

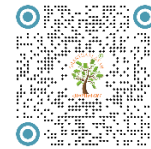
Original Article

## BEYOND GREEN CLAIMS: A SYSTEMATIC LITERATURE REVIEW OF GREEN MARKETING STRATEGIES AND CONSUMER PURCHASE BEHAVIOUR IN THE FMCG SECTOR

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### ABSTRACT

The global push towards environmental sustainability has led FMCG companies to leverage green marketing strategies in an attempt to promote environmentally friendly products and influence consumers' purchase behavior. However, rising concerns surrounding green claims' credibility and an increase in greenwashing practices have presented obstacles for organizations looking to win consumer trust. Therefore, this study aims to conduct a systematic literature review of existing research on green marketing strategies and consumer purchase behavior within the FMCG industry. By utilizing the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method for study selection, this review gathered literature from Scopus and Google Scholar databases ranging from 2015 to 2025. In total, 50 studies were chosen based on pre-determined inclusion and exclusion criteria and underwent thematic analysis. Six themes were generated: green marketing strategies, sustainable packaging, eco-labels and certifications, green trust and brand credibility, greenwashing and consumer skepticism, and consumer purchase behavior. Results show that sustainable packaging, eco-labels, and environmental certifications help facilitate consumer purchase intentions by legitimizing green marketing claims. Green trust was identified as a mediating factor between green marketing and consumer behavior, while greenwashing and consumer skepticism act as barriers to sustainability-based marketing. Lastly, the theme of consumer purchase behavior showed that there is still an attitude-behavior gap between consumers and their actual consumption due to factors such as price, convenience, and value. This review allows researchers to further their understanding of green marketing by providing integration on the factors that affect consumer purchase behavior. Additionally, it can help other researchers and practitioners identify ways to properly execute credible sustainability-based marketing strategies.

**Keywords:** Green Marketing, Consumer Purchase Behaviour, Sustainable Packaging, Green Trust, Greenwashing, FMCG Sector, Systematic Literature Review

### INTRODUCTION

Environmental sustainability is now at the forefront of concerns for businesses, governments and consumers worldwide. Increasing awareness of climate change, resource exhaustion, plastic pollution, and environmental deterioration has contributed to a rising number of consumers interested in products and services that meet the criteria of sustainable development. With consumers being increasingly aware of the environmental impact of their purchasing choices, organizations are facing increasing pressure to prove their green credentials in their marketing and operational activities.

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There is a wider significance to the discussion about the place of the Fast Moving Consumer Goods (FMCG) sector. FMCG are products such as food, drinks, toiletries, cleaning products and other household goods which are consumed by millions of consumers every day. Due to their large quantities of production, demand for packaging, and the frequency of transactions, products of FMCG industry are known to have a major impact on environment, causing such problems as generation of plastic waste, carbon emissions and excessive use of natural resources. As a result, sustainability has become a core focus for many FMCG firms as they attempt to align with shifting consumer demand and reduce their eco-footprint.

In this context, green marketing has emerged as a way to portray environmental responsibility to consumers. Green marketing is the development and marketing of products that are designed, manufactured, packaged, and distributed with consideration given to the environmental aspects throughout the product lifecycle. Over the years, brands have also introduced various green marketing practices such as recyclable and biodegradable materials, business sustainability models, support for environmental projects, and sourcing ingredients responsibly. These techniques are employed to edge out competitors, both in increasingly competitive markets and to stimulate more environmentally responsible consumption.

The rise in popularity of green marketing is indicative of an underlying change in consumer values. There is substantial evidence that many consumers are concerned about the environment and prefer to buy 'green' products. This change in consumer attitudes has led companies to feature sustainability-related messages more prominently in their branding and promotional material. Consequently, product packaging, advertisements, corporate websites and social media are inundated with environmental statements. Words like "natural," "eco-friendly," "sustainable," "organic," and "environmentally responsible" have become ubiquitous in commercial messaging.

Although green marketing efforts are ever more widespread, their success in actually driving consumer purchasing is still up for debate [Dean \(2009\)](#). Yet many consumers attitudes don't seem to reflect in their actions when purchasing. Price, convenience, product performance and availability are among the practical matters that consumers consider when they choose what to buy. Findings suggest that the stated concern for the environment is not reflected in real purchasing decisions and this 'attitude-behaviour' gap has been widely discussed in the literature. Investigating the drivers of this gap has grown to be a prominent research topic in both the marketing and sustainability literatures.

It is compounded by a new proliferation of environmental claims from companies. Along with the rise of sustainability as a potent marketing theme, concerns about the truthfulness of green claims have grown. Today's consumers are bombarded with a multitude of environmental messages, many of which are not easily scrutinized for accuracy. This has helped fuel an increasing level of consumer skepticism about the truth of claims related to sustainability. In some cases, companies have been criticized for "greenwashing" – over- or mis-representing their environmental performance or making unrealistic claims to gain the favor of green consumers. Such conduct is regularly referred to as greenwashing.

The problem of greenwashing has gained attention of scholars, government and consumers protection organisations. If consumers regard environmental claims as deceptive or not supported by any evidence, the credibility of brand and product could be compromised. On the other hand, sustainability practices, when perceived as authentic and transparent, have the potential to enhance brand trust and consumer attitude. Therefore, trust has been regarded as an essential component in the success of green marketing. As a result, the connection between green marketing, consumer trust and buying behaviour is an area of research that is emerging stronger than ever.

In the FMCG industry, the importance of trust is even greater as consumers tend to make purchase decisions in an environment of scanty information and limited time. FMCG are usually impulse buys, unlike high-involvement products, FMCG shopping is often habitual and repetitive. As such, consumers often look to signals, including packaging, labels, certification, brand equity and prior experience to judge claims on the environment. The role of these cues in shaping perceptions of credibility and trust may thus offer important insights into the processes underlying consumer decisions to purchase.

In the last few years, a large number of papers were published on different aspects of green marketing and green consumer. Studies on purchase intentions and buying behaviour have been conducted for the effects of eco-labels, sustainable packaging, environmental advertising, green brand image, environmental concern, and green trust. While these studies have greatly enriched our understanding, the findings are scattered across different literatures. In addition, the advancing dialogue on greenwashing and consumer scepticism has introduced new dynamics that should be closely considered.

Hence, the current study aims to bridge this gap in research by clearly elucidating the effect of green marketing strategies on consumer purchase behaviour in the fast-moving consumer goods (FMCG) industry. Systematic review is an approach for summarizing evidence from numerous and diverse studies in order to identify themes recurring across studies, to evaluate trends emerging from them, and to point out methodological advances or researches to be conducted. With recourse to evidence from recent studies, this paper strives to offer an all-inclusive understanding of green marketing strategies, the importance trust and credibility play in them, and the effect they have on consumer purchase behaviour in fast moving consumer goods (FMCG) companies.

## REVIEW OF LITERATURE

### GREEN MARKETING AND SUSTAINABILITY IN THE FMCG SECTOR

The growing concern about the environment has had a considerable impact on how companies function and how they communicate with consumers. Issues surrounding climate change, waste generations, depletion of natural resources, and environmental pollution have prompted companies to consider sustainability as a business imperative. Besides other industries, the Fast-Moving Consumer Goods (FMCG) industry is under a lens due to its high packaging requirements, mass manufacturing, and consumption rate. With the rise of the environmentally aware consumers, FMCG firms are under increased pressure to prove responsible business practice and mitigate the impact on the environment.

Sustainability has become a business imperative rather than a compliance-driven activity in response to this evolution in expectations. Some FMCG companies are adopting green measures, including using less plastic, switching to recyclable packaging, becoming more energy efficient and sourcing raw materials through sustainable supply chains. These efforts, including the green washing ones, are often transmitted to the consumers in the shape of green marketing which attempts to associate the company to the environmental concerns and to also present value to those consumers that are more aware of the environment.

As a result, green marketing has become a significant aspect of sustainability-driven business strategies. Green marketing is more than just advertising a product; it also involves activities that highlight environmental advantages and demonstrate responsible business conduct. Environmental consciousness among consumers compelled organizations to implement marketing strategies that highlight sustainability related features and environmental performance [Joshi and Rahman \(2015\)](#). Likewise, [Jaiswal and Singh \(2018\)](#) found that consumers are paying more attention to environmental considerations while making product choices, especially in such product categories as daily use.

In the FMCG industry, the communication of sustainability has also been made visible on product packaging through green environmental certification labels or trust seals, on advertising campaigns as well as on the sustainability efforts of companies. With the competition heating up, firms are looking to carve a niche by marketing their products as green options. Studies indicate that consumers tend to have positive attitudes towards products they consider to be environmentally friendly especially when the environmental attributes of the product are well-defined and substantiated by reliable information [Jaiswal and Singh \(2018\)](#), [Correia et al. \(2023\)](#).

Yet, this is not surprising since the rise of green marketing also brought about a new set of challenges. Despite many consumers cite environmental issues as being important, these concerns are not always reflected in their purchasing behaviour. A few studies reported that price sensitivity, convenience, product quality, and availability still had an influence on consumers' purchasing decisions besides environmental factors [Joshi and Rahman \(2015\)](#), [Nekmahmud and Fekete-Farkas \(2022\)](#). This may imply that sustainability activities may not be enough to ensure consumer acceptance unless they are supported by other expectations toward product value and performance.

New literature also underlines the power of trust in determining consumer responses to sustainability-affiliated marketing. With environmental claims proliferating, consumers have become more skeptical and now want brands to prove their authenticity. Sustainable packaging, eco-labels, and environmental certifications can enhance consumers' perceptions; however, their attributes may not be effective when consumers consider the claims to be fake or when the information provided is insufficient [Magnier and Schoormans \(2015\)](#), [Cai et al. \(2017\)](#). As a result, green marketing in FMCG industry is no longer about just informing consumers of environmental advantages but also about building trust and transparency with consumers in the area of sustainability.

The existing literature suggests that sustainability and green marketing are increasingly intertwined in the context of the FMCG sector. Companies keep investing in sustainable efforts, but the success of these efforts depends on how consumers perceive them, trust them, and on companies' ability to communicate their sustainability commitments in a meaningful and credible way. These trends have begun to fuel increasing scholarly attention toward identifying the particular green marketing strategies that trigger consumers' decision-making and buying.

### GREEN MARKETING STRATEGIES IN THE FMCG SECTOR

Eco-friendly marketing is now a part of the core of sustainable development practices in FMCG companies. While environmental consciousness among consumers is on the rise, which pressures organizations to adapt their offerings, the application of sustainability-related marketing instruments to create a product differentiation in the market is becoming increasingly popular. These are green advertising, sustainable packaging, eco-label, environmental certification, green brand and green communication. Together they are supposed to inform consumers about the environmental product benefits and to induce a more responsible consumption behavior.

Environmental communication and green advertising, in particular, have attracted a great deal of attention from the literature and among the various tools of green marketing. Green advertising is intended to emphasize a product's environmental features, its sustainable manufacturing procedures, or the company's overall commitment to the environment. Studies show that an effective green marketing communication has the potential to favorably impact consumers' attitude and intention to purchase. [Correia et al.](#)

(2023) observed a stronger green purchasing behaviour for green marketing communication sensitive consumers. In the same way, Su et al. (2024) demonstrated that all the elements of green marketing mix including environmental based promotional activities have significant influence on environmental attitudes and green purchase intentions.

Sustainable packaging is also a common well-known trend amongst consumers. Packaging is one of the most accessible source of information for consumers at the point of sale, which may be a stimulus to communicate brand environmentalism Hultén et al., (2011). Consumers, stated Magnier and Schoormans (2015), appreciate sustainable packaging when environmental claims on packaging are backed by a visual design that is coherent and by information that is trustworthy. In the same vein, Steenis et al. (2017) found that the packaging material and the packaging graphics had a significant effect on consumers' perceptions related to sustainable packaging and on evaluations of the product. Environmental studies have since established that green packaging may have a positive impact on purchasing intentions especially for consumers that are more environmentally concerned Petkowicz et al. (2024), Duarte et al. (2024).

Eco-labels and environmental certifications are yet another key green marketing tool in the FMCG industry. Eco-labels inform consumers about the environmental performance of a product and are sometimes used to alleviate doubts in the product selection process Hazra et al. (2019). Cai et al. (2017) also identified trustworthiness in eco-labels as an important determinant of consumer purchase intention. Similarly, Nguyen (2022) also concludes that ecolabels have a positive impact on green purchase intention especially when validated through green brand equity. A study by Hossain et al. (2022) also indicates that a good comprehension among consumers of eco labels strengthens green trust which leads to more environmentally responsible action.

Green branding is also a useful tool for companies to develop long term relationships with green consumers. With green branding, companies seek to link their products and company name with values related to sustainability. Successful green branding can lead to positive brand image, perceived environmental performance, and consumer trust. Pancić et al. (2023) revealed that green advertisement and green brand associated attributes have positive influence on repurchase intention, thereby suggesting the strategic benefits of sustainability driven brand positioning. Similarly, Liu et al. (2025) revealed that green perceived value has a positive effect on purchase intention via positive brand attitude and trust.

Latest research also noted that a mix of several green marketing tools should be utilized instead of a single sustainability tool. Consumers combine packaging cues, labels, brand reputations, advertising messages and corporate behaviours when assessing environmental claims. Quoc (2025) green packaging, branding and eco-labelling have significant impact on consumer's mind and behavior, indicating that the success of green marketing lie in the harmony between the green signals a company communicates in its brand. Consumers are more likely to demonstrate a preferential response if such environmental commitments are made in various elements of the marketing mix, which is consistent with the finding here.

In the end, the green marketing approach is a form of marketing that targets specific consumer segments, since its success varies among consumers. A number of researches reveal that environmental concerns, environmental knowledge, personal values and perceived consumer effectiveness can affect an individuals' response to sustainability related marketing Jaiswal and Singh (2018), Nekomahmud and Fekete-Farkas (2022). In addition, the growing prevalence of environmental claims has made consumers more skeptical in assessing sustainability messages. Therefore, the effectiveness of green marketing information lies not only in the environmental attributes but also in the perceived trust of the communicated message with the green marketing information.

In general, the prior art indicates that innovative green marketing tools have a positive effect on the purchase intention and perceptions of consumers when they are considered reliable, supportive and related to other more comprehensive sustainability practices. But while more environmental claims are flooding the market, concerns around trust, credibility and whether sustainability communications are more of a marketing gimmick rather than true commitment are also rising. This led researchers to investigate the green trust and brand credibility as essential factors for green marketing success.

## GREEN TRUST AND BRAND CREDIBILITY

Environmental sustainability is now an important part of marketing communication, and trust in this context is now a decisive variable affecting consumer reaction to green marketing initiatives. As consumers face more and more environmental claims via advertising, packaging and product labeling, their success in cutting through the spin depends largely on whether the information is seen to come from a trusted source. As a result, green trust has emerged as a key notion for explaining how consumers process sustainability related information and apply it in their purchase decisions.

Green trust is a consumer's confidence to rely on a product, a brand, or a firm that the environmental commitment and accomplishment are truthful and that it is not deceptive. Green trust differs from general trust in that general trust captures broader perceptions of integrity and competence at the firm level, whereas green trust concerns trust in a firm's environmental performance and commitments to sustainability. The literature review: Having examined the aforementioned previous empirical, theoretical and conceptual studies, trust is inferred to have a significant effect on uncertainty and risk perception in the context of green products. Technical knowledge is required for consumers to check environmental claims on their own and so they rely on information from companies, certifications and third parties in making decisions about what to buy.

The positive effect of green trust on the intention of consumers to purchase was verified in various researches. [Chen \(2015\)](#) revealed green trust is affected by perceived product quality, satisfaction, and perceived environmental performance, and also suggested that green trust motivates consumers to purchase green products. Similarly, [Konuk et al. \(2015\)](#) found a positive effect of green trust on behavioural intentions and willingness to pay a premium for green products. These results imply that trust serves as a key channel through which green marketing activities affect consumers' behaviour.

The importance of trust is further emphasized in the FMCG industry where purchase decisions tend to be faster and with less information. There, as studies show, consumers have a tendency to rely on simple signals like brand name, eco-label, claims on packaging, and experiences. Studies have shown if consumers think sustainability-related information is trustworthy, they have more positive product and brand attitudes. [Wang et al. \(2022\)](#) revealed that green brand trust not only has a positive impact on purchase intention, but also contributes to establishing long-term consumer commitment which underscores its importance as a strategic instrument for organizations to attain sustainable competitive advantages.

Green trust is also closely associated with perceived brand credibility and is another key factor influencing consumer response. It also indicates the degree to which consumers trust that a company can deliver its promises. In the arena of sustainability, credibility is a function of how well environmental claims reflect a company's business practices. Consumers are increasingly questioning if a company's behavior matches the sustainability messaging in its marketing. Consumers generally feel more positive when they believe a brand is taking a real, active approach to its environmental claims, with such claims supported by tangible, verifiable deeds.

Eco-label and environmental certification have been shown to be influential to green trust. [Cai et al. \(2017\)](#) demonstrated that the credibility of the eco-label has a significant impact on consumers' intention to purchase, especially when labels come from credible bodies. In a similar [vein et al. \(2010\)](#) found that adequate knowledge of ecolabels has a positive impact on green trust that subsequently leads to pro-environmental behaviour. These results indicate that consumers sometimes take third-party certifications as an indicator of the product's credibility which allows them to assert more confidently on environmental statements.

Recent studies have reportedly further re-affirmed the role of perceived value in building trust-based relationships. [Liu et al. \(2025\)](#) also revealed that green perceived value positively affects purchase intention through the formation of positive brand attitude and green trust. Consumers with functional value and environmental benefits perception are more inclined to trust about sustainability-related information and have greater intentions to purchase. This would suggest that trust is not established through environmental communication alone, but also through consumers' overall appraisals of product performance and value.

However, the development and maintenance of green credibility is still a major problem for companies. Environmental claims are also on the rise and consumers are becoming increasingly sceptical of them. Many people actually want to see information that backs up environmental claims and they are less trusting of claims. Therefore, companies need to make sure their sustainability messaging is clear and consistent, and that it is backed up by real environmental action. Otherwise, it could trigger disbelief and decreased trust, which would dilute the effectiveness of the green marketing strategy.

On the whole, this literature review indicates that green trust and brand credibility can be considered as key mediators between green marketing activities and consumer purchasing behaviour. Trust reduces perceived risk, builds confidence in environmental claims and leads to greater positive consumer outcomes. However, it is acknowledged that the greater use of environmental messaging has raised concerns over false claims and the inflation of sustainability promises. These issues have attracted growing scholarly attention in terms of greenwashing and consumer scepticism, two key threats to the effectiveness of green marketing in today's markets.

## GREENWASHING AND CONSUMER SKEPTICISM

The increasing interest in sustainability as a marketing topic has brought about new opportunities as well as challenges for companies. Although some businesses have genuinely tried to enhance their environmental performance, others have drawn criticism for overstating, misrepresenting, or selectively releasing environmental data. The strategic use of green claims within advertising, commonly known as 'greenwashing', has attracted significant attention in both academia and business. As consumers come into contact with environmental statements on advertisements, packaging, websites, social media and more, the question of how real these statements are – and how much they can be trusted – is becoming louder.

Practice of greenwashing is to make environmental claims about a product, service, or company that are misleading. [de Freitas Netto et al. \(2020\)](#) greenwashing is manifested through various strategies as vague claims, misleading labels, selective disclosure of information, overstated environmental benefits, and sustainability statements without substantiation. Such methods like this confuse the consumer, and make it more difficult to tell whether a product really is sustainable or if it just borrows imagery from nature to sell itself.

The literature implies a growing greenwashing that plays a crucial role in increasing consumer scepticism. Scepticism about consumer goods is a consumer's predisposition to doubt or question the veracity and integrity of marketing assertions. Scepticism arises in green marketing when consumers have doubts about the environmental claims made and suspect that these messages emanate more from commercial rather than from environmental interest. [Leonidou and Skarmas \(2017\)](#) demonstrated that green

skepticism diminishes consumers' trust in environmental statements and undermines the effectiveness of marketing activities pertaining to sustainability. Their results suggest that when consumers become more skeptical, they tend to question green claims more on a superficial level about the company's environmental performances.

Some empirical studies have focused on the immediate effects of greenwashing on consumers. [Akturan \(2018\)](#) has found that the perceived greenwashing has negative influences on green brand equity, green brand trust, and purchase intention. In addition, [Nguyen et al. \(2019\)](#) revealed a significant impact of greenwashing on reducing consumers' intent to buy green products. Their study also suggested that green scepticism plays the role of mediator; as a result green sceptics are more likely to have their purchasing intentions lowered by greenwash perceptions. The results demonstrate the harm that false environmental claims can do to both consumer confidence and earnings in the market.

Previous studies on greenwashing have demonstrated its effects on consumers evaluating brands and products outside the realm of environmental activities. Based on the belief that consumers are dealing with greenwashing, [Szabo and Webster \(2021\)](#) revealed that the negative attitudes are also toward the quality of the product, reliability of the brand and the reputation of the company as a whole. In effect, greenwashing may do more than debase environmental assertions – it can erode wider consumer confidence in the company. This is particularly applicable in case of the FMCG industry as brand image is a significant factor that helps in retaining customers.

Another significant question used in the study is whether consumers can tell when an environmental claim is false. Although consumers are now more conscious of sustainability matters, a lot of them are still confused on what are real environmental activities versus greenwashing. [Fella and Muñoz \(2024\)](#) found that consumers are generally poor at detecting greenwashed products, especially when environmental claims are framed in technical language, use vague terms, or show attractive pictures. Thus, consumers might either blindly trust misleading claims or become cynical about and too cautious when interpreting any environmental messaging.

The impact of eco-labelling and third party certification has been discussed extensively in this respect. Research of [Cai et al. \(2017\)](#), [Hossain et al. \(2022\)](#) and [Nguyen \(2022\)](#) indicates that trustful eco-labels can contribute to alleviating consumer uncertainty and enhancing trust towards environmental statements. However, certifications may lose their power, if they are unfamiliar or if consumers doubt the integrity of certifying organizations. This points to the need for greater transparency and third party assurance in boosting consumer trust and reducing perceptions of green-washing.

More recently, studies have reported on the increasing significance of greenwashing awareness. [Apostolopoulos et al. \(2025\)](#) concluded that greener awareness leads to more critical evaluation of environmental assertions and greater reliance on scientific-based sustainability information. In a similar vein, [Khandai et al. \(2025\)](#) demonstrated that greenwashing fosters skepticism among consumers and triggers negative feelings towards brands, which in turn weaken intentions to buy. Taken together, these results imply that consumers are becoming more sophisticated in assessing sustainability claims and are increasingly calling for organizational accountability.

The growth of digital media has only heightened attention on greenwashing. Social media allows consumers to access multiple sources of information, such as customer reviews, independent evaluations, activist campaigns and sustainability reports. This greater availability of information can enhance transparency, but also “increases the potential for misrepresentation to be questioned and challenged in the public sphere”. [Nabivi et al. \(2025\)](#) also identified that greenwashing beliefs impact on consumers' brand attitudes and purchase as well as positive eWOM behavioral intentions. As a result, there is increased pressure on businesses to deliver a sustainability message that is consistent with their sustainability performance.

Nevertheless, there is no indication from the literature that consumers have become wholly disbelieving of green marketing. Instead, they seem more interested in transparency, being genuine, and taking responsibility. Environmental claims with credible certifications, quantifiable results and tangible sustainable endeavors are rather more appreciated than generic or unsubstantiated promotional claims [Cai et al. \(2017\)](#), [Hossain et al. \(2022\)](#), [Apostolopoulos et al. \(2025\)](#). This suggests that trust can still be earned when organizations are willing to demonstrate plainly verifiable commitment to the environment.

In general, the existing knowledge shows that both greenwashing and consumer skepticism pose strong challenges to the effectiveness of green marketing tools. Although communications related to sustainability may have a positive influence on attitudes and purchase behaviour of consumers, the effect is highly dependent on the degree of credibility of communicated information. As customers grow wiser to false claims on the environment, companies will need to go beyond the symbolic green messaging and prove up real sustainability practices that can withstand the test of consumer scrutiny. These changes are likely to have a significant impact on the well-documented challenge of understanding consumer purchase behaviour and the continual discrepancy between positive environmental attitudes and actual purchasing.

## CONSUMER PURCHASE BEHAVIOUR AND THE ATTITUDE-BEHAVIOUR GAP

Buyer behavior in consumers is still emerged as one of the most well investigated dependent variables in green marketing study. With environmental issues becoming more salient, researchers have tried to identify factors that drive consumers to purchase environmentally friendly products and to understand the extent to which sustainability-related preferences can predict purchase

decisions. While there is an extensive literature indicating that consumers hold positive attitudes toward protecting the environment and towards sustainable consumption, evidence has consistently shown that these attitudes do not always culminate in actual purchases.

Concepts such as green purchasing behaviour and environment-friendly buying have been used to describe the impact of environmental concern on purchase decisions, where the latter refers to purchasing and consuming products that are considered least harmful to the environment. A growing body of literature has proved that the high environmental awareness and concern consumer is more likely to hold a favorable attitude toward green products. [Joshi and Rahman \(2015\)](#) reviewed green purchase behaviour literature and found that environmental concern, environmental knowledge, perceived consumer efficacy, and positive attitude towards sustainability were among the key factors influencing green purchase behaviour. [Jaiswal and Singh \(2018\)](#) also found that environmental concern and consumer attitudes have a substantial impact on green purchase intention in India.

Although it is clear that positive environmental attitudes are important, it is also suggested by studies that purchasing behavior is dependent upon a wider range of economic, functional and psychological factors. Consumers usually consider the quality, price, convenience, availability and brand of a product when they evaluate the environmental features. [Prakash and Pathak \(2017\)](#) revealed that consumers can talk the talk in terms of supporting green products but are unwilling to invest in them if they have to pay more or get less in terms of functional benefits. In the same vein [Testa et al. \(2021\)](#) maintained that environmental concern is generally not a sufficient motivator for actual purchase behaviour, particularly when consumers are confronted with physical barriers, such as those of affordability and availability.

This discrepancy between reported attitudes and actual behaviour has been widely discussed in the literature as the attitude-behaviour gap. The term refers to a situation when consumers have positive environmental values and strong intentions to buy green products but do not do so. [Carrington et al. \(2014\)](#) have introduced the concept of attitude-action gap by claiming consumers' follow through on ethical or environmental beliefs is often moderated by situational factors, competing priorities and contextual influences. Consequently, even well-informed and positive attitudes to sustainability do not necessarily lead to the purchase of sustainable products.

In recent years, a several of research has been conducted to understand the reasons behind the existence of this gap in knowledge and practice with implications for environment awareness. [Nekmahmud and Fekete-Farkas \(2022\)](#) indicated that financial limitation, availability of products and access to a trusted source of information are some of the factors that limit the consumers' potential to be involved in green purchasing. In a like manner, [Margariti et al. \(2024\)](#) observed in their systematic review on sustainable consumption that while environmental consciousness has risen dramatically over the past decade, a significant gap still exists between what consumers claim to value, and the decisions they ultimately make as consumers.

The trust-related attitude-behaviour gap has also been identified in the literature. To convert a positive attitude into a buying decision, the consumer has to trust the environmental claims. He further revealed that green trust facilitates consumers' intention to purchase environmentally friendly products by decreasing perceived risk and uncertainty [Chen \(2015\)](#). Also, [Liu et al. \(2025\)](#) found that green perceived value indirectly predicts purchase intention via positive brand attitudes and trust. These results suggest that trust serves as an effective process through which sustainability-related attitude beliefs are transformed into actual behaviours.

The influence of eco-label and certification on green purchase intentions was also studied. Green purchasing is more likely if environmental certifications are trustable, which makes consumers more confident in evaluating sustainability claims, according to the findings of [Cai et al. \(2017\)](#), [Hossain et al. \(2022\)](#), and [Rana et al. \(2025\)](#). It was found that when consumers consider environmental information to be trustworthy and not difficult to understand, they are more prone to apply sustainability information into their decision making.

Meanwhile, increasing doubts about greenwashing add further layers of complexity in consumers' mind games. [Akturan \(2018\)](#), [Nguyen et al. \(2019\)](#) and [Apostolopoulos et al. \(2025\)](#) reveal that the feeling that environmental claims are deceptive can damage the trust of the consumer and thus affect the purchase intentions. As the public becomes increasingly cynical about sustainability-related communications, green products may face a double bind when their most vocal environmental advocates are reluctant to put their money where their mouth is. This implies that not only trust is undermined by greenwashing, but also may contribute to the persistence of the attitude-behaviour gap.

A number of the recent studies point to the significance of integrated green marketing approaches for successful purchase behaviour improvement. Eco-branding, green labelling and environmental information relating to the clip pack are what typically combine to influence the customer eyes and choices and the gap pack does the very same when the customer is on a purchase compared to simple nonlinear communications methods in most cases. In their study, [Quoc \(2025\)](#) revealed that green packaging and green branding with eco-labeling has a significant impact on green purchasing behavior and green consumer attitude, whereas [Correia et al. \(2023\)](#) found that the predominant successful green marketing communication strategy that positively influences green purchase behaviour is the environmentally- adapted message. The results point to the multi-cue inference to evaluate environmental claims rather than rely on only one source of information.

In summary, findings from the literature suggest that consumer buying behaviour is shaped by a multilevel interplay of environmental concern, trust, perceived value, product-related factors and marketing communications. Yet, while consumers

increasingly claim to be in favour of sustainable and environmentally friendly products, the actual translation of these attitudes into purchasing behaviour is less than consistent. The continued attitude-behaviour gap, combined with increasing scepticism about greenwashing and legitimacy, calls for a better integration of insight on green marketing effects on consumers' decision process within the FMCG area. From these observations the main research gaps that this review addresses are established.

## SYNTHESIS OF EXISTING LITERATURE

The reviewed literature indicates that green marketing has turned into an influential tool in shaping the buying behaviour of consumers within the fast moving consumer goods (FMCG) industry. Research has shown that initiatives that relate to sustainability, including green advertising, sustainable packaging, eco-labels and environmental certifications, may influence consumers' perceptions in a favourable manner and foster purchase of green products.

A consistent result in the literature is the significance of trust and credibility. Generally, consumers tend to react more positively to green marketing practices when they perceive the environmental assertions to be authentic and evidence-based (Walsh et al., 2011). Conversely, skepticism relating to greenwashing and deceptive sustainability claims is on the rise, which has an adverse impact on the effectiveness of environmental communications and on purchase intentions. The importance of sustainable packaging and eco-labels in purchasing decisions is also discussed in the literature. Moreover, these also act as tangible symbols of environmental care to enable consumers in evaluating green products at the purchase point. However, their success is highly dependent on consumer knowledge and their confidence in the information given.

A related recurring finding is the attitude-behaviour gap, which means that favorable environmental attitudes do not always lead to purchase behaviours. Price, quality of the product, convenience, and perception of value are still among the factors considered by consumers when making their purchasing decisions together with environment.

In general, the literature appears to indicate that the success of green marketing is a function of the combination effect of sustainability activities, consumer trust and perceived credibility. Existing studies on the green marketing provide good understanding about each factor, however, there is little comprehensive knowledge about combined effect of concern, attitude and trust on buying behavior in the FMCG industry. This gap in knowledge provides the basis for the present systematic review.

## RESEARCH GAP

The existing literature review shows that there is considerable research done under the topic of green marketing and consumer behaviour. Literature reviews have discussed several types of green marketing such as green advertising, green packaging, ec-labels and environmental certifications and green branding. In the same vein, much emphasis has been focused on green trust, environmental concern, purchase intention, green purchase behaviour. These works have made important contributions to the understanding of what drives consumers to favour environmentally friendly products.

There are numerous gaps and inconsistencies that need to be addressed although knowledge in this area is expanding. The first is that a considerable amount of the extant research has treated green marketing instruments separately. For instance, some articles are related to the importance of eco-labels, others on the significance of sustainable packaging, green advertising or green trust considered one at a time. Hence, the body of work continues to be fragmented, and does not offer insight into the synergistic effects of these strategies on consumer behaviour in the FMCG context.

Second, green trust has become a significant factor influencing consumer decisions, there is still lack of review-based holistic evidence about what trust means in the context of different green marketing approaches (i.e., how trust is affected by such strategies). The literature typically studies trust in isolation rather than investigating its role as an overarching theme in which environmental claims and purchasing behaviour are linked.

Third, increasing worries about greenwashing have added new complexities to the consumer decision-making process. Although some recent research has examined consumer scepticism as well as negative implications of deceptive environmental claims, these observations are scattered in various strands of the literature and have not been sufficiently integrated with the wider green marketing research. As a result, there is a lack of clarity on the impact of greenwashing on the success of green marketing strategies and the resulting consumer uncertainty in buying green products.

An equally significant chasm exists to our knowledge for the attitude-behaviour gap. The literature consistently presents consumers as having a tendency to display positive attitudes towards sustainability but do not in reality purchase sustainably. While the relevance of these aspects in general is undisputed, the contribution of such factors as trust, credibility, price sensitivity, product quality, and awareness related to the environment explaining the gap, has not yet been established clearly, especially not in the context of FMCG. Besides, a significant part of the literature has been focused on purchase intention rather than purchase behaviour. Purchase intention is considered to be a strong determinant of behaviour but intention may not lead to behaviour. This suggests that there is a need to explore a broader range of real consumer behaviour factors beyond intentions and environmental attitudes [Chen \(2015\)](#). Considering the above gaps, a consolidation of the extant literature that combines green marketing strategies, green trust, consumer scepticism, greenwashing, and purchase behaviour in one integrative model is warranted. The current systematic

literature review aims to fulfill this gap by integrating the results of the most recent published research and thus providing more clarity on how green marketing activities impact consumer buying behavior in the fast moving consumer goods (FMCG) industry.

## OBJECTIVES OF THE STUDY

The present study aims to systematically review the existing literature on green marketing strategies and consumer purchase behaviour in the FMCG sector. Based on the identified research gaps, the study seeks to achieve the following objectives:

- 1) To identify and examine the major green marketing strategies adopted by FMCG companies, including green advertising, sustainable packaging, eco-labels, environmental certifications, and green branding.
- 2) To analyse the influence of green marketing strategies on consumer purchase behaviour in the FMCG sector.
- 3) To examine the role of green trust, brand credibility, consumer skepticism, and greenwashing in shaping consumer responses to green marketing initiatives.
- 4) To identify key research trends, existing gaps, and future research directions in the field of green marketing and consumer purchase behaviour.

## RESEARCH METHODOLOGY

### RESEARCH DESIGN

This paper uses a systematic literature review in order to analyze the impact of green marketing on consumer behavior in the fast-moving consumer goods (FMCG) industry. A review of the literature was deemed necessary as it allows for a structured identification and critical assessment of the body of knowledge on a certain subject. Based on the selection and screening of relevant articles according to the PRISMA guidelines, the study conducts a thematic analysis to develop a map of the literature by uncovering dominant patterns, trends, and clusters of research.

### DATA COLLECTION PROCEDURE

Relevant studies were collected from Scopus and Google Scholar databases. The search was limited to articles published between 2015 and 2025 to capture recent developments in green marketing, sustainability, and consumer behaviour research. Keywords such as “green marketing,” “green advertising,” “sustainable packaging,” “eco-labels,” “green trust,” “greenwashing,” “consumer purchase behaviour,” and “FMCG” were used individually and in combination during the search process. The initial search identified 412 records. After removing duplicate and irrelevant studies and applying the predefined selection criteria, 50 studies were retained for detailed review and thematic analysis. The study selection process was conducted following the PRISMA framework and is presented in the subsequent sections.

### STUDY SELECTION CRITERIA

To ensure the relevance and quality of the review, studies were selected based on predefined inclusion and exclusion criteria. Only studies directly related to green marketing and consumer purchase behaviour were considered for analysis.

**Table 1**

Table 1 Inclusion and Exclusion Criteria		
Criteria	Inclusion Criteria	Exclusion Criteria
Publication Period	2015–2025	Studies published before 2015
Language	English	Non-English publications
Document Type	Peer-reviewed journal articles and relevant review papers	Conference abstracts, editorials, book reviews, theses, and reports
Research Focus	Green marketing, sustainable packaging, eco-labels, green trust, greenwashing, consumer purchase behaviour, FMCG	Studies unrelated to green marketing or consumer behaviour
Accessibility	Full-text articles available	Articles with inaccessible full text

The application of these criteria helped ensure that only relevant and high-quality studies were included in the final review.

**PRISMA SCREENING PROCESS**

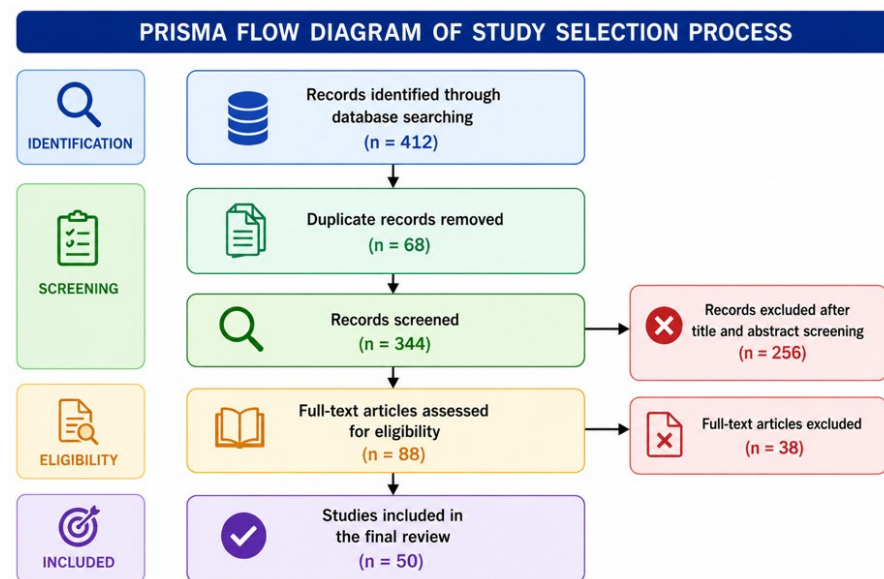
The study selection process was conducted in accordance with the PRISMA framework. Following the database search, duplicate records and studies that did not meet the inclusion criteria were removed. The remaining articles were screened based on their titles, abstracts, and full-text content to assess their relevance to the objectives of the review. After the screening process, 50 studies were retained for detailed analysis.

**Table 2**

Table 2 PRISMA Screening Summary	
Screening Stage	Number of Records
Records identified through database searching	412
Duplicate records removed	68
Records screened	344
Records excluded after title and abstract screening	256
Full-text articles assessed for eligibility	88
Full-text articles excluded	38
Studies included in the final review	50

The PRISMA flow diagram illustrating the study selection process is presented in Figure 1.

**Figure 1**



**Figure 1 PRISMA Flow Diagram of the Study Selection Process**

**DATA ANALYSIS PROCEDURE**

The selected studies were analysed using thematic analysis. After a detailed review of the literature, studies were grouped according to recurring themes related to green marketing and consumer behaviour. Key themes identified included green marketing strategies, sustainable packaging, eco-labels and certifications, green trust and brand credibility, greenwashing and consumer skepticism, and consumer purchase behaviour. This approach facilitated the identification of common patterns, major findings, and research gaps within the existing literature.

**Table 3**

<b>Table 3 Major Themes Emerging from the Literature</b>		
<b>Theme No.</b>	<b>Identified Theme</b>	<b>Focus Area</b>
<b>Theme 1</b>	Green Marketing Strategies	Environmental communication, green advertising, and sustainability-oriented marketing practices
<b>Theme 2</b>	Sustainable Packaging	Eco-friendly packaging and its influence on consumer perceptions and purchase decisions
<b>Theme 3</b>	Eco-Labels and Certifications	Role of environmental certifications and labels in consumer decision-making
<b>Theme 4</b>	Green Trust and Brand Credibility	Consumer trust, perceived authenticity, and brand credibility
<b>Theme 5</b>	Greenwashing and Consumer Skepticism	Misleading environmental claims and consumer skepticism towards sustainability messages
<b>Theme 6</b>	Consumer Purchase Behaviour and the Attitude–Behaviour Gap	Factors influencing purchase behaviour and the gap between environmental attitudes and actual purchasing decisions

## **FINDINGS AND DISCUSSION**

The analysis and synthesis of the selected papers led to the emergence of six main themes concerning green marketing and consumer purchasing behaviour in the FMCG industry. These themes correspond to the most talked-about topics in the literature and identify the drivers for consumer reaction towards sustainability-related marketing activities. The results related to each theme are illustrated below.

### **GREEN MARKETING STRATEGIES AND CONSUMER RESPONSE**

The review results suggest that green marketing practices are now a powerful means of shaping consumers' attitudes and promoting green consumption. Among those that were reviewed, green advertisement, sustainability-driven communication, and green branding are the dominant strategies for communicating environmental responsibility of FMCG companies. These practices were generally perceived to raise the consciousness of consumers, enhance brand image, and forming positive attitudes toward green products.

Moreover, the respondents had higher positive reaction towards environmental message when it was backed with tangible sustainability practices than advertising alone. Green marketing initiatives are also more successful when complemented with other sustainability-based components, such as sustainable packaging, certifications, or ethical business practices. This implies that consumers are increasingly verifying environmental claims from a variety of sources of information, rather than just from an advertisement.

Nevertheless, the review also shows that green marketing does not capture all the purchase behaviour. Product quality, price, convenience and trust remain important in deciding. Accordingly, although green marketing has the potential to reinforce consumer interest and positive impressions, the potential to facilitate actual purchasing depends on the trustworthiness and truthfulness of the sustainability claims in the communication.

In conclusion, results of the present study indicate that green marketing positively influences consumers' engagement with sustainability, especially when environmental claims are substantiated by true deeds and open communication.

### **SUSTAINABLE PACKAGING AS A KEY INFLUENCE ON PURCHASE DECISIONS**

Sustainable packaging was identified as one of the key trends in the analyzed literature. Results suggest that consumers are placing what appears to be an increasing connection between recyclable, biodegradable and eco-friendly packaging and the responsible way of doing business. Information is the package in the FMCG industry; it shapes consumers' perception about quality of the products, environmental awareness and brand image.

The review also indicates that sustainable packaging improves purchase intentions through perceived environmental value. Nevertheless, environmental advantages are not enough to assure consumers acceptance. Factors including convenience, functionality, durability and cost still influence the purchase. Thus, sustainable packaging may be "most compelling when it delivers a product benefit as well as an environmental responsibility."

Overall, this study suggests that sustainable packaging has the potential to act as a powerful marketing instrument, helping to reconnect consumers with sustainability and deliver positive choice outcomes.

### **ECO-LABELS AND CERTIFICATIONS AS SIGNALS OF CREDIBILITY**

The results show that eco-labels and environmental certification are an effective instrument for mitigating consumer uncertainty about sustainability related information. Because environmental claims are difficult for consumers to verify on their own, eco-labels provide immediately recognizable signs of a product's environmental impact and guide consumers in their product choices.

The results indicate that green related trust and perceived authenticity are mediators of the effect of certification on the intention to purchase green products. On the whole, consumers were more trusting of sustainability claims when they were accompanied by known labels or third-party certification. Conversely, vague, general, or unknown labels had minimal impact on consumers' purchase decisions.

Results also show that the success of eco-labels is contingent on the level of consumer knowledge. Environmentally informed consumers tend to rely more on certifications when evaluating products. On the whole, it is safe to conclude that labels and certification show to be encouraging signals that enhance trust and promote environmentally friendly purchasing behaviour.

### **GREEN TRUST AND BRAND CREDIBILITY AS DRIVERS OF CONSUMER BEHAVIOUR**

Green trust and brand credibility were found to be the most important determinants of the impact on consumer reaction among green marketing instruments. The reviewed literature uniformly emphasized that consumers tend to advocate greener products when the sustainability assertions are perceived as authentic, transparent, and trustworthy. Trust reduces uncertainty and makes consumers feel more confident about their purchase decisions.

The results also indicate that green trust mediates the effect of green marketing on purchase behavior. Sustainability practices such as eco-labels, green packaging and environmental messaging had their impact enhanced when the brand issuing these messages was trusted. On the other hand, green marketing messages are often weakened in power due the lack of credibility, even if they promote genuine environmental benefits.

Generally, the evidence suggests that trust is not only an effect of green marketing, but rather a prerequisite for it. Brands so far which have shown consistency in practicing are more likely to build sustained consumer trust and drive continued sustainable purchase behaviour.

### **GREENWASHING AND CONSUMER SKEPTICISM: EMERGING CHALLENGES**

Significance of the greenwashing and consumer skepticism was found to have great impact to green marketing performance. The reviewed studies suggest that consumers tend to be more sceptical when assessing environmental claims, especially in cases where sustainability messages are overstated, ambiguous or unsupported by evidence. With increased consciousness of environmental concerns, consumers are increasingly focusing on whether the company's sustainability efforts are real or not.

Results indicate that perceived greenwashing has a negative impact on consumer trust, brand credibility, and purchase intention. Consumers are more skeptical about such products and may have negative brand perceptions as a result. This impairs not only green marketing effectiveness but also long-term consumer relationships. In general, these findings underline the need for more transparency and responsibility in sustainability communication. Environmental claims substantiated by sincere acts, coupled with reliable information, are likely to gain the trust of consumers, while greenwashing could potentially escalate public scepticism and undermine consumer confidence.

### **CONSUMER PURCHASE BEHAVIOUR AND THE ATTITUDE-BEHAVIOUR GAP**

From the results of the review, there is a long-standing discrepancy between consumers' favourable attitudes toward sustainability and their actual buying behaviour. However, many consumers who are concerned about environmental issues and who claim to support products with environmentally responsible packaging do not always buy such products. This discrepancy was identified as one of the most reported problems.

Results indicate that price, quality of products, ease of access, availability, and value for money are known to influence purchasing decisions, along with environmental factors. As such, while consumers may have a general preference for green products, they often end up buying non-green products when confronted with economic or practical limitations. The review further suggests the importance of trust and credibility in this regard, as a number of studies have shown that the gap is reduced with increased trust in the reliability of sustainability claims and consumers also tend to be more willing to act on their environmental preferences.

In general the evidence implies that promoting sustainable consumption is not the same as promoting environmental awareness. To convert positive attitudes into purchase behavior, companies need to address both the functional and emotional drivers behind consumer decision making.

## CONCLUSION

This systematic review integrated evidence of the impact of green marketing on consumer buying behaviour in the FMCG industry by analyzing 50 articles between 2015 and 2025. It underlines the increasing significance of sustainability in modern marketing and reveals that environmental aspects have become more and more embedded in consumer decision-making patterns.

As a result, green marketing tools, such as sustainable packaging, eco-labels, environmental certifications, green advertising, and green branding, significantly enhance consumer perception and contribute to sustainable consumption of consumers. Among these approaches, sustainable packaging rose to become one of the most conspicuous and efficacious substantive tools, most notably in the sector of fast moving consumer goods (FMCG), where the package normally visits the eye within a fleeting moment at the shelf. In the same way, eco-labels and certifications increased consumer trust as they act as trustworthy signals about a product's environmental performance.

The centrality of green trust and brand credibility in predicting successful outcomes of green marketing was also a prominent finding of the review. Consumers are progressively more prepared to pay for and consume such products as long as their sustainability assertions are seen as genuine, transparent and backed by real-life actions. Trust was also identified as a critical variable in connecting environmental marketing practices with customers buying behavior, which suggests organizations should distance themselves from symbolic sustainability rhetoric in general.

The review adds to the insight into the increasing challenge of greenwashing and skepticism amongst consumers. As claims about the environment become more common, consumers are taking a more skeptical view of communications related to sustainability. The claims were also detected to damage trust, to have a negative impact on purchase intentions and brand credibility. These results indicate that firms need to focus on transparency and accountability to enhance consumer trust and the effectiveness of green marketing strategies.

Yet another significant point is the persistence of the attitude-action gap. While ever more consumers show positive attitudes towards sustainability and being environmentally responsible, these attitudes do not invariably result in actual purchase behaviour. When purchasing, consumers are still influenced by non-environmental factors including price, quality, convenience, availability and perceived value in addition to environmental concerns. This suggests that sustainable consumerism promotion should embody an integrated solution considering environmental and consumer practical needs.

To sum up, the review suggests that the success of green marketing lies in more than just the promotion of the environmental attribute. Consumer trust and perceived credibility and authenticity of sustainability efforts are key determinants of purchasing behaviour. Given that sustainability is increasingly shaping market forces, those that 'walk the talk' by aligning environmental commitments with clear, transparent communication and relevant consumer value will likely be best positioned to build enduring consumer trust and drive the practice of sustainable consumption.

## FUTURE RESEARCH DIRECTIONS

The present systematic review provides several avenues for future research. First, further studies are required to analyze the combinatorial effect of the various green marketing tools, instead of focusing on single tools such as packaging, eco-labels, or advertising alone. A more holistic perspective would reveal how consumers process this information at the point of purchase.

Second, future research is encouraged to examine the purchase intention-behavior gap. Although many researches focus on consumers' intention toward green products, only few working directly on actual purchasing decisions. Behavioural and longitudinal research might contribute to explaining the intention-action-gap in the context of positive environmental attitudes and sustainable consumption.

Third, increasing concerns about greenwashing are also deserving of research attention. Future research could examine the way in which consumers recognize false environmental assertions, how skepticism emerges, and what communication strategies are most successful in regaining consumers trust.

Fourth, more focus is needed on the opportunities presented by emerging markets and developing countries, where awareness of sustainability issues may be less embedded in consumer habits than in the developed world. Cross-national and cross-cultural research may also deepen our understanding of green marketing strategies in a cultural diverse setting. Finally, future research could also explore the impact of digital technologies and social media platforms on consumers' perception of sustainability, as well as investigating how artificial intelligence and data-driven marketing may influence sustainability perceptions of consumers. With organizations increasingly dependent on digital to share their environmental efforts, it will be important to understand how these channels impact consumer trust and purchase behavior.

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