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Sustainable Marketing and the Greenwashing Dilemma: Consumer Trust, the Attitude-Behaviour Gap, and the Limits of Green Claims

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Abstract

Sustainability has moved from the fringes of corporate strategy to how companies present themselves, and with that shift has come a problem of credibility. As green claims proliferate across packaging and advertising, consumers are less sure what to believe. The commercial stakes are large: the NYU Stern Center for Sustainable Business reports that sustainability-marketed products now hold 18.5 per cent of the packaged-goods market it tracks and have grown far faster than conventional ones (Kronthal-Sacco & Whelan, 2024). Drawing on a survey of 241 Indian consumers and a review of the sustainability marketing and consumer psychology literature, this paper examines how consumers respond to green claims, what makes a claim credible rather than empty, how wide the gap is between professed environmental concern and actual purchasing, and how suspected greenwashing affects trust and willingness to pay a premium. The results suggest that consumers favour sustainable products in principle and will pay more for them, but that this support is fragile. Vague claims, a mismatch between a company's image and its core business, and a lack of verifiable evidence quickly erode trust, whereas specific, third-party-verified claims tied to tangible benefits are rewarded. Chi-square tests support both hypotheses. The paper argues that credibility is a currency in sustainable marketing: marketing can amplify the truth of a company's practices but cannot substitute for it, and the cost of overstating green credentials now reaches beyond reputation into legal and regulatory consequences. It closes with practical advice for marketers, small businesses, regulators and educators.

Keywords: *sustainable marketing, greenwashing, consumer trust, attitude-behaviour gap, green claims, consumer psychology, corporate responsibility*

1. INTRODUCTION

Sustainable, eco-conscious, made from recycled materials are words that now appear on packaging, in advertising and across corporate communications with a frequency that would have seemed remarkable a decade ago. The commercial logic is quite clear. Sales of consumer packaged goods touting sustainability in North America increased by more than thirty per cent in a recent five-year period, reaching figures estimated in the hundreds of billions of dollars, and such products have continued to take market share from conventional ones since (Kronthal-Sacco & Whelan, 2024). A clear majority of consumers say they would

pay more for products with sustainable packaging, and being perceived as good for the environment is, in short, profitable. But that profitability has come with a predictable side effect. Some firms will stick labels of commercial value on products and practices that do not deserve them, and the loss of trust that follows hurts honest and dishonest firms alike.

This is the world of greenwashing, the art of marketing a company or product as being more environmentally friendly than it really is. The phrase has been around for years but has grown in prominence as sustainability claims proliferate and regulators begin to take a closer interest. High-profile disputes, such as lawsuits over fast-fashion sustainability lines, and well-publicized corporate scandals involving emissions, have made consumers more aware that the green story they are hearing may not match what the company is actually doing. The tension is in the structure. A company might really want to behave more responsibly, but still be locked into a business model that is driven by the basic economics of high volume, low prices and fast turnover. Greenwashing tends to flourish in the space between the aspiration and the model. Sometimes it is deliberate deception and sometimes it is a more innocent overstatement that has outrun the substance behind it.

At the heart of the marketing question is a deeper economic question. The main problem sustainability tries to solve is the externality, the cost a business creates that it does not have to bear itself, but passes on to society, future generations or the environment. The balance sheets of a factory emitting greenhouse gases do not record the costs of the ensuing climate damage. Where a human cost is associated with the making of a garment in unsafe conditions of labour, that human cost is not built into the price the consumer pays. Sustainable marketing, at its most earnest, is an attempt to expose these hidden costs, and to reward those companies which internalise them, rather than those which continue to externalise them. In this context, greenwashing is a means of attempting to gain the reputational reward of internalising costs without actually internalising costs, which is exactly why it is corrosive.

There’s also a well-documented psychological puzzle at the heart of sustainable consumption. In surveys, consumers consistently express strong environmental concern, but some of the fastest growing brands on earth operate on models that are difficult to characterize as sustainable by any measure. This is the attitude-behaviour gap, the gap that is always there between what people say they value and what they actually buy. Understanding why this gap exists and what marketing can do and cannot do to narrow it, is essential to any honest account of sustainable marketing. The gap is not a sign of insincerity on the part of consumers; it is a sign that intention is trapped in a tangle of price barriers, convenience costs, information overload and the normal human tendency to rationalise inconsistency rather than resolve it.

The paper adopts a grounded perspective on these issues. It does not view sustainable marketing as an intrinsically good or an intrinsically bad activity. It considers it a powerful

set of practices whose value depends solely on the genuineness, verifiability and consistency of the claims being made with the organization's actual behavior. The objective is to explore how consumers respond to sustainability claims, how well they can differentiate between credible and empty claims, and how suspicion of greenwashing affects trust and willingness to pay. The structure of the paper is standard: literature review, objectives and hypotheses, research methodology and data analysis with chi square tests. It concludes with findings, implications for practice and directions for future research.

2. REVIEW OF LITERATURE

The conceptual basis for sustainable development is usually attributed to the Brundtland Commission (World Commission on Environment and Development, 1987) which defined sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs." This definition has endured precisely because it is broad enough to encompass both environmental and social concerns, but concrete enough to guide policy. It lays the ethical foundation for most of the work in the field that followed. It also supports the current corporate practice of mapping sustainability strategy to the United Nations Sustainable Development Goals, which have become a de facto standard of legitimacy for large companies, even though they were never intended to be a marketing checklist.

The awareness that economic growth has ecological limits is even older. The first serious attempt to model the consequences of applying an economic logic of unlimited growth to a finite planet was The Limits to Growth (Meadows, Meadows, Randers and Behrens, 1972). Its main conclusion – that continued growth of population and industrial production at then current rates would eventually outstrip the capacity of the Earth's systems – was controversial at the time and is still debated today. However, many of its broad projections have stood up well enough to keep the report in active discussion more than fifty years later. Recent work on planetary boundaries, in particular by Rockström et al. (2009), has sharpened this thinking by identifying specific environmental thresholds, including climate change, loss of biodiversity and land-system change, beyond which the risk of large and irreversible change rises sharply. The concept of tipping points and feedback loops (like releasing methane from melting permafrost) adds a sense of urgency to the conversation that linear models lack.

In terms of social considerations, Raworth's (2017) doughnut model has become one of the most influential recent frameworks. It combines an ecological ceiling, beyond which environmental degradation becomes dangerous, with a social foundation, below which people lack the essentials for a dignified life, including food, water, health care, education, and political voice. The safe and just space for humanity is in the ring between the two. The power of the model is in its integration: it argues that social development cannot be achieved by breaking through the ecological ceiling, and environmental protection cannot be achieved

when billions of people lack basic rights and resources. This framing is starting to influence policy, with some governments experimenting with wellbeing budgets that go beyond gross domestic product as the only measure of progress.

In marketing, especially in the field of sustainability marketing, a special conceptual apparatus has developed. In a common treatment, Belz and Peattie (2012) define sustainability marketing as the creation and maintenance of sustainable relationships with customers, the social environment and the natural environment. They point to several unique elements that distinguish it from traditional green marketing, including a long-term rather than a transactional focus, a commitment across the whole organisation rather than a stand-alone marketing initiative, a genuine market orientation that is sensitive to changing social and environmental expectations, and a systemic mode of thinking that considers not just the impact of a single product but the broader socio-ecological system that an industry influences. It's a good framing because it sets a high bar: marketing is not really sustainable unless operations, supply chains and finance are also aligned behind it.

There is a large body of literature on consumer segmentation in the sustainability space. A key example is the Lifestyles of Health and Sustainability (LOHAS) model, which describes a large market segment and divides consumers into groups ranging from a committed core, for whom sustainability is integrated into every area of life, through health-oriented naturalites, trend-sensitive drifters, and cost-sensitive conventionals, to an unconcerned group who are better reached through defaults and convenience than persuasion. A similar typology from Roper green-gauge provides a parallel spectrum of profiles, from the passionate true-blue greens to the sceptical grousers and disengaged basic browns. The voluntary simplifiers are a segment that has been emphasised more recently. They are characterised by a deliberate decision to consume less, not because of financial need but because they believe that accumulation does not necessarily lead to wellbeing. These frameworks share one core insight: there is no single sustainable consumer, and a strategy that ignores the diversity of motivation, capability and behaviour will fail to reach most of the people it targets.

The attitude–behaviour gap has been reported in many studies. Carrington, Neville and Whitwell (2010) investigated the reasons that consumers' expressed ethical intentions rarely result in ethical purchases, and identified a variety of situational and psychological factors mediating the relationship between intention and behaviour. Their work, and earlier studies, highlights a number of common barriers: the price premium that sustainable products often carry, even when their life-cycle costs are lower; the extra effort that the sustainable option often demands; information overload, meaning that cognitively economical consumers turn to heuristics rather than careful consideration; cognitive dissonance, which people resolve by rationalising inconsistency rather than changing behaviour; and moral licensing, the tendency to treat a good act as permission for a subsequent indulgence. The first and essential step in designing around barriers is to understand them.

The behavioural tools to close the gap have been widely explored. Cialdini's work on social norms (2007) demonstrated that descriptive norms (what other people actually do) and injunctive norms (what people approve of) can be more powerful in changing behavior than most persuasive messages. A famous series of studies on hotel towels, replicated many times, found that guests were more likely to reuse their towels if told that other guests did so and even more likely if the comparison group was narrowed to previous guests in the same room; this is an example of the effect being stronger for a reference group that is closer and more similar. Thaler and Sunstein (2008) showed that the default option, such as the standard rather than the exception of a plant-based option, can produce sizable shifts without limiting choice, and that default effects tend to be more effective than persuasion because they work even when consumers are not thinking carefully.

Also, the framing of sustainability messages has been taken into account. Loss aversion research, dating back to the seminal work of Kahneman and Tversky (1979), suggests that messages framed as avoiding a loss (e.g., the money wasted each year by a poorly insulated home) tend to be more effective than messages framed as an equivalent gain. One important mediator has been the idea of perceived consumer effectiveness, the belief that one's own actions actually make a difference. The more people believe that what they do makes a difference, the more inclined they are to do something. That's why campaigns that make a purchase into something tangible and observable—like a certain number of trees planted or a quantifiable amount of plastic removed from the ocean—tend to outperform vague appeals to environmental virtue.

Greenwashing itself has become a subject of study. Delmas and Burbano (2011) analysed its drivers, differentiating between external pressures (e.g. consumer and investor demand) and internal factors (e.g. incentive structures and organisational politics) and noting that the limited penalties historically attached to greenwashing made it an attractive shortcut. Lyon and Montgomery (2015) extended this work with a review of the different types of greenwashing and the conditions under which it is most likely to occur. A common theme in this literature is the gap between a firm's stated image and its fundamental practices, as evidenced by examples where a small, well-publicised sustainable product line is part of a much larger business whose overall model is still environmentally costly. The literature also notes a changing regulatory environment, where advertising authorities and competition regulators in a number of jurisdictions are starting to require that environmental claims be substantiated with evidence and, in some proposals, independently verified.

Finally, a strand of work has looked at the corporate governance dimension of sustainability, which has a direct bearing on the credibility of green claims. Supporting the business case for sustainability, Eccles, Ioannou, and Serafeim (2014) provided evidence that firms that embed sustainability in their governance and strategy outperform comparable firms over the long

term. At the same time, more recent commentary has also highlighted the structural barriers that prevent companies from delivering on their stated commitments, including the fallacy of parallel tracks, whereby a chief sustainability officer is given accountability without real authority and where commercial performance and sustainability performance are tracked and rewarded through entirely separate systems. Where governance fails to marry the two, the gap between what a company says and does tends to widen, and the temptation to close that gap through communication rather than action correspondingly grows.

More recent work, much of it published between 2023 and 2025, has shifted attention towards the digital settings in which green claims now circulate and towards the brand-level consequences of being caught out. As sustainability messaging has migrated onto social media and into ESG communication aimed at investors as much as shoppers, researchers have begun to track how digital exposure shapes both greenwashing and the scrutiny of it. Ren, Wu and Hou (2024), for instance, find that heightened social-media attention is associated with more corporate greenwashing rather than less, as firms feel pressure to be seen to act before they have the substance to show for it. On the demand side, Sajid, Zakkariya, Mohd Suki and Ul Islam (2024) document that perceived greenwashing does not merely dent trust but actively drives brand avoidance and negative word-of-mouth, a more punishing reaction than quiet disengagement. This recent literature reinforces a theme that runs through the older work, that the penalty for an exposed false claim is asymmetric, falling harder and faster than the reward for an honest one, and it carries that theme into the faster-moving and more public arena of digital communication.

Because the present study draws on Indian respondents, the small but growing body of work on greenwashing in the Indian market is directly relevant. Jog and Singhal (2020), using structural equation modelling with Indian consumers, show that consumers' understanding of greenwashing moderates the link between receptivity to green advertising and green purchase behaviour, so that more aware consumers are less easily swayed by green appeals; their work also notes that many Indian advertisements project a superficial green image without substantive evidence to support it. More recent evidence in a similar vein, drawn from a multi-country study led from an Indian institution, finds that perceived greenwashing erodes brand attitude and consumption, and that environmentally knowledgeable consumers react most sharply (Rehman, Kumar, Alghafes, Broccardo & Patel, 2025). The regulatory context has moved in parallel: the Advertising Standards Council of India (2024) introduced guidelines on environmental and green claims, effective in early 2024, that require such claims to be accurate, adequately substantiated and not misleading. Taken together, this evidence suggests that the patterns documented in Western markets, namely conditional support for sustainability, sensitivity to verification and a sharp penalty for exposed deception, are broadly echoed among Indian consumers, even as they are shaped by a distinct media and regulatory environment.

The literature, tying the threads together, provides fairly clear accounts of the ecological and social rationale for sustainability, the diversity of sustainable consumers, the persistence of the attitude-behaviour gap, the behavioural tools that could be used to narrow it, and the drivers and forms of greenwashing. What is less mapped is how consumers themselves, in their own descriptions, assess the credibility of green claims and how they balance price against principle in their actual purchasing; and how the suspicion of greenwashing reshapes their trust in brands. In this paper we make a modest contribution to that gap by foregrounding the perceptions of a sample of consumers as they describe their responses to sustainability marketing and their reactions to the possibility that the claims they encounter are not entirely honest.

3. OBJECTIVES OF THE STUDY

- To examine how consumers respond to sustainability marketing claims and what factors shape the perceived credibility of those claims.
- To evaluate the relationship between suspected greenwashing and consumer trust, brand evaluation, and willingness to pay a sustainability premium.

4. HYPOTHESES

- H1: The perceived credibility of sustainability claims significantly influences consumer trust and purchase intentions.
- H2: Suspected greenwashing significantly influences consumer trust, brand evaluation, and willingness to pay a sustainability premium.

5. RESEARCH METHODOLOGY

The study is quantitative research that includes a focused literature review. Primary data were collected through a structured questionnaire completed by 241 consumers who had purchased, or considered purchasing, products marketed on the basis of environmental or social sustainability within the past twelve months. The sample was recruited through a combination of professional networks, university alumni groups and snowball sampling, with an attempt to include consumers of different ages, income levels and levels of stated environmental concern. Respondents were drawn from India, predominantly from urban and peri-urban centres including Pune and Mumbai in Maharashtra, with smaller numbers from other metropolitan areas, so the sample reflects the more affluent, connected and brand-exposed end of the Indian consumer market rather than the country as a whole. Of roughly 330 people invited, 241 returned usable responses, an effective response rate of about 73 per cent. The achieved sample skewed somewhat urban and somewhat younger, with a little over half aged between 25 and 40, a near-even split between men and women, and a spread of monthly household incomes from lower-middle to upper-middle bands; levels of stated environmental concern ranged from high to indifferent. This profile is consistent with the

broader picture of sustainability-conscious consumers reported in market research, in which urban, younger and better-educated buyers are over-represented, and it is a feature of the sample that should be kept in mind when interpreting the results.

The questionnaire was designed using five-point Likert scales ranging from firmly disagree to firmly agree. Two scales were developed. The first measured responses to sustainability marketing and the factors that shape perceived credibility, including items on willingness to pay a premium, the importance of independent verification, the role of specific versus vague claims, and the gap between expressed concern and actual purchasing. The second measured the effects of suspected greenwashing on trust, brand evaluation, and the willingness to continue paying a premium once doubts had arisen. Items were adapted from established instruments in sustainability marketing and consumer behaviour literature to the local context. Before finalisation, the instrument was reviewed by three academic reviewers and two marketing practitioners, with minor changes to wording to improve clarity. This expert review provided a check on content and face validity, confirming that the items covered the intended constructs and read clearly to ordinary consumers. The internal consistency of the two scales was assessed using Cronbach's alpha. Both were satisfactory, with the credibility-of-claims scale returning an alpha of .83 and the suspected-greenwashing scale an alpha of .86, each comfortably above the conventional threshold of .70 and indicating that the items within each scale cohere well.

Data were analysed using descriptive statistics and nonparametric tests. Chi-square goodness-of-fit tests were used to determine if the distributions of responses were significantly different from the uniform pattern expected if the items did not discriminate between agreement and disagreement. All tests are carried out at the 95 per cent confidence level. The study followed standard ethical procedures for survey research. Participation was voluntary, and the questionnaire began with a brief statement explaining the purpose of the study, how the data would be used and the respondent's right to withdraw before submission; respondents indicated their informed consent before proceeding. Respondents were assured anonymity and confidentiality, and no personally identifiable purchase or financial information was collected. Responses were stored securely and used only in aggregate for research purposes. The small sample size and cross-sectional design prevent causal inference and generalization beyond the surveyed population. Therefore, the results should be seen as descriptive of the sample and indicative of the broader discussion, but not as conclusive evidence about all consumers. The data are sufficient, despite these limitations, to identify the general patterns that the study seeks to describe.

6. DATA ANALYSIS

6.1 Consumer Responses to Sustainability Marketing and the Credibility of Green Claims

Table 1. Consumer responses to sustainability marketing and the credibility of green claims.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am willing to pay more for a product that is genuinely produced in an environmentally responsible way.	12 (5.0%)	16 (6.6%)	22 (9.1%)	88 (36.5%)	103 (42.7%)
I trust a sustainability claim more when it is backed by independent, third-party verification.	8 (3.3%)	11 (4.6%)	18 (7.5%)	86 (35.7%)	118 (49.0%)
Vague claims such as 'eco-friendly' or 'green' mean little to me unless supported by specific evidence.	10 (4.1%)	14 (5.8%)	21 (8.7%)	84 (34.9%)	112 (46.5%)
I am more convinced by a claim that ties sustainability to a tangible benefit, such as trees planted or plastic removed.	11 (4.6%)	17 (7.1%)	26 (10.8%)	90 (37.3%)	97 (40.2%)
I often express concern for the environment but still buy products that are not the most sustainable option.	14 (5.8%)	22 (9.1%)	29 (12.0%)	95 (39.4%)	81 (33.6%)

A large majority of respondents — some seventy-nine per cent — agree or strongly agree that they are willing to pay more for products that are truly produced in an environmentally responsible way. The strongest single endorsement, at around eighty-five per cent, is for the importance of independent third-party verification. Eighty-one per cent agree that broad terms such as eco-friendly or green mean little without specific supporting evidence. Some seventy-three per cent openly acknowledge that they often express concern about the environment but still buy products that are not the most sustainable option — a remarkably frank confirmation of the attitude-behaviour gap. The full distribution of these responses is shown in Figure 1.

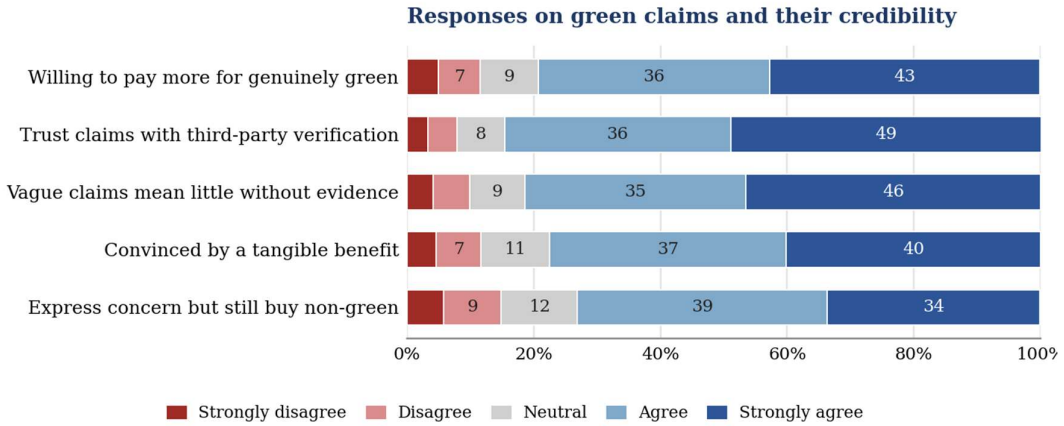

Figure 1. Distribution of consumer responses on green claims and their credibility (percentage of respondents).

6.2 The Effects of Suspected Greenwashing on Consumer Trust and Behaviour

Table 2. The effects of suspected greenwashing on consumer trust and behaviour.

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My trust in a brand drops sharply if I discover that its sustainability claims were exaggerated or misleading.	7 (2.9%)	10 (4.1%)	16 (6.6%)	84 (34.9%)	124 (51.5%)
A company that markets a small 'green' product	9 (3.7%)	13 (5.4%)	24 (10.0%)	91 (37.8%)	104

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
line while its main business remains harmful is engaging in greenwashing.					(43.2%)
I would stop paying a price premium for a brand once I suspected it of greenwashing.	11 (4.6%)	15 (6.2%)	27 (11.2%)	92 (38.2%)	96 (39.8%)
Distant target dates with no interim milestones make me doubt the seriousness of a company's environmental goals.	10 (4.1%)	14 (5.8%)	28 (11.6%)	95 (39.4%)	94 (39.0%)
I believe regulators should require companies to substantiate their environmental claims with evidence.	8 (3.3%)	10 (4.1%)	17 (7.1%)	82 (34.0%)	124 (51.5%)

The most strongly endorsed item is that trust in a brand declines sharply when its sustainability claims are found to be exaggerated or misleading, with around eighty-six per cent agreeing. An equally strong response is given to the regulatory item, with eighty-six per cent agreeing that companies should be required to provide evidence to back up their environmental claims. Some eighty-one per cent recognise the structural form of greenwashing — a small green product line alongside a harmful core business — and seventy-eight per cent say they would stop paying a premium once greenwashing is suspected. This is where the reputational cost of greenwashing becomes a direct commercial cost. Figure 2 shows the full distribution of these responses.

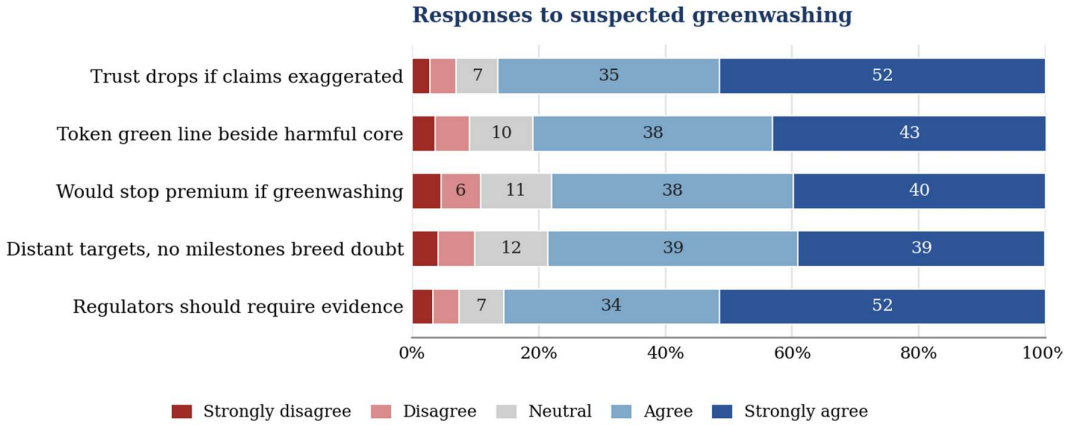

Figure 2. Distribution of consumer responses to suspected greenwashing (percentage of respondents).

7. HYPOTHESIS TESTING

H1: The perceived credibility of sustainability claims significantly influences consumer trust and purchase intentions.

Table 3. Chi-Square Test Statistics for H1.

Statement	Chi-Square (χ^2)	df	Asymp. Sig.
I am willing to pay more for a product that is genuinely produced in an environmentally responsible way.	148.726	4	.000
I trust a sustainability claim more when backed by independent,	201.349	4	.000

Statement	Chi-Square (χ^2)	df	Asymp. Sig.
third-party verification.			
Vague claims such as 'eco-friendly' or 'green' mean little to me unless supported by specific evidence.	183.512	4	.000
I am more convinced by a claim that ties sustainability to a tangible benefit.	139.804	4	.000
I often express concern for the environment but still buy products that are not the most sustainable option.	112.487	4	.000

The chi-square values range from about one hundred and twelve to two hundred and one, all highly significant at the one per cent level. The third-party verification item has the highest value, and it is also the item with the strongest concentration of agreement. The tests indicate that the response patterns are not consistent with chance and provide statistical support for H1. The single most valuable thing a company can do to make a green claim credible is to have it independently confirmed, whether through a recognised certification, a third-party audit or transparent and checkable data.

H2: Suspected greenwashing significantly influences consumer trust, brand evaluation, and willingness to pay a sustainability premium.

Table 4. Chi-Square Test Statistics for H2.

Statement	Chi-Square (χ^2)	df	Asymp. Sig.
My trust in a brand drops sharply if I discover that its sustainability claims were exaggerated or misleading.	218.473	4	.000
A company that markets a small green product line while its main business remains harmful is greenwashing.	162.915	4	.000
I would stop paying a price premium for a brand once I suspected it of greenwashing.	138.226	4	.000
Distant target dates with no interim milestones make me doubt the seriousness of environmental goals.	131.547	4	.000
I believe regulators should require companies to substantiate their environmental claims with evidence.	210.892	4	.000

The chi-square values range from about one hundred and thirty-one to two hundred and eighteen, all significant at the one per cent level. The item about a sharp drop in trust after discovered exaggeration has the highest value, confirming that consumers feel decisively about this. Notably, the punishment items in this hypothesis produce even higher chi-square values on the whole than the reward items in H1, consistent with the broader literature on trust which suggests that trust is more difficult to build than to break. The tests provide strong support for H2.

8. FINDINGS

Several findings are clear from the analysis. Consumers are, by and large, willing to pay a premium for sustainable products, but that this willingness is conditional on the credibility of the claims made. Some 79 per cent of respondents say they will pay more for products that are truly sustainable. About 85 per cent value independent verification highly, while some 81 per cent discount vague green language that is not backed up by specific evidence. The

commercial potential of sustainability marketing is thus real, but only to companies whose claims are strong enough to withstand scrutiny.

A second finding is that consumers themselves openly admit the attitude-behaviour gap. Seventy-three per cent of respondents confess to voicing concern about the environment but at the same time continue to buy products that are not the most sustainable choice. This honesty is valuable in that it correctly identifies the problem. The challenge of sustainable consumption is not a lack of concern but the price premiums, convenience costs and cognitive burdens that lie between intention and purchase. Marketing that simply tries to persuade consumers to care more, without addressing these barriers, is unlikely to succeed; marketing that designs around them, using verified claims, tangible benefits, sensible defaults and effective framing, has a much better chance.

The third result concerns the size and symmetry of the greenwashing penalty. Around eighty-six per cent of respondents say their trust in a brand decreases when its sustainability claims are revealed to be false, while seventy-eight per cent say they'd cease to pay a premium if they suspect greenwashing. Overall, the chi-square values associated with these punishment items are higher than those associated with the reward items, indicating that consumers hold even stronger convictions about greenwashing than they do about authentic sustainability. Consumers also recognise the structural form of greenwashing, with around eighty-one per cent seeing the promotion of a small green line next to a harmful core business as such, and they are rightly sceptical of distant target dates without interim milestones.

The findings, taken together, present a coherent picture. Consumers want sustainability, are prepared to pay for it and have developed fairly sophisticated tools for distinguishing genuine claims from empty ones. They reward authenticity, verification and specificity and they punish vagueness, mismatch and discovered deception, the punishment outweighing the reward. The strong support for regulatory substantiation requirements suggests that consumers would like some external help to tell honest from dishonest claims. This in turn suggests that the regulatory tightening now underway in several jurisdictions is largely in line with public expectations rather than ahead of them.

9. DISCUSSION AND IMPLICATIONS

The main message of the study, in line with the existing literature, is that credibility is a currency in sustainable marketing. Marketing can amplify the truth of a company's environmental and social practices and doing so can bring real commercial reward, but marketing cannot create a truth that does not exist. If the image a company sets out to project is greater than its actual behavior, the difference becomes a liability rather than an asset, and the data here suggest that consumers are increasingly well-positioned to identify and punish

that difference. That is not a reason for companies to shy away from making sustainability claims; it is a reason to make sure the claims they do make are claims they can stand behind.

Marketers face a number of implications. The first is to replace vague green language with specific, evidenced and preferably independently verified claims. A precise statement, which a sceptical consumer can check, is worth far more than a reassuring adjective, which they cannot. Secondly, where possible sustainability messages should be linked to a tangible and visible benefit, as the data confirms that consumers respond to a sense that their action makes a measurable difference. The third is that the structural integrity of the claim matters: promoting a marginal sustainable product line while leaving a harmful core business untouched is a recognisable and heavily penalised form of greenwashing, and not one that consumers are fooled by. It is probably better for trust that is more durable to be honest about where a company is on the journey of sustainability, including what it has not yet achieved, than to tell an overstated story of virtue achieved.

The practical conversation that motivated this study has implications that are somewhat different in emphasis but similar in substance for small businesses, an important part of the context. Small businesses are less likely to be able to afford the resources for complex sustainability programmes, but they are less hampered by the structural contradictions that plague large companies whose core business models are hard to reconcile with their green message. Small businesses can embed sustainability in their model from the start and use targeted, credible signals – including industry-specific certifications and recognised standards – to communicate their commitments without overclaiming. The decision to invest in a formal third-party certification is a real trade-off between cost and credibility and should be made deliberately, not reflexively, paying attention to which certification, if any, truly fits the business and its customers.

These implications also play out differently from one industry to the next, and it is worth drawing out a few sector-specific contrasts. In fashion and fast fashion, where sustainable lines often sit inside a high-volume, low-price model, the structural form of greenwashing that respondents recognised so readily, a small green range beside a harmful core, is especially exposed, and the credible move is to report on the mainstream range rather than to spotlight a token capsule collection. In fast-moving consumer goods, food and personal care, claims tend to be made at the level of the individual product and the label, so recognised certifications and specific, checkable attributes do most of the work; this is the setting in which third-party verification, the single most valued cue in the data, pays off most directly, and it is also where Indian regulatory attention has fallen most heavily. In energy, automotive and other heavy industries, the credibility battleground is the long-dated net-zero pledge, and the data are clear that distant target dates without interim milestones invite suspicion, so near-term, verifiable commitments matter more than headline ambitions for a date two decades away. In financial services, where ESG funds and green labels have drawn particular

regulatory and journalistic scrutiny, the same logic applies to the labelling of products as to their marketing. The common thread is that the credibility test is constant across sectors, but the specific claims most at risk, and the verification that best answers them, vary with the industry's structure.

The findings provide regulators with a picture of public expectations that is well aligned with the path of recent policy. Respondents' strong support for requiring companies to substantiate their environmental claims with evidence mirrors the substance of recent proposals in several jurisdictions to require verification of green claims and to penalise deceptive environmental marketing. The overall public mandate appears quite stable. For regulators, the problem is less the principle, but the practical work of defining what counts as adequate substantiation, making sure that verification is genuinely independent, and calibrating penalties so that greenwashing carries a cost commensurate with the harm it does to consumer trust and to honest competitors.

The findings suggest to educators that sustainability marketing should be seen as a discipline where ethics and effectiveness are not separable but as a set of persuasion techniques. Students preparing to work in marketing will be working in an environment where green claims are scrutinised by consumers, journalists, activists and regulators, and where the cost of overstatement is rising. They will benefit more from education that develops the ability to make credible, evidence-based claims, to recognise the structural conditions that produce greenwashing, and to understand the psychology of the attitude-behaviour gap than from education focused narrowly on the mechanics of green advertising. The marketers of tomorrow will need to be as fluent in verification and substantiation as in storytelling.

10. CONCLUSION

This paper examines the relationship between sustainable marketing, consumer trust and greenwashing, based on empirical data from a survey of 241 consumers and an extensive literature review on sustainability marketing, consumer psychology and corporate responsibility. The findings show consumers are generally willing to support and pay for sustainable products, that this willingness is conditional on the credibility of the claims being made, that the attitude–behaviour gap is real and openly acknowledged, and that suspected greenwashing causes severe and asymmetric damage to trust and to willingness to pay. The response distributions differ significantly from chance as indicated by chi-square tests, providing statistical support for both hypotheses. The patterns identified are consistent with key findings of the sustainability marketing tradition but also reflect the increased scrutiny that green claims are now facing.

In short, the paper has attempted to argue that authenticity is not a soft or optional feature of sustainable marketing but its core requirement. Sustainability can be a real growth driver but

only when it is authentic, verifiable and matching the company's real behaviour. Trust in this domain is fragile. The potential gains of a credible green claim are countered by, and in the data here outweighed by, the potential losses of a discovered hollow one. And as the regulatory environment tightens, and consumers become more discerning, the old shortcut of telling a green story with no green substance is becoming not just ineffective, but actively dangerous. The winners will be those who do the work underneath first and let their marketing describe what is really there.

Some limitations of the study should be noted. The sample size is small and biased towards urban, younger and relatively environmentally aware respondents limiting generalisation. The cross-sectional design means that the findings are correlational, not causal. The instrument is based on self-reported perceptions, which are subject to the usual risks of social desirability bias. This risk is particularly acute in a domain where respondents may want to appear more environmentally conscious than their behaviour warrants. It is reassuring to see a frank admission of an attitude–behaviour gap in the data here, but this does not remove the concern. Future work would benefit from longitudinal designs, larger and more representative samples, and mixed-method approaches that combine survey responses with observations of actual purchasing behaviour.

There are a number of specific directions for future research worth flagging. We need to study this interplay of cultural context and the effectiveness of sustainability messages in more depth. A green claim that works in a market that emphasizes long-term frugality will have a very different impact in a market that emphasizes individual benefit or collective identity. The role of social norms and identity signalling in the diffusion of sustainable consumption, barely touched upon in the literature review, deserves dedicated empirical attention. As substantiation requirements transition from proposal to practice in different jurisdictions, the effectiveness of particular regulatory interventions will be a key area to watch. Comparative work across firm sizes, contrasting the credibility challenges faced by small businesses with those faced by large corporations whose core models are difficult to reconcile with their green messaging, would also be of value.

In sustainable marketing, the truth is the strategy and any communication that tries to out-run it will eventually be caught. That is the sentence that sums up the argument, if there is one. The data here show that consumers are already doing the sorting, with a discrimination sometimes underestimated in public debate. Helping companies meet that discernment honestly, through better marketing practice, better governance, better regulation and better education is the practical agenda that this paper hopes to support.

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