

Customer Attitude towards Sustainability and Its Effect on the Intention to Buy an Electric Vehicle a Conceptual and Empirical Review of Green Consumer Behaviour in the Electric Vehicle Market

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Abstract:

The transition from internal combustion engine vehicles to electric vehicles (EVs) is widely regarded as one of the most visible manifestations of sustainable consumption in the transportation sector. While governments and manufacturers have invested heavily in charging infrastructure, subsidies, and product development, the ultimate diffusion of EVs depends on individual consumers choosing to purchase them. This paper examines how customer attitude towards sustainability shapes the intention to buy an electric vehicle. Drawing on the Theory of Planned Behaviour, Value-Belief-Norm theory, and the growing body of empirical literature on green consumer behaviour, the paper develops a conceptual model in which environmental concern, perceived environmental knowledge, and green attitude act as antecedents of purchase intention, with economic perception, social influence, and perceived behavioural control operating as complementary and moderating factors. A structured review of recent studies from South Korea, China, Pakistan, Egypt, and Europe is synthesised to identify convergent findings and unresolved debates. The review finds that sustainability-oriented attitude is consistently one of the strongest predictors of EV purchase intention, but that its influence is conditioned by cost sensitivity, range anxiety, charging infrastructure, and trust in green marketing claims. The paper concludes with a proposed survey-based methodology for empirically testing the model, along with managerial and policy implications for automakers, marketers, and regulators seeking to accelerate sustainable mobility adoption.

Keywords: Sustainability; electric vehicles; consumer attitude; purchase intention; green consumer behaviour; Theory of Planned Behaviour; environmental concern; sustainable consumption

1. Introduction

Climate change, urban air pollution, and the depletion of fossil fuel reserves have pushed sustainability from the margins of corporate strategy to the centre of consumer decision-making. Transportation is one of the largest contributors of global greenhouse gas emissions, and passenger vehicles account for a significant share of that total. Electric vehicles (EVs) have therefore emerged as a flagship technology in the broader movement towards decarbonisation, offering a tangible way for individual consumers to reduce their personal carbon footprint while still meeting their mobility needs. Unlike many sustainability initiatives that require consumers to sacrifice convenience, EV ownership is marketed as a solution that combines environmental responsibility with technological sophistication, lower running costs, and, increasingly, comparable or superior driving performance to conventional vehicles.

Despite considerable policy support in the form of purchase subsidies, tax exemptions, and investment in charging networks, global EV adoption remains uneven across markets and continues to lag behind the ambitious targets set by many governments. This gap between policy intention and market reality suggests that infrastructural and financial incentives alone are insufficient to drive adoption; consumer psychology, and specifically the attitudes that consumers hold towards sustainability, play a decisive role in shaping the intention to purchase an EV. Attitude, in the classic sense used by consumer behaviour researchers, refers to a person's overall evaluation of an object, behaviour, or outcome, formed from beliefs about its consequences. When that

evaluation is favourable towards environmentally responsible consumption, it is commonly described as a pro-environmental or sustainability-oriented attitude.

The relationship between sustainability attitude and EV purchase intention is theoretically appealing but empirically complex. On one hand, a growing segment of consumers reports genuine concern for the environment and a willingness to pay a premium for green products. On the other hand, purchase decisions for a high-involvement, high-cost product such as a vehicle are shaped by a wide array of competing considerations, including price, driving range, charging convenience, resale value, brand reputation, and social norms. Consumers who hold strongly favourable attitudes towards sustainability do not automatically translate those attitudes into purchase behaviour, a phenomenon widely documented in the sustainable consumption literature as the attitude-behaviour gap or the green gap.

This paper addresses three specific objectives. First, it reviews and synthesises the existing empirical literature on the relationship between sustainability-related attitudes and EV purchase intention across diverse geographic and cultural contexts. Second, it develops an integrated conceptual framework that situates sustainability attitude alongside other established predictors of purchase intention, namely environmental concern, perceived economic benefit, social influence, and perceived behavioural control, within the structure of the Theory of Planned Behaviour. Third, it proposes a research methodology through which the conceptual model can be empirically tested, and discusses the practical implications of the findings for automobile manufacturers, marketers, and policymakers who seek to accelerate the transition to sustainable mobility. The paper is organised as follows: Section 2 reviews the relevant literature; Section 3 presents the conceptual framework and hypotheses; Section 4 outlines the proposed methodology; Section 5 discusses the synthesised findings; Section 6 considers managerial and policy implications; Section 7 notes limitations and directions for future research; and Section 8 concludes.

2. Literature Review

2.1 Sustainability and Green Consumer Behaviour

Sustainable consumption refers to the use of goods and services that minimise environmental impact while meeting present needs without compromising the ability of future generations to meet their own needs. Over the past two decades, sustainable individual consumption has grown substantially, prompting increasing global attention to environmental protection and encouraging researchers to examine the psychological drivers of green purchase behaviour more closely. Green purchase intention is generally conceptualised as a consumer's preference for eco-friendly products over conventional alternatives, driven by underlying green beliefs, emotions, and attitudes. Within this broader literature, the automobile sector has attracted particular attention because vehicles are simultaneously a major source of household emissions and a highly visible, identity-expressive purchase.

Researchers studying green consumer behaviour generally agree that attitude functions as a proximal predictor of intention, mediating the effect of more distal beliefs such as environmental concern, perceived consumer effectiveness, and ecological knowledge. In the specific context of electric vehicles, this means that a consumer's general concern about environmental degradation must first be translated into a favourable evaluation of EVs as a solution before it meaningfully affects purchase intention. Several studies have shown that this translation is not automatic and depends on the extent to which consumers believe that adopting an EV will produce a genuine environmental benefit, as opposed to being a symbolic or marginal gesture.

2.2 Attitude and the Theory of Planned Behaviour

The Theory of Planned Behaviour (TPB), developed by Icek Ajzen, remains the dominant theoretical lens for explaining EV purchase intention in the consumer behaviour literature. TPB proposes that behavioural intention is jointly determined by three constructs: attitude towards the behaviour, subjective norms, and perceived behavioural control. Attitude captures the individual's overall positive or negative evaluation of performing the behaviour, in this case, purchasing an EV. Subjective norms reflect the perceived social pressure from family, peers, and reference groups to perform or not perform the behaviour. Perceived behavioural control reflects the

individual's perception of how easy or difficult the behaviour is to perform, which in the EV context is closely tied to affordability, availability of charging infrastructure, and confidence in the technology.

Empirical applications of TPB to the EV domain consistently find that attitude is a statistically significant, and often the strongest, predictor of purchase intention, ahead of subjective norms and perceived behavioural control. Researchers have also extended the base TPB model by incorporating environmental concern as an antecedent that shapes all three TPB constructs simultaneously, on the logic that a consumer who is more concerned about the environment will not only hold a more favourable attitude towards EVs but will also perceive greater social pressure to adopt them and greater personal capability to do so. Studies applying this extended model with structural equation modelling and confirmatory factor analysis have found that environmental concern significantly influences attitude, subjective norms, perceived behavioural control, and sustainable consumption intention among prospective EV buyers, lending strong support to the view that sustainability orientation operates both directly and indirectly on purchase intention.

Beyond the classical TPB constructs, several studies have incorporated a utilitarian-hedonic distinction into the attitude construct itself, recognising that consumers evaluate EVs not purely on functional or environmental grounds but also on emotional and experiential dimensions. Research on hybrid and electric vehicle purchase intention in South Asian markets has found that consumer attitudes and intentions are significantly influenced by perceptions of both utilitarian value, such as fuel savings and reliability, and hedonic or emotional value, such as the pleasure, novelty, and social prestige associated with owning a technologically advanced, environmentally conscious vehicle. This dual-attitude structure suggests that sustainability messaging alone may be insufficient to move consumers toward purchase; pairing environmental appeals with emotionally engaging brand experiences appears to strengthen the attitude-intention link.

2.3 Environmental Concern, Knowledge, and Purchase Intention

Environmental concern, defined as the degree to which individuals are aware of and worried about environmental problems and supportive of efforts to solve them, is one of the most frequently studied antecedents of EV adoption. A large-scale South Korean study surveying fifteen hundred potential consumers found that, among a range of attitudinal attributes, environmental and economic perceptions concerning EV use were the strongest predictors of purchase intention, while technological concerns exerted a negative influence on the decision to purchase. This finding is echoed by research conducted in China, Egypt, and several European markets, which consistently identifies environmental attitude as a leading driver of intention, generally outperforming demographic variables such as age, income, and education in predictive power.

However, the strength of the environmental concern-intention relationship is not uniform across studies, and several researchers have cautioned that concern for the environment, when measured as a general disposition rather than a product-specific belief, can be a relatively weak and inconsistent predictor unless it is channelled through more specific beliefs about the environmental performance of EVs themselves. A widely cited European study involving in-depth interviews and real-world test drives with a plug-in battery electric vehicle found that the perceived environmental performance of the EV was a stronger predictor of consumer attitude, and thus of purchase intention, than either price value or range confidence, suggesting that when consumers can directly experience and verify the environmental credentials of an EV, sustainability becomes an even more powerful determinant of intention than cost-related concerns.

Environmental knowledge, encompassing both general ecological literacy and specific knowledge about EV technology, charging requirements, and lifecycle emissions, has also been shown to moderate the attitude-intention relationship. Consumers with limited product knowledge often express uncertainty and scepticism about the true environmental benefits of EVs, particularly regarding the source of electricity used for charging and the environmental costs of battery production and disposal. This uncertainty can weaken an otherwise favourable sustainability attitude, underscoring the importance of transparent communication and education as complements to environmental appeals in marketing strategy.

2.4 Economic and Technological Perceptions

While sustainability attitude is a central focus of this review, the literature is unanimous in finding that it operates alongside, rather than in isolation from, economic and technological considerations. High acquisition costs, limited driving range, inadequate charging infrastructure, and concerns about battery longevity and resale value are repeatedly identified as barriers that can suppress purchase intention even among consumers who hold strongly favourable attitudes towards sustainability. Total cost of ownership, which accounts for fuel or electricity savings, maintenance costs, and available subsidies over the vehicle's lifetime, has been found in several studies to significantly enhance purchase intention when clearly communicated to consumers, suggesting that pairing sustainability messaging with transparent economic information can be more persuasive than either message delivered alone.

Perceived value theory has been integrated with TPB and the Technology Acceptance Model in more recent studies to capture the multifaceted nature of EV adoption decisions, which combine cognitive, technological, and behavioural factors. This integrated perspective finds that perceived value not only drives purchase intention directly but also shapes consumers' broader sustainability perceptions, suggesting a reciprocal relationship in which positive early experiences with EV value reinforce and deepen sustainability-oriented attitudes over time. Digital innovation features, such as over-the-air software updates, connected vehicle services, and smart charging management, have similarly been shown to enhance perceived value and indirectly strengthen sustainable purchase intention through improved trust and satisfaction.

2.5 Green Trust, Brand Image, and Social Influence

A further stream of research emphasises the role of green branding, corporate social responsibility (CSR), and green trust in translating sustainability attitude into actual purchase intention. Studies conducted in the Chinese electric vehicle market have found that sustainable marketing initiatives improve brand image, which in turn strengthens customer engagement and the appeal of sustainable purchasing intentions; customer engagement itself has been identified as a durable driver of long-term purchase intention. Corporate social responsibility has been shown to play a significant moderating role in this relationship, strengthening the links between brand image, customer engagement, and sustainable purchase intention, particularly in markets where consumers are skeptical of greenwashing or exaggerated environmental claims made by manufacturers.

Green brand experience and green brand love have also been examined as mechanisms through which personal environmental beliefs translate into emotional attachment to an EV brand, which subsequently shapes purchase intention. Research adopting this branding-oriented extension of TPB has recommended that manufacturers create meaningful green experiences, such as test drives conducted in eco-friendly settings, participation in electric mobility expos, and support for clean energy projects, as practical strategies for deepening the emotional connection between sustainability-minded consumers and EV brands. Social influence, captured through subjective norms in TPB and through broader constructs such as reference group pressure and observability of EV ownership, consistently emerges as a significant, if generally secondary, predictor of purchase intention, particularly in collectivist cultural contexts where visible endorsement by peers and family carries substantial normative weight.

2.6 The Attitude-Behaviour Gap in Sustainable Vehicle Choice

A recurring theme across the sustainable consumption literature more broadly, and one that applies with particular force to the EV context, is the persistent gap between stated environmental attitudes and actual purchasing behaviour. Consumers frequently report strong concern for the environment and express positive attitudes towards green products in survey research, yet these attitudes do not consistently predict subsequent purchase behaviour when tracked longitudinally or verified against actual sales data. Several explanations for this gap have been proposed in the literature. The first relates to the high financial stakes involved in vehicle purchases, which amplify the influence of practical constraints such as price, financing terms, and total cost of ownership relative to lower-cost green purchases such as household products or groceries, where attitude-behaviour consistency tends to be considerably higher. The second relates to habitual and situational constraints,

including existing vehicle ownership, established driving routines, and limited access to home or workplace charging, which can override a favourable attitude even when the consumer genuinely intends to act on their environmental values.

A third explanation, increasingly emphasised in more recent studies, concerns consumer scepticism towards the authenticity of green marketing claims made by both automakers and energy providers. As environmental messaging has become a near-universal feature of automotive marketing, some consumers have grown wary of greenwashing, questioning whether claimed environmental benefits, particularly regarding battery production, mineral sourcing, and the carbon intensity of electricity generation in their region, are genuine or overstated for commercial advantage. This scepticism can weaken the strength of the attitude-intention relationship even among consumers who hold otherwise strong pro-environmental values, and represents an important boundary condition that must be accounted for in any comprehensive model of EV purchase intention. Addressing the attitude-behaviour gap, therefore, requires attention not only to strengthening consumer attitudes themselves but to removing the structural, financial, and trust-related barriers that prevent favourable attitudes from being expressed in actual purchasing decisions.

2.7 Research Gap

Taken together, the literature converges on several points: sustainability-oriented attitude is a robust and often leading predictor of EV purchase intention; this relationship is strengthened when environmental concern is channelled through specific, verifiable beliefs about an EV's environmental performance rather than expressed only as general disposition; and the attitude-intention link is conditioned by economic perceptions, technological confidence, brand trust, and social influence. However, most existing studies examine these constructs in isolation or in partial combinations, and comparatively few studies integrate sustainability attitude, economic perception, green trust, and social influence within a single, empirically tested model across diverse market contexts. Furthermore, relatively limited attention has been paid to the moderating role of scepticism towards green marketing claims, which recent research identifies as an emerging and underexplored barrier even among consumers who are otherwise environmentally motivated. This paper's conceptual framework, presented in the next section, is designed to address this gap by integrating these strands into a single testable model.

2.8 Demographic and Cultural Moderators

A number of studies have examined whether the sustainability attitude-purchase intention relationship varies systematically across demographic segments, with generally consistent findings that age, income, education, and prior technology adoption behaviour each exert a moderating influence. Younger consumers and those with higher levels of formal education tend to report both stronger environmental concern and greater technological confidence, which together produce a more favourable overall evaluation of EVs and a stronger translation of that evaluation into purchase intention. Higher-income consumers, unsurprisingly, are less constrained by the price premium associated with EVs relative to comparable conventional vehicles, which allows sustainability attitude to operate with fewer economic obstacles standing in the way of actual purchase behaviour. Regression tree analyses conducted on large South Korean samples have identified age, prior driving experience, and innovativeness as key branching variables that interact with attitudinal factors to determine the ultimate likelihood of purchase, suggesting that sustainability attitude should not be treated as a uniform predictor across the population but rather as one that operates differently depending on a consumer's broader psychographic and demographic profile.

Cross-cultural comparisons add a further layer of nuance. Studies contrasting developed and developing markets, and collectivist and individualist cultural contexts, have found that while the core direction of the sustainability attitude-intention relationship remains positive across settings, its relative strength compared to social influence and perceived behavioural control shifts depending on cultural orientation. In more collectivist societies, subjective norms and the visibility of EV ownership within one's social circle appear to carry comparatively greater weight relative to individual environmental conviction, whereas in more individualist societies, personal attitude and perceived control tend to dominate the intention formation process. National culture has also been shown to moderate the relative importance of performance expectancy and environmental

values within integrated technology-adoption and value-belief-norm models, reinforcing the conclusion that any global marketing or policy strategy for EV adoption must be adapted to local cultural context rather than applied uniformly.

3. Conceptual Framework and Hypotheses

Building on the Theory of Planned Behaviour and the Value-Belief-Norm framework, this paper proposes a conceptual model in which customer attitude towards sustainability functions as the central mediating construct linking environmental concern and environmental knowledge to EV purchase intention, while economic perception, perceived behavioural control, social influence, and green trust operate as parallel direct predictors and as moderators of the attitude-intention relationship.

The model comprises six core constructs. Environmental concern represents the consumer's general level of worry about ecological degradation and support for pro-environmental action. Environmental knowledge represents the consumer's factual understanding of EV technology, emissions, and lifecycle impact. Sustainability attitude represents the consumer's overall favourable or unfavourable evaluation of EV ownership as an expression of environmentally responsible behaviour. Perceived economic benefit represents the consumer's assessment of the total cost of ownership relative to a conventional vehicle. Social influence represents the perceived normative pressure from family, peers, and society to adopt sustainable consumption practices. Green trust represents the degree to which the consumer believes manufacturers' environmental claims about EVs are genuine and not merely promotional. Purchase intention, the dependent variable, represents the consumer's stated likelihood of purchasing an EV within a defined time horizon.

Based on this structure, the paper advances the following hypotheses for empirical testing:

- H1: Environmental concern has a significant positive effect on customer attitude towards sustainability.
- H2: Environmental knowledge has a significant positive effect on customer attitude towards sustainability.
- H3: Customer attitude towards sustainability has a significant positive effect on intention to purchase an electric vehicle.
- H4: Perceived economic benefit has a significant positive effect on intention to purchase an electric vehicle.
- H5: Social influence has a significant positive effect on intention to purchase an electric vehicle.
- H6: Green trust positively moderates the relationship between sustainability attitude and purchase intention, such that the relationship is stronger among consumers with higher trust in manufacturers' environmental claims.
- H7: Perceived behavioural control positively moderates the relationship between sustainability attitude and purchase intention, such that the relationship is stronger among consumers who perceive fewer practical barriers to EV ownership.

This framework positions sustainability attitude not as an isolated determinant but as the psychological conduit through which broader environmental values are converted into concrete purchase behaviour, while explicitly recognising that economic, social, and trust-related factors can either reinforce or constrain this conversion process.

4. Proposed Research Methodology

4.1 Research Design and Philosophy

A quantitative, cross-sectional survey design is proposed to test the hypothesised model, consistent with the dominant methodological approach in the reviewed literature. A positivist research philosophy is adopted, treating the constructs of attitude, intention, and their antecedents as measurable psychological variables whose

relationships can be examined through statistical inference. A deductive approach is used, in which hypotheses derived from established theory are tested against empirical data collected from prospective vehicle buyers.

4.2 Sampling and Data Collection

The target population consists of adult consumers who are current or prospective vehicle owners and who have not yet purchased an electric vehicle, thereby capturing genuine purchase intention rather than post-purchase rationalisation. A minimum sample size of approximately three hundred to four hundred respondents is recommended to support structural equation modelling with adequate statistical power, consistent with sample sizes used in comparable published studies, several of which have surveyed between two hundred and seven hundred respondents. A combination of purposive and convenience sampling is proposed, distributing a self-administered structured questionnaire through online panels, automobile dealership visitor lists, and university or corporate mailing lists to ensure variation in age, income, and prior exposure to EVs. Screening questions should be used to exclude respondents who do not hold a valid driving licence or have no involvement in household vehicle purchase decisions.

4.3 Measurement Instrument

All constructs should be measured using multi-item scales adapted from previously validated instruments in the green consumer behaviour and TPB literature, with items rated on a five-point or seven-point Likert scale ranging from strongly disagree to strongly agree. Environmental concern items should capture general worry about climate change and pollution; environmental knowledge items should assess factual understanding of EV emissions and charging infrastructure; sustainability attitude items should capture overall evaluative judgements about EV ownership as an environmentally responsible choice; perceived economic benefit items should capture beliefs about running costs, subsidies, and resale value; social influence items should capture perceived approval or expectation from significant others; green trust items should capture confidence in manufacturers' environmental claims; and purchase intention items should capture the stated likelihood and timeframe of EV purchase. A pilot test with thirty to fifty respondents is recommended prior to full data collection to assess item clarity and preliminary reliability.

4.4 Data Analysis Technique

Structural equation modelling (SEM), using either covariance-based or partial least squares estimation, is recommended as the primary analytical technique, consistent with its widespread use in the reviewed studies. Prior to structural modelling, confirmatory factor analysis should be conducted to establish convergent and discriminant validity of the measurement model, and Cronbach's alpha or composite reliability coefficients should be reported for each construct. The moderating effects of green trust and perceived behavioural control can be tested through interaction terms or multi-group analysis comparing high- and low-trust or high- and low-control subsamples. Common method bias should be assessed using Harman's single-factor test given the use of a single self-report instrument for all constructs.

4.5 Ethical Considerations

As with any study involving human participants, informed consent should be obtained from all respondents prior to survey completion, with clear communication regarding the voluntary nature of participation, the anonymity of responses, and the intended academic use of the data. Given that the survey does not involve sensitive personal information beyond general demographic and attitudinal items, the associated ethical risk is low, though standard institutional review procedures should nonetheless be followed, including secure data storage and the option for respondents to withdraw at any point before final submission.

5. Discussion

The synthesised literature strongly supports the central premise that customer attitude towards sustainability is a significant and often dominant driver of intention to purchase an electric vehicle, a finding that holds consistently across markets as diverse as South Korea, China, Pakistan, Egypt, and several European countries. This consistency across cultural and economic contexts suggests that the attitude-intention relationship reflects a

relatively universal psychological mechanism rather than a context-specific artefact, lending confidence to policy and marketing strategies built around strengthening consumer environmental attitudes.

At the same time, the review highlights that sustainability attitude does not operate as a stand-alone predictor. Its effect is amplified when consumers possess concrete, verifiable knowledge of an EV's environmental performance, as demonstrated by research showing that direct experience through test drives strengthens the attitude-intention link more than abstract environmental concern alone. Conversely, the effect of sustainability attitude can be suppressed by persistent barriers related to cost, range, and charging infrastructure, and by scepticism towards green marketing claims when consumers doubt the authenticity of manufacturers' environmental commitments. This pattern is consistent with the broader attitude-behaviour gap documented in sustainable consumption research, in which favourable environmental attitudes frequently fail to translate into purchase behaviour when practical or trust-related obstacles remain unresolved.

The literature also reveals an important distinction between utilitarian and hedonic dimensions of consumer attitude. Purely rational, cost-and-emissions-based appeals appear less effective in isolation than messaging that also engages consumers' emotional response to EV ownership, including the pleasure, novelty, and social prestige associated with driving a technologically advanced and environmentally conscious vehicle. This suggests that effective sustainability communication in the EV sector must balance factual environmental information with experiential and emotionally resonant brand engagement, rather than relying on environmental appeals alone.

Finally, the review underscores those social and institutional factors, including perceived social norms, corporate social responsibility, and green brand trust, function as important complements to individual attitude in shaping purchase intention. In markets where EV ownership remains a minority behaviour, the visibility of early adopters and the credibility of manufacturers' sustainability claims appear to play an outsized role in either reinforcing or undermining the confidence of environmentally concerned consumers in translating their attitudes into actual purchase decisions.

The demographic and cultural patterns identified in the review carry an additional implication for the interpretation of the proposed model: the strength of the paths linking environmental concern, sustainability attitude, and purchase intention should not be assumed to be constant across a given market's consumer base. Segmenting prospective buyers by income, age, and prior technology adoption behaviour before designing communication strategies is therefore likely to produce more efficient outcomes than a single undifferentiated sustainability message directed at the entire market. Similarly, the comparative weight of social influence relative to individual attitude in more collectivist cultural settings implies that community-based and peer-referral marketing approaches may outperform individually targeted environmental appeals in those contexts, whereas the reverse may hold in more individualist markets where personal conviction and perceived control weigh more heavily on the final purchase decision.

6. Managerial and Policy Implications

For automobile manufacturers, the findings suggest that sustainability-focused marketing should move beyond generic environmental slogans towards specific, verifiable claims about emissions reduction, battery sourcing, and lifecycle environmental impact, since concrete and credible environmental information appears to strengthen the attitude-intention relationship more effectively than abstract appeals. Investment in experiential marketing, such as test drive events held in environmentally themed settings, participation in clean energy and electric mobility expos, and partnerships with renewable energy providers, can help convert favourable environmental attitudes into stronger emotional brand attachment and, ultimately, purchase intention.

Marketers should also recognise that economic messaging remains essential even for environmentally motivated consumers. Clear, transparent communication of total cost of ownership, inclusive of applicable subsidies, electricity costs, and maintenance savings relative to conventional vehicles, can reinforce rather than compete with sustainability appeals, since consumers appear to weigh economic and environmental considerations jointly rather than sequentially. Given the demonstrated importance of green trust, manufacturers should be cautious

about overstating environmental benefits in ways that could later be perceived as greenwashing, since this review's findings suggest that scepticism towards green marketing claims can materially weaken the attitude-intention relationship.

For policymakers, the consistent finding that sustainability attitude is a strong predictor of purchase intention supports continued investment in public environmental education and awareness campaigns that build consumers' factual understanding of EV technology and its environmental benefits, alongside existing financial incentives. However, because economic and infrastructural barriers continue to constrain the conversion of favourable attitudes into actual purchases, policies that combine environmental communication with tangible improvements in charging infrastructure, purchase subsidies, and total cost of ownership are likely to be more effective than environmental messaging or financial incentives pursued in isolation.

Beyond the vehicle purchase decision itself, manufacturers and utility providers can jointly reinforce sustainability attitudes by bundling EV purchases with renewable energy products, such as home solar installations or green electricity tariffs, thereby closing the loop between the vehicle's marketed environmental benefit and the actual source of the electricity used to power it. This bundling strategy directly addresses one of the specific sources of consumer scepticism identified in the literature, namely uncertainty about whether the electricity used for charging is itself generated sustainably, and may therefore strengthen green trust in a way that generic environmental advertising cannot. Dealership sales staff also warrant particular attention in translating favourable attitudes into completed purchases, since front-line sales interactions are frequently where unresolved concerns about range, charging, and total cost of ownership are either addressed or left to undermine an otherwise positive disposition toward the vehicle; targeted training that equips sales staff to address these specific concerns in the same conversation as environmental benefits may reduce the drop-off between expressed interest and final purchase.

7. Limitations and Directions for Future Research

This paper is based on a synthesis of secondary literature rather than newly collected primary data, and the proposed conceptual model and hypotheses, while grounded in established theory and consistent empirical patterns, require dedicated empirical testing to confirm their validity in any specific market. The reviewed studies also vary considerably in sample composition, measurement instruments, and cultural context, which limits the precision with which findings can be generalised across markets. Future research should prioritise longitudinal designs capable of tracking the evolution of sustainability attitudes and purchase intention over time, particularly as EV technology matures and charging infrastructure expands, since attitudes formed under current conditions of relative novelty and higher cost may shift substantially as the market matures. Comparative cross-cultural studies that directly test the proposed model across multiple markets simultaneously would also help clarify which relationships are culturally universal and which are context-dependent. Finally, future research should give greater attention to the role of scepticism towards green marketing and perceived greenwashing as a moderating factor, an area that remains comparatively underexplored relative to the more established constructs of environmental concern, economic perception, and social influence.

8. Conclusion

This paper has examined how customer attitude towards sustainability shapes the intention to purchase an electric vehicle, synthesising findings from a broad body of empirical literature grounded primarily in the Theory of Planned Behaviour. The review confirms that sustainability-oriented attitude is one of the most consistent and influential predictors of EV purchase intention across diverse markets, but that its influence operates in conjunction with, rather than independently of, environmental knowledge, perceived economic benefit, social influence, and trust in manufacturers' environmental claims. The proposed conceptual framework integrates these constructs into a single testable model, and the accompanying methodology offers a practical pathway for future empirical validation. For manufacturers, marketers, and policymakers alike, the central implication is that accelerating the transition to sustainable mobility requires strategies that simultaneously strengthen consumers' environmental attitudes, provide credible and specific environmental information, address economic and infrastructural barriers, and build trust in the authenticity of sustainability claims. Only when

these elements are addressed jointly is the gap between favourable sustainability attitudes and actual electric vehicle purchase behaviour likely to narrow substantially. As EV technology continues to mature, battery costs continue to decline, and charging networks continue to expand, the practical barriers that currently constrain the conversion of favourable attitudes into purchases can be expected to diminish, which would allow the underlying strength of consumers' sustainability attitudes to exert a correspondingly larger influence on the pace of market-wide adoption. In this sense, the psychological groundwork of building strong, well-informed, and trusted sustainability attitudes among today's consumers may prove to be one of the most durable investments that manufacturers, marketers, and policymakers can make in securing tomorrow's electric vehicle market.

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