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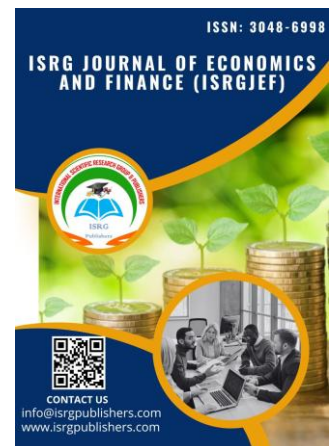
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INFLUENCE OF GREEN MARKETING STRATEGIES ON CONSUMER ADOPTION OF RENEWABLE ENERGY PRODUCTS IN IMO STATE

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Abstract

The adoption of renewable energy products in developing regions depends not only on technological availability but also on effective marketing strategies that shape consumer awareness and behaviour. In Imo State, Nigeria, green marketing has increasingly been used to promote renewable energy solutions such as solar panels, inverters, and energy-efficient appliances; however, adoption levels remain uneven. This study examined the influence of green marketing strategies on consumer adoption of renewable energy products in Imo State. A descriptive survey research design was adopted, and data were collected from 250 respondents, comprising consumers and stakeholders in the renewable energy sector, using a structured questionnaire titled Green Marketing Strategies and Consumer Adoption Questionnaire (GMSAQ), out of which 230 were valid for analysis. The instrument yielded a reliability coefficient of 0.89. Data were analyzed using descriptive statistics and Spearman Rank Order Correlation Coefficient at a 0.05 level of significance. The findings revealed that green marketing strategies significantly influence consumer adoption of renewable energy products. Additionally, specific green marketing practices such as green advertising, eco-labeling, corporate social responsibility initiatives, and product demonstrations were found to have a strong positive relationship with consumer adoption. The study concludes that effective and credible green marketing strategies play a vital role in encouraging the

adoption of renewable energy products and supporting sustainable energy development in Imo State. It recommends that renewable energy firms and government agencies strengthen transparent marketing practices, consumer education, and regulatory support to enhance adoption outcomes.

Keywords: *Green Marketing Strategies, Consumer Adoption, Renewable Energy Products*

Introduction

In today's global push toward sustainable development, green marketing strategies have become crucial tools for encouraging the adoption of renewable energy products. Green marketing refers to marketing activities, initiatives, and campaigns designed to promote products and services that are environmentally friendly and socially responsible. According to Papadas, Avlonitis, and Carrigan (2017), green marketing is the holistic management process that identifies, anticipates, and satisfies customer needs in a manner that is profitable and environmentally sustainable. Similarly, Rahman, Barua, and Hoque (2021) define green marketing as the planning and execution of marketing activities that highlight environmental benefits in products and services, aiming to reduce negative ecological impacts.

Green marketing strategies typically include eco-labeling, green advertising, sustainable packaging, environmentally conscious pricing, and corporate social responsibility initiatives (Kumar, Mallick, Hota, & Vasudevan, 2024). These strategies are intended to influence consumers' perceptions and behaviors toward products that minimize environmental harm. In the context of renewable energy, such strategies play a key role in shaping consumer awareness and willingness to adopt products like solar panels, biogas systems, and energy-efficient appliances (Nguyen, Lobo, & Greenland, 2019).

Consumer adoption of renewable energy products is influenced not only by awareness but also by perceptions of the environmental and economic benefits of such products. Studies have shown that well-designed green marketing strategies can increase adoption rates by providing information, demonstrating credibility, and encouraging positive attitudes toward sustainable products (Leonidou & Skarmas, 2017; Yadav & Pathak, 2017). In Nigeria, and particularly in Imo State, renewable energy adoption is gradually increasing, yet the full potential of marketing strategies to influence consumer behavior remains underexplored. Solar energy companies, eco-innovation startups, and renewable technology providers are using various green marketing strategies to encourage consumers to switch from conventional energy sources to renewable alternatives (Okonkwo & Nwachukwu, 2020).

Despite these efforts, adoption rates are often lower than expected. Understanding how green marketing strategies directly influence consumer adoption of renewable energy products can provide critical insights for businesses and policymakers. This study therefore investigates the influence of green marketing strategies on the adoption of renewable energy products in Imo State, focusing on practical marketing tactics that can increase consumer uptake.

Statement of the Problem

The adoption of renewable energy products remains a significant challenge in many developing countries, including Nigeria. In Imo State, while green marketing strategies are increasingly employed

to promote solar panels, inverters, biogas systems, and other eco-friendly technologies, consumer uptake is still relatively low. A major concern is that marketing campaigns may not effectively reach, convince, or motivate consumers to switch from conventional energy products to renewable alternatives.

Many consumers in Imo State remain skeptical of green marketing claims due to previous experiences with substandard products, exaggerated environmental promises, or limited knowledge about renewable technologies (Okonkwo & Nwachukwu, 2020). Moreover, inadequate consumer education, weak enforcement of product standards, and insufficient after-sales support contribute to reluctance in adopting renewable products. This gap between marketing efforts and actual adoption raises critical questions: Do green marketing strategies genuinely influence consumer adoption of renewable energy products? Which specific marketing practices are most effective in driving consumer uptake in Imo State?

Without empirical evidence, renewable energy providers may continue to struggle in converting awareness into action, slowing the transition to cleaner energy systems. Therefore, it is imperative to study the influence of green marketing strategies on consumer adoption of renewable energy products, providing insights that can guide effective marketing, policy, and consumer engagement practices in Imo State.

Objectives of the Study

The main aim of this study is to empirically examine the influence of green marketing strategies on consumer adoption of renewable energy products in Imo State. The specific objectives are to:

1. Determine the extent to which green marketing strategies influence consumer adoption of renewable energy products in Imo State.
2. Ascertain the extent to which specific green marketing practices influence consumer adoption of renewable energy products in Imo State.

Research Questions

1. To what extent do green marketing strategies influence consumer adoption of renewable energy products in Imo State?
2. To what extent do specific green marketing practices influence consumer adoption of renewable energy products in Imo State?

Research Hypotheses

Ho1: Green marketing strategies do not significantly influence consumer adoption of renewable energy products in Imo State.

Ho2: Specific green marketing practices do not significantly influence consumer adoption of renewable energy products in Imo State.

Review of Related Literature

Conceptual Review

Concept of Green Marketing

Green marketing is broadly understood as the promotion and distribution of products, services, and practices that are environmentally sustainable and socially responsible. It involves strategies that emphasize ecological benefits, while meeting consumer needs. According to Eko, Hodo, Edim, Inyang, Neba, and Abe (2024), green marketing is an integrated process that includes eco-friendly product development, sustainable pricing, green distribution, and transparent promotion aimed at reducing environmental harm. Halawa (2024) described green marketing as a strategic business practice linking environmental responsibility with organizational competitiveness by raising consumer awareness and encouraging adoption of renewable technologies. Similarly, Akeem and Adeola (2021) noted that green marketing emphasizes eco-labeling, consumer education, and environmentally focused campaigns that influence purchasing behavior. Green marketing emphasizes consumer awareness, eco-labeling, renewable alternatives, and communication strategies that encourage environmentally conscious consumption (Shaibu, Echetama, Chikezie & Njoku, 2025).

Sharma and Dutta (2022) observed that green marketing extends beyond traditional advertising to promote responsible consumption, improve corporate reputation, and foster environmental stewardship. It serves not only as a marketing tool but also as a means of achieving long-term sustainability goals, guiding consumers toward products and services that reduce ecological footprints.

Moreover, green marketing incorporates innovative strategies such as lifecycle analysis, carbon labeling, and eco-certification programs that communicate the environmental impact of products to consumers (Papadas, Avlonitis, & Carrigan, 2017). Such strategies help build credibility, enhance consumer confidence, and reduce skepticism toward environmental claims. In the context of renewable energy, green marketing includes campaigns that highlight the cost savings, efficiency, and environmental benefits of solar panels, inverters, and other renewable solutions (Kumar, Mallick, Hota, & Vasudevan, 2024).

Effective green marketing aligns corporate social responsibility with marketing objectives, creating a win-win scenario for businesses and the environment. It also plays a critical role in shaping consumer attitudes, influencing purchasing decisions, and fostering behavioral change toward sustainable consumption. For example, awareness campaigns and eco-labeling can motivate consumers in developing countries to adopt renewable energy products by demonstrating both economic and ecological value (Nguyen, Lobo, & Greenland, 2019). Furthermore, green marketing strategies are increasingly integrated with digital platforms, social media, and influencer campaigns to reach broader audiences and enhance engagement (Rahman, Barua, & Hoque, 2021). These strategies not only inform consumers but also encourage advocacy, word-of-mouth promotion, and community-level adoption of environmentally friendly practices.

Therefore, green marketing is best viewed as a comprehensive management process that balances profit motives with environmental responsibility, fosters consumer trust, and promotes sustainable development. It is both a driver of organizational

competitiveness and a catalyst for societal transition toward renewable energy and sustainable lifestyles.

Concept of Consumer Adoption

Consumer adoption refers to the process by which individuals accept, purchase, and consistently use new products or technologies. In the context of renewable energy products, adoption is influenced by consumer awareness, perceived environmental and economic benefits, and exposure to marketing initiatives. According to Leonidou and Skarmas (2017), adoption decisions are shaped by the perceived credibility of product information and the alignment of products with consumers' values and needs.

Nguyen, Lobo, and Greenland (2019) argued that marketing strategies, particularly green marketing, can significantly influence adoption by providing relevant information, highlighting long-term benefits, and addressing potential consumer concerns. Adoption is not only about initial purchase but also about sustained use, which is critical for achieving broader renewable energy transitions. Eze, Okafor, Nwankwo, and Chukwu (2022) noted that in developing economies, adoption is also affected by socio-economic factors, education, and accessibility of renewable products, which must be considered when designing marketing strategies.

Furthermore, adoption is influenced by consumers' perceived ease of use, perceived reliability, and overall trust in renewable energy solutions. Awareness campaigns, incentives, and product demonstrations have been shown to increase adoption rates, particularly in communities with limited prior exposure to renewable technologies. Understanding the factors that drive consumer adoption is therefore essential for designing effective marketing strategies that can accelerate the shift toward renewable energy in regions like Imo State.

Concept of Renewable Energy

Renewable energy refers to energy derived from natural sources that are replenished continuously and are environmentally sustainable. Such sources include solar, wind, hydroelectric, biomass, and geothermal energy. Renewable energy is widely regarded as a cleaner alternative to fossil fuels because it produces little or no greenhouse gas emissions and reduces environmental degradation. Halawa (2024) described renewable energy as a critical component of sustainable development, integrating technological innovation with environmental protection and long-term energy security.

Renewable energy systems involve the use of technologies such as solar panels, wind turbines, biogas digesters, and energy-efficient appliances to generate and utilize clean energy. Bello and Ajibola (2021) emphasized that renewable energy development requires coordinated efforts among governments, industries, and communities to ensure effective deployment, affordability, and accessibility. These efforts include policy support, infrastructure development, and investment in renewable technologies.

The adoption and utilization of renewable energy are influenced by economic incentives, regulatory frameworks, and public awareness initiatives. Assay, Musa, Ibrahim, and Bello (2022) noted that education programs, supportive policies, and effective marketing strategies play significant roles in encouraging the use of renewable energy products. For renewable energy systems to achieve sustainability goals, technological advancement must be complemented by consumer awareness and behavioral

engagement, ensuring widespread acceptance and long-term use of clean energy solutions.

Green Marketing and Consumer Adoption of Renewable Energy Products

Green marketing strategies play a critical role in driving consumer adoption of renewable energy products. Strategies such as eco-labeling, green advertising, corporate social responsibility, sustainability certifications, and product demonstrations influence consumer perceptions and encourage environmentally responsible behavior. According to Eko, Hodo, Edim, Inyang, Neba, and Abe (2024), green marketing affects purchase intentions by linking the environmental benefits of renewable products with consumer values, thereby increasing willingness to adopt.

Agyemang and Boateng (2020) observed that well-designed marketing campaigns normalize the use of renewable energy by framing it as both cost-effective and sustainable. Effective communication about product benefits, transparency, and long-term economic advantages reduces consumer resistance, encourages behavioral change, and fosters higher adoption rates. Halawa (2024) further highlighted that marketing campaigns focusing on environmental responsibility, affordability, and reliability are more likely to influence consumers to adopt solar panels, biogas systems, and energy-efficient appliances in developing economies like Nigeria.

Moreover, Kumar, Mallick, Hota, and Vasudevan (2024) noted that integrating digital platforms, social media outreach, and community-based awareness programs enhances the reach and impact of green marketing initiatives. By providing detailed product information, demonstrations, and testimonials, firms can address consumer concerns about quality, durability, and cost-effectiveness, thereby increasing adoption. Eze, Okafor, Nwankwo, and Chukwu (2022) emphasized that repeated exposure to consistent and credible green messages reinforces positive attitudes and encourages sustained use of renewable energy products.

Green marketing strategies contribute to shaping social norms and community-level acceptance of renewable technologies. Papadas, Avlonitis, and Carrigan (2017) highlighted that marketing campaigns that engage local communities, provide incentives, and involve stakeholders in decision-making processes foster trust, increase awareness, and ultimately drive adoption. By aligning marketing strategies with local consumer values and economic realities, renewable energy providers can maximize adoption rates and support broader sustainable energy transitions in regions like Imo State.

Factors Influencing Consumer Adoption

Several factors mediate the effectiveness of green marketing in driving the adoption of renewable energy products. These factors can be outlined and explained as follows:

1. **Product Awareness:** This occurs when consumers are not fully informed about renewable energy products, their features, benefits, and long-term value. Limited awareness reduces willingness to adopt technologies like solar panels, inverters, or biogas systems. Awareness campaigns, demonstrations, and educational initiatives help bridge this gap and encourage informed decision-making.

2. **Perceived Environmental Benefits:** Consumers adopt products when they understand the positive impact on the environment, such as reducing carbon emissions, conserving energy, and promoting sustainability. If the benefits are unclear or not communicated effectively, adoption is hindered. Highlighting ecological advantages in marketing campaigns strengthens consumer motivation to switch to renewable options.
3. **Economic Incentives:** High costs or lack of financial support discourage consumers from investing in renewable products. Subsidies, discounts, and flexible payment plans reduce perceived financial risks, making adoption more attractive. Long-term cost savings, such as reduced electricity bills, can also motivate consumers to invest in renewable technologies.
4. **Credibility of Marketing Claims:** Adoption is reduced when marketing messages are exaggerated, misleading, or untrustworthy. Consumers rely on transparent, certified, and accurate information to make purchase decisions. Trustworthy marketing, backed by eco-certifications or testimonials, increases confidence and willingness to adopt renewable products.
5. **Accessibility:** Limited availability of products, lack of local suppliers, installation challenges, and poor after-sales services reduce adoption. Products that are easily obtainable, coupled with reliable customer support, enhance consumer confidence and encourage sustained use. Accessibility also includes the convenience of purchase and timely delivery of products.
6. **Socio-Cultural Influences:** Community norms, household decision-making patterns, traditional energy practices, and cultural beliefs influence adoption. Marketing strategies that respect local culture, involve community leaders, and engage social networks are more effective in promoting renewable energy products. Peer influence and societal endorsement can further encourage adoption.
7. **Behavioral and Psychological Factors:** Trust, perceived reliability, perceived ease of use, and positive attitudes toward sustainability affect adoption. Consistent exposure to credible marketing messages, demonstrations, and success stories strengthens consumer confidence and encourages long-term commitment to renewable technologies. Psychological readiness and perceived social responsibility also play a role in adoption decisions.

Theoretical Review

The study is anchored on the Theory of Planned Behaviour (TPB) and the Diffusion of Innovations Theory (DOI). These theories collectively provide insights into how consumer attitudes, social influences, and innovation characteristics shape green marketing strategies and consumer adoption of renewable energy products in Imo State.

Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB), developed by Ajzen (1991), extends the Theory of Reasoned Action by including perceived behavioral control as an additional determinant of human

action. According to TPB, behavior is driven by three main factors: attitude toward the behavior, subjective norms, and perceived behavioral control. Attitude reflects personal evaluations of the behavior, subjective norms represent social pressures to engage or not engage in the behavior, and perceived behavioral control captures the ease or difficulty of performing the behavior.

This theory is particularly relevant to the present study as it explains how consumers' attitudes toward renewable energy products, social influences, and their perceived ability to adopt such technologies determine actual adoption. In Imo State, where green marketing campaigns are increasing, TPB provides a framework for understanding how marketing strategies influence consumer intentions and behaviors toward renewable adoption. The model highlights that positive attitudes, social endorsement, and perceived ease of adoption encourage consumers to switch from conventional to renewable energy solutions, thereby enhancing the effectiveness of green marketing interventions.

Diffusion of Innovations Theory (DOI)

The Diffusion of Innovations Theory (DOI), proposed by Rogers (2003), explains how new ideas, products, or technologies spread within a population over time. Adoption is influenced by five key attributes: relative advantage, compatibility, complexity, trialability, and observability. Relative advantage refers to the perceived benefits of the innovation over existing alternatives, compatibility relates to how well it fits with existing values and experiences, complexity is the perceived difficulty of using the innovation, trialability reflects the opportunity to test it before full adoption, and observability is the extent to which results are visible to others.

DOI is highly applicable to this study as renewable energy products represent innovations in the energy sector. Green marketing strategies that highlight the economic, environmental, and social advantages of these products, demonstrate ease of use, offer trials, and make benefits observable can accelerate adoption among consumers in Imo State. By framing renewable energy as a practical, beneficial, and credible alternative, marketing campaigns can influence the rate and extent of adoption, supporting broader renewable energy transitions.

Empirical Studies

Jaiswal and Kant (2020) explored how perceived environmental concern and trust in firms influence purchase intentions toward renewable energy products among Indian consumers. A structural equation modeling approach was applied to survey data from 410 respondents. Results revealed that consumer trust mediated the relationship between green marketing efforts and adoption of renewable technologies. Specifically, misleading claims reduced trust, weakening renewable adoption. This study supports the current research by demonstrating that trust is a central mechanism through which green marketing influences renewable transitions.

Adebayo, Okafor, and Nwankwo (2022) examined the role of green marketing communication in promoting solar energy adoption among households in Lagos and Ogun States, Nigeria. Using a sample of 300 respondents, the study applied structural equation modeling to assess the impact of eco-labeling, green advertising, and environmental education on consumer adoption. The findings revealed that environmental education and green advertising had strong positive effects on adoption, while eco-labeling influenced adoption indirectly through consumer trust.

This study is relevant to the present research as it demonstrates the critical role of awareness and credible communication in enhancing renewable energy uptake in Nigerian states.

Chitra and Rajesh (2019) investigated the relationship between green marketing practices and consumer purchasing behaviour in the renewable energy sector in South India. Using a survey of 320 households, data were analyzed with regression models to test the impact of eco-labeling, green advertising, and sustainability certifications. The findings showed that eco-labeling and transparent communication significantly increased consumer trust, which directly influenced renewable energy adoption decisions. The study is relevant to the present research as it highlights how marketing credibility reduces skepticism and fosters renewable transitions in developing contexts similar to Nigeria.

Bello, Ajibola, and Musa (2021) investigated the effect of corporate social responsibility (CSR) and green marketing strategies on consumer adoption of energy-efficient appliances in selected urban areas of Northern Nigeria. The study collected data from 280 respondents using a structured questionnaire and analyzed it using regression analysis. Results showed that CSR initiatives and green advertising significantly increased consumer adoption, with trust and perceived economic benefits acting as mediators. The study is pertinent to the current research because it underscores how targeted green marketing strategies, combined with CSR efforts, can influence adoption behavior in developing country contexts similar to Imo State.

Okonkwo, Nwachukwu, and Eze (2021) investigated the influence of green marketing strategies on consumer adoption of solar energy products in Southeast Nigeria. Using 400 respondents from Imo and Abia States, the study employed descriptive and inferential statistics to examine the effect of eco-labeling, green advertising, and corporate social responsibility initiatives on adoption levels. Results indicated that green advertising and CSR initiatives had a significant positive influence on consumer adoption, while eco-labeling had a moderate effect. The study is relevant to the present research as it highlights how context-specific marketing strategies can improve renewable energy uptake in Nigerian states, including Imo State.

Agyemang and Boateng (2020) examined the impact of green marketing and consumer trust on the adoption of energy-efficient appliances in Ghana. Data were collected from 350 households and analyzed using multiple regression analysis. Findings revealed that transparency in green marketing messages, combined with product demonstrations and community engagement, significantly enhanced adoption intentions. The study supports the present research by showing that trust-building mechanisms and clear communication strategies are critical in motivating consumers to adopt renewable energy products in developing countries.

Methods

The study adopted a descriptive survey research design to investigate the influence of green marketing strategies on consumer adoption of renewable energy products in Imo State. The target population comprised consumers, business operators, and stakeholders directly involved in renewable energy solutions, including solar energy firms, biogas providers, and energy-efficient appliance suppliers within the state. This population was considered appropriate because these groups either implement green marketing strategies or are direct beneficiaries of renewable energy products. A purposive sampling technique was employed to

select 250 respondents, ensuring representation across urban and semi-urban areas of Imo State. The choice of purposive sampling was informed by the need to reach individuals with firsthand knowledge and experience with renewable products and green marketing initiatives.

The main instrument for data collection was a structured questionnaire titled Green Marketing Strategies and Consumer Adoption Questionnaire (GMSCAQ). The instrument was designed on a four-point Likert scale with response options: To a Very Great Extent (VGE) = 4, To a Great Extent (GE) = 3, To a Low Extent (LE) = 2, and To No Extent (NE) = 1. The questionnaire was divided into three sections: demographic information, green marketing strategies, and consumer adoption of renewable energy products. To ensure content validity, the instrument was reviewed by three experts in marketing, renewable energy, and sustainable development. Its reliability was tested using Cronbach's Alpha, yielding a coefficient of 0.89, indicating a high level of internal consistency. Out of the 250 questionnaire items distributed, 230 were duly completed and returned, representing a 92% response rate. Data collected were analyzed using descriptive statistics, including mean and standard deviation, to address the research questions. The research hypotheses were tested using Spearman Rank Order Correlation Coefficient (r) with the aid of SPSS Version 25 at a 0.05 level of significance. This analysis determined the extent to which green marketing strategies influence consumer adoption of renewable energy products in Imo State.

Results

Ho1: Green marketing strategies do not significantly influence consumer adoption of renewable energy products in Imo State.

Table 1: Correlation between Green Marketing Strategies and Consumer Adoption

Variables	N	Correlation Coefficient (r)	Sig. (2-tailed)
Green Marketing Strategies	230	1.000	—
Consumer Adoption	230	0.732**	0.000

Correlation is significant at 0.05 level (2-tailed).

Source: Researchers' Data, 2026.

Table 1 shows a correlation coefficient (r) of 0.732 with a significance value of 0.000, which is below the 0.05 alpha level. Since the significance value (0.000) is less than 0.05, the null hypothesis (Ho1), which states that green marketing strategies do not significantly influence consumer adoption of renewable energy products in Imo State, is rejected. Therefore, the alternative hypothesis is accepted. This indicates that green marketing strategies significantly contribute to consumer adoption by raising awareness, shaping perceptions, and encouraging behavioral change toward renewable energy products in Imo State.

Ho2: Specific green marketing practices do not significantly influence consumer adoption of renewable energy products in Imo State.

Table 2: Correlation between Specific Green Marketing Practices and Consumer Adoption

Variables	N	Correlation Coefficient (r)	Sig. (2-tailed)
Specific Green Marketing Practices	230	1.000	—
Consumer Adoption	230	0.756**	0.000

Correlation is significant at 0.05 level (2-tailed).

Source: Researchers' Data, 2026.

Table 2 shows a correlation coefficient (r) of 0.756 with a significance value of 0.000, which is below the 0.05 alpha level. Since the significance value (0.000) is less than 0.05, the null hypothesis (Ho2), which states that specific green marketing practices do not significantly influence consumer adoption of renewable energy products in Imo State, is rejected. Therefore, the alternative hypothesis is accepted. This suggests that targeted green marketing practices, such as eco-labeling, green advertising, corporate social responsibility, and product demonstrations, play a critical role in influencing consumer adoption by building trust, demonstrating value, and promoting environmentally responsible behavior in Imo State.

Discussion of Findings

The findings of this study revealed that green marketing strategies significantly influence consumer adoption of renewable energy products in Imo State. The analysis showed a positive correlation (r = 0.732, p < 0.05) between green marketing strategies and consumer adoption, indicating that marketing initiatives such as eco-labeling, green advertising, corporate social responsibility (CSR), and product demonstrations effectively raise awareness, shape perceptions, and encourage behavioral change toward renewable energy products. This finding aligns with Adebayo, Okafor, and Nwankwo (2022), who found that environmental education and green advertising had strong positive effects on solar energy adoption among households in Lagos and Ogun States, while eco-labeling influenced adoption indirectly through consumer trust. Similarly, Chitra and Rajesh (2019) reported that eco-labeling and transparent communication significantly increased consumer trust, directly influencing renewable energy adoption decisions in South India. These studies reinforce the role of credible marketing communication in shaping consumer perceptions and promoting renewable energy uptake.

Furthermore, the results indicated that specific green marketing practices significantly influence consumer adoption (r = 0.756, p < 0.05). This suggests that targeted initiatives, including CSR activities, sustainability certifications, and community engagement programs, play a crucial role in motivating consumers to adopt renewable energy products. Bello, Ajibola, and Musa (2021) corroborated this finding, reporting that CSR initiatives and green advertising increased consumer adoption of energy-efficient appliances in Northern Nigeria, with trust and perceived economic benefits acting as mediators. Okonkwo, Nwachukwu, and Eze (2021) also found that green advertising and CSR initiatives had a significant positive influence on solar energy adoption in Southeast Nigeria, while eco-labeling had a moderate effect. Collectively, these studies demonstrate that context-specific green marketing practices, when combined with credibility and social engagement,

enhance consumer trust, reduce skepticism, and encourage the adoption of renewable technologies.

Conclusion

This study examined the influence of green marketing strategies on consumer adoption of renewable energy products in Imo State. The findings revealed that green marketing strategies significantly influence consumer adoption by increasing awareness, shaping positive perceptions, and encouraging environmentally responsible purchasing behaviour. Practices such as green advertising, eco-labeling, corporate social responsibility initiatives, and product demonstrations were found to be effective in motivating consumers.

The study also established that credible and well-communicated green marketing practices enhance consumer confidence, reduce skepticism, and increase willingness to adopt renewable energy products. The study therefore concludes that effective green marketing strategies play a vital role in promoting consumer adoption of renewable energy products and supporting sustainable energy development in Imo State.

Recommendations

Based on the findings and conclusion of the study, the following recommendations were made:

1. Renewable energy firms and marketers in Imo State should strengthen credible green marketing strategies, such as transparent green advertising, eco-labeling, and sustainability-focused messaging, in order to improve consumer awareness and positively influence the adoption of renewable energy products.
2. Government agencies and renewable energy providers should enhance consumer trust through education, regulation, and support, by ensuring accurate marketing claims, proper certification of renewable products, and improved after-sales services, which will encourage greater consumer confidence and sustained adoption.

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