

**INFLUENCE OF GREEN ENTREPRENEURIAL INNOVATION ON THE  
PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN  
SOUTHEAST NIGERIA.****PROF. AMAKA U. OKEKE**

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**\*\*Corresponding Author****ABSTRACT**

*The study determined the influence of green entrepreneurial innovation on the performance of small and medium enterprise(SMEs) in South-East Nigeria. The focus was to ascertain whether green entrepreneurial innovation influences the competitive advantage of SMEs in the area. One research question guided the study while one null hypothesis was tested. Survey research design was adopted for the study. Population of the study was 196,075 registered SMEs out of which a sample size of 400 SMEs was randomly drawn from each of the five states and used for the study. Data were*

*collected with a 13- item validated questionnaire which was subjected to face and content validation by three experts. The five-point Likert scale with the following responses ranging from 5 indicating strongly agree (SA); 4 indicating agree (A); 3 indicating Neutral (N), 2 indicating disagree (D); and 1 indicating strongly disagree (SD) was utilized. Cronbach Alpha reliability tool was used to determine the reliability of the instrument. Twenty-one (21) copies of the questionnaire were administered to Small and Medium Enterprises in Delta State, outside the area of study and the data obtained yielded a reliability coefficient of 0.83. Mean was used to answer the research question while standard deviation was used to check the spread of the respondents' responses to the mean. The null hypothesis was tested at 0.05 level of significance using simple linear regression analysis. Findings of the study revealed that business owners agreed that green entrepreneurial innovation positively influences SMEs' performance. The result of the hypothesis testing also revealed that there is a significant positive influence of green entrepreneurial innovation on SMEs performance in Southeast Nigeria. Based on the findings of the study, it was concluded that there is a significant positive influence of green entrepreneurial innovation on SMEs performance in Southeast Nigeria. It was therefore recommended that SMEs in Southeast Nigeria should adopt green innovation practices, such as reducing waste, conserving energy by using renewable energy sources, and using environmentally friendly materials while the government should develop policies that support the growth of green innovation, such as tax incentives and subsidies, in the area.*

**KEYWORDS:** Green entrepreneurship, green innovation, small and medium sized enterprises, performance, influence.

## **INTRODUCTION**

Over the years, the surge in global population has fueled a rise in consumption and production, ultimately contributing to resource depletion and environmental harm. Some of the serious repercussions of environmental damage include global warming, increased environmental pollution, and decline in the flora and fauna (plants and animals). Then the environmental concerns of climate change have been globally intensified recently as its disastrous consequences are overwhelming and reported in almost every region in the world, Nigeria inclusive (Michali, et al, 2022).

With the growing attention paid to global environmental protection, firms are facing pressure to take responsibility in protecting the environment in order to meet regulations from local government (Ebrahimi & Mirbargkar, 2017) and to meet expectations from stakeholders and marketplaces. In other words, firms are facing the challenge of cultivating green capability to cope with increasing pressure from the government and the public (Dangelico & Pujari, 2010; Lee & Min, 2015.). Many entrepreneurs have adopted environment-related strategies, such as creating a firm green image, pollution reduction and green innovation, among others. Since then, green entrepreneurship has been receiving growing attention from the public and researchers.

Green entrepreneurship (or environmental entrepreneurship, eco-entrepreneurship, sustainable entrepreneurship) refers to the implementation of innovations related to environmental protection (Ebrahimi & Mirbargkar, 2017). According to Kirkwood and Walton (2014), green entrepreneurship was first mentioned in a book by Gustav Berle (1991) which provided a poetic definition of green entrepreneurship as the ability and willingness of humans to take up responsibilities of creating the kind of world they dream to live in. Kirkwood and Walton (2014) defined green entrepreneurship as activities that makes purposeful efforts at proffering solutions to, or curbing socio-environmental challenges using basic entrepreneurial ideas in a way that does not only benefit the environment, but also provides sustained financial gains for the entrepreneur. Similarly, anyone who sets-up and commences the running of an entrepreneurial entity with the goal of designing green products, or offering green service in an environmentally friendly manner is referred to as a green entrepreneur (Schaper, 2016). The goal of a green or eco-friendly business is to reduce or eliminate any negative influence that business will have on the environment, both locally and globally. Green businesses are characterized by; offering non-toxic, eco-friendly products in sustainable, recyclable, or reusable packaging; sourcing materials and ingredients from companies dedicated to ethical, fair-trade, and sustainable practices;

prioritizing the health, wellbeing, and treatment of their workers and employees amongst others.

According to Chukwuka and Eboh (2018), green businesses are also measured by using the indices such as; green entrepreneurial initiative, green entrepreneurial recruitment and selection, green innovation, green marketing, green entrepreneurial inclination, green entrepreneurial orientation, green entrepreneurial jobs, ecological economy and carbon economy. However, Gao et al. (2019), averred that green entrepreneurship is entrepreneurial behavior in an enterprise's green innovation of products and services, aimed at enhancing the performances of SMEs while considering environmental protection.

Green innovation refers to all aspects of environmentally friendly items and procedures, such as minimizing energy usage, regulating pollution, recycling garbage, creating products, and managing the environment (Chan et al., 2012). Green innovation includes green product and process innovation, including green administrative innovation (Chan et al., 2012). It necessitates minimizing the environmental effects of the whole product life cycle, like manufacturing-related pollution, increasing energy efficiency, and adopting biodegradable packaging (Wilburn-Green et al., 2015). Green innovation is a strategic step for SMEs to increase sustainability and financial performance in the global market through recycling sustainability. Green entrepreneurial innovation, also viewed as eco-innovation (environmentally friendly innovation green innovation or sustainable innovation), is often used to locate those innovations that bring about sustainable environment through ecological improvements (Olalekan et al., 2020). It consists of completely new or perhaps modified procedures, methods, and items that benefit the environment and additionally play a role in environmental sustainability (Li et al., 2018). Seman et al. (2018) opines that bringing together green innovation practices is the key to survival and maintenance of manufacturing companies in improving and sustaining their capabilities and performance. Wang et al. (2014) define green innovation as those innovations that focus on achieving sustainable development and the conservation of natural resources through the development of greener products and services. Chen et al. (2012) define green innovation as the development of sustainable products and processes through the use or adoption of environmentally friendly raw materials during the manufacturing or design process. Green innovation is defined as the development, promotion and development of ecological products, services and processes that incorporate a certain degree of novelty. Green innovation is understood as a balance between the different pillars of sustainability, including the implementation and development of innovations that minimize environmental and social damage and produce economic improvements. It is understood as the search, promotion, and development of ecological products, services, and processes that incorporate a certain degree of novelty.

Green innovation consists of new innovative ideas that aim to provide a product or service without attacking nature, respecting the environment, and being ecological in its conception, construction, use, and disposal. It is the development and implementation of new or improved products, processes, and services that reduce environmental impacts. Green innovation is the integration of environmental considerations into the innovation process to reduce environmental impacts. Green innovation refers to all aspects of environmentally friendly items and procedures, such as minimizing energy usage, regulating pollution, recycling garbage, creating products, and managing the environment (Chan et al., 2012). Porter and Van der Linde as cited by Muo and Adebayo (2019) also defined green innovation as the creation of new or improved products, processes, and services that deliver greater environmental benefits than existing ones. According to Chen et al. (2012), Green innovation is the development and application of new technologies, products, and processes that reduce environmental degradation and improve environmental sustainability. Muo and Adebayo (2019) in his study defined green innovation as the introduction of new or improved products, processes, and services that reduce environmental impacts and improve resource efficiency. Green innovation is the development and implementation of sustainable solutions that meet the needs of the present without compromising the ability of future generations to meet their own needs. Green innovation is the development and application of new technologies, products, and processes that reduce environmental impacts and improve environmental sustainability (OECD, 2011). Green innovation fuels the development of eco-friendly products and services, which can then be effectively promoted through targeted green marketing campaigns. It involves the development and implementation of new or improved products, processes, and services that minimize environmental impact, reduce waste and promote sustainable development. Small and medium-sized enterprises can leverage green innovation to improve environmental performance and enhance competitiveness.

Small and medium enterprises (SMEs) are businesses that have limited resources, size and scope. SMEs are defined by the World Bank as businesses with a maximum of 249 employees and annual revenue of \$15 million (World Bank, 2020). The European Union (EU) defined an SME as an enterprise which has less than 250 employees; has either an annual turnover not exceeding ECU 50 million, or annual balance sheet total not exceeding ECU 27 million; is less than 25% owned by non-SME, (European Commission, 2020). SMEs play a vital role in economic development as they have been the main source of employment generation and output growth, both in developing as well as in developed countries. SMEs are also the fastest-growing sector of most economies and are perceived to be more pliant regarding structure and speed of response than larger enterprises (Kumar 2015). Small and medium sized enterprises (SMEs) constitute the largest business entities in many countries, where governments show a keen interest in ensuring their competitiveness. This interest is usually

channeled through policies and financial assistance towards the implementation of innovative and emerging technologies, especially in developing countries. To compete and survive in a highly competitive global marketplace, it is important for SME owners to resort to the utilization of green entrepreneurial practices to have a competitive edge over their rivals, as well as to improve business performance (Maziriri and Maramura, 2022).

Consequently, the environmental damage phenomenon is a challenge for businesses today, including small and medium industries in developing countries. In Nigeria, Small and Medium-sized Enterprises (SMEs) play a crucial role in the economy, contributing significantly to GDP, employment, and innovation (Adejumo & Olufemi, 2015). However, SMEs in Nigeria face numerous challenges, including environmental degradation, resource depletion, and climate change. The country's southeast region, home to numerous Small and Medium-sized Enterprises (SMEs), is no exception. This region has suffered from rampant deforestation and land degradation threatening biodiversity and ecosystem; Industrial activities, vehicle emissions, and poor waste management leading to air and water pollution, affecting human health and the environment (WHO, 2018; NPC, 2018); Vulnerability to climatic change impacts like rising temperatures, droughts, and floods, which affect agriculture, health, and livelihoods (IPCC, 2014).

Green innovation has become increasingly important in Nigeria, particularly among small and medium-sized enterprises (SMEs). This concept involves the creation of businesses that focus on environmental sustainability and social responsibility. In southeast Nigeria, green innovation has the potential to drive socio-economic development while promoting environmental conservation. Green innovation among SMEs in southeast Nigeria has several socio-economic benefits. These include: creating employment opportunities in various sectors, such as renewable energy, sustainable agriculture, and eco-tourism which helps to reduce poverty levels in southeast Nigeria; improve the livelihoods of individuals and communities by providing access to clean energy, water, and sanitation; promoting environmental conservation by encouraging the use of renewable energy sources, reducing waste, and promoting sustainable practices. According to a study by the Nigerian Environmental Study/Action Team (NEST 2019), the adoption of green innovation practices among SMEs in Nigeria can lead to significant economic benefits, including increased revenue and job creation. As a valuable resource, green innovation can be a crucial component of a firm's resource-based view strategy, enabling it to differentiate itself from competitors and achieve long-term success.

The resource-based view (RBV) theory was propounded by Jay Barney in 1991. RBV theory posits that a firm's resources and capabilities are the primary sources of

competitive advantage and superior performance. The theory suggests that firms can develop sustainable competitiveness advantages by exploiting their internal resources. According to RBV theory, intangible assets are essential for a company's success (Amit & Schoemaker, 1993). This theory notes that entrepreneurs must interact with their resources over time to discover their productive services and judge how best to allocate, deploy, and maintain those resources (Penrose, 1959). Technological advancements, production/process, expertise, customer loyalty, and machine capacity are all among the company's resources (Wernerfelt, 1984). The RBV theory relates to green innovation by highlighting the importance of developing unique resources and capabilities that enable firms to adopt environmentally friendly practices and technologies.

## **REVIEW OF EMPIRICAL STUDIES**

Various authors argue that, green innovation positively influences SME firm performance. Green innovation can bring an SME economic performance not only by use of physical resources and technology but also intangible resources. On the one hand, green innovation contributes to economic performance by lowering cost, increasing productivity, or differentiating products that can gain market position ( Ma et al., 2018; Weng et al., 2015)

Achaku et al. (2022) investigates the effect of green entrepreneurship on the performance of SMEs in North-Central Nigeria and the federal capital territory. A pre-test was conducted, and a descriptive cross-sectional questionnaire was used. The study examined 1,233 consenting randomly chosen respondents from six states and Abuja City in North-Central Nigeria. Simple linear regression was used to test the hypotheses. The findings demonstrated that green entrepreneurship can decrease the negative influences of business activities on the environment and also ensure profitability. Moreover, green entrepreneurial innovative production and green entrepreneurial inclination significantly influence competitive edge respectively. The study offers useful public information and experimental confirmation of environmental sustainability engaged in viable business activities. This study shares similarity with the current one as they both have the same independent variable and dependent variable and was also carried out in the same country. The difference exists in terms of method of data collection and analysis.

Abubakar et al. (2022) examined the strategic integration effect of green entrepreneurial innovation, green entrepreneurial behavior and information systems on sustainable business performance and competitiveness in Nigeria. The relationships between the constructs were discussed in terms of long-term developments and post pandemic business trends. Data were collected from 221 owners/managers of small and medium sized enterprises in Kano using structured questionnaire, while structural equation modeling was used to analyze the data. All the hypotheses were supported,



and the results revealed that there was significant influence of green entrepreneurial innovation, green entrepreneurial behavior and information systems on sustainable business performance and competitiveness. This study shares similarity with the current one as they both have the same independent variable and dependent variable, as well as having the same subsector under study. The difference exists in terms of tools of analysis and in the geographical scope.

Michalis et al. (2022) examines both the relationship between green innovation and green entrepreneurship and the mediating role of firm strategies in the relationship between green entrepreneurship, green innovation, and competitive advantage. A total of 225 managers responsible for the environmental strategy of medium and large-sized firms operating in Greece were used as a sample for the study. To measure the research variables, a structured questionnaire was used. The collected data were analyzed using descriptive and inductive statistics, including principal components analysis, correlation analysis, a multivariate generalized linear model, and a structural equations model. The empirical results indicate a positive influence of green entrepreneurship in green product innovation and green process innovation. Furthermore, the mediating role of firm strategies in the relationship between green entrepreneurship, green innovation, and competitive advantage is confirmed. This study shares similarity with the current one as they both have the same independent variable and dependent variable. The difference exists in terms of the size of firms studied and in the geographical scope.

Eugene and Tafadzwa (2022) conducted a study aimed at assessing the impact green product innovation and green process innovation on sustainable competitive advantage and business performance of SMEs in the manufacturing sector of South Africa. For this study, a quantitative approach was employed. The analysis was carried out in SPSS 25 for demographic data analysis and AMOS 25 was used for the modeling and modeling of the structural equation. It was established that sustainable competitive advantage and business performance were positively affected by green product innovation and green process innovation. This study shares similarity with the current one as they both have the same independent variable and dependent variable. The difference exists in terms of geographical location.

### **STATEMENT OF THE PROBLEM**

Several environmental hazards in Nigeria gave rise to youth restiveness in the country and emergence of angry groups came up due to the environmental pollution caused by SMEs that did not appreciate the need to go green. Nigeria has a high level of air pollution, poor water quality, high level of noise from traffic, environmental pollution caused by polymer, a lot of great and rapid decrease energy waste. SMEs in Nigeria face numerous challenges, including environmental degradation, resource depletion, and climate change. The country's southeast region, home to numerous Small and



Medium-sized Enterprises (SMEs), is no exception. This region has suffered from rampant deforestation and land degradation threatening biodiversity and ecosystem; Industrial activities, vehicle emissions, and poor waste management leading to air and water pollution, affecting human health and the environment (WHO, 2018; NPC, 2018); Vulnerability to climatic change impacts like rising temperatures, droughts, and floods, which affect agriculture, health, and livelihoods (IPCC, 2014). Small and medium scale enterprises in Nigeria as a whole and southeast in particular can use different strategies to encourage green behavior to achieve sustainable development. Due to growing environmental problems and its adverse effects on physical and mental health of human beings a lot needs to be done in advocacy for ethos of greenness.

Despite the growing importance of green entrepreneurship in influencing small and medium-sized enterprises (SMEs) performances in southeast Nigeria, this region is still faced with significant challenges in adopting green innovative practices, which hinders their ability to improve their environmental performance, reduce carbon footprint, and enhance their overall performance (Chukwuka and Eboh, 2018). The lack of understanding of the influence of green innovation on firms' performance and inadequate regulatory support are some of the key barriers that hinder the adoption of these practices among SMEs in the region. As a result, SMEs in southeast Nigeria are missing out on the opportunities to improve their competitiveness, reduce environmental degradation, and contribute to sustainable economic development. There is also limited research that explores this area and need for more empirical studies to be carried out in order to understand the actual outcomes and influences of green entrepreneurship in different context, more especially on the context of green innovation. This study therefore seeks to close this gap by determining the influence of green entrepreneurial innovation on SMEs performance in Southeast Nigeria.

### **OBJECTIVE OF THE STUDY**

The broad objective of this study was to determine the influence of green innovation on small and medium enterprises performance in South-East Nigeria. Specifically, the study sought to determine whether green entrepreneurial innovation influences competitive advantage of SMEs in the region.

### **RESEARCH QUESTION**

The following research question guided the study:

1. How does green entrepreneurial innovation influence competitive advantage of SMEs in South-East Nigeria?

## RESEARCH HYPOTHESIS

The following null hypothesis was tested at 0.05 level of significance

H<sub>0</sub>: There is no significant influence of green innovation on competitive advantage of SMEs in South-East Nigeria.

## METHODOLOGY

This study adopted a descriptive survey research design. This is because the study made use of questionnaire to collect data from a sample of SMEs operators while the findings are expected to be generalized to the entire population. Survey research design involves asking questions and recording responses on a defined research problem using a specified instrument usually the questionnaire (Okeke, Olise & Eze, 2014). The study was conducted in the South-East Nigeria comprising Abia, Anambra, Ebonyi, Enugu and Imo States respectively. The population of the study was all the 196,075 small and medium enterprises in the area that were registered with SMEDAN as at 2020. Taro Yamane formula was used to determine sample size of 400 SMEs, while stratified random sampling technique was employed to draw 80 SMEs from each of the five states. The instrument for data collection was a five-point rating scale questionnaire titled “Green entrepreneurship and SMEs performances (GESMEsP) containing 13 items with strongly agree(SA), agree (A), neutral (N), disagree (D) and strongly disagree(SD). The questionnaire was validated by three experts and to check the internal consistency, Cronbach Alpha was used because it is one of the best methods used in measuring attitude scales where there are no preferred answers and every answer attracts a score (Nworgu 2015). The internal consistency of the questionnaire items was 0.83. Data were collected using electronic media comprising of Facebook, WhatsApp and Telegram to distribute the online questionnaire prepared using Google form and collect data from respondents. This helped in the seamless distribution of the questionnaire and easy coding and analysis of the questionnaire as the questionnaire was returned to a designated email already arranged and some level of descriptive statistics would have already been done.

The data collected were analyzed using mean ratings and standard deviation to answer the research question and to check the spread of the respondents’ responses to the mean; while simple linear regression analysis was used to test the null hypothesis at 0.05 level of significance. Decisions for the questionnaire items and the research question were based on a cut-off mean score of 3.50 which implies that if an item or the cluster mean score is 3.50 and above, it means that the respondents agreed but if it is below 3.50, it means that the respondents disagreed. Therefore, a cluster mean score is 3.50 and above means that respondents agreed that green innovation influences the competitive advantage of SMEs in the area of study, but where it is less than 3.50, it means that respondents disagreed that green innovation influences SMEs’ competitive advantage in the study area. For the hypothesis, where the p-value is equal or greater than 0.05, ( $P > 0.05$ ) it means that green innovation does not have significant influence

on the competitive advantage of the SMEs and the null hypothesis was not rejected. Where the reverse is the case, ( $P < 0.05$ ), it means that green innovation has significant influence on the competitive advantage of SMEs and the null hypothesis was rejected. SPSS version 25 was used for the analysis.

## RESULTS

The result of the descriptive analysis is presented in Table 1 below.

**Table 1**  
**Respondents' mean and standard deviation ratings on how green entrepreneurial innovation influences competitive advantage of SMEs in Southeast Nigeria.**

S/N	Item statement	Mean	SD	Remarks
1	designing products with minimal environmental impact using recyclable materials gives SMEs a competitive advantage.	4.08	0.81	A
2	minimizing waste makes SMEs to differentiate themselves from competitors and gain a competitive advantage in the market.	4.07	0.93	A
3	using renewable energy sources such as solar energy, can lead to cost savings and operational efficiency of SMEs.	4.04	1.00	A
4.	applying nature-inspired designs such as pineapple-leaf inspired textiles gives competitive advantage.	4.19	0.86	A
5.	developing new products and services that cater to the growing demand for eco-friendly solutions, gives SMEs a unique selling proposition	4.19	0.86	A
6.	Partnerships and collaborations with other environmentally conscious organizations helps to expand the market reach and customer base of SMEs.	4.2	0.7	A
7.	Conducting regular environmental audits to comply with	4.11	0.81	A

mance of SMEs.

8. Applying green Innovative ideas helps to avoid potential penalties or legal issuing, ensuring long-term business sustainability.	4.08	0.9	A
9. Investing in solar, wind, or other renewable energy sources to power operations provides positive media coverage and public recognition.	4.06	0.91	A
10. SMEs use green innovation for enhancing brand visibility and reputation.	4.12	0.86	A
11. Prioritizing sustainability and environmental responsibility like reduction of energy consumption and paper usage attracts investors and secure funding more easily, which gives financial advantage to SMEs.	4.06	0.92	A
12. Implementing water-saving technologies and practicing minimizes water waste thereby improving resource management and reducing costs.	4.09	0.83	A
13. SMEs Implement green innovation by creating products with longer lifespan.	4.12	0.91	A
Cluster Mean	4.12		A

(N=383)

Table 1 shows that mean scores for all the items are above the cut-off mean of 3.50 which means that the respondents agreed with each of them. The cluster mean value of 4.1 which is above the cut-off point of 3.50 indicates that on the whole, the business owners agreed that green innovation influences competitive advantage of SMEs in South-East Nigeria. Standard deviation for all the items is within the same range from 0.8 to 1.0 which shows that the respondents are homogeneous in their ratings.

Table 2

Results of linear regression analysis on the influence of green innovation on competitive advantage of SMEs in South-East Nigeria.

**Model Summary**

Model	R	R Square	Adjusted R square	Std Error of estimate
1	0.67	0.45	0.45	2.3

Predictors (constant) Green innovation

Dependent variable: competitive advantage.

**ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig	Decision
Regression	1846.302	1	1846.302	321.067	.000	Significant
Residual	2190.946	381	5.751			
Total	4037.248	382				

**Coefficients of Regression analysis**

Model	Unstandardized coeff.		Standardized coeff.	T	Sig
	B	Std Error	Beta		
Constant	7.4	0.97		7.6	.000
Green innovation	0.6	0.34	0.67	17.9	.000

Data in Table 2 shows that the model demonstrated a significant overall fit.  $F(1, 381) = 321.067$ ,  $P < 0.05$ , with an  $R^2$  of 0.45, indicating that approximately 45% of the variance in competitive advantage could be explained by the linear relationship with green innovation which is large. The regression equation in competitive advantage where the unstandardized coefficient for green innovation ( $B=7.4$ ,  $\beta=0.67$ ,  $P < 0.05$ ) signifies that there is significant positive influence of green innovation on SMEs competitive advantage in South-East Nigeria, therefore the null hypothesis is rejected. The findings suggest that SMEs that adopt green innovation strategies are more likely to achieve a competitive advantage over others.

## DISCUSSION

### **Influence of green innovation on competitive advantage of SMEs in Southeast Nigeria**

The findings of this study revealed that green innovation positively influences competitive advantage of SMEs in Southeast Nigeria. All thirteen items under green innovation were rated as 'Agree' by the respondents. This rating indicates that SMEs that design products with minimal environmental impact, invest in solar, wind or other renewable energy sources and adopt other green innovation strategies tend to have a higher competitive advantage compared to those that do not, thereby leading to greater performance. The result of the linear regression analysis also indicated that there is significant positive influence of green innovation on SMEs competitive advantage.

The finding is consistent with Abubakar et al (2022) which reported a significant influence of green entrepreneurial innovation on sustainable business performance and competitiveness. They agree with the findings of Michalis et al (2022) that there is a positive influence of green entrepreneurship in green product innovation and green process innovation. Furthermore, the results support Mohammad et al (2018) which found a significant positive impact of entrepreneurial innovativeness on business performance.

However, the findings of the study differ slightly from that of Wafiq and Erna (2023) which reported that green product innovation has effect on firm performance while green process innovation does not have effect on firms' performance. The findings of this study also have implications for policy makers and practitioners. For instance, policy makers can provide incentives and support for SMEs to adopt green innovation strategies, such as tax breaks, subsidies and training programs. On the other hand, practitioners can also prioritize green innovation as a key strategy for achieving competitiveness and higher performance. Furthermore, the study's findings suggest that SMEs in South-East Nigeria can benefit from adopting green innovation strategies, such as reducing waste and emissions, using renewable energy and implementing water saving technologies.

## CONCLUSION

Based on the results of the study, that green innovation has a significant positive influence on SMEs' performance in South-East Nigeria, it was concluded that by adopting green innovation strategies the SMEs can improve their competitiveness and also contribute to sustainable development in the region.

**RECOMMENDATIONS**

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

1. SMEs in Southeast Nigeria should adopt green innovation practices, such as reducing waste, conserving energy, and using environmentally friendly materials. They should invest in green innovations, such as solar, wind and other renewable energy systems, to reduce their environmental impact and improve their performance.
2. Business owners should sponsor their staff to adequate training programmes like short courses, conferences, seminars and workshops to develop skills for effective adoption of green entrepreneurial innovation practices.
3. The government should develop policies that support the growth of green entrepreneurship in Southeast Nigeria, such as tax incentives and subsidies.
4. Government should provide training and capacity-building programmes for SMEs to develop the skills and knowledge needed to adopt green entrepreneurship practices.



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