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Green Innovation and Technology: Implications for the Nigerian Financial Market

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***Abstract*-- In Nigeria recently, there seems to be a lot of attention drawn to the application of environmentally friendly technologies and innovations aimed at enhancing economic sustainability in the Nigeria's financial market. This paper attempted an in-depth analysis that captures green innovation, green technology and Nigerian financial market nexus with special reference to their challenges and opportunities. This paper adopted relevant theories of green innovation and technology (GIT) and financial market activities. This paper showed that the nexus between green innovation and technology and the Nigerian financial market is such that the financial markets provides the capital required for green innovation whereas GIT enhances market resilience, sustainability, and long-term economic growth. The findings show that as opportunities abound for employing GIT in the Nigerian financial market, so also abounds the challenges of achieving sustainability of the financial market. This paper recommended that to enhance Nigeria's GIT performance in the financial market environment, a multi-faceted approach is required, focusing on adhering strictly to environmental, social and governance (ESG) principles. By integrating these green innovations into the financial market, Nigeria can attract sustainable investments, improve financial stability, and drive long-term economic growth.**

***Keywords*— ESG, financial market, green finance, green innovation, green technology, Nigeria.**

I. INTRODUCTION

Green Innovation and Technology (GIT) refers to the development and application of environmentally friendly technologies, processes, and innovations aimed at reducing negative environmental impacts, enhancing sustainability, and promoting energy efficiency(Chukwukadiba & Nnamani, 2023). It includes advancements in renewable energy, waste management, sustainable agriculture, green manufacturing, and eco-friendly materials. GIT plays a crucial role in addressing climate change, resource depletion, and pollution while fostering economic growth through sustainable practices. Governments, businesses, and researchers invest in GIT to achieve long-term ecological and economic benefits.

Given Nigeria's economic reliance on fossil fuels and its vulnerability to climate change, GIT is crucial for achieving sustainable development, reducing carbon emissions, and enhancing environmental conservation (Abdullahi, Shamwil & Munkaila, 2025). Key areas of GIT in Nigeria can be broadly categorized into renewable energy, sustainable agriculture and food security, waste management and recycling.

In the area of renewable energy, Nigeria has abundant solar resources, with initiatives like the solar power Naija program under the economic sustainability plan aimed at providing off-grid solar solutions to millions of households. Wind and hydropower projects like the Katsina wind farm and small hydroelectric dams which contribute to diversifying Nigeria's energy mix as well as the bioenergy which concentrates research on converting agricultural wastes (e.g., cassava peels, palm kernel shells) into biofuels. Adoption of climate-smart agriculture techniques, such as drought-resistant crops, precision farming, and organic fertilizers, can be categorized as sustainable agriculture and food security while technologies like drip irrigation, hydroponics, and aeroponics are used to optimize water usage and boost food production. Investing in Nigeria's Green Innovation and Technology sector offers the potential for substantial environmental and economic benefits, contributing to sustainable development and climate change mitigation (Nchofoung, Edoh & Monkam, (2022). The Nigerian financial market (NFM) refers to the system through which financial assets, such as stocks, bonds, currencies, and commodities, are created, traded, and managed within the financial landscape. It serves as the platform for mobilizing funds from surplus economic units (savers, investors) to deficit economic units (businesses, government, and individuals in need of capital for business and expansion) in order to facilitate economic growth and development. The Nigerian financial market is broadly classified into money market (short-term funds market) and capital market (long-term funds market). The money market deals with short-term financial instruments, typically with maturities of one year or less.

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It helps in liquidity management and short-term financing. Key instruments used in the market includes treasury bills, commercial papers, certificates of deposit, banker's acceptances, repurchase agreements among others. The major participants in the money market are the Central Bank of Nigeria (CBN), deposit money/commercial banks, merchant banks, discount houses, and corporate entities while the CBN regulates their activities. The capital market provides a platform for trading long-term securities, facilitating investment and economic expansion using instruments like equities (stocks), bonds (corporate and government), preference shares, and debentures (Adeyemi, Olasupo, Johnson, Adegun & Sajuyigbe, 2024). The major participants in this market includes Nigerian Stock Exchange (NGX), Securities and Exchange Commission (SEC), issuing houses, stockbrokers, pension funds, insurance companies, and institutional investors while SEC regulates their activities.

Other specialized markets existing in the Nigerian financial market are the foreign exchange (Forex) market which facilitates currency trading and exchange rate determination; commodity market which deals with agricultural and mineral commodities (e.g., crude oil, cocoa, palm oil), derivatives market which trades financial contracts based on the value of underlying assets and the insurance and pension markets involved in risk management (insurance) and retirement savings (pensions). The Nigerian financial market typically carries out functions such as channeling funds from savers to productive investments, ensuring capital is allocated to the most productive sectors, enabling easy conversion of financial assets to cash, managing economic risks through insurance and derivatives and supporting business expansion and government financing through debt instruments.

Green innovation technology has influenced Nigeria's economic growth, particularly through renewable energy initiatives and digital advancements especially solar power. Also, there are improvements in health, and safety of the average Nigerian due to reduced reliance on hazardous energy sources like kerosene lamps with its periodic explosions. A study involving 2,658 households and businesses connected to solar mini-grids in Nigeria revealed significant socioeconomic improvements (UNDP, 2016). One year post-connection, these communities experienced notable enhancements in productivity and income levels.

Bank of Industry (BOI) in collaboration with the United Nations Development Programme launched the solar energy programme to provide long-term financing for solar energy solutions in off-grid rural communities. Between 2015 and 2016, solar solutions were installed in six off-grid communities across Nigeria, aiming to power over 100,000 households and microenterprises by 2021. In the second quarter of 2024, the Information and Telecommunication (ICT) sector contributed approximately 20% to Nigeria's real gross domestic product (GDP). This growth underscores the sector's potential to drive economic diversification and reduce dependence on oil and gas revenues (CBN, 2024). Initiatives like the Tony Elumelu Foundation (TEF) have empowered young entrepreneurs, leading to job creation and economic development. Since 2010, TEF's support has resulted in the creation of over 40,000 jobs and generated over ₦2.3 billion in revenue, highlighting the impact of digital innovation and entrepreneurship on economic growth (UNDP, 2016).

Over the years, Nigerian government has implemented policies and programs to support green innovation and technology investments in the country. Renewable energy programs aims to stimulate the energy sector by attracting capital and promoting the development of renewable energy initiatives and technologies in Nigeria was set up in 2020. National Agency for the Great Green Wall was established to address land degradation and desertification, boost food security, and support communities to adapt to climate change in northern Nigeria. Bank of Industry Initiatives programs like the solar energy programs to fund and implement renewable energy projects, aiming to power off-grid households and microenterprises in rural communities were launched. Despite these advancements and policies, Nigeria faces challenges in fully harnessing green innovation for economic growth. The national power grid's frequent failures result in economic losses estimated at ₦29 billion annually (CBN, 2024). Aging infrastructure, vandalism, and insufficient investment contributed to these challenges, underscoring the need for decentralized energy solutions like solar power. The transition to green energy is hindered by a shortage of local expertise. Companies have encountered difficulties in recruiting skilled personnel for renewable energy projects, thereby emphasizing the necessity for enhanced technical and vocational training to support the sector's growth (World Bank, 2017).

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Nigeria's financial market has played a pivotal role in shaping the nation's economic trajectory since 2020. Nigeria's GDP growth decelerated from 3.3% in 2022 to 2.9% in 2023, primarily due to high inflation and a sluggish global economy. This growth was driven by the services and agriculture sectors on the supply side, and by consumption and investment sectors on the demand side. Inflation surged from 18.8% in 2022 to 24.5% in 2023, influenced by rising fuel costs and a depreciating naira. The naira experienced significant devaluation, losing over 70% of its value against the US dollar following two devaluations. In 2023, the Nigerian government implemented major reforms, including the removal of the petrol subsidy and unification of exchange rates. These measures aimed at strengthening public finances and stabilize the naira exchange rate, resulting in increased foreign direct investments, which reached ₦30 billion over the past year. The naira's stabilization and attractive yields has the tendency of drawing foreign investors back to the market. In the area of remittance inflows, this has reached ₦600 million in September 2024, up from ₦250 million earlier in the year. The CBN aims to achieve ₦1 billion in monthly remittances. Consequently, foreign reserves have risen to over ₦40 billion (CBN, 2024).

Also the Nigerian government has implemented policies and programs to support the Nigerian financial market. The government enacted comprehensive tax reforms to boost revenue and streamline the tax system. Notably, the value added tax (VAT) rate has been maintained at 7.5%, with the attendant considerations. Adjustments have been made to the distribution of VAT revenue and tax rates for the petroleum industry. The CBN has mandated banks to bolster their capital bases by March 2026, aiming to enhance financial stability. Banks with international operations are required to have a minimum capital of ₦500 billion, national banks ₦200 billion, and regional banks ₦50 billion. This directive is expected to lead to mergers and acquisitions, strengthening the banking sector. To enhance transparency and liquidity in the foreign exchange market, the CBN planned to automate foreign currency trades starting December 2024. This shift from over-the-counter transactions to an automated system aims to provide real-time pricing and improve market efficiency. SEC continues to regulate and develop the capital market, ensuring orderly and equitable dealings in securities. The SEC's oversight is crucial in maintaining investor confidence and promoting market integrity (CBN, 2024).

Despite these positive indicators and policy reforms, challenges persist, including elevated inflation, high poverty levels, and public discontent over economic hardships. Nigerians are frustrated over rising living costs but this does not change the fact that Nigeria's financial market has been instrumental in both influencing and reflecting the nation's economic conditions since 2020. These scenarios above gave rise to this in-depth study that captures green innovation, green technology and Nigerian financial market nexus with special reference on their challenges and opportunities.

II. Review Of Literature

Conceptual Literature

There is no universally accepted definition of green innovation and technology (GI, but several scholars and institutions have defined related concepts. Green innovation refers to innovation that reduces environmental harm, either through new or improved products, processes, marketing methods, or organizational approaches (OECD, 2011). Green technology refers to environmentally friendly technologies that aim to conserve natural resources, reduce pollution, and promote sustainability (United Nations Environment Programme, UNEP, 2015). Green technology is a set of technological innovations aimed at creating energy efficiency, reducing carbon emissions, and enhancing sustainability in industrial and economic systems (John Mathews, 2016). Well-designed environmental regulations can trigger innovations that may offset the costs of compliance, leading to competitive advantage through green innovation (Porter and Van der Linde, 2006). Sustainability-driven innovation creates business value by improving efficiency, reducing waste, and addressing environmental and social concerns (Hart and Milstein, 2003). From these definitions, Green Innovation and Technology (GIT) can be defined as the development and application of innovative technologies, products, and processes that reduce environmental impacts, promote energy efficiency, and contribute to sustainable economic growth.

A financial market is a medium where buyers and sellers engage in the exchange of financial assets, such as stocks, bonds, currencies, and derivatives. It facilitates the allocation of capital by connecting investors with entities that need funding, ensuring liquidity, price discovery, and efficient capital distribution.

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Financial markets can be categorized into different segments, including the money market (for short-term funds), capital market (for long-term securities), foreign exchange market (for currency trading), and derivatives market (for risk management instruments) (Lee and Lee, 2022).

Theoretical Literature

This section will study relevant theory each in the GIT and financial market areas.

A. Diffusion of Innovation (DOI) Theory

The Diffusion of Innovation (DOI) Theory, developed by Everett Rogers in 1962, explains how innovations (new ideas, technologies, or practices) spread within a social system over time and it is widely used in various disciplines. In the context of green innovation and technology, DOI helps analyze how sustainable technologies (e.g., renewable energy, electric vehicles, eco-friendly materials) are adopted by individuals, businesses, and societies. Rogers describes a five-stage process individuals or organizations go through when adopting an innovation. Knowledge – the individual becomes aware of the innovation and understands how it works, Persuasion – the individual forms a favorable or unfavorable attitude toward the innovation, Decision – the individual decides whether to adopt or reject the innovation, Implementation – the innovation is put into use and finally Confirmation – the adopter seeks reinforcement for the decision or may reverse it if exposed to conflicting messages. Rogers identified attributes that determine how quickly an innovation is adopted to include, the perceived superiority of the innovation over existing alternatives, how well the innovation aligns with existing values, needs, and experiences, the level of difficulty in understanding and using the innovation, the ability to test the innovation before full adoption and the extent to which the benefits of the innovation are visible to others.

Green Innovations with these characteristics tend to diffuse faster though the social structure, cultural norms, and regulatory environment influence the speed and extent of innovation diffusion. DOI theory is widely used to study the adoption of sustainable innovations, such as renewable energy technologies, green manufacturing and eco-friendly products and smart technologies for sustainability. The strengths of DOI theory includes universal applicability, meaning that it can be applied across industries and disciplines and provision of insights on factors affecting diffusion.

The limitations on the other hand includes that it assumes a step by step process of adoption without fully considering external constraints like cost, regulation, and infrastructure available. DOI theory provides a comprehensive framework for understanding how green innovations spread within societies and industries. It is useful for policymakers, businesses, and researchers looking to accelerate sustainable technology adoption.

B. Efficient Market Hypothesis (EMH)

The Efficient Market Hypothesis (EMH), developed by Eugene Fama (1970), is one of the most influential theories in financial economics. It asserts that financial markets are informationally efficient, meaning that asset prices fully reflect all available information at any given time. The theory suggests that it is impossible to consistently achieve above-average returns through stock selection or market timing because all known information is already incorporated into asset prices. As a result, only random luck or insider information can lead to abnormal profits. Fama identified three forms of market efficiency, each based on the type of information reflected in asset prices to include: weak-form efficiency in which asserts with all past market prices and volume data are already reflected in current prices. This implies that technical analysis (chart patterns, moving averages, trends) is ineffective for predicting future price movements; Semi-strong form efficiency which states that all publicly available information (financial reports, earnings announcements, economic news, industry trends) are already incorporated into asset prices and finally, strong-form efficiency which claims that all public and private (insider) information are already reflected in stock prices meaning that not even insider traders can consistently earn excess returns. Despite its popularity, EMH faces criticism that stocks that have performed well tend to continue performing well in the short run, contradicting weak-form efficiency. Also events indicate that stock prices sometimes deviate from true value due to irrational investor behavior since investors often make irrational decisions based on emotions thereby challenging EMH. The theory asserts that financial markets fully reflect all available information, making it impossible to consistently achieve above-average returns. This study examines the Nigerian financial market in light of EMH, analyzing whether the market is weak-form, semi-strong, or strong-form efficient. In reality, The Nigerian financial market exhibits weak-form inefficiency and semi-strong inefficiency, because both technical and fundamental analysis can yield excess returns.

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While ongoing reforms aim to enhance efficiency, challenges such as liquidity constraints, regulatory gaps, and investor behavior continue to hinder the development of the financial market.

Empirical Literature

Few empirical studies on on GI and financial market are presented..

Adeyemi, Olasupo, Johnson, Adegun and Sajuyigbe (2024) studied green innovation and finance with evidences from the Nigerian banks with the objective of examining the mediating effect of financial innovation on the relationship between green finance and environmental performance of Access Bank. A total of 200 questionnaire were completed and data were analyzed using the structural equation modeling technique. The results show that green loans, green training, green investment, and green policy have a positive and significant impact on environmental performance. The authors recommended that government green policies should be such to promote financial innovation so as to enhance the environmental performance of commercial banks in Nigeria.

Olusegun and Ajao (2024) studied capital market development and economic growth in Nigeria from 2003 to 2022 using market capitalization as a proxy for stock market development, along with interest rates, and the real gross domestic product as a measure of economic growth in order to determine whether there is a substantial and positive impact of Nigeria's stock market development on economic growth in Nigeria. Multiple regression analysis was the econometric test employed in the study. The results show that stock market has a positive but non-significant impact on economic growth. The study recommended that market regulators for the capital markets, such as the Securities and Exchange Commission, should be more adaptable and receptive to new ideas without endangering investor interests, protection, or the effectiveness of the market.

Sofiyan Umar (2024) explored the interrelationship between capital market integration, money market efficiency, and economic growth in Nigeria. The results show that higher levels of capital market integration has positive impact on economic growth while improved money market efficiency directly impacts the availability of credit for businesses and consumers. The study recommended that the government should set policies aimed at enhancing capital market integration and improving money market operations as these are essential tools for driving economic growth in Nigeria.

Abdullahi, Shamwil and Munkaila (2025) evaluated the impact of green technological innovation, renewable energy consumption and financial development on environmental sustainability in Nigeria by employing dynamic autoregressive distributed lag technique, modified ordinary least square and canonical cointegrating regression approaches as the econometric tools. The results indicate that green technological innovation, renewable energy consumption and financial development respectively, promote environmental sustainability in the longrun, whereas, in the shortrun, green technological innovation is negatively related to the environmental quality in Nigeria. Also trade openness contributes towards environmental degradation both in the short-run and the long run. The study recommended that policymakers should strengthen policies that encourage green technological investments and innovations, in order to promote economic growth and environmental sustainability in Nigeria.

Ilesanmi (2025) examined how green and sustainable business innovation can be harnessed to advance a just and transformative business model and energy transition in Nigeria. The findings especially from the reviewed literature showed that external factors such as unsupportive government policies hinder successful implementation of eco-entrepreneurial activities. Also lack of internal capacity of eco-ventures hinder the successful design and implementation of transformative and sustainable business model that promote business opportunities. The study therefore recommended that government should close gaps that hinder sustainable business innovation as this will address risks encountered by entrepreneurs and also make impactful contributions to attaining global sustainability goals.

III. Opportunities Of Green Innovation Technology And Nigerian Capital Market

Numerous opportunities abound in the green innovation and technology sector of the Nigerian economy. Opportunities exist in developing solar farms, wind parks, and off-grid renewable energy solutions to enhance electricity access in rural areas. Nigeria's potential for green hydrogen production is significant, given its renewable energy resources. Investing in green hydrogen technologies can position Nigeria as a leader in the emerging hydrogen economy. Establishing recycling plants for plastics, electronic waste, and organic materials can address waste management challenges and create employment opportunities.

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Investing in agroforestry projects that integrate tree planting with crop cultivation can provide farmers with additional income through carbon credits for sustainable agriculture. Investments in modern farming techniques, agro-processing, and agritech solutions are particularly promising, given the government's focus on achieving food security and reducing import dependence. Developing electric vehicle charging infrastructure and supporting the adoption of electric vehicles, including motorcycles and tricycles, can reduce carbon emissions in the transportation sector and reduce excessive use of fuels. Nigeria has an estimated 427,000 MW of solar power potential in the renewable energy growth and infrastructure, yet only 12,500 MW of installed capacity. Establishing investment funds dedicated to financing green projects can mobilize capital for sustainable initiatives. Investment in solar farms, hydro projects, and mini-grids can improve energy access and market growth. Collaborations with organizations like the Nigerian Capital Development Fund (NCDF) can facilitate investments in sectors such as renewable energy, sustainable agriculture, and eco-friendly technologies. Growing investment in solar mini-grids and waste recycling, private sector initiatives that drive innovation in clean energy and emerging government backed programs spells boom for Nigeria. The energy sector, encompassing oil, gas, and renewable energy, presents substantial investment opportunities. Recent developments, such as the commissioning of the Dangote Refinery, has reshaped the downstream oil industry, introducing competitive dynamics and potential for private investment. Finally adequate jobs could be created in the renewable energy sector by developing skilled workforce in green engineering, energy management, and climate science. This green industrialization can reduce Nigeria's reliance and dependence on oil and create a more resilient economy. In summary, Nigeria's journey in green innovation and technology showcases a blend of progress and hurdles. Continued investment, effective policy implementation, capacity building, and public-private partnerships are essential to fully harness the potential of GIT for sustainable development in the country. By harnessing these opportunities, Nigeria can unlock the full potential of GIT fostering economic growth while ensuring environmental sustainability [Takalo & Tooranloo 2021; Yalabik & Fairchild, 2011; Juan, 2011).

Nigeria's financial market offers a diverse array of investment opportunities, bolstered by recent regulatory reforms aimed at enhancing economic growth and investor confidence.

Nigeria's technology sector, especially financial technology (FinTech), has seen exponential growth. Fintech startups can develop digital platforms for green investment, carbon offset trading, and sustainable banking. Financial institutions can fund climate-smart agriculture programs powered by AI which can reduce waste and increase productivity. Expanding the Central Bank of Nigeria's Sustainable Banking Principles encourage banks to integrate sustainability which could create a more robust green finance ecosystem. Financial markets can provide green mortgages and energy-efficient housing loans. The real estate sector in Nigeria, particularly in urban centers like Lagos, Abuja, and Port Harcourt, has capacity for significant growth. Investments in residential and commercial properties have yielded substantial returns, driven by rapid urbanization and a growing population. Innovative schemes, such as rent-to-own models, have made property investments more accessible to a broader range of citizens. The government offer of tax breaks for green investments and grants for renewable energy projects could accelerate funding for large-scale infrastructure projects. The proliferation of digital payment platforms, mobile banking, and online investment services have provided access to financial services, attracting both local and international investors. Nigeria's capital markets have witnessed a resurgence in foreign capital inflows, with investments of over ₦6 billion in the first half of 2024. This growth is attributed to economic reforms and the liberalization of currency controls, enhancing the attractiveness of equities and debt instruments. Nigeria issued Africa's first sovereign green bond (₦10.69 billion in 2017), creating a market for green finance. The opportunity therein entails expansion of green bonds, climate funds, and impact investing which can attract foreign direct investment. The introduction of carbon credit trading and emissions reduction programs allow businesses to earn from reducing emissions. The opportunity therein entails the development of a carbon trading market which could boost Nigeria's financial sector and ensure environmental sustainability (Nchofoung, Edoh & Monkam,2022; Sadiq, Le-Dinh, Tran, Chien, Phan and Huy, (2023).

Opportunities for green innovation and technology and the Nigerian financial market abound. The transition to a green economy presents significant opportunities for both sectors. These opportunities span investment, job creation, financial market expansion, and environmental sustainability.

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The nexus between GIT and NFM is a two-way relationship- Financial markets provide the capital required for green innovation while GIT enhances market resilience, sustainability, and long-term economic growth. The nexus lies in the role of finance in supporting sustainable development and the transition to a green economy. This relationship is characterized by capital mobilization, risk mitigation, regulatory frameworks, and economic growth through sustainable investments. To fully harness this relationship, Nigeria needs more investment-friendly policies, improved financial incentives, and increased public-private partnerships (both locally and internationally) in sustainable projects.

IV. Challenges Of Green Innovation Technology And Nigerian Capital Market

Despite the potential benefits of integrating GIT into the Nigerian financial market, several barriers hinder progress. These challenges range from policy inconsistencies to limited financing, infrastructure gaps, and market risks. Nigerian banks and financial institutions have low participation in green financing, making it difficult for businesses to access funds for renewable energy, waste management, and sustainable green projects. High cost of capital and investment risks exist, making investors to perceive green projects as risky due to long payback periods and uncertain returns. While Nigeria has sustainable banking principles and green bond frameworks, there is weak enforcement and implementation of these green finance policies. This is attributable to limited availability of green funds and loans as well as limited availability of funds for long-term investment. Policy inconsistencies affect investors' confidence and results in low participation. Currency volatility and inflation increase the cost of importing green technology and financing renewable projects in Nigeria. Also frequent devaluation of the Naira unfavorably impact on international trade. Inadequate power supply and connectivity issues still prevail in Nigeria and negatively affects the market (Bankole & Oladapo, 2019; Barbiroli & Raggi, 2003); Frenken & Faber, 2009; Ottman, 1998).

Innovation in green tech requires significant investment in research and development but Nigeria's funding in this sector is low compared to global standards. Many businesses and investors lack knowledge about green bonds, carbon credits, and sustainable finance options often limiting their participation (Chukwukadiba & Nnamani, 2023).

The presidential compressed natural gas initiative faced low adoption rates due to skepticism and infrastructure gaps because businesses and individuals perceive eco-friendly technologies as expensive or unnecessary. The government leads many green initiatives, but private investors remain hesitant due to policy instability and market risks. This results in limited financial inclusion since a significant portion of the population remains unbanked. There is also insufficient public-private partnerships necessary for scaling green projects, further worsened by bureaucracy and corruption which deter foreign direct investment. The transition to green energy in Nigeria is hindered by a significant skills gap in workforce development. Companies face challenges in hiring skilled personnel thereby highlighting the need for enhanced technical and vocational training to support renewable energy projects. Weak enforcement of environmental and sustainability regulations, limited local expertise and infrastructure for green technology adoption, bureaucratic delays and policy inconsistency also hinder large-scale renewable green projects (Tang, 2006).

Enhancing green financing access through lower interest rates and risk-sharing mechanisms, strengthening regulations and enforcement of sustainable finance principles, investing in infrastructure to support renewable energy and technology adoption and raising public awareness about the financial benefits of sustainability could be ways to mitigate these problems. By addressing these challenges, Nigeria can create a more robust synergy between GIT and NFM, thereby fostering economic growth, financial stability, and environmental sustainability.

V. Conclusion And Policy Implications

5.1 Conclusion

Nigeria's GIT performance is moderate but needs significant improvement in policy execution, infrastructure, and workforce capacity. If challenges are addressed, Nigeria could emerge as a leader in sustainable innovation in Africa. Also, Nigeria's financial market plays a crucial role in the country's economic development by ensuring capital formation, liquidity, and investment growth. It has shown resilience amid significant challenges. While economic reforms and currency adjustments have attracted foreign investment and bolstered the equity market, issues such as high inflation, currency volatility, and public discontent over economic conditions persist.

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Continued efforts in policy implementation, infrastructure development, and social welfare are essential to sustain growth and improve the overall economic landscape. While policies supporting GIT in the Nigerian financial market exists, effective implementation and enforcement remain challenges. Strengthening institutional frameworks and ensuring policy coherence are crucial for advancing these initiatives.

5.2 Policy Implication

i. The financial regulators should expand Nigeria's green bond market to finance renewable energy, clean transportation, and climate-resilient infrastructure by providing tax incentives and lower interest rates for green projects so as to attract both domestic and foreign investors. The financial regulators should encourage banks and financial institutions to integrate environmental, social, and governance criteria into lending decisions.

ii. The Nigerian government should promote digital green banking by enforcing paperless banking through digital banking platforms, reducing the carbon footprint of financial transactions and introducing green savings accounts where deposits are used exclusively for funding sustainable projects. They should develop AI-powered credit assessment models that favor eco-friendly businesses and sustainable banking practices.

iii. CBN should promote the development of fintech startups focused on sustainability, such as platforms for investing in impact-driven businesses and encourage mobile money platforms to integrate viable financial products, such as micro-loans for setting up businesses. They should encourage institutional investors to prioritize investments in companies with sustainable business models.

iv. Green public private partnerships is another alternative. The CBN should partner with tech firms to develop smart grids and sustainable energy financing models, leverage international green funds and climate finance instruments to support large-scale sustainability projects. CBN should develop government-backed loan schemes that provide affordable financing for businesses adopting clean energy solutions.

v. The Central Bank of Nigeria should increase green financing and investment incentives by introducing low-interest loans for GIT Startups. They should offer affordable loans to green startups and SMEs. CBN can create a green investment fund for clean energy projects, encourage agroforestry and carbon credit trading to attract international investments and develop national carbon credit registry to track and certify compliance.

vi. The government should bridge the skills gap in GIT by developing green energy training programs, integrate solar, wind, and hydropower training into university and vocational education curricula and establish green tech innovation hubs that provide hands-on training on eco-friendly programs. They should prioritize partnering with international organizations to offer certified training programs.

vii. The government should strengthen policy implementation and regulation by harmonizing green policies and enforcing their implementation. They should streamline regulations to attract private sector investment in large-scale renewable energy projects.

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