

Green-Tech Governance: Reimagining Nigerian Corporate Law for Climate Smart Technology

Zahradeen A. Ahmad^{1*}, Aisha B. Ahmad²

¹Lecturer I, Department of Corporate Law Practice at Nigerian Law School, Abuja - Nigeria

²Senior Associate, Department of Corporate and Commercial Transactions at eButton Legal Services, Kano - Nigeria

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*Corresponding author: Zahradeen A. Ahmad

Lecturer I, Department of Corporate Law Practice at Nigerian Law School, Abuja - Nigeria

Abstract

Climate change poses significant risks to economic stability and sustainable development, necessitating a reorientation of corporate governance frameworks toward environmental accountability and innovation. This paper examines the role of corporate law in advancing green-tech governance in Nigeria, arguing that the existing shareholder-centric model under Nigerian corporate law is inadequate for addressing climate-related risks and promoting climate-smart technologies. Using doctrinal legal analysis, the study interrogates Nigeria's corporate law framework particularly the Companies and Allied Matters Act (CAMA) 2020, the Climate Change Act 2021, and related regulatory instruments to identify gaps in sustainability reporting, director accountability, ESG integration, and incentives for green innovation. The article situates Nigeria's experience within global developments in Environmental, Social, and Governance (ESG) theory and stakeholder-oriented corporate governance. It contends that the absence of mandatory climate-risk disclosure, weak enforcement mechanisms, and limited statutory incentives undermine the effectiveness of corporate participation in climate mitigation and adaptation. The paper proposes a reimagined corporate law framework that embeds ESG duties into directors' obligations, mandates climate-risk disclosure aligned with international standards, incentivizes green-tech investments, and strengthens regulatory enforcement. By advancing these reforms, the paper contributes to scholarly discourse on sustainable corporate governance and offers policy-relevant insights for aligning Nigeria's corporate law with climate resilience and green economic transformation.

Keywords: Green-tech, climate smart-tech, corporate governance, Nigeria.

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INTRODUCTION

Climate change represents one of the major challenges of the 21st century, affecting global ecosystems, human societies, and economies. Earth's climate is changing at an unprecedented rate, largely due to human activities such as industrialization, deforestation, and fuel combustion. These activities have contributed to the atmospheric concentration of greenhouse gases (GHGs), in particular carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), which trap heat and cause global warming. The consequences of climate change include rising sea levels, more frequent and more severe weather events (such as hurricanes, droughts and heat waves); biodiversity change, and environmental and agricultural hazards. As the impacts of climate change become more apparent, there is an urgent need for innovative solutions to mitigate these impacts. Green technologies, also known as clean or environmentally friendly technologies, play an important role in addressing climate challenges.

Corporate entities play a pivotal role in national climate action. They are major emitters of greenhouse gases, key drivers of technological innovation, and critical allocators of capital. Effective green-tech governance the legal and institutional mechanisms that influence corporate engagement with climate-smart technologies is essential if Nigeria is to meet its climate commitments and fully harness the potential of technological innovation for sustainable growth. Despite this, Nigeria's corporate law, principally governed by the Companies and Allied Matters Act (CAMA) 2020, remains largely traditional in its orientation, focusing primarily on shareholder interests and commercial profitability rather than environmental and climate outcomes. While CAMA 2020 represents a significant overhaul of Nigeria's corporate regulatory framework, its provisions do not yet comprehensively integrate climate and sustainability considerations into corporate governance duties and reporting obligations.

Regulatory bodies such as the Securities and Exchange Commission (SEC) have publicly urged businesses to adopt sustainable and climate-friendly practices, highlighting sustainable finance and ESG integration as catalysts for growth and resilience. These pronouncements reflect a growing recognition among Nigerian regulators that corporate entities must play a proactive role in advancing climate and sustainability objectives. Similarly, the Financial Reporting Council (FRC) has underscored the necessity of climate and sustainability governance as a core board responsibility, pushing Nigerian firms toward credible and globally competitive sustainability reporting. The Climate Change Act 2021 established statutory obligations for businesses to designate climate change or sustainability officers and prepare annual reports on carbon reduction efforts, aligning corporate disclosures with national carbon budget targets. However, ambiguities in statutory language and limited enforcement mechanisms may undermine the effectiveness of these obligations, highlighting the need for clearer and more actionable legal mandates connected to corporate governance frameworks.

Nigeria's corporate law still exhibits critical limitations in supporting green-tech governance. The traditional focus on shareholder primacy, weak climate reporting obligations, and fragmented regulatory guidance constrain corporate responsiveness to climate imperatives. This situation risks excluding Nigerian firms from sustainability-driven global value chains and constricts access to international green finance, which increasingly prioritizes robust ESG performance and climate risk management. There is an urgent need to rethink Nigeria's corporate law architecture to better align with climate-smart technology deployment and sustainable corporate conduct. Re-imagining corporate governance to integrate environmental outcomes, embed ESG duties into directors' obligations, and establish mandatory climate risk disclosures will strengthen the legal foundation for green innovation and position Nigeria as a competitive player in the transition to a low-carbon economy.

CONCEPTUAL AND THEORETICAL FRAMEWORK Green Technology and Climate-Smart Technology

Green technology, also known as environmental or clean technology, includes many innovations designed to reduce environmental impact and promote sustainability. A green primary objective is to reduce reliance on non-renewable sources, curb greenhouse gas (GHG) emissions and reduce negative environmental impacts of human activities. Renewable energy systems such as solar, wind, hydro and biomass are available, which produce electricity without emitting significant amounts of CO₂. Other types of green technologies are sustainable agricultural practices such as precision farming, which improves inputs, reduces soil erosion, and conserves water, as well as green infrastructure solutions, such as energy-efficient

buildings, wastewater management, and energy-reducing sustainable urban planning. Several theoretical frameworks have emerged to guide the adoption and implementation of green technologies in the context of sustainability. One such policy is the "triple line" approach, which emphasizes balancing economic, social and environmental impacts in order to pursue sustainable development. Another important framework is the "circular economy" model, which encourages the development of products and strategies to reduce waste through recycling and reuse. This framework provides the basis for driving technology green is embedded in broader approaches to sustainability, which ensure that its adoption not only reduces environmental impacts but also contributes to socio-economic development. Green technologies play an important role in mitigating climate change by reducing GHG emissions, increasing energy efficiency, and promoting the use of renewable resources. The ways these technologies climate mitigation measures include carbon sequestration, energy conversion, and pollution reduction. For example, renewable energy technologies such as solar and wind are replacing fossil fuel energy, significantly reducing carbon emissions. In addition, energy-efficient technologies such as LED lighting, electric vehicles (EVs), and manufacturing efficiencies reduce energy consumption, reducing the demand for low-carbon energy. Technologies that green has been at the forefront of climate change mitigation strategies in developed countries. Several case studies highlight the success of this technology in countries such as Germany, Denmark, and the United States. In Germany, for example, the Energiewende (Energy Transition) program greatly expanded renewable energy infrastructure, especially wind and solar energy, leading to significant reductions in carbon emissions - Reduced dependence on the fuel tank. There has been tremendous success with innovations in electric vehicles in the U.S., led by companies such as Tesla, that help reduce emissions in the transportation industry. This case study highlights the power of a green technologies can play a transformative role in combating climate change while strong supports emphasize planning processes and investments. The adoption of green technologies in developing countries presents both opportunities and challenges.

Developing countries, often referred to as the global south, are uniquely positioned in the climate change discussion. While they contribute relatively less to global GHG emissions compared to developed countries, they are more vulnerable to the impacts of climate change and thus to the adoption of green technologies in these countries are important not only for their own development but also for global efforts to mitigate climate change. However, the current scenario for the adoption of green technologies in developing countries is quite different. While some countries, such as China, India and Brazil, have made significant progress in adopting renewable energy, many others have lagged behind due to economic constraints, lack of

resources and lack of technology. Similarly, Brazil has been a pioneer in biofuels, primarily producing ethanol from sugarcane, and has helped reduce the country's dependence on imported oil and reduce its carbon footprint. Despite success these types, many developing countries face significant challenges in implementing green technologies. Financial constraints are among the most important, as many green technologies require large upfront investments, which can be prohibitive for low-income countries. Besides, lack of technical expertise, poor infrastructure and weak regulatory frameworks often hinder the widespread adoption of green technologies. Dat, Yen in the National Development Strategy for Green Technologies A comparative analysis about the effectiveness of green technologies complicating integration efforts has provided valuable insights into how different countries approach climate change mitigation. These studies typically compare green technologies used in different sectors, such as energy, agriculture and transportation to assess the impact on reducing GHG emissions and promoting sustainable development. For example, studies comparing renewable energy adoption in Europe and Asia highlight the role of government policies, market conditions and cultural factors in affecting green technology adoption. A study by Dat, Yen successfully emphasizes more than how green energy technologies can significantly reduce carbon emissions but a notable gap in literature is the complete lack of comparative studies focusing on technologies that it is mainly on greener adoption and effectiveness in developing countries. Most existing research focuses on developed countries, where green technology adoption is more advanced and well documented. Although some studies of individual developing countries are available, detailed comparative studies of green technologies adoption and their relative success in many developing countries are limited. This gap provides opportunities for further research.

Green-Tech Governance

Green governance is a new idea that includes the concept of sustainability and makes companies responsible for the long-term social, economic, and environmental repercussions. Over the last ten years, academics and businesses have given green governance much attention as it is still a relatively new concept. However, little data exists on how green governance may impact a firm's overall performance. Green governance refers to the processes and structures through which environmental policies are formulated and implemented, integrating ecological considerations into governance frameworks at all levels. It underscores the critical need for synergy among governments, businesses, and civil society to drive impactful and lasting sustainable outcomes.

One study defines green governance as a coordination mechanism that reconciles human-nature conflicts through institutional arrangements aimed at sustainable decision making. It underscores the critical

need for synergy among governments, businesses, and civil society to drive impactful and lasting sustainable outcomes

Green governance models are increasingly integrating Corporate Social Responsibility (CSR) concepts and Green IT strategies to address environmental challenges. These models are designed to harness ICT's full potential, driving efficiency and effectiveness while empowering enterprises to achieve their goals in a sustainable manner. The proposed "ICT Green Governance" framework offers guidelines and principles for improving economic, social, and environmental performance of companies. Interestingly, while traditional corporate governance models like Anglo-Saxon and Continental European have been extensively studied. The literature reveals a glaring gap, with 85% of the reviewed studies being theoretical, underscoring the urgent need for more empirical research. This highlights the need for more evidence-based research on green governance models. In conclusion, the literature suggests a shift towards sustainable IT governance strategies, with proposed models incorporating green decision-making variables, processes, and multi-software agents.

The rising prominence of green equity in academic discourse underscores its critical role in shaping sustainable investment strategies and addressing global environmental challenges and the natural advantages of digital transformation in green governance. This highlights the urgent need to develop and implement robust green governance models, which are essential for driving sustainable development and ensuring a balance between economic growth and environmental stewardship.

To further illustrate the application of green governance models on a global scale, notable initiatives such as the European Green Deal, Asia's Green Growth Strategy, and the USA's Climate Action Plan highlight diverse approaches to achieving sustainability and balancing environmental priorities with economic growth. The European Green Deal aims to make Europe the first climate-neutral continent by 2050, targeting a 55% reduction in greenhouse gas emissions by 2030. It promotes renewable energy, a circular economy, and biodiversity preservation through initiatives like the Circular Economy Action Plan and "Fit for 55" package, ensuring all sectors contribute to sustainability goals.

Asia's Green Growth Strategy focuses on sustainable economic development through low-carbon technologies, public-private partnerships, and regional initiatives like the ASEAN Action Plan on Climate Change. Countries such as Japan and South Korea emphasize renewable energy, hydrogen fuel, and eco-friendly infrastructure, while China leads in solar energy and electric vehicle investments. The USA's Climate Action Plan seeks net-zero emissions by 2050 through

investments in clean energy, stricter emission regulations, and climate-resilient infrastructure. With measures like the Inflation Reduction Act and rejoining the Paris Agreement, the USA emphasizes renewable energy transition, methane reduction, and global collaboration on climate efforts.

Corporate Governance

In the evolving landscape of financial research, the intersection of Corporate Governance (CG) and Environmental, Social, and Governance (ESG) factors has emerged as a critical area of study. Chopra *et al.*, revealed the significance of cross-cutting research on ESG, which is significantly related to achieving sustainable development. Singhania and Gupta empirically documented that ESG disclosure is a firm risk-taking mechanism that reduces idiosyncratic rather than systematic risk. Kartal *et al.*, conducted a study and reported that ESG principles prominently enhance the disclosure performance of Turkish firms. Tsang *et al.*, broadly reviewed the ESG pattern globally and documented that it is increasing rapidly, while Khan discovered ESG disclosure and performance. Wasiuzzaman *et al.*, stated that strong ESG regulation is required globally to promote financial performance and solve environmental issues. Rezaee *et al.* conducted a study between the USA and Europe based on voluntary and mandatory ESG disclosure. They revealed that the USA's voluntary ESG disclosure performance is better than the EU's. Wasiuzzaman and Subramaniam found that corporate governance elements, particularly board diversity, significantly influence the ESG disclosure performance of developed and developing countries' firms. Mohammad *et al.*, documented that corporate governance elements like institutional factors, ownership structure, and legal environment dominate ESG disclosure. Cicchiello *et al.*, documented that regulatory framework positively influences the transparency of ESG disclosure between financial and non-financial firms in the US and Europe.

Environmental, social, and corporate governance (ESG) guidelines and procedures are essential for investors to capture long-term value. Again, ESG performance affects corporate operating performance, efficiency, remuneration policies, investor trading, and valuation. According to research, improved ESG performance boosts operating performance, efficiency, and firm value. Lack of uniform reporting requirements, subjectivity in rating, and accuracy limitations make ESG reports problematic for investors and prevent cross-company comparisons. Eccles and Serafeim discuss the exchange between sustainability initiatives and a company's economic condition, stating that a strategic focus on ESG concerns must remain on the "performance frontier" and mitigate value judgment. Again, ESG disclosure emphasizes the corporate governance of the company. Strong governance ensures capital is conserved and expanded for long-term sustainability, serving all stakeholders in a company. The

ESG materiality framework seeks financial benefits in ESG performance by emphasizing investor and stakeholder ESG concerns. Tamimi and Sebastianelli evaluated 500 companies' ESG disclosures and found varying levels of voluntary disclosure. Governance issues are prioritized over environmental ones. ESG disclosure moderates the adverse effects of flaws and the impact of strengths. Governance disclosure scores influence ESG disclosure scores. Attendance at the board of directors is a significant predictor of both ratings, indicating that more committed boards lead to improved sustainability performance

OVERVIEW OF NIGERIA'S CORPORATE LAW FRAMEWORK

Companies and Allied Matters Act (CAMA) 2020

Nigeria's corporate law framework is principally anchored in the Companies and Allied Matters Act, 2020 (CAMA 2020), which serves as the foundational statute governing incorporation, management, regulation, and dissolution of companies in the country. The Act repealed the previous 2004 legislation and represents the most significant reform of Nigerian company law in over three decades, reflecting evolving domestic business realities and global corporate governance standards. CAMA 2020 establishes the Corporate Affairs Commission (CAC) as the regulatory body responsible for company registration and compliance monitoring. The CAC oversees incorporation procedures, maintains statutory registers, and ensures companies comply with statutory filing requirements. This institutional structure is intended to promote transparency and accountability in corporate operations while streamlining business formation and regulatory compliance in Nigeria's dynamic economic environment.

The Act empowers corporate stakeholders by introducing provisions that align with international best practices. For example, CAMA 2020 mandates that public companies maintain at least three independent directors on their boards, reinforcing board independence and oversight. It also prohibits a person from serving as a director of more than five public companies simultaneously, thereby reducing risks associated with multiple directorships and potential conflicts of interest. CAMA 2020 also addresses board leadership structures by prohibiting the same individual from serving as both Chairperson and Chief Executive Officer of a public company. This separation of leadership roles is designed to strengthen checks and balances at the highest level of corporate management and enhance the board's capacity to provide effective oversight.

Beyond compliance and structural reforms, CAMA 2020 enhances corporate transparency and accountability. Public companies are required to publish their audited financial statements on their corporate websites, which facilitates access to financial information for shareholders, investors, and other stakeholders. Additionally, the Act introduces a register

of persons with significant control, requiring disclosure of individuals or entities holding substantial interests in companies. This beneficial ownership register is expected to bolster transparency and combat illicit use of corporate entities for activities such as tax evasion and money laundering. The Act also modernized corporate governance procedures by accommodating electronic processes. CAMA 2020 permits electronic filing of statutory documents and, for private companies, virtual general meetings. These provisions acknowledge the digital evolution of business operations and have gained increased relevance in a post-pandemic environment where remote engagement is prevalent.

Nigeria's corporate law framework remains largely shareholder-centric, and the explicit integration of broader stakeholder and environmental considerations is still emerging. Although directors' duties under CAMA 2020 include obligations to act in good faith and in the best interests of the company, the Act does not fully mandate comprehensive environmental or climate risk reporting. Nonetheless, there are indications of an evolving approach. Recent analysis notes that directors are expected, in discharging their duties, to consider the impact of corporate operations on the environment and host communities, suggesting a gradual shift toward integrating broader ESG concerns into corporate decision-making. Nigeria's corporate governance landscape is shaped by complementary codes and regulatory instruments. The Nigerian Code of Corporate Governance (NCCG) and the Securities and Exchange Commission (SEC) Code of Corporate Governance outline best practices for listed companies, emphasizing board competence, accountability, risk management, and stakeholder engagement. These codes reinforce statutory provisions and encourage companies to adopt governance practices that align with global standards of transparency and responsibility.

Sector-specific regulations increasingly shape corporate behaviors. For example, the Petroleum Industry Act (PIA) emphasizes environmental remediation and community development, reflecting heightened regulatory focus on sustainable practices in Nigeria's critical oil and gas sector. Meanwhile, financial regulators such as the Central Bank of Nigeria (CBN) issue guidelines like the Nigerian Sustainable Banking Principles, which encourage financial institutions to integrate ESG considerations into lending and investment decisions. These developments indicate that corporate legal obligations are being influenced by a broader regulatory ecosystem that recognizes the importance of sustainability. Nigeria's corporate law framework, anchored in CAMA 2020 and complemented by governance codes and sectoral regulations, reflects significant strides toward modern corporate governance. While progress has been made in transparency, board independence, and procedural modernization, integrating ESG imperatives within the statutory law remains a key

frontier for legal reform and effective green-tech governance.

Legal Duties of Directors under Nigerian Corporate Law

The primary legislation regulating directors' duties in Nigeria is the Companies and Allied Matters Act CAMA, 2020. Under CAMA 2020, directors of Nigerian companies owe several critical duties aimed at ensuring good corporate governance. One of the foremost duties imposed on directors is the fiduciary duty, which requires them to act in utmost good faith and in the best interest of the company. According to section 305 of CAMA 2020, a director must observe utmost good faith towards the company in any transaction with it or on its behalf. In *Yalaju-Amaye v ARECLtd*, the Supreme Court emphasized the importance of fiduciary duty and the duty to act in the best interest of the company. A person standing in a fiduciary relationship relative to another means that such a person is in a position of mutual trust and confidence with respect to whom they relate. Such a relationship is one of dependability and unique trust requiring a director to exercise utmost integrity and honesty to ensure they do not take decisions that hurt the company as an entity.

Moreover, section 305 (3) states that the director shall always act in what he believes to be in the best interest of the company as a whole so as to preserve its assets, further its business, and promote the purposes for which it was formed, and in such a manner as a faithful, diligent, careful and ordinarily skillful director would act in the circumstances. Section 305(3) of CAMA further mandates the directors while acting in the best interests of the company to have regard to the impact of the company's operations on the environment in the community where it carries on business. This provision explicitly obligates directors to take account of the impact of the company's operations on the environment.

In addition to fiduciary duties, directors also owe a duty of care, skill, and diligence under section 308 (1) of CAMA 2020. A director is obligated to exercise reasonable care, skill, and diligence in performing his duties. This provision introduces an objective standard, requiring directors to perform their functions with the same level of care and skill that a reasonably diligent person with their general knowledge and experience would exercise. The standard is that of a reasonably prudent director would exercise in comparable circumstances.

Section 306(1) of CAMA 2020 also requires directors to avoid conflicts of interest, ensuring that their personal interests do not conflict with those of the company. This duty includes the obligation not to make secret profits and to disclose any personal interest in company transactions. In line with this, section 303(1) of CAMA 2020 specifically mandates directors to disclose any direct or indirect interest in transactions or

arrangements involving the company, reinforcing transparency and accountability in corporate governance. In the case of *Adewunmi v Ogunbiyi*, the Court of Appeal held that directors have a fiduciary duty to prioritize the company's interests over their own personal interests. Similarly, the court in *Okpata v Ibru*, emphasized that directors must not place themselves in a position where their personal interest's conflict with the company's interests. In essence, director must consistently avoid situations in which personal interests' conflict with their duties to the company. This obligation is most clearly illustrated when a director appropriates corporate opportunities intended for the company for personal gain.

Directors also have a duty to act within the powers conferred on them by the company's constitution and relevant statutory provisions, ensuring that their decisions align with corporate governance principles and legal obligations. Section 305(5) of CAMA 2020 specifically requires directors to exercise their powers only for the purposes for which they were conferred and not for any collateral purpose. The directors are expected to act bona fide in what the directors consider not what the courts consider to be in the best interest of the company. Moreover, section 377 of CAMA 2020 mandates company directors to prepare annual financial statements, which must include a directors' report, among other components. Furthermore, Section 4 of the Fourth Schedule to the Act outlines specific contents of the directors' report, notably the requirement to disclose any likely developments in the business of the company and its subsidiaries.

Indeed, the duties of directors under CAMA 2020 require them to act in the best interests of the company, avoid conflicts of interest, exercise due care and diligence, and act within the company's powers. The Directors are therefore liable against the company for any breach of their duties, with companies retaining the right to enforce against them. In addition, no provision either in the articles of association of the company or in the resolutions, may relieve any director of their duty or relieve them of any liability arising from a breach of their duties. Be that as it may, every director of a company is required to exercise their powers and perform their duties with honesty, integrity, and in the best interests of the company. They must apply a degree of care, skill, and diligence that would reasonably be expected from a prudent and responsible director in comparable circumstances. Furthermore, the law provides that a failure to uphold these standards may lead to legal consequences, including liability for negligence and breach of duty.

Moreover, the Nigerian Code of Corporate Governance 2018 establishes an essential framework that underscores the responsibilities of directors in embedding environmental, social, and governance considerations into corporate strategy and oversight. Although, the NCCG 2018 does not have the force of

law, it is issued pursuant to the Financial Reporting Council of Nigeria Act 2011, and applies on a 'apply and explain' basis to all public companies and other specified entities, thereby creating persuasive obligations for corporate boards. Central to the NCCG 2018 is Principle 26, which emphasizes that the board should pay adequate attention to sustainability issues including environment, social, occupational, community health and safety. This principle imposes a *de facto* duty on directors to integrate climate considerations into decision-making processes, particularly where the company's activities have direct or indirect environmental impacts. Principle 26 further requires that companies should develop a framework for sustainability, including policies and practices, which address environmental, social and governance issues. Directors, therefore, bear the strategic responsibility to ensure that climate-related risks such as carbon exposure, regulatory transitions, reputational harm, and supply chain disruptions are identified, disclosed, and addressed in line with stakeholder expectations and long-term corporate sustainability.

Furthermore, Principle 1 of the NCCG 2018 charges the board with the ultimate responsibility for the company's governance and overall strategy, requiring directors to act in the best interest of the shareholders and other stakeholders while sustaining the prosperity of the company. In essence, directors must ensure that environmental, social, and governance factors, including climate risk, are incorporated into decision-making.

Also relevant is Principle 17 of the NCCG 2018, which emphasizes risk management and internal controls, requiring the board to ensure the establishment of a risk management framework that defines the company's risk policy, risk appetite and risk limits and identifies, assesses, monitors and manages key business risks to safeguard shareholders' investments and the company's assets. It also requires the board to ensure that the company's risk management framework is disclosed in the annual report. Accordingly, directors are expected to integrate climate-related risks into their enterprise risk management frameworks. This involves conducting scenario analyses, developing transition plans, and ensuring board-level oversight of sustainability and climate-related strategies. Failure to act or engaging in only superficial compliance may expose companies to regulatory investigations, shareholder activism, or even litigation, particularly where environmental risks have materialized and caused harm to investors or the wider public

In light of these provisions, the NCCG requires boards not only to comply with governance principles in form but also to demonstrate meaningful integration of climate risk into their operational, strategic, and disclosure functions. For example, companies listed on the Nigerian Exchange are now required under NGX's Sustainability Disclosure Guidelines, 2021 to report on environmental and climate-related performance placing

directors in a frontline role of ensuring the accuracy and completeness of such disclosures.

Indeed, while the Nigerian Code of Corporate Governance is not legislation, it imposes significant normative and best-practice standards that directors are expected to adhere to in order to fulfill their obligations as responsible corporate stewards. As such, Principles 1, 17, and 26 of the NCCG 2018 jointly establish a governance imperative for boards to recognize, manage, and disclose climate risks in a manner consistent with fiduciary and strategic duties. Failure to do so not only expose companies to environmental, reputational, and financial risks but also opens directors up to potential legal consequences under evolving interpretations of governance failure and breach of duty in Nigeria's climate-conscious regulatory landscape.

CLIMATE RISK IN THE CONTEXT OF DIRECTORS' DUTIES UNDER NIGERIAN CORPORATE LAW

Climate risks have increasingly become central to corporate governance discussions due to their far-reaching implications for business operations, financial stability, and stakeholder interests. Directors of companies, particularly in jurisdictions such as Nigeria, are under growing legal and regulatory expectations to consider climate-related risks as part of their fiduciary responsibilities. Although Nigerian company law does not expressly refer to climate risk, the Companies and Allied Matters Act 2020 provide a flexible framework within which directors' duties may be interpreted to encompass emerging threats such as climate risk. Thus, in the absence of a clearly defined statutory obligation, the responsibility to address climate-related risks remains implicit, grounded in the broader fiduciary and duty of care obligations, which may evolve in line with changing regulatory expectations and stakeholder demands

Section 308(1) of CAMA requires directors to exercise their powers and discharge their duties with a degree of care, skill, and diligence which a reasonable prudent director would exercise in comparable circumstances. This implies that directors are expected to possess and utilize a level of skill and diligence that encompasses understanding and addressing foreseeable and material climate risks and opportunities relevant to the company's business. Climate risk increasingly represents a material risk factor that directors must address as part of their duty of care. This duty extends to ensuring that the company conducts a thorough analysis of climate risks, whether physical risks from extreme weather events or transition risks arising from regulatory changes, such as carbon taxes or emissions restrictions. Directors must make informed decisions about how the company will manage these risks and avoid practices that could leave the company vulnerable to the adverse financial and reputable implications of these risks. The

failure to take these risks into account could be deemed a breach of their duty of care.

Section 305(3) of CAMA further mandates that directors must act in good faith and in a manner that they believe, in their honest judgment, is most likely to promote the success of the company for the benefit of its members. In the current global context, long-term corporate success is increasingly determined by a company's ability to manage environmental sustainability, adapt to regulatory shifts, and align with investor expectations regarding climate resilience. A director who fails to account for the financial and operational risks posed by climate change, or who does not incorporate climate considerations into long term strategic planning, may be failing to promote the company's success in the holistic manner required by law.

Moreover, International jurisprudence and thought leadership have reinforced the foreseeability and materiality of climate risks. The *Client Earth v Shell Plc* case brought these issues to the fore when Client Earth, a minority shareholder, argued that Shell's directors had failed to implement an adequate climate risk management strategy, thereby breaching their duties to promote the company's success. Although, the court declined to allow the derivative claim to proceed, it did not reject the underlying argument that climate strategy may be relevant to fiduciary duties.

GAPS IN NIGERIA'S CORPORATE LAW ON GREEN-TECH GOVERNANCE

Despite incremental progress in Nigeria's corporate law and governance frameworks, significant legal and regulatory gaps persist that impede the effective governance of climate-smart technologies and sustainability-oriented corporate behavior. These shortcomings are particularly evident in the areas of mandatory sustainability reporting, incentives for green innovation, director accountability for environmental harm, and the broader integration of Environmental, Social, and Governance (ESG) principles into statutory corporate obligations.

Lack of Mandatory Sustainability Reporting

One of the most conspicuous gaps in Nigeria's corporate law framework is the absence of a comprehensive mandatory sustainability reporting regime. While global best practices increasingly require companies to disclose climate-related financial risks and sustainability performance using frameworks such as the Task Force on Climate-related Financial Disclosures (TCFD) or the International Sustainability Standards Board (ISSB) standards, Nigeria's legal regime does not yet impose a universally binding reporting standard for all corporate entities. Although the Companies and Allied Matters Act (CAMA) 2020 makes limited reference to environmental considerations requiring directors to consider impacts on the environment in the

communities where they operate this duty does not translate into a structured requirement for sustainability or climate disclosure that is enforceable across the board. This limitation reduces transparency and constrains the ability of stakeholders to assess corporate climate risks and sustainability performance.

Sustainability reporting in Nigeria remains largely voluntary or guided by non-binding frameworks developed by regulators or exchanges. For example, the Nigerian Exchange Limited (NGX) and the Securities and Exchange Commission (SEC) have issued sustainability reporting guidelines which encourage listed firms to report environmental and social metrics, but compliance is not universally obligatory under statutory law. The absence of a unified and mandatory legal framework creates inconsistencies in reporting quality and scope, as firms may selectively adopt global standards like the Global Reporting Initiative (GRI) or TCFD without legal compulsion. This patchwork approach weakens the credibility of sustainability data and undermines investor confidence in ESG disclosures. Moreover, the lack of consistent reporting obligations inhibits the ability of Nigerian companies to attract international capital that increasingly prioritizes credible sustainability disclosures. Without mandatory frameworks aligned with international standards, Nigerian firms' risk being sidelined in global value chains and excluded from green finance instruments that demand high-quality ESG disclosures.

Weak Incentives for Climate-Smart Innovation

A second critical gap in Nigeria's corporate law and policy environment is the absence of robust incentives for climate-smart innovation. While regulatory instruments such as the Central Bank of Nigeria's Sustainable Banking Principles encourage financial institutions to integrate environmental considerations into lending practices, there is no cohesive legal incentive structure that specifically rewards corporate investments in climate technologies. In many advanced jurisdictions, governments deploy a mix of tax incentives, subsidies, research and development credits, and preferential financing to stimulate private sector investment in clean technologies. These legal and fiscal tools help offset the high costs and risks associated with early-stage green innovation. In Nigeria, however, the policy framework lacks clear statutory incentives linked to the development or adoption of climate-smart technologies. Without such incentives, the commercial risks of investing in technologies like renewable energy systems, energy-efficient infrastructure, or carbon-reducing processes remain relatively unattractive to private firms.

This shortfall is compounded by limited regulatory clarity on how existing incentive schemes interact with corporate governance obligations. For example, while the Climate Change Act 2021 introduces some climate governance duties, its provisions leave

regulatory guidance on innovation incentives ambiguous. The absence of clear tax breaks, innovation credits, or legal mandates that tie corporate compliance to climate innovation reduces the economic impetus for companies to pursue climate-smart solutions proactively.

Limited Director Accountability for Environmental Harm

A third key gap relates to director accountability for environmental harm. CAMA 2020 introduces a notable provision requiring directors to consider the impact of corporate operations on the environment in the communities where they operate. This duty represents a step toward embedding environmental considerations within fiduciary obligations, but it is qualitatively limited and lacks comprehensive enforcement mechanisms. Section 305(3) of CAMA 2020 signals that directors must "have regard to the impact of the company's operations on the environment," yet it does not specify how this duty should be operationalized, monitored, or enforced. Nor does it link environmental considerations to climate-related financial risk or mandate specific reporting or mitigation actions. As a consequence, directors may fulfill their statutory obligations in a superficial manner, leaving substantive environmental harms unaddressed.

Recent regulatory moves, such as directives by the Financial Reporting Council (FRC) holding directors personally liable for inaccurate or misleading sustainability disclosures, show an emerging emphasis on ESG accountability at the board level. The FRC has warned that omissions or misstatements in sustainability and climate reporting could expose directors to liability, indicating a shift toward stricter enforcement. However, these directives often rely on regulatory guidance rather than explicit statutory mandates, which can limit their legal force and deterrent effect relative to codified corporate duties. Under CAMA 2020 and accompanying environmental statutes such as the Environmental Impact Assessment Act, corporate liability for environmental harm tends to fall on the company rather than individual directors, unless negligence or misconduct is clearly established. This framework falls short of ensuring proactive board-level governance of environmental risks and climate impacts, especially when directors may prioritize shareholder returns over broader ecological concerns.

Poor Integration of ESG Principles

Nigeria's corporate law framework exhibits poor integration of ESG principles into statutory obligations, which limits the ability of the legal system to promote sustainability as an intrinsic element of corporate governance. While elements of ESG are recognized in different regulatory instruments (environmental considerations under CAMA 2020, corporate governance principles under the Nigerian Code of Corporate Governance 2018, and sustainability guidelines from the NGX and SEC), these elements

remain disparate and unharmonized. For example, environmental duties under CAMA 2020 are framed as considerations for directors, not as enforceable performance standards. Meanwhile, social and governance aspects of ESG often fall under voluntary codes or exchange guidelines rather than binding legal mandates. This fragmentation diminishes the overall coherence of ESG integration and creates uncertainties for companies and investors regarding expectations and compliance requirements. Integrated ESG frameworks where environmental, social, and governance duties are embedded in core company law obligations and disclosure requirements are increasingly viewed as essential for aligning corporate behavior with sustainable development goals. The absence of such integration in Nigeria's corporate law highlights a structural gap that weakens the governance architecture for green-tech adoption and climate resilience.

REIMAGINING NIGERIA'S CORPORATE LAW

Reimagining Nigeria's corporate law is essential for positioning the country to effectively respond to climate change and harness the opportunities presented by climate-smart and green technologies. While existing statutes such as the Companies and Allied Matters Act (CAMA) 2020 and the Climate Change Act 2021 contain fragments of sustainability considerations, they fall short of establishing a coherent and enforceable framework for green-tech governance. A reformed corporate law regime must therefore embed ESG obligations into directors' duties, mandate climate-risk disclosure, incentivize green-tech investments, and strengthen regulatory enforcement mechanisms.

Embedding ESG Duties into Directors' Obligations

A foundational reform lies in embedding Environmental, Social, and Governance (ESG) duties directly into directors' statutory obligations. According to stakeholder governance theory, directors should balance shareholder interests with broader societal and environmental responsibilities to ensure long-term corporate sustainability. Although section 305(3) of CAMA 2020 requires directors to "have regard to the impact of the company's operations on the environment," this obligation remains largely aspirational and lacks enforceable standards. Reimagined corporate law should move beyond discretionary consideration to affirmative ESG duties, explicitly requiring directors to integrate environmental and climate risks into strategic decision-making. This could involve statutory clarification that failure to address material climate risks constitutes a breach of fiduciary duty. According to the OECD, embedding sustainability into directors' duties improves risk governance, enhances corporate resilience, and aligns corporate conduct with national climate goals. Such reform would shift Nigerian corporate governance from short-term profit maximization toward long-term value creation that accounts for environmental sustainability.

Mandatory Climate-Risk Disclosure

Another critical pillar of reform is the introduction of mandatory climate-risk and sustainability disclosure. Globally, corporate law is increasingly linked with transparency obligations requiring firms to disclose how climate change affects their operations and how their activities impact the environment. According to the International Sustainability Standards Board, consistent and comparable climate-related disclosures are essential for informed investment decisions and efficient capital allocation. In Nigeria, sustainability reporting remains largely voluntary, guided by SEC and NGX sustainability guidelines rather than binding statutory provisions. This fragmented approach limits the reliability and comparability of disclosures. Reimagined corporate law should mandate climate-risk disclosure aligned with international standards such as ISSB or TCFD, particularly for public interest entities and listed companies. According to Okoye and Gbegi, mandatory disclosure would enhance accountability, improve investor confidence, and integrate climate risk into corporate governance processes. Embedding disclosure obligations within CAMA or subsidiary regulations would ensure uniform compliance and provide regulators with enforceable oversight tools.

Incentivizing Green-Tech Investments

Legal reform must also address the economic barriers to climate-smart innovation by incentivizing green-tech investments. Climate-smart technologies often require high upfront capital and involve uncertain returns, discouraging private sector participation in the absence of legal and fiscal support. According to the World Bank, countries that successfully attract private green investment combine regulatory obligations with targeted incentives such as tax credits, subsidies, and preferential financing. Nigeria's corporate law framework currently lacks explicit provisions linking corporate compliance with access to green incentives. Reimagined corporate law should integrate incentives such as tax reliefs for renewable energy investments, preferential treatment for green bonds, and reduced compliance costs for companies that meet defined ESG thresholds. Embedding such incentives within corporate and fiscal legislation would encourage companies to internalize climate objectives as part of their business strategy rather than viewing sustainability as a compliance burden. This approach aligns with Nigeria's Energy Transition Plan and broader sustainable development objectives.

Strengthening Regulatory Enforcement

Effective green-tech governance depends on robust regulatory enforcement. Even the most progressive legal provisions are ineffective without strong institutional capacity and coordinated oversight. Nigeria's corporate governance ecosystem involves multiple regulators including the Corporate Affairs Commission (CAC), Securities and Exchange Commission (SEC), Financial Reporting Council (FRC),

and environmental agencies whose mandates often overlap without sufficient coordination. Reimagined corporate law should strengthen enforcement by clarifying regulatory roles, enhancing inter-agency collaboration, and imposing proportionate sanctions for non-compliance with ESG and climate obligations. According to the United Nations Environment Programme, effective enforcement mechanisms including administrative penalties, director liability, and public reporting of non-compliance are crucial for embedding sustainability into corporate behavior. Empowering regulators with clearer enforcement powers and improving monitoring mechanisms would ensure that ESG obligations move from paper commitments to practical implementation.

CONCLUSION AND RECOMMENDATION

This paper has demonstrated that Nigeria's corporate law framework, while showing emerging sensitivity to environmental concerns, remains insufficient for effective green-tech governance. The current legal regime inadequately integrates ESG principles, relies heavily on voluntary sustainability disclosures, provides weak incentives for climate-smart innovation, and imposes limited accountability on directors for environmental harm. These deficiencies constrain the ability of Nigerian corporations to meaningfully contribute to climate mitigation, adaptation, and sustainable development. To address these shortcomings, the article recommends four key reforms. First, ESG obligations should be explicitly embedded into directors' fiduciary duties, with clear statutory standards linking climate risk management to corporate decision-making. Second, Nigeria should adopt mandatory climate-risk and sustainability disclosure requirements aligned with international frameworks such as ISSB or TCFD to enhance transparency and investor confidence. Third, corporate and fiscal legislation should introduce targeted incentives for green-tech investments, including tax reliefs, preferential financing, and regulatory support for climate-smart innovation. Regulatory enforcement should be strengthened through improved inter-agency coordination, clearer sanctions for non-compliance, and enhanced monitoring mechanisms.

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