CHALLENGES OF CLEAN ENERGY TRANSITION IN NIGERIA

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Abstract

In this twenty-first century, the global transition to clean energy represents one of the most transformative developments. In Nigeria, the process is both crucial and complex, given the nation's over-reliance on fossil fuels as the primary driver of its economy. This paper examines the challenges associated with clean energy transition in Nigeria using doctrinal method, focusing on the legal, institutional, and policy frameworks shaping the process. The aim is to appraise the extent to which Nigeria's legal and institutional arrangements encourage or hinder the transition toward renewable and sustainable energy sources. The objectives include assessing the adequacy of existing laws and policies governing clean energy, identify obstacles to their successful implementation, and propose reform strategies to strengthen Nigeria's energy transition regime. Relying on statutory provisions, judicial decisions, and scholarly commentary, this paper adopts a doctrinal research methodology to critically assess Nigeria's efforts in balancing economic development with environmental sustainability to ensure sustainable living. Although Nigeria has adopted several policies such as the National Renewable Energy and Energy Efficiency Policy (NREEEP) 2015 and the Renewable Energy Master Plan (REMP), this paper finds that implementation remains weak due to institutional overlap, inadequate legal enforcement, and insufficient investment incentives. The paper recommends the establishment of an integrated legislative framework, improved regulatory oversight from relevant agencies, and greater investment in renewable energy infrastructure to facilitate a just and effective transition toward economic sustainability for the country.

Key-Words: Clean Energy, Energy Transition, Renewable Energy, Nigeria

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1. Introduction

Energy plays a fundamental role in the socio-economic development of every nation. In Nigeria, energy production and consumption have historically revolved around fossil fuels, particularly crude oil and natural gas. Despite being a leading oil producer, Nigeria faces severe energy poverty, with millions lacking access to reliable electricity. The global push for clean energy transition, which involves shifting from fossil fuels to renewable energy sources, is therefore both a necessity and a challenge. The concept of clean energy transition aligns with Nigeria's obligations under international environmental law, notably the Paris Agreement 2015, which mandates countries to reduce greenhouse gas emissions into the environment and promote sustainable energy use. However, Nigeria's transition is impeded by weak governance structures, insufficient legal frameworks, economic dependence on hydrocarbons, and inadequate technological capacity.

Doctrinal analysis of the country's statutory instruments such as the Electric Power Sector Reform Act (EPSRA) 2005, Energy Commission of Nigeria Act, and Petroleum Industry Act (PIA) 2021 reveals that while these instruments recognize renewable energy development, they remain fragmented and lack enforceable mechanisms for coordinated implementation needed to achieve meaningful results.

2. Definition of Key Terms

2.1 Clean Energy

Clean energy refers to energy derived from renewable, sustainable, and low-carbon sources that have minimal negative impact on the environment. Examples include wind, solar, hydro, and bioenergy. Unlike fossil fuels, which cause climate change through greenhouse gas emissions, clean energy offers a cleaner alternative.[1]

2.2 Energy Transition

Energy transition refers to the gradual transformation of an energy system from reliance on carbon-intensive fuels to sustainable and environmentally friendly renewable sources.[2]

[1]Energy Commission of Nigeria, Renewable Energy Policy Draft (Abuja: ECN, 2015).
[2]United Nations Environment Programme, Global Energy Report (2019).

2.3 Renewable Energy

Renewable energy refers to energy generated from natural processes that are continuously replenished, such as sunlight, wind, rain, tides, and geothermal heat.[3]

3. Types of Energy

Nigeria's energy resources can generally be classified into non-renewable and renewable sources. Non-renewable sources include crude oil, natural gas, and coal, which constitute over 90% of national energy consumption.[4] Renewable sources include solar, wind, biomass and hydro energy.

3.1 Solar Energy

Nigeria lies within the high solar radiation belt, receiving an average of 3.5–7.0 kWh/m²/day, particularly in the northern region.[5] Despite this potential, records show that it is grossly underutilized, solar energy accounts for less than 2% of national electricity generation due to poor infrastructure and lack of incentives.

3.2 Wind Energy

Wind energy potential is significant along coastal and northern zones, yet remains underdeveloped despite its vast potential. Pilot projects by the ECN and the Federal Ministry of Power have not achieved commercial scale.[6]

3.3 Biomass and Biofuel

Biomass remains a critical source of rural energy, though often exploited unsustainably. The National Biofuel Policy and Incentives (2007) was introduced to promote cleaner bioenergy, but implementation has lagged.[7]

3.4 Geothermal

Geothermal energy refers to energy generated from the earth's core to produce heat and electricity.[8]

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[3]S. O. Ojo, "Renewable Energy Law and Sustainable Development in Nigeria" (2020) *Nigerian Journal of Energy Law* 14.
[4]World Bank, Nigeria Energy Review Report (2022).
[5]Energy Commission of Nigeria, Solar Atlas of Nigeria (2020).
[6]*Ibid.*
[7]National Biofuel Policy and Incentives, Federal Republic of Nigeria (2007).
[8] Violet O. Aigbokhaevbo, *Climate Change in Nigeria: Cases and Materials* (University of Benin Press, Ekehuan Campus, Benin-City, Edo State, 2023) 51.

3.5 Tidal Energy
Tidal energy refers to energy generated by using ocean tides to turn turbines and create electricity.[9]

3.6 Hydropower
Hydropower constitutes about 20% of Nigeria's electricity generation, with major dams such as Kainji and Shiroro. However, environmental degradation and poor maintenance hinder their efficiency and they have operated below capacity over the years.[10]

3.7 Wave Energy
Wave energy refers to energy generated by harnessing wave movement to create electricity.[11]

4. History of Energy Transition in Nigeria
The history of energy transition in Nigeria has its roots in the post-colonial period when electricity generation was mainly managed by the Electricity Corporation of Nigeria (ECN) established in 1950.[12] The ECN was later merged with the Niger Dams Authority to form the NationalElectric Power Authority (NEPA) in 1972.[13] Despite these institutional reforms, Nigeria's energy sector remained heavily reliant on thermal and hydropower plants, with little attention given to renewable alternatives for energy supply. The first major policy recognition of renewable energy came with the Energy Commission of Nigeria Act of 1979, which established the Energy Commission of Nigeria (ECN) as the coordinating body for national energy policy.[14] However, progress was limited until the 2000s, when global climate change discourse prompted Nigeria to develop the Renewable Energy Master Plan (REMP) in 2005. This plan set ambitious targets for increasing renewable energy's contribution to the national energy mix but was largely unimplemented due to institutional overlap and weak political will to drive it forward.

Further efforts include the National Renewable Energy and Energy Efficiency Policy (NREEEP) adopted in 2015, which aligns with Nigeria's Vision 30:30:30 aiming to achieve 30% renewable energy

[9]*Ibid.*
[10]Federal Ministry of Water Resources, Hydropower Development Plan (2018).
[11]*Ibid.*
[12]Electricity Corporation of Nigeria Ordinance, No. 15 of 1950.
[13]National Electric Power Authority Act, Cap N33, LFN 2004 (now repealed by EPSRA 2005).
[14]Energy Commission of Nigeria Act, s. 2.

contribution by 2030.[15] Nonetheless, Nigeria's clean energy transition remains largely ambitious.

5. **Challenges of Energy Transition in Nigeria**

Regardless of the abundant renewable energy potential, Nigeria faces deep-rooted challenges that obstruct the smooth transition to clean energy. These challenges fall into legal, institutional, infrastructural, economic, and socio-political dimensions.

5.1 Weak Legal and Regulatory Framework

Although the Electric Power Sector Reform Act 2005 (EPSRA) established the Nigerian Electricity Regulatory Commission (NERC) to oversee the power sector, it does not provide a comprehensive legal framework for renewable energy promotion.[16] Similarly, the Energy Commission of Nigeria Act 1979 empowers the ECN to coordinate energy policy, yet the Act lacks binding obligations on renewable integration. The absence of a consolidated Renewable Energy Act results in fragmented policies and jurisdictional overlaps among regulatory bodies such as the Federal Ministry of Power, NERC, ECN, and the Rural Electrification Agency (REA).[17]

5.2 Reliance on Fossil Fuels

Nigeria's economy relies heavily on oil and gas, which account for more than 70% of government revenue and 90% of foreign exchange earnings.[18] Over the years, Nigeria's budget has been prepared using the international crude oil price as a benchmark. As a result, whenever there is a sharp drop in the price of crude oil, the Nigerian economy suffers significantly. This dependence discourages investment in alternative energy sources and creates strong political resistance to energy diversification. The Petroleum Industry Act 2021 (PIA), while a landmark reform, continues to emphasize fossil fuel development, with only minimal provisions on host community sustainability and environmental remediation.[19] This aptly evidences the lack of political will for the development of alternative source of energy.

5.3 Poor Institutional Coordination

Institutional overlap without clear distinct roles is a major impediment to effective policy implementation. Several agencies operate with

[15]Federal Ministry of Power, NREEEP Policy Document (2015).
[16]Electric Power Sector Reform Act 2005, s. 32.
[17]A. M. Adegbite, "Energy Regulation and Policy Coherence in Nigeria" (2021) *Journal of Environmental Law* 23.
[18]Central Bank of Nigeria, *Annual Economic Report* (2023).
[19]Petroleum Industry Act, ss. 104–107.

overlapping mandates, leading to duplication of functions and bureaucratic bottlenecks.[20] For instance, while the ECN is entrusted with coordinating national energy policies, the Federal Ministry of Power and NERC also issue independent directives on renewable energy development. These contradictions create administrative bottlenecks, impacting the quality of services provided.

5.4 Financial and Technical Drawbacks

Renewable energy projects in Nigeria suffer from limited access to finance, high capital costs, and lack of technological capacity.[21] The high risk associated with financing long-term renewable projects which are capital intensive, discourages local banks from financing such projects, while foreign investors face the challenge of unpredictable exchange rate coupled with policy uncertainty.

5.5 Energy Access and Social Disparity

The World Bank (2022) estimates that about 85 million Nigerians lack access to grid electricity.[22] The uneven distribution of energy infrastructure creates rural-urban disparities and weakens public trust in energy reforms.

5.6 Corruption and Policy Incompatibility

Corruption in the energy sector undermines regulatory integrity and deters foreign investment. The Independent Corrupt Practices and Other Related Offences Commission (ICPC) has reported several cases of mismanagement in energy subsidy schemes.[23] In *Centre for Oil Pollution Watch v. Nigerian National Petroleum Company*,[24] the Supreme Court emphasized that environmental governance demands transparency and accountability, principles equally vital to clean energy transition.

6.Institutional and Policy Coordination Challenges in Nigeria's Energy Transition

The recently concluded Renewable Energy and Energy Efficiency Associations Alliance (REEEAA) 4th International Conference on Energy Transition, held in Lagos on 26 September 2025, provides significant insight into the policy and institutional challenges facing

[20]*Ibid.*
[21]United Nations Development Programme (UNDP), *Renewable Energy Market Report* (2020).
[22]World Bank, *Access to Electricity Database* (2022).
[23]ICPC Annual Report (2021).
[24](2019) LPELR-48203(SC).

Nigeria's clean energy transition.[25] The conference, themed "Energy Transition: From Rhetoric to Action in Nigeria," highlighted the need for pragmatic reforms, sustained policy consistency, and strategic implementation to move Nigeria from policy formulation to measurable action.[26] Despite the optimism generated by commitments such as the Lagos State Government's initiative to solar-power 42,000 streetlights and 32 general hospitals participants acknowledged that Nigeria's progress remains constrained by weak inter-agency coordination, inconsistent regulatory enforcement, and limited private-sector integration.[27] The Rural Electrification Agency (REA)'s announcement of over US$2 billion mobilized for de-risking solar investment also underscores that financial readiness alone cannot substitute for the institutional discipline required to sustain project implementation.[28]

The conference thus reaffirmed some of the central challenges of Nigeria's clean energy transition: policy incoherence between the federal and state levels, and the absence of a clear governance framework that ensures synergy between climate commitments and domestic development priorities.[29]

7. **Clean Energy Transition and Climate Change -Nexus**

The relationship between clean energy transition and climate change represents one of the most profound linkages in contemporary environmental law and policy. Both ideas are intrinsically intertwined, the clean energy transition serves as a strategic and legal pathway for mitigating the adverse impacts of climate change, while climate change itself provides a regulatory and moral justification for accelerating the shift to cleaner energy sources. In essence, clean energy transition is not

[25]Renewable Energy and Energy Efficiency Associations Alliance (REEEAA), "Nigeria's Energy Transition Highlighted as REEEAA's 2025 Conference Concludes with Actionable Outcomes," *EnviroNews Nigeria* (26 September 2025)<https://www.enviro newsnigeria.com/nigerias-energy-transition-highlighted-as-reeeaas-2025-conference-concludes-with-actionable-outcomes/> accessed 29 October 2025.

[26]*Ibid.*

[27]Guardian Nigeria, "How Coordinated Policy, Investment Can Aid Sustainable Energy Future" *The Guardian* (27 September 2025) <https://guardian.ng/energy/how-coordinated -policy-investment-can-aid-sustainable-energy-future/> accessed 29 October 2025.

[28]REEEAA, Nigeria's Energy Transition Highlighted as REEEAA's 2025 Conference Concludes with Actionable Outcomes (n.22).

[29]*Ibid;* see also Arise News, "NAEE Warns Nigeria Faces Fiscal Risks Amid Global Energy Transition," *Arise TV* (30 September 2025) <https://www.arise.tv /naee-warns-nigeria-faces-fiscal-risks-amid-global-energy-transition/> accessed 29 Octo ber 2025.

simply a technological or economic transformation but a form of climate governance rooted in domestic and international legal frameworks.[30]

Climate change is driven primarily by the accumulation of greenhouse gases such as carbon dioxide, methane, and nitrous oxide in the atmosphere, most of which originate from the burning of fossil fuels for electricity, transportation, and industrial use.[31] Therefore, any sustainable effort to curb global warming must involve a determined reduction in carbon-intensive energy generation. The transition from fossil-based systems to renewable and low-carbon alternative energy sources such as solar, wind, hydro, biomass, and hydrogen, thus stands at the center of global climate action.[32]

The nexus between clean energy transition and climate change can be examined through two major dimensions which are mitigation and adaptation. From the mitigation perspective, the use of renewable energy directly reduces greenhouse gas emissions by displacing fossil-fuel combustion and increasing energy efficiency. Clean technologies also encourage carbon neutrality goals by decarbonizing end-use sectors such as transportation, manufacturing, and domestic energy consumption.[33] On the adaptation side, clean and decentralized energy systems such as mini-grids and off-grid solar installations promote community persistence against climate-induced disruptions.[34] For instance, in regions of Nigeria where flooding and desertification affect centralized power systems, renewable micro-grids provide a stable and climate-resilient energy alternative.

Legally, the nexus finds strong expression in both international and domestic instruments. At the international level, the Paris Agreement (2015) mandates each state to submit and implement Nationally Determined Contributions (NDCs) toward emission reduction, with renewable energy forming the backbone of most countries' climate strategies.[35] Nigeria's updated NDC explicitly commits to generating at least 30 percent of its electricity from renewables by 2030, thereby

[30]Intergovernmental Panel on Climate Change (IPCC), Sixth Assessment Report: Climate Change 2022 – Mitigation of Climate Change (Geneva: IPCC, 2022).
[31]*Ibid.*
[32]International Energy Agency (IEA), World Energy Outlook 2023 (Paris: IEA, 2023).
[33]United Nations Environment Programme (UNEP), Emissions Gap Report 2022.
[34]Energy Commission of Nigeria (ECN), Renewable Energy Master Plan (Abuja: ECN, 2012).
[35]Paris Agreement, 2015, Articles 2 and 4.

entrenching the clean energy transition within its climate obligations.[36] Domestically, the Climate Change Act 2021 provides statutory backing for emission reduction and institutional coordination, while the Electric Power Sector Reform Act 2005 (EPSRA) and the National Renewable Energy and Energy Efficiency Policy 2015 (NREEEP) collectively establish the regulatory and policy environment required to upgrade renewable generation.[37]

The judiciary has also played an instrumental role in reinforcing this nexus through reform-minded interpretation of environmental rights and corporate accountability. In *Gbemre v. Shell Petroleum Development Company*, the Federal High Court held that gas flaring violates the constitutional rights to life and dignity, aligning Nigeria's human rights jurisprudence with global climate principles.[38] Similarly, in *Centre for Oil Pollution Watch v. NNPC*, the Supreme Court recognized the standing of environmental advocacy groups to prosecute environmental degradation, thus reinforcing legal accountability for climate-related harm.[39] These judicial precedents demonstrate that the courts can act as custodians of climate justice and catalysts for clean energy reforms. Economically, clean energy transition encourages climate objectives by putting in place sustainable development pathways consistent with the United Nations' Sustainable Development Goals (SDGs), particularly Goals 7 (Affordable and Clean Energy) and 13 (Climate Action).

A renewable-powered economy reduces air pollution, improves public health, and fosters industrial diversification all of which contribute to climate persistence.[40] The linkage is therefore not only environmental but developmental, as it addresses both climate risks and socio-economic disparities. However, achieving this synergy in Nigeria requires overcoming significant legal and institutional challenges. The lack of a single comprehensive Renewable Energy Act leaves renewable energy governance fragmented among various agencies such as the Energy Commission of Nigeria, the Nigerian Electricity Regulatory Commission (NERC), and the Rural Electrification Agency (REA) with overlapping mandates and weak coordination.[41] Furthermore, inconsistent policy

[36]Federal Republic of Nigeria, Updated Nationally Determined Contribution (Abuja: Federal Ministry of Environment, 2021).
[37]Electric Power Sector Reform Act 2005; Climate Change Act 2021; National Renewable Energy and Energy Efficiency Policy 2015.
[38]*Gbemre v. Shell Petroleum Development Company* (2005) AHRLR 151 (NgHC).
[39]*Centre for Oil Pollution Watch v. NNPC* (2019) LPELR-48203(SC).
[40]United Nations, *Sustainable Development Goals Report 2023*.
[41]A.M. Adegbite, "Energy Regulation and Policy Coherence in Nigeria" (2021) *Journal of Environmental Law* 23.

implementation, regulatory uncertainty, and insufficient climate finance hinder effective alignment between energy and climate objectives. To bridge these gaps, Nigeria must enact legally enforceable renewable energy targets, integrate climate mitigation goals into all energy-related statutes, and develop clear monitoring, reporting, and verification (MRV) frameworks for emission tracking.[42]

The doctrinal intersection between clean energy transition and climate change thus lies in the legal recognition that energy policy constitutes climate policy. The transition to clean energy provides the most direct route to reducing emissions and fulfilling Nigeria's obligations under international environmental law. Conversely, climate law offers the normative framework and enforcement mechanisms to guide, monitor, and sustain the clean energy transition. The synergy between the two should therefore be seen not as an optional alignment but as a necessary convergence for sustainable national development.[43] The nexus between clean energy transition and climate change summarizes the integration of law, policy, and science toward a single goal securing a habitable planet. For Nigeria, whose economy remains heavily dependent on fossil fuels, the challenge is to balance developmental needs with environmental responsibility. This requires strong legislative reform, judicial activism, and institutional coherence to ensure that clean energy serves both as a vehicle for economic transformation and a tool for climate stabilization. Only through a legally monitored and well-coordinated clean energy transition can Nigeria efficiently contribute to global climate mitigation while protecting its national interest in a sustainable future.[44]

8. **Legal and Institutional Frameworks for Clean Energy Transition in Nigeria**

8.1 Constitution of the Federal Republic of Nigeria

Energy matters fall under the Exclusive Legislative List, particularly Item 39, Part I, Second Schedule to the 1999 Constitution (as amended), giving the Federal Government exclusive authority over electricity generation and transmission,[45] while this centralization ensures national uniformity, it limits state governments in independently developing large-scale renewable energy projects without federal approval. In *Attorney-General of Lagos State v. Eko Hotels Ltd*,[46] the Supreme Court

[42]Climate Change Act 2021, ss. 3–7.
[43]UNEP & African Development Bank, *African Climate Policy Outlook* (2022).
[44]World Bank, Nigeria Climate and Development Report (Washington DC: World Bank, 2022).
[45]1999 Constitution of the Federal Republic of Nigeria (as amended), Second Schedule, Part I, Item 39.
[46](2017) 15 NWLR (Pt. 1588) 1.

reaffirmed that where a matter falls within the Exclusive List, states may only legislate to the extent permitted by federal law. This principle affects subnational participation in renewable energy initiatives.

8.2 Statutory and Policy Instruments

Several laws and policies govern the clean energy sector in Nigeria:

8.2.1 Electric Power Sector Reform Act

EPSRA liberalized the electricity market and established the Nigerian Electricity Regulatory Commission (NERC).[47] It empowers NERC to license renewable energy generation, though implementation has been slow.

8.2.2 Energy Commission of Nigeria Act

The ECN Act created the Energy Commission of Nigeria to coordinate national energy policies.[48] However, the Act lacks adequate enforcement mechanisms to compel renewable adoption.

8.2.3 Petroleum Industry Act

The PIA consolidates petroleum governance and introduces the Host Communities Development Fund to mitigate environmental degradation.[49] Nevertheless, the Act's environmental provisions focus more on mitigation than on energy diversification.

8.2.4 The National Environmental Standards and Regulations Enforcement Agency (Establishment) Act

NESREA provides the statutory foundation for Nigeria's environmental and climate governance, which directly supports the clean energy transition agenda. Specifically, Section 7(g) empowers NESREA to enforce compliance with international environmental treaties and agreements, including those on climate change, while Section 7(c) mandates it to ensure adherence to national environmental standards on air quality and pollution control.[50] Through these provisions, NESREA plays a vital role in regulating industrial and energy sector emissions, promoting the adoption of cleaner technologies, and ensuring Nigeria's compliance with its obligations under the Paris Agreement (2015) and the Climate Change Act 2021.[51]

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[47]EPSRA, s. 96.
[48]Energy Commission of Nigeria Act, s. 2(1).
[49]PIA, s. 234.
[50]National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007, ss. 7(c), 7(g).
[51]Paris Agreement, 2015, Art. 4; Climate Change Act, 2021, s. 3(1).

8.2.5 National Renewable Energy and Energy Efficiency Policy

This policy aims to achieve a 30% renewable energy contribution by 2030.[52] It aligns with the Paris Agreement and Sustainable Development Goal (SDG) 7, but remains policy-based without statutory backing.

8.2.6 Renewable Energy Master Plan

Jointly developed by ECN and UNDP, the REMP outlines targets for solar, wind, and biomass development.[53] However, the absence of a legal enforcement mechanism renders it largely aspirational.

8.3 Institutional Agencies

The main regulatory and implementation agencies include: Energy Commission of Nigeria (ECN) (focused on national energy coordination and research), Nigerian Electricity Regulatory Commission (NERC) (focused on licensing and tariff regulation), and Rural Electrification Agency (REA) and Federal Ministry of Power (focused on policy formulation and energy sector supervision).[54]

8.4 Judicial Contribution

Nigerian courts have recognized environmental protection as integral to sustainable development. In *Gbemre v. Shell Petroleum Development Company*,[55] the Federal High Court held that gas flaring violates the right to life and dignity under Sections 33 and 34 of the Constitution. This case laid the foundation for judicial enforcement of clean energy-related rights. Similarly, in *Centre for Oil Pollution Watch v. NNPC*,[56] the Supreme Court affirmed *locus standi* for environmental litigants, strengthening accountability mechanisms.

9. Comparative Analysis from other Jurisdictions

9.1 South Africa

South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) offers a successful model for attracting private investment in renewables.[57] Through transparent bidding and legal guarantees, it has added over 6,000 MW of renewable capacity since 2011. Nigeria could adopt a similar procurement mechanism within NERC's framework.

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[52]Federal Ministry of Power, NREEEP (2015).
[53]Energy Commission of Nigeria & UNDP, Renewable Energy Master Plan (2012).
[54]*Ibid.*
[55](2005) AHRLR 151 (NgHC 2005).
[56](2019) LPELR-48203(SC).
[57]Department of Energy, Republic of South Africa, REIPPPP Progress Report (2020).

9.2 Kenya

Kenya's Energy Act 2019 provides a unified legal framework for electricity, renewable energy, and energy efficiency.[58] The establishment of the Rural Electrification and Renewable Energy Corporation (REREC) demonstrates effective institutional consolidation an approach Nigeria's fragmented agencies could emulate.

9.3 Germany

Germany's Energiewende (Energy Transition Policy) is driven by the Renewable Energy Sources Act (EEG) 2000, which introduced feed-in tariffs and grid priority for renewables.[59] The clear legislative framework and fiscal incentives have accelerated Germany's transition to over 40% renewable electricity generation.

10. **Recommendations**

1. Enact a Comprehensive Renewable Energy Act: A unified statute should consolidate renewable energy provisions, provide fiscal incentives, and empower NERC to enforce compliance.
2. Decentralize Energy Governance: Amend the Constitution to allow states greater legislative power over renewable energy expansion.
3. Strengthen Institutional Coordination: Establish an Energy Transition Council to harmonize policies among agencies.
4. Enhance Judicial Enforcement: Courts should continue to interpret constitutional rights expansively to protect environmental and energy interests.
5. Promote Public-Private Partnerships (PPPs): Government should provide guarantees and subsidies to attract renewable investments.
6. Increase Funding and Capacity Building: Develop technical training and research centers dedicated to renewable energy technologies.
7. Leverage International Cooperation: Engage in technology transfer and funding through global mechanisms like the Green Climate Fund.

11. **Conclusion**

Nigeria's transition to clean energy is a legal, institutional, and developmental imperative. Although the country has made policy progress through NREEEP (National Renewable Energy and Energy

[58]Energy Act of Kenya (2019).
[59]German Renewable Energy Sources Act (EEG 2000).

Efficiency Policy) and REMP (Renewable Energy Master Plan), the absence of a binding legislative framework and weak enforcement mechanisms continue to hinder progress. Judicial pronouncements such as *Gbemre v. Shell* and *Centre for Oil Pollution Watch v. NNPC* underscore the judiciary's potential in promoting environmental and energy justice. However, genuine transformation requires coordinated action legislative reform, institutional coherence, and sustained political will for implementation.

Finally, achieving clean energy transition in Nigeria demands a multidimensional approach grounded in law, governance, and justice. The future of Nigeria's development, environmental sustainability, and international credibility depends on the nation's capability to move beyond fossil fuel dependence and embrace renewable energy as the foundation of its economic and legal framework.