

APPRAISING THE LEGAL FRAMEWORK FOR A JUST TRANSITION IN PETROLEUM ENERGY PRODUCTION AND EXPORTATION IN NIGERIA: LESSONS FROM THE UNITED KINGDOM

By

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Abstract

As global awareness of climate change grows, countries heavily reliant on fossil fuels for economic stability face challenges aligning national policies with international climate commitments. Petroleum energy plays a key role in many developing economies, influencing revenue, job creation, and energy security. This reliance complicates efforts to transition to cleaner energy. This article critically analyzes the legal frameworks under UN climate agreements, assessing their effectiveness in supporting a fair shift to renewable energy. Using doctrinal research, key challenges were identified, including economic dependency on fossil fuels, limited capacity for climate policy implementation, and inadequate financial support for renewable energy investments. The article recommends establishing comprehensive legal and regulatory frameworks that prioritize social equity, stakeholder engagement, and sustainable development. Governments are urged to develop clear national climate policies, enhance participation mechanisms for affected communities, invest in workforce retraining, strengthen legal frameworks, and leverage international financial support for sustainable projects. A just transition in petroleum-dependent nations requires focused efforts on both national and international levels.

Keywords: *Climate Change, Energy, Renewable Energy, Just Transition, Energy Security*

Introduction

Climate change is a critical global challenge that requires coordinated international efforts. The United Nations plays a pivotal role in formulating and promoting policies aimed at mitigating the impacts of climate change and facilitating a transition to sustainable energy systems.¹ A just transition, as defined by the UN, involves shifting towards a low-carbon economy in a manner that ensures fairness and equity for all stakeholders, particularly those in sectors and regions most affected by the transition.²

The United Nations Framework Convention on Climate Change³ established in 1992, serves as the foundation for global climate policy.⁴ The Kyoto Protocol⁵ and the Paris Agreement⁶ (2015) are key

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¹ United Nations Framework Convention on Climate Change (UNFCCC) 1992.

² (n1).

³ *Ibid.*

⁴ F W Geels, 'Regime Resistance Against Low-Carbon Transitions: Introducing Politics and Power into the Multi-Level Perspective' [2014] (31) (5) *Journal of Theory, Culture and Society* 21-40.

⁵ Kyoto Protocol 1997.

⁶ Paris Agreement 2015.

milestones under the UNFCCC that set binding and non-binding targets for reducing greenhouse gas emissions.⁷ The Paris Agreement is a landmark accord wherein countries committed to limit global warming to well below 2 degrees Celsius above pre-industrial levels, with efforts to keep it below 1.5 degrees Celsius.⁸ The Agreement emphasizes the importance of sustainable development and poverty eradication, which are crucial elements of a just transition.⁹ Countries that produce and export petroleum face unique challenges in the transition to a low-carbon economy.¹⁰ Their economies are heavily dependent on fossil fuels.

Petroleum energy producing and exporting countries face significant challenges in this global effort due to their economic reliance on fossil fuels. The transition to a low-carbon economy, while crucial for addressing climate change, poses substantial economic and social risks for these nations. A failure to manage this transition justly could exacerbate social inequalities, economic instability, and geopolitical tensions. Petroleum energy producing and exporting countries derive a significant portion of their GDP, government revenues, and employment from the oil and gas sector. The decline in global demand for fossil fuels, driven by climate policies and the shift towards renewable energy, threatens to destabilize these economies. The reduction in fossil fuel consumption and prices can lead to severe fiscal deficits, compromising the ability of these countries to invest in public services and infrastructure. Many of these economies have limited diversification, making it challenging to pivot to other industries without significant time and investment.

Critical Analysis of the International Legal Framework on Climate Change and Just Transition

The UNFCCC serves as the cornerstone of international efforts to combat climate change. The Convention outlines the ultimate objective which is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.¹¹ Stabilizing greenhouse gas concentrations is essential for minimizing the adverse impacts of climate change on vulnerable communities, including those dependent on petroleum-based economies.¹² The UNFCCC establishes several key principles, including the principle of common but differentiated responsibilities, equity, and the need to take precautionary measures to address climate change.¹³ The principle of CBDR acknowledges historical differences in responsibility for climate change and underscores the need for developed countries to take the lead in reducing emissions and providing support to developing countries.¹⁴ Upholding the principle of equity is crucial for ensuring a just transition in petroleum energy-producing and exporting countries, as it emphasizes the fair distribution of benefits and burdens of climate policies and measures. Article 4(1) outlines the commitments of all parties to the convention to adopt national policies and take measures to mitigate climate change and facilitate adaptation to its adverse effects, also emphasizes the importance of

⁷ (n4).

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ S Carley and D M Konisky, 'The Justice and Equity Implications of the Clean Energy Transition' [2020] (5) *Journal of Energy Law* 569-577.

¹¹ (n1), art 2(1).

¹² *Ibid.*

¹³ *Ibid.*, art 3(1).

¹⁴ *Ibid.*

national actions in addressing climate change and aligns with the Paris Agreement's goals of nationally determined contributions (NDCs). National policies and measures to mitigate climate change should be designed to ensure a fair and inclusive transition for workers and communities affected by the shift away from petroleum-based energy sources.¹⁵

There is a financial mechanism to provide financial resources to developing countries to assist them in implementing the objectives of the convention.¹⁶ Financial support from developed countries can facilitate the transition to low-carbon economies in petroleum energy-producing and exporting countries by providing resources for renewable energy projects, capacity-building, and social safety nets for affected communities.¹⁷ By upholding principles of equity, providing financial support, and emphasizing the importance of education and public awareness, the UNFCCC contributes to efforts to mitigate climate change while ensuring that the transition to sustainable energy is fair, inclusive, and leaves no one behind. However, addressing the challenges of implementation and mobilizing the necessary resources will be essential for the successful transition to low-carbon economies.

Furthermore, the Paris Agreement,¹⁸ is a landmark international treaty under the UNFCCC. It aims to strengthen the global response to climate change by keeping the global temperature rise well below 2 degrees Celsius above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius. It aims to strengthen the global response to the threat of climate change by holding the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius.¹⁹ It sets the long-term temperature goal of the Paris Agreement,²⁰ aligning with the broader objectives of the UNFCCC to mitigate climate change and its impacts. While not explicitly addressing just transition, the temperature goals of the Paris Agreement emphasize the urgency of transitioning to low-carbon energy systems, including in petroleum energy-producing and exporting countries, to avoid the most severe impacts of climate change.

Article 4(2) requires each Party to prepare, communicate, and maintain successive Nationally Determined Contributions (NDCs) that reflect its highest possible ambition, considering its national circumstances. These include reducing greenhouse gas emissions and enhancing resilience to climate change. Petroleum energy-producing and exporting countries are encouraged to set ambitious NDCs that reflect their highest possible ambition to transition towards low-carbon energy systems while ensuring a just and inclusive transition for affected communities.²¹

The article encourages international cooperation and the use of market-based approaches to enhance the ambition of climate action and facilitate the implementation of NDCs.²² Cooperative approaches

¹⁵ (n1).

¹⁶ *Ibid.*, art 11

¹⁷ (n6).

¹⁸ *Ibid.*

¹⁹ *Ibid.*, art 2(1)(a).

²⁰ *Ibid.*

²¹ *Ibid.*

²² *Ibid.*, art 6.

such as internationally transferred mitigation outcomes, can provide petroleum energy-producing and exporting countries with additional opportunities to finance emission reduction projects and support the transition to sustainable energy systems.²³ Article 9 establishes the obligation of developed countries to provide financial resources to assist developing countries with the implementation of mitigation and adaptation actions. The article emphasizes the importance of financial resources in supporting developing countries in their efforts to address climate change, including the transition to low-carbon energy systems.²⁴

Article 10 underscores the importance of technology development and transfer to support the implementation of mitigation and adaptation actions by developing countries. Access to clean and sustainable technologies is essential for petroleum energy-producing and exporting countries to transition towards more sustainable energy systems, supporting economic diversification and job creation in renewable energy sectors.²⁵

Harmonizing Nigeria's national energy policies with international commitments is essential for a just energy transition that aligns with global sustainability goals. This process involves aligning Nigeria's domestic policies with international frameworks, such as the Paris Agreement and the United Nations Sustainable Development Goals (SDGs). Nigeria's energy transition faces unique challenges, including high dependence on fossil fuels, energy poverty, and a growing population, which make alignment with international commitments both critical and complex.²⁶

Nigeria is a signatory to the Paris Agreement, committing to reduce greenhouse gas (GHG) emissions and limit global temperature rise. Through its Nationally Determined Contributions (NDCs), Nigeria has set specific targets, including reducing carbon emissions by 20 percent unconditionally and 45 percent with international support by 2030.²⁷ Achieving these targets requires a significant shift toward renewable energy and the reduction of fossil fuel dependency. Nigeria's energy policies also align with the SDG 7, which advocates for affordable and clean energy, and SDG 13, focusing on climate action. Meeting these SDGs requires addressing energy poverty through renewable sources, promoting energy efficiency, and implementing clean energy projects that benefit all sectors of society, especially vulnerable and underserved communities.²⁸

The African Union's Agenda 2063 envisions a continent with inclusive growth and sustainable development. Nigeria is expected to contribute to this goal by adopting clean energy sources and achieving universal energy access.²⁹ This aligns with Agenda 2063's emphasis on sustainable industrialization and climate-resilient development. Energy efficiency is a cornerstone of Nigeria's commitments under the Paris Agreement and SDG 7. Nigeria has adopted the National Energy

²³ (n6).

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ A I Ukaegbu, 'Policy and Legal Challenges in Nigeria's Energy Sector' [2023] (15) *Journal of Renewable Energy Policy* 110-128..

²⁷ *Ibid.*

²⁸ (n26).

²⁹ *Ibid.*

Efficiency Action Plan, which sets targets for reducing energy consumption in residential, commercial, and industrial sectors. For example, NEEAP mandates energy-efficient lighting in public buildings. However, enforcement is inconsistent, and energy-efficient technologies remain underutilized in many sectors.

Transitioning to renewables could lead to revenue losses, making it challenging to harmonize domestic policies with climate commitments.³⁰ The Nigerian National Petroleum Corporation Limited continues to invest in fossil fuel infrastructure, including new pipelines, which conflicts with Nigeria's NDC targets. Balancing the economic reliance on oil with climate commitments remains a key obstacle. In Lagos, the state's renewable energy initiatives sometimes conflict with federal policies, as local authorities prioritize their economic interests over national commitments.³¹ This fragmentation hampers Nigeria's ability to achieve cohesive, nationwide progress toward international goals. Nigeria's renewable energy sector faces significant funding shortages. Aligning national policies with international commitments requires substantial investment in renewable infrastructure, research, and capacity building, which Nigeria currently lacks. Despite support from international organizations, financing large-scale renewable projects remains a challenge. Nigeria's dependence on external funding for initiatives like the NEP reflects a broader lack of domestic financial capacity to fully commit to international climate goals. Monitoring progress toward international commitments is crucial, but Nigeria faces challenges in tracking and reporting on its progress due to limited institutional capacity and lack of transparency. The slow progress in tracking emissions reductions from projects like the NGFCP has made it difficult for Nigeria to measure its achievements relative to its Paris Agreement targets. Strengthening accountability measures is essential to ensure compliance.³²

Current Regulatory Framework in Promotion of Just Energy Transition in Nigeria as a Petroleum Energy Dependent Economy

Nigeria's energy sector is dominated by oil and gas, which account for about 90 percent of its foreign exchange earnings and 60 percent of government revenues.³³ This heavy reliance makes the economy vulnerable to fluctuations in global oil prices, and there's been a push toward diversifying energy sources to include renewable energy (such as solar, wind, and hydro). Diversifying energy sources would improve energy security, reduce greenhouse gas emissions, and enhance sustainability. However, various legal and regulatory challenges have hindered this goal.³⁴

³⁰ *Ibid.*

³¹ *Ibid.*

³² Ukaegbu (n26).

³³ K A B Adnan, 'Just Energy Transition: An Analysis of Legal and Regulatory Frameworks' [2022] (25) *Journal of Energy and Natural Resources Law* 45-67.

³⁴ *Ibid.*

Electric Power Sector Reform Act,³⁵ established the Nigerian Electricity Regulatory Commission and aimed to privatize the power sector.³⁶ EPSRA supports both conventional and renewable energy sources by allowing private sector participation, which is crucial for investments in renewables.³⁷

The Renewable Energy Policy³⁸ outlines Nigeria's commitment to increasing renewable energy's contribution to the energy mix, aiming to provide 10 percent of the country's energy from renewable sources by 2025.³⁹ It emphasizes solar, hydro, biomass, and wind energy, as well as the mini-grid development to reach remote areas.⁴⁰ National Renewable Energy and Energy Efficiency Policy 2015, sets guidelines and frameworks to increase renewable energy uptake and improve energy efficiency.⁴¹ However, the implementation of this policy has faced slow progress due to limited funding, technical capacity, and clear regulatory frameworks that effectively promote investment in renewable energy.

Petroleum Industry Act⁴² represents a major reform in the oil and gas sector, aimed at increasing investments and ensuring better governance. While it mainly addresses oil and gas, PIA also includes provisions for environmental regulations and local content, which can indirectly support a shift to renewables by improving environmental protection standards.

Conditions of Climate Justice in Just Transitions

Climate justice refers to the ethical and political framework that addresses the disproportionate impacts of climate change on marginalized communities, advocating for fair treatment, participation, and the equitable distribution of resources in climate action and adaptation strategies.⁴³ The conditions of climate justice become crucial to ensure that the rights and needs of vulnerable populations are prioritized.⁴⁴ This is especially important in transitioning to renewable energy, where investment in infrastructure, capacity building, and training must benefit those most affected by climate change and energy poverty. In Nigeria, oil-rich regions like the Niger Delta suffer from environmental degradation due to oil extraction, yet they often lack access to clean energy and infrastructure. A just transition would require investment in renewable energy projects in these areas, ensuring that local community's benefit from clean energy initiatives and receive compensation for environmental damage.

Meaningful participation of affected communities in decision-making processes is critical for achieving climate justice. This involves incorporating local knowledge, addressing concerns, and ensuring that the voices of marginalized groups are heard in climate policy development. In Nigeria, local communities have often been excluded from discussions around oil extraction and energy projects.

³⁵ Electric Power Reform Act 2005

³⁶ *Ibid.*

³⁷ (n33).

³⁸ Renewable Energy Policy 2015.

³⁹ A A Akinwale, 'Regulatory Challenges of Renewable Energy in Nigeria: A Legal Perspective' [2021] (28) *Journal of African Law* 112-139.

⁴⁰ *Ibid.*

⁴¹ C E Nwoke 'Legal Implications of Nigeria's Just Energy Transition' [2020] (35) *Energy, Sustainability and Society Journal* 45-60.

⁴² PIA 2021.

⁴³ Ukaegbu (n26).

⁴⁴ *Ibid.*

Initiatives that engage communities in renewable energy planning, such as community solar projects, can empower locals and ensure their needs are addressed. For example, community-led projects in areas like Kano have successfully utilized solar energy to provide electricity while involving local stakeholders in the process.⁴⁵

In South Africa, the government has implemented participatory processes in its renewable energy procurement, allowing local communities to express their needs and preferences in project planning. This has resulted in the establishment of community-owned renewable energy projects that reflect local priorities.⁴⁶ Climate justice necessitates special attention to the rights and needs of vulnerable populations, including low-income communities, indigenous peoples, and women, who are often the most affected by climate impacts and least able to adapt.⁴⁷ Women in Nigeria play a significant role in agriculture and food security but face disproportionate impacts from climate change, such as erratic rainfall and resource scarcity. A just transition must incorporate gender considerations, ensuring that women are included in decision-making and have access to resources and technologies for sustainable agriculture. Indigenous communities worldwide, such as the Sámi people in Norway and Sweden, face threats to their livelihoods due to climate change and resource extraction.⁴⁸

A just transition involves not only the shift to renewable energy but also enhancing the resilience of communities to climate impacts.⁴⁹ This means developing strategies to adapt to changing climatic conditions while ensuring that communities have the capacity to withstand future shocks. The National Adaptation Strategy and Plan of Action for Climate Change (NASPA-CC) aims to improve resilience among vulnerable communities in Nigeria. This includes projects that enhance agricultural practices, water management, and disaster preparedness, particularly in regions most affected by climate change, such as the North East. In the Philippines, community-based disaster risk reduction programs empower local populations to adapt to climate impacts.⁵⁰ These programs incorporate traditional knowledge and enhance community resilience through training, infrastructure improvement, and access to early warning systems. To achieve climate justice, it is crucial to establish policies and legal frameworks that promote equitable energy transitions. This involves creating regulations that support renewable energy development while protecting the rights of affected communities.

Legal Issues and Challenges in the Implementation of Just Energy Transition in Nigeria

Legal obstacles significantly hinder the implementation of renewable energy projects in Nigeria, despite the country's abundant natural resources and policies aimed at diversifying its energy mix.⁵¹ The regulatory framework governing renewable energy is often bureaucratic, with multiple permits and licenses required from different agencies. For example, project developers must obtain licenses from the Nigerian Electricity Regulatory Commission, environmental permits from the Federal Ministry of

⁴⁵ *Ibid.*

⁴⁶ Ukaegbu (n26).

⁴⁷ *Ibid.*

⁴⁸ *Ibid.*

⁴⁹ *Ibid.*

⁵⁰ *Ibid.*

⁵¹ O J Adedayo, 'The Role of Policy and Law in Nigeria's Energy Transitions' [2023] (12) *International Journal of Energy and Environmental Law* 36-50.

Environment, and other consents from local authorities.⁵² This complexity discourages investment in renewables. Mini-grid operators, essential for rural electrification through renewable sources, report significant delays in obtaining licenses and permits.⁵³ In some cases, project timelines are extended by up to a year due to bureaucratic inefficiencies, impacting rural areas that urgently need reliable power. Also, land acquisition is one of the significant hurdles for renewable energy projects, especially solar farms and wind projects that require large tracts of land.⁵⁴

The Land Use Act⁵⁵ vests land ownership in the hands of state governments, necessitating lengthy approval processes that vary by region. This makes it challenging for developers to secure the land quickly and may increase project costs due to prolonged negotiations.⁵⁶ The Solar Power Naija programme, part of the Economic Sustainability Plan, aims to deploy solar home systems to millions of Nigerians, but some projects have stalled due to land acquisition issues. The uncertainty around land titles and the time-consuming approval process have hindered the roll-out in certain areas.

Furthermore, Nigeria's energy policies sometimes lack consistency, leading to confusion for renewable energy investors.⁵⁷ Changes in policy direction and lack of alignment between federal and state-level regulations create uncertainties that delay or halt project implementation.⁵⁸ In the past, the Nigerian Bulk Electricity Trading company suspended several Power Purchase Agreements for renewable projects, which caused setbacks for international developers who had already invested resources in pre-development activities.⁵⁹ This abrupt policy changes hurt investor confidence and impacted future investment decisions.⁶⁰ The Environmental Impact Assessment Act mandates an EIA for renewable energy projects, particularly those with a substantial physical footprint, like wind and solar farms.⁶¹ However, obtaining EIA clearance can be a lengthy process, especially with understaffed agencies, which slows down project timelines.

Numerous solar projects under the Rural Electrification Agency have faced delays due to prolonged EIA processing times.⁶² These delays increase costs and, in some cases, cause developers to abandon projects altogether due to the extended timeline and budget overruns. The current tariff system in Nigeria does not sufficiently support renewable energy investments.⁶³ Tariffs for renewable energy projects, especially solar and wind, are often considered uneconomical, limiting profitability, and discouraging private investment. This is due to a lack of specific feed-in tariffs (FiTs) for renewables,

⁵² *Ibid.*

⁵³ *Ibid.*

⁵⁴ *Ibid.*

⁵⁵ Land Use Act Cap L5 LFN 2004.

⁵⁶ S O Akintoye, 'Legal Frameworks for Sustainable Energy Development in Nigeria' [2012] (14) *Renewable Energy Law and Policy Review* 52-68.

⁵⁷ K E Eze, 'Challenges to Renewable Energy Adoption in Nigeria: A Legal Analysis' [2020] (18) *Journal of African Environmental Law* 100-115.

⁵⁸ *Ibid.*

⁵⁹ (n57).

⁶⁰ *Ibid.*

⁶¹ *Ibid.*

⁶² *Ibid.*

⁶³ *Ibid.*

despite NERC's efforts to establish guidelines.⁶⁴ The absence of standardized FiTs has been a significant issue for solar developers under the National Renewable Energy and Energy Efficiency Policy. Many developers find it challenging to secure PPAs that reflect fair returns on their investments due to NERC's reluctance to establish mandatory FiTs. This has slowed the development of on-grid renewable energy projects.⁶⁵

The legal overlap among Federal, State, and local governments creates regulatory ambiguity. This fragmentation results in multiple, sometimes conflicting, requirements that developers must satisfy, leading to inefficiency and delays in project execution.⁶⁶ A project in Lagos faced delays due to differences in the state's land use regulations and Federal environmental requirements. Developers had to navigate conflicting rules, which prolonged the project timeline and significantly increased costs, as they sought to satisfy requirements from multiple regulatory bodies.⁶⁷ While Nigeria has made strides with policies like the National Renewable Energy and Energy Efficiency Policy, the legal framework does not yet provide sufficient financial incentives or tax breaks for renewable energy investors. Without such incentives, renewable projects struggle to compete with the well-established oil and gas sector, which enjoys favourable tax regimes.

Many smaller renewable energy startups have cited the absence of tax incentives or grants as a major hindrance to securing funding. For example, solar companies seeking to expand rural electrification projects find it difficult to scale without government-supported tax reliefs or subsidies, resulting in stunted growth for these projects. Despite Nigeria's commitments to renewable energy, the enforcement of related policies and regulations is inconsistent. This inconsistency makes the sector less attractive to investors and creates challenges in implementing projects effectively. Under the Renewable Energy Master Plan, Nigeria aimed to increase its renewable energy capacity significantly by 2025, but weak enforcement of policies has meant that progress remains slow.⁶⁸ Many projects do not reach completion as policy support is often lacking, and commitments to promoting renewables fall short in practical implementation.⁶⁹

Electricity theft is a significant issue that affects the profitability of renewable projects, especially mini grids that rely on smaller, more dispersed installations. Due to weak regulatory controls, mini-grid operators often face electricity theft, further reducing their already tight margins. Mini-grid operators in rural communities in northern Nigeria have reported instances where electricity theft impacts their revenue collection, making it challenging to maintain the financial viability of renewable projects in off-grid areas.

⁶⁴ B O Folayan, 'Energy Justice in Nigeria: Legal and Policy Perspective' [2022] (21) *African Journal of law and Policy* 77-90.

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

⁶⁷ (n64).

⁶⁸ F B Kalu, 'The Regulatory Landscape of Renewable Energy in Nigeria' [2023] (26) *Journal of Energy Law* 140-157.

⁶⁹ *Ibid.*

Appraisal of the Role of Institutions in Just Energy Transition in Nigeria

The role of institutions in Nigeria's just energy transition is crucial, as they provide the governance, regulatory frameworks, policy support, and financing mechanisms needed to shift the country toward cleaner energy sources in a socially inclusive way. For Nigeria, the goal of a "just energy transition" means moving from fossil fuels to renewable energy while ensuring that communities and workers are not left behind in this shift.⁷⁰ Institutions in Nigeria, from government agencies to non-governmental organizations, play a key role in shaping this process, though they face unique challenges in balancing economic, environmental, and social objectives. The FME plays a vital role in ensuring that Nigeria's energy transition aligns with environmental sustainability goals.⁷¹ It is responsible for enforcing environmental policies, including the Environmental Impact Assessment Act, which affects the development of renewable energy projects. The FME sets standards for environmental practices and works to mitigate the environmental impacts of energy projects, both renewable and non-renewable. Its focus on environmental regulation is essential to maintaining a balance between growth in renewable energy and ecological preservation. Insufficient resources and technical expertise, along with bureaucratic delays, impact its effectiveness in enforcing environmental standards across various energy projects.⁷²

NERC is the main regulatory body overseeing Nigeria's electricity sector, including renewable energy.⁷³ It provides licenses for energy projects, sets tariffs, and promotes competition and private sector participation in the energy market. NERC supports the integration of renewable energy into the grid through regulations for mini-grids, net metering, and embedded generation, making it central to expanding renewable energy access in urban and rural areas.⁷⁴ By setting tariffs and incentivizing renewable energy, NERC helps create a viable market for renewables. NERC's tariff structure for renewables is not yet favourable enough to attract significant private investment, and inconsistent regulatory enforcement can cause project delays, thereby impacting investor confidence.⁷⁵ The REA is tasked with expanding electricity access to underserved and off-grid areas, primarily through renewable energy sources like solar mini-grids and home systems.⁷⁶ REA's mandate aligns with the just transition by providing clean, affordable energy to rural communities and creating jobs through renewable energy initiatives. Programs like the Solar Power Naija initiative seek to provide solar power to millions of homes, directly contributing to energy access and social inclusion. Limited funding and logistical challenges in reaching remote communities hinder REA's ability to fully realize its mandate. Furthermore, the agency faces bureaucratic hurdles in obtaining necessary approvals, impacting project implementation.⁷⁷

⁷⁰ T A Eweje, 'Nigeria's Energy Transition: Legal Barriers and Opportunities' [2021] (29) *African Energy Policy Journal* 38-54.

⁷¹ *Ibid.*

⁷² *Ibid.*

⁷³ *Ibid.*

⁷⁴ *Ibid.*

⁷⁵ *Ibid.*

⁷⁶ *Ibid.*

⁷⁷ Eweje (n70).

The Ministry of Power develops and implements policies for the energy sector, which includes both renewable and non-renewable sources. It is responsible for the long-term strategic planning of Nigeria's energy transition. The Ministry is key to formulating national energy policies that encourage diversification toward renewable energy sources, while also addressing issues like energy poverty and security. Its role is to create a stable policy environment that encourages investment in renewables. Conflicting priorities within the Ministry, such as the strong focus on oil and gas, sometimes overshadow the need for renewables, impacting the pace of the transition.⁷⁸

NSIA is responsible for managing Nigeria's sovereign wealth fund, which includes investments in infrastructure and development projects, including renewable energy. NSIA's role in financing infrastructure is critical for renewable energy development, particularly in the construction of solar farms, wind projects, and hydroelectric power. By providing long-term funding for renewable projects, NSIA helps to attract private sector investment. NSIA's investment portfolio is still heavily skewed toward fossil fuel-related projects, given Nigeria's dependency on oil revenue. Diversifying this portfolio to include a larger share of renewable energy is essential for a just transition.

NGOs and CSOs play a watchdog role, ensuring that the energy transition process remains socially inclusive and environmentally responsible.⁷⁹ They also advocate for fair treatment of communities impacted by energy projects and provide education on renewable energy benefits. NGOs and CSOs raise awareness, monitor government policies, and promote community engagement, helping to ensure that the transition to renewable energy includes the voices of those most affected by it, particularly in marginalized communities. Limited funding and sometimes restricted access to decision-making processes limit the influence of NGOs and CSOs in the transition process.⁸⁰ Additionally, collaboration with government agencies is sometimes weak, limiting their impact.

Policy implementation is inconsistent, often due to insufficient coordination between federal and state authorities. The strong focus on oil and gas has slowed progress toward a diversified energy mix.⁸¹ Community engagement efforts are sometimes superficial, resulting in resistance to projects due to concerns over land use, cultural impacts, and economic displacement. Strengthening these efforts would improve public acceptance and support a more equitable transition.⁸² To meet the technical demands of renewable energy, institutions like NERC and REA are increasingly focused on capacity building within the sector.⁸³ Training programs and workshops aim to upskill the workforce, but progress is limited by funding and resource constraints. More consistent efforts are required to develop the technical expertise needed for maintaining renewable energy projects and integrating them into the national grid.

⁷⁸ *Ibid.*

⁷⁹ Ukaegbu (n26).

⁸⁰ *Ibid.*

⁸¹ Ukaegbu (n26).

⁸² *Ibid.*

⁸³ *Ibid.*

Lessons from the United Kingdom and Application in Nigeria

Nigeria can draw several lessons from the UK's experience with just energy transition, particularly in overcoming legal and regulatory challenges. The UK's journey in advancing a fair energy transition offers insights on policy frameworks, public-private partnerships, regulatory innovations, and stakeholder engagement along the following milestones;

Clear National Legislation on Climate Goals

THE UK's Climate Change Act⁸⁴ legally mandates emission reduction targets, including a net-zero target by 2050.⁸⁵ This legislative approach provides a strong legal foundation and creates accountability across sectors. Nigeria could mirror her Climate Change Act to legally anchor its emission reduction targets, such as those outlined in its NDCs under the Paris Agreement.⁸⁶ This law could provide a roadmap for gradually phasing out fossil fuels while incentivizing renewable energy.

Comprehensive Regulatory Frameworks for Renewable Energy

The UK has developed a sophisticated regulatory framework for renewable energy, including feed-in tariffs, Renewable Obligation Certificates, and Contracts for Difference. These mechanisms create a stable investment environment for renewable energy projects.⁸⁷ Nigeria's energy regulatory framework could benefit from feed-in tariffs and competitive bidding processes to attract private investment in renewable energy. Strengthening the Nigerian Electricity Regulatory Commission's (NERC) ability to enforce and incentivize renewable projects would also improve investor confidence and market stability.

Just Transition Funds for Affected Workers and Communities

The UK has initiated funds to support workers and communities impacted by the transition away from fossil fuels, helping them retrain and find employment in the green economy. Such funds ensure a socially inclusive transition that minimizes economic displacement. Nigeria could establish a Just Transition Fund to provide social protection, reskilling, and financial support to communities affected by the decline in oil and gas.⁸⁸ This fund could be financed by a carbon tax or levies on fossil fuel companies, ensuring that resources are available for sustainable livelihoods.

Strengthening Energy Efficiency Standards

The UK has implemented stringent energy efficiency standards for buildings, appliances, and industries, reducing overall energy demand and lowering carbon emissions.⁸⁹ Policies like the Energy Company Obligation (ECO) require energy companies to support energy-saving measures for low-income households. Developing and enforcing energy efficiency standards for buildings and appliances could reduce energy demand in Nigeria. Integrating energy efficiency targets within the National Renewable

⁸⁴ Climate Change Act 2008, UK.

⁸⁵ S K Collins, 'Legal Pathways for a Just Energy Transition in the UK' [2022] (24) *Energy law Journal* 220-237.

⁸⁶ *Ibid.*

⁸⁷ Collins (n85).

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*

Energy and Energy Efficiency Policy would help reduce energy consumption and lower costs, benefiting both consumers and the environment.

Establishing Carbon Pricing Mechanisms

The UK's carbon pricing strategy, including the Carbon Price Floor, has been instrumental in reducing emissions by providing a financial incentive to transition from coal to cleaner energy.⁹⁰ Carbon pricing discourages the use of fossil fuels by making them more expensive relative to renewables.⁹¹ Nigeria could consider implementing carbon pricing mechanisms as part of its climate policy framework. Revenue from carbon pricing could be reinvested in renewable energy projects and infrastructure, helping to fund the transition.

Public-Private Partnerships for Infrastructure Development

The UK's energy transition has relied heavily on public-private partnerships (PPPs) for funding large renewable energy projects, like offshore wind farms. These partnerships leverage private investment while spreading the financial risks. Nigeria could adopt similar PPP models to attract private capital into large-scale solar and wind projects. Through collaboration with international financial institutions, Nigeria could develop infrastructure that supports renewable energy generation and grid integration.⁹²

Integrated and Decentralized Energy Solutions

The UK has promoted decentralized renewable energy systems, such as distributed solar and community energy projects, as part of a flexible grid structure that can accommodate intermittent renewable sources.⁹³ Nigeria could prioritize off-grid and mini-grid solutions for rural electrification, especially in regions with unreliable grid access. Promoting decentralized solar power for households and businesses would increase energy access while reducing reliance on diesel generators, promoting both sustainability and energy independence.

Conclusion and Recommendations

The legal framework for a just transition in petroleum energy-producing and exporting countries is centered around principles of fairness, social inclusiveness, environmental sustainability and economic resilience. It emphasizes several key elements essential for achieving a balance between reducing carbon emissions and ensuring socio-economic stability. These include decarbonization strategies designed to minimize economic disruptions, social protections for workers and communities reliant on fossil fuel industries, and international cooperation to align national efforts with global climate goals, such as those outlined in the Paris Agreement. Additionally, the framework highlights the need for capacity-building in developing countries to enhance their ability to shift toward renewable energy while maintaining economic resilience. It is recommended thus;

1. Petroleum energy-producing countries like Nigeria should develop and implement comprehensive national climate policies that align with UN Climate Change goals. These

⁹⁰ *Ibid.*

⁹¹ *Ibid.*

⁹² Collins (n85).

⁹³ *Ibid.*

policies should outline clear targets for emissions reductions, renewable energy deployment, and social equity measures. By establishing specific, measurable objectives, countries can create a roadmap for transitioning to sustainable energy while ensuring accountability and transparency.

2. It is vital to include a diverse range of stakeholders, including local communities, civil society organizations, labour unions, and the private sector, in the transition process.
3. To address potential job losses in fossil fuel sectors, governments should invest in education and retraining programs for workers. This includes developing vocational training programs focused on renewable energy technologies and other green jobs. By equipping the workforce with the necessary skills, countries can facilitate a smoother transition while mitigating socio-economic disruptions.
4. Nigeria needs to enhance her legal and regulatory frameworks to support renewable energy development and ensure social protections during the transition. This includes creating incentives for renewable energy investments, enforcing environmental regulations, and establishing social safety nets for displaced workers.
5. Petroleum energy-producing countries like Nigeria should actively seek international financial mechanisms and partnerships to support their transition to renewable energy. By engaging with entities such as the Green Climate Fund and other multilateral institutions, countries can secure funding for sustainable projects and access advanced technologies. Additionally, collaboration with developed nations can facilitate knowledge sharing and capacity building, ensuring that transitions are both effective and sustainable.