

THE LEGAL AND INSTITUTIONAL FRAMEWORK FOR RENEWABLE ENERGY IN NIGERIA

Introduction

In the last 20 years, there has been an increase in the number of renewable energy sources in the global energy mix. These renewable energy sources are becoming ever more inexpensive particularly in comparison to traditional fossil fuel options. This is a good sign of things to come for the environment and for the small and large communities on our planet. In Nigeria, a number of companies and start-ups are taking advantage of the peculiar climatic conditions in the country for solar energy production, for instance, the recent partnership between Kano Electricity Distribution Company and Konexa to generate and distribute 10 MW of electricity from solar power to distribute to 30,000 consumers in Kano.

With the growth of interest and investment by local and international companies, funds, sponsors, DFI's and other stakeholders in the Nigerian renewables market, the question of which laws and regulations apply to power generation and distribution of renewable energy in Nigeria has become a crucial one. This explanatory note looks at the institutional, legal and regulatory framework that applies and governs the Nigerian renewable energy sector.

Renewable Energy

Renewable energy is power, derived from natural sources which are perpetually replenishable. Another perspective is to consider renewable energy in terms of its difference from traditional fossil fuel energy. According to the National Renewable Energy and Energy Efficiency Policy (NREEEP), 2015, renewable energy refers to energy obtained from energy sources whose utilisation does not result in the depletion of the earth's resources. Solar (sun), wind, hydro (river), geothermal energy, tides, nuclear and biofuels (biomass) are all sources of renewable energy. There are technologies in place to harness these sources, and thankfully these technologies keep evolving, making these energy sources ever cheaper and more ubiquitous. Each of these sources presents a usable energy alternative that is derived from replenishable sources.

The Legal Framework for Renewable Energy in Nigeria

A. Applicable Laws

There is no single comprehensive Nigerian legislation or indeed even a comprehensive framework designed to regulate the renewable energy sector specifically. However, there are various laws that apply to power generation in general, and which therefore also cover renewable energy sources as well as fossil fuels. These laws regulate the power sector as a whole and establish its regulatory institutions. Thus, the extant laws regulating energy generally in Nigeria also apply to renewable energy. This is in contrast to jurisdictions like Germany and China where there are specific laws enacted specifically for renewable energy. In China, there is a 'Renewable Energy Law' which came into effect in 2006 and which makes provisions for national renewable energy targets, a mandatory connection and purchase policy, and a *feed-in tariff system*, an incentive system under which eligible renewable electricity generators, including homeowners, business owners, farmers and private investors, are paid a cost-based price for the renewable electricity they supply to the grid thereby enabling diverse renewable technologies to be developed and provides investors a reasonable return. In Germany, the Renewable Energy Act, 2014, generally regulates renewable energy in Germany. It governs the transition from a feed-in tariff scheme¹ to an auction system for most renewable electricity sources, covering wind power, photovoltaics, biomass, hydroelectricity, and geothermal energy.

In Nigeria, the body of laws that we refer to for renewable energy policy and regulatory oversight include the Electric Power Sector Reform Act, the Environmental Impact Assessment Act and the National Renewable Energy and Energy Efficiency Policy (NREEEP) 2015.

- **The Electric Power Sector Reforms Act 2005 (EPSRA):** This is the flagship law for the power sector in Nigeria and provides the legal and regulatory framework for electricity generation and distribution in Nigeria. The EPSRA encourages the generation of electricity from diverse sources, including renewable energy sources, and establishes and empowers the Nigerian Electricity Regulatory Commission (**NERC**)² and the Rural Electrification

¹In a feed-in tariff scheme, providers of energy from renewable sources, such as solar, wind or water, receive a price for what they produce based on the generation costs. This purchase guarantee is offered generally on a long-term basis, ranging from 5 to 20 years, but most commonly spanning 15–20 years. "Low Carbon Green Growth Roadmap for Asia and the Pacific". Available from <https://www.unescap.org/sites/default/d8files/26.%20FS-Feed-In-Tariff.pdf> (Accessed on 30 June 2021).

² See sections 31 of the Electric Power Sector Reforms Act, 2005 which provides: "(1) There is hereby established a commission to be known as the Nigerian Electricity Regulatory Commission, which shall be a body corporate with perpetual succession which can sue or be sued in its corporate name and subject to this Act, perform all acts that bodies corporate may by law perform."

Agency (**REA**).³ This legislation also enabled the establishment of the Nigerian Bulk Electricity Trading Plc and the Transmission Company of Nigeria Plc.⁴ By virtue of the law⁵, the objectives of the NERC are as follows:

(a) to create, promote, and preserve efficient industry and market structures, and to ensure the optimal utilisation of resources for the provision of electricity services;

(b) to maximise access to electricity services, by promoting and facilitating consumer connections to distribution systems in both rural and urban areas;

(c) to ensure that an adequate supply of electricity is available to consumers;

(d) to ensure that the prices charged by licensees are fair to consumers and are sufficient to allow the licensees to finance their activities and to allow for reasonable earnings for efficient operation;

(e) to ensure the safety, security, reliability, and quality of service in the production and delivery of electricity to consumers;

(f) to ensure that regulation is fair and balanced for licensees, consumers, investors, and other stakeholders; and

(g) to present quarterly reports to the President and National Assembly on its activities.

- **The Environmental Impact Assessment Act (EIA):** is a law that seeks to protect the environment by identifying all public and private projects which are likely to adversely impact the environment. The EIA requires an assessment to be conducted by the National Environmental Standards and Regulations Enforcement Agency (NESREA) to determine the impact of a project or works, both beneficial and adverse, considering the inter-related socio-economic, cultural, and human-health factors. Unless exempted in accordance with the EIA, renewable energy projects

³ Section 88 of the Electric Power Sector Reforms Act, 2005: “There is established and Agency, to be known as the Rural Electrification Agency, which shall be a body corporate capable of suing and being sued in its corporate name and, subject to this Act, of performing all acts that bodies corporate may by law perform.”

⁴ Established pursuant to section 8 of the Electric Power Sector Reforms Act, 2005.

⁵ Section 32 (1)

require assessment to determine their impact on the environment. Although one might intuitively think that renewable projects would require minimal or no oversight, however, renewable energy projects such as projects involving the construction of dams of over 15 metres high and ancillary structures covering a total area over 40 hectares and projects of reservoirs with a surface area over 400 hectares, require mandatory study under the EIA. Renewable energy projects do indeed become sustainable once they reach the operational phase of their project cycles, but regulators remain vigilant about the impacts of such projects during the construction phase in particular.

- **The National Renewable Energy and Energy Efficiency Policy 2015 (NREEEP)** This is a policy document which highlights the measures put in place by the Federal Government through the Federal Ministry of Environment and the National Environmental Standards and Regulations Enforcement Agency (NESREA) for the promotion of renewable energy and energy efficiency. Through the NREEEP, the government seeks to improve energy security and increase generation capacity and output from renewable energy sources. The policy encourages public sector collaboration and partnership with the private sector in the renewable energy sector to develop the renewable energy infrastructure of Nigeria. Some of the Incentives proposed by the NREEEP include:-
 - Assistance by the Federal and State governments to manufacturers of energy efficient products and renewable energy projects with the allocation or grant of land to further their cause.
 - implementation of a Power Production Tax Credit (PTC) for electricity generation companies, to incentivize the adoption of renewable energy;
 - setting up a Public Benefits Fund (PBF) dedicated to the support of on and off grid renewable energy generation projects;
 - licence waivers for renewable energy plants with less than 1MW at a site, and capital grants;
 - tax holidays and exemptions, and other incentives for renewable energy projects.

C. Registration with the NERC

Generally, before an entity participates in the power sector value chain in Nigeria, it is required to register with the NERC. However, energy companies generating power below 1MW aggregate at a site or engaged in the distribution of energy with a capacity below 100KW aggregate at a site are not mandated to register and obtain the licence of the NERC. However, the

NERC has put in place the Nigerian Electricity Regulatory Commission Mini-Grid Regulation, 2016 to regulate power generation below 1MW and provide for application for permits for mini grid operators. The difference between a registration certificate holder and a permit holder is that while the latter enjoys exit compensation like larger systems, the former does not.

Also, notwithstanding the exemption from registration, the NERC as a regulator may require an exempt energy company to clarify the extent of its operations and report periodically to the NERC on its technical and performance standards, customer service standards and tariff structure.

Renewable energy companies which wish to apply or are required to apply for licence of the NERC to engage in the generation and distribution of power are generally required to provide the following documentation including:

- i. completed Application Form,
- ii. Certificate of Incorporation, Memorandum and Articles of Association, or Deed of Partnership, or Deed of Trust (where applicable),
- iii. Tax Clearance Certificate for preceding three (3) years,
- iv. Registered title documents in respect of the operations site,
- v. Environmental Impact Assessment approval,
- vi. Health and Safety Policy,
- vii. Business plan, and
- viii. relevant memorandum of understanding, agreements, and technical documents, depending on the licence, permit or registration sought.

An applicant for licensing may be required to submit further documentation as may be determined by the NERC from time to time in respect of the specific licence sought.

B. The Regulatory Institutions

The regulatory institutions in the energy sector in Nigeria can be classified into three types:

- i) Policy-Making Institutions,
 - ii) Licencing Institutions
 - iii) Industry Participants/Business Enablers.
- i) *The **Policy-making institutions** are those regulators that make policies for renewable energy sector, but may not necessarily be the direct issuers of mandatory licences and permits for players in the field. These institutions include the Federal Ministry of Power, the Energy Commission of Nigeria and the National Environmental Standard and Regulations Enforcement Agency.*

1. **The Federal Ministry of Power:** The Federal Ministry of Power (FMOP) is the policy-making and operational arm of the Federal Government tasked with the responsibility of provision of power in the country. The FMOP formulates and implements the policies of the government for the development and efficient operation of the entire power sector, monitors and superintends the generation, transmission, and distribution of electricity.
2. The **Energy Commission of Nigeria (ECN)** has the mandate to strategically plan and coordinate national policy in the energy sector⁶ The ECN advises the government on the policies for renewable energy in Nigeria. The ECN has in carrying out its functions, advised on the National Renewable Energy and Energy Efficiency Policy 2015 and the National Energy Policy.

The **National Environmental Standard and Regulations Enforcement Agency (NESREA)** is an agency supervised by the Federal Ministry of Environment and established by the National Environmental Standard and Regulatory Enforcement Agency (Establishment) Act (NESREA Act) for the protection of the environment, biodiversity conservation and enforcement of environmental standards. The NESREA supervises the implementation of the EIA and issues permits after the assessment of projects likely to cause harm to the environment. These permits relate to air quality, waste and toxic substance, electrical and electronic equipment, biodiversity conservation and eco-guard certification.⁷

For instance, The *National Environment Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations* made pursuant to the Federal Environmental Protection Agency Act provide that a permit will be required:

- for storage, treatment and transportation of harmful toxic waste within Nigeria;
- where effluents with constituents beyond permissible limits will be discharged into public drains, rivers, lakes, sea, or as an underground injection;
- for an industry or a facility with a new point source of pollution or a new process line with a new point source. Such an industry or facility shall apply to the agency for a **discharge permit**.⁸

⁶ <https://www.energy.gov.ng/re.php>

⁷ The Radioactive Waste Management Regulations 2006 which provides that any person generating or managing radioactive waste must apply for and obtain a permit from the Nigerian Nuclear Regulatory Authority. "Environment Law in Nigeria": <https://www.mondaq.com/nigeria/energy-law/53804/environment-law-in-nigeria> (accessed on 30 June 2021).

⁸ Ibid. Other types of permits issued by NESREA are: 1. Air Quality Permit relating to issues on Atmospheric Emissions, Vehicular Emissions, Open Burning, Refrigeration and Air Conditioning equipment (RAC), and Noise; 2. Waste and Toxic Substances Permit relating to issues on Waste Generation, Restricted Chemicals, Sludge Disposal and Effluent Discharge; 3. Used Electrical and Electronic Equipment (UEEE) Permit relating to handling,

4. The **Nigerian Electricity Regulatory Commission (NERC)** is established by the EPSRA as an independent regulatory body with authority to regulate the electric power sector in Nigeria (See the enumerated list of functions of the NERC above at 'section A page 3').⁹

One of the primary functions of the Commission as contained in Section 32 (d) of the EPSRA, 2005 is to ensure that the prices charged by licensees are fair to customers and sufficient to allow the licensees to finance their activities and to allow for reasonable earnings for efficient operation.¹⁰

Pursuant to the authority given under Section 76 of the EPSRA 2005, the Commission established a methodology for regulating electricity prices called the Multi-Year Tariff Order (MYTO). The MYTO provides a 15 year tariff path for the Nigerian electricity industry with limited minor reviews each year in the light of changes in a limited number of parameters (such as inflation and gas prices) and major reviews every 5 years, when all of the inputs are reviewed with stakeholders.¹¹

The NERC is also empowered to grant licences (*section 62 of the EPSRA 2005 provides that any person intending to engage in the business of electricity generation, transmission, system operation, distribution or trading shall be required to obtain an operator's licence from the Nigerian Electricity Regulatory Commission*), and to regulate persons and entities engaged in the generation, transmission, system operation, distribution, and trading of electricity in Nigeria (the Commission is charged with the responsibility of seeing to the establishment, promotion and monitoring of a competitive Nigerian electricity market). Further to the regulatory powers given to the NERC under the EPSRA, the NERC has issued regulations and guidelines for the power sector. These regulations include:

- a. *Nigerian Electricity Regulatory Commission (Permits for Captive Power Generation) Regulations, 2008*. This regulation requires entities which construct, own, maintain, install captive generation

import and export of UEEE; and 4. Biodiversity Conservation Permit relating to issues on Assess to Genetic Resources. 5. Eco-Guard Certification: Eco-guard Certification is issued to facilities that are in the preconstruction and construction stages of their projects.

⁹ NERC's primary duty is protect the interests of consumers, issue licences to operators/investors, set and review electricity tariffs and where possible promote competition. See <https://nerc.gov.ng/index.php/about/role> (accessed on 30 June 2021)

¹⁰ <https://nerc.gov.ng/index.php/library/documents/Tariff-Charges--and--Market-Rules/> (assessed on 2 July 2021)

¹¹ Ibid

plants to generate power in excess of 1MW for self-consumption to apply to the NERC for the permit to do so.

- b. *Independent Electricity Distribution Networks Regulations, 2012*. This regulation provides the standard rules for the issuance of distribution licences to qualified operators to engage in electricity distribution, in areas with no access to the national grid. In deciding to issue a licence, the NERC may consider the expansion plans of the existing distribution companies and may not issue a licence where a distribution company already covers the proposed area of operation.
- c. *Nigerian Electricity Regulatory Commission (Acquisition of Land and Access Rights for Electricity Projects) Regulations, 2012*. This provides the regulatory framework for the acquisition of land and access rights for electricity projects in Nigeria, including power generation, transmission, and distribution. This regulation provides the mechanism for the payment of compensation and resettlement of persons who have been affected by the acquisition of land for electricity projects. The law encourages voluntary acquisition of land and requires a licensee to notify the landowner of its intention to enter upon the land for the purpose of the electricity project and obtain 'Free Prior Informed Consent' of the landowner.

The land can only be compulsorily acquired where:

- (a) a Licensee is a company wholly or partially-owned by a Local, State or Federal Government;
- (b) the project cannot be sited anywhere else aside from the land which is the subject of the acquisition;
- (c) the affected land owner has withheld or refused to give the Licensee Free Prior Informed Consent to acquire the land voluntarily; and
- (d) after the Commission has evaluated the application by the Licensee, and is convinced that the land is necessary for the project and therefore is required by the Licensee.¹²

¹² Section 4 (2)

In the compulsory acquisition of land by the NERC, the input and submissions of the Commissioner of Lands of the State where the land is situate is expected to be obtained.¹³

- d. *Nigerian Electricity Regulatory Commission Mini-Grid Regulation, 2016* which regulates the grant of licence and the operation of mini-grids with a generation capacity between 0KW to 1MW. Registration with the NERC under this regulation is dependent on the distributed power in the mini-grid and can be on any of the three licences: Isolated Mini-Grids up to 100 kW of distributed power, Isolated Mini-Grids larger than 100 kW of distributed power and up to 1 MW of generation capacity, and Interconnected Mini-Grid.

Every mini-grid is required to have a generator in its network. Where the generator is a third party, the mini-grid developer and the distribution licensee are required to sign a tripartite contract with the generator and submitted for approval by the NERC.

- e. *Nigerian Electricity Regulatory Commission Regulations for the Procurement of Generation Capacity, 2014*. This regulates the process of acquisition of a generation and distribution licence. The regulation requires a bidding process for entities that seek to acquire a generation licence for a power plant generating above 10MW of electricity or distribution of electricity. Bids submitted further to the regulation must meet the technical, financial and operations criteria to be considered by the NERC.¹⁴
- f. *Nigerian Electricity Regulatory Commission (Embedded Generation) Regulations, 2012*. This regulates the transmission of electricity over the grid. It provides that power generation above 20MW should be centrally dispatched over the grid. The regulation imposes an obligation on the operators of Renewable Energy

¹³ Section 10

¹⁴ The Nigerian Electricity Regulatory Commission (NERC) has so far issued over 55 licences to potential independent power projects (IPPs) for the supply of new electricity generation capacity in excess of 26,000 MW, See <https://nerc.gov.ng/doclib/nerc-guidelines/313-generation-procurement-guidelines/file> (accessed on 30 June 2021).

Power Systems (REPS) to ensure that where storage is not required, the power is evacuated through the transmission network.¹⁵

A system is classified as an on-grid power system when it is tied to the utility grid. However, when it is not tied to the utility grid, it can be referred to as an off-grid power system. When a system is Off-grid, it generates power for the use of a specific facility and stores the excess for future use. The excess cannot be sent back to the grid and the facility cannot get power that comes from a grid since it is not connected to the grid. The off-grid system is more suitable for rural areas where there are no grid connections. Consequently, when the system is tied to the utility grid, it is referred to as On-grid. In this case, the excess power can be sent back through the grid when it is not completely consumed, and the facility can also be supplied power from the grid. These are different from the Independent Power Plants which are privately financed power project for power generation which may be distributed through the grid.¹⁶ Here, there is a long-term Power Purchase Agreement with the Independent Power Producer and NBET to enable the distribution of the power generated and the subsequent settlement of the Independent Power Producer.

The regulation classifies the units into small size units (1-6MW), large size units (6-20MW) and units greater than 20MW. Generating units with capacity of 20MW and above shall be centrally despatched by the System Operation Licensee in accordance with the provision of the National Electric Power Policy ('NEPP').¹⁷

- ii) *The Licencing institutions include the Nigerian Electricity Regulatory Commission (NERC), and the Federal Ministry of Water Resources*

3. **Nigerian Bulk Electricity Trading Plc (NBET)** is the manager of the 'electricity pool' for electricity supply in Nigeria. NBET acts under the licence of the NERC to carry out a bulk electricity purchase and resale function contemplated by the EPSRA. Thus, NBET purchases electricity from the

¹⁵See Regulation 8 of the NERC (Embedded Generation) Regulations, 2012. Federal Republic of Nigeria, Official Gazette, No. 114 Vol.99.

¹⁶ This is made possible by the Electric Power Sector Reform (EPSR) that was enacted in March 2005 and which enables private companies to participate in electricity generation, transmission, and distribution. The EPSR Act permits the NERC to issue a licence for a period of 15 years and also has provisions for renewal. In 2016, Nigeria signed power purchase agreements (PPAs) worth US\$2.5 billion with 14 independent power producers (IPPs) to build a total 1,125 megawatts of installed solar capacity for the national grid.

¹⁷ Regulation 5

Generating Companies through power purchase agreements and sells to the Distribution Companies by vesting contracts. Renewable energy companies with licence to generate power above 10MW for transmission over the national grid and distribution through distribution companies, require NBET to facilitate the distribution. In July 2016, NBET signed power purchase agreements with about 14 solar energy firms valued at USD2.5Billion. The firms which are licenced by NERC to generate energy from the Northern region of Nigeria are expected to generate 1000megawatts of power which will be added to the national grid for distribution to the public. However the development of the project has been stalled due to disagreements between the government and the IPPs on the Power Purchase Agreement tariff structure.

- iii) *The 'Industry participants/business enablers' who participate in the power sector value chain from generation to distribution and serve as a link between the sector participants.*

4. **Transmission Company of Nigeria Plc (TCN).** This is a federal government-owned company which is licensed to provide for nationwide electricity transmission and system operations and electricity trading. The TCN expands the transmission grid to new areas and maintains the grid infrastructure. It is responsible for evacuating electric power generated by the power generating companies and transmitting it to the distribution companies. The distribution of power generated from renewables through the national grid will be facilitated by the TCN and settled by NBET. The current electricity challenges in the country explains the inability of the company to function optimally. Although the company successfully transmitted another new record peak generation of 5,615.40MW on 28th February, 2021, which surpassed the previous peak generation of 5,593.40MW,¹⁸ this is meagre compare to the 13,000 megawatts of electricity being generated. This is as a result of the challenges faced by the transmission and distribution networks.

5. **Rural Electrification Agency (REA).** This REA is set up to provide access to reliable electric power in rural communities. Although the REA does not directly regulate the renewable energy sector, the ESPRA created a Rural Electrification Fund from which rural electrification programmes can be promoted and supported through public and private sector participation. Further to this, renewable energy companies can partner with the REA in executing renewable energy projects in rural communities.

¹⁸ https://www.tcn.org.ng/blog_post_sidebar109.php (Assessed on 2 July 2021)

Even though the Nigerian Constitution decentralised electricity regulation as electricity is a matter on the concurrent legislative list¹⁹, it appears that the Federal government still monopolizes electricity regulation which power they derive from the Electric power sector reform Act. The power of the states in respect of Electricity includes:

- electricity and the establishment, in that state, of electric power stations;
- the generation, transmission and distribution of electricity to areas not covered by a national grid system within that state; and
- the establishment within that state of any authority for the promotion and management of electric power stations established by the state.

However, these provisions have been conflicted by the EPSRA. Even though the Constitution gives states the powers to regulate off-grid electric power²⁰, and rural electricity is off-grid power, the Federal Government still legislates on rural electricity.

The enactment of the Electric Power Sector Reforms Act seems to have hijacked this power from the states in favour of the Federal Government in the following regard:

1. The EPSRA provides for the establishment of the Rural Electrification Agency, which is to administer a fund meant for the provision, promotion, and support of rural electrification programmes. The roles played by this agency conflict with the constitutionally vested authority of the states to regulate off-grid, and rural electrification is off-grid.

2. Also, the act gives NERC power to make regulations for the granting of permits for captive power generation. This power should ordinarily be exercised by the states because captive electricity generation is off-grid.

However, state governments like Lagos, Rivers, Akwa Ibom, Edo, Delta, Anambra, Cross Rivers, Kano among others, have built or are building Independent Power Plants (IPPs) with the aim of generating, transmitting and distributing electricity to consumers within their states. Although, the establishment of IPPs has not been met with any hindrances from the Federal Government, it is paramount to state that no state government has

¹⁹ Item 14 and 15 on the Concurrent Legislative List

²⁰ <https://theconversation.com/conflicting-laws-keep-nigerias-electricity-supply-unreliable-81393> (Assessed on 2 July 2021)

been successful in participating in electricity distribution within its territory, due to the provisions of the EPSRA.²¹

We recommend that State Governments in Nigeria be allowed to create State Electricity Regulatory Commissions similar to India. The role of the State Electricity Regulatory Commissions will be to license private companies to get involved in off-grid electricity generation, transmission and distribution.

²¹ Engaging with Lagos State's drive towards energy federalism : <https://www.premiumtimesng.com/opinion/463518-engaging-with-lagos-states-drive-towards-energy-federalism-by-odion-omonfoman.html> (accessed on 13th July, 2021)

CONTACT DETAILS

Kolade Sofola

Partner

Main Practice Areas: Banking & Finance, Corporate & Commercial, Dispute Resolution, Employment, Real Estate, and Tax.

Contact: koladesofola@kslegal.org

Habeeb Adekola

Associate

Main Practice Areas: Dispute Resolution, Taxation, Insolvency Practice, Corporate & Commercial Law, Corporate Finance and Employment Law.

Contact: habeeb.adekola@kslegal.org

Charles Emejuo

Associate

Main Practice Areas: Dispute Resolution, Consumer Protection, Corporate & Commercial Law, Employment Law, and Intellectual Property.

Further information about the firm & its practice areas are available at
www.kslegal.org



KS | LEGAL
Kayode Sofola & Associates

9, Ondo Street Osborne Foreshore Estate,
Ikoyi, Lagos, Nigeria.

Tel: +234 1 453 4162
Email: admin@kslegal.org