

# FUNDING THE ENERGY SECTOR IN NIGERIA



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### INTRODUCTION



Nigeria's energy sector remains a critical driver of economic development, industrialization, and social welfare. As of January 2025, its crude oil and condensate reserves stood at 31.44 billion barrels and 5.84 billion barrels respectively, while its associated gas and non-associated gas reserves were 101.03 trillion cubic feet (TCF) and 109.51 TCF, yielding total proven gas reserves of 210.54 TCF.[1]

Despite this vast endowment of fossil and renewable energy resources, the country continues to grapple with a chronic energy crisis. Poor infrastructure, underinvestment, and weak governance have hampered development, with the nation only able to meet approximately 60% of its electricity demand - leaving over 40% of the population in total darkness.[2] According to the International Energy Agency (IEA), more than 86 million Nigerians still lack access to reliable electricity, making Nigeria one of the countries with the largest electricity access deficits globally.[3]

persistent shortfall in power supply deepened energy poverty, hindered inclusive growth, sustained of socio-economic and cycles underdevelopment. Millions of households enterprises remain excluded from the productive economy, while critical sectors such as manufacturing, healthcare, and education are hamstrung by high energy costs and unreliable power.

Adding complexity to this crisis is the paradox of the global energy transition. While fossil fuels - historically the backbone of Nigeria's energy mix - are being increasingly defunded by global financial institutions, there has not been a commensurate flow of capital into renewable energy. The reason: investors perceive that a significant portion of Nigeria's population lacks the economic capacity to sustainably offtake and repay renewable energy services, particularly in rural and low-income urban areas.

Over the past five years, investment trends in Nigeria's energy sector have highlighted a pronounced imbalance: robust capital flow into fossil fuel activities alongside modest growth in renewables. According to Global Climatescope, Nigeria's clean energy investment peaked at US\$279.7 million in 2021, fell sharply to US\$21.96 million in 2022, then rose to US\$69.3 million in 2023.[4] Despite this volatility, Nigeria's share of total energy investment remains disproportionately low compared to peers like Kenya and South Africa, which invested US\$3.2billion and US\$2billion in clean energy in 2023 respectively.[5] Meanwhile, the International Energy Agency (IEA) reports that total private-sector clean energy investment in Africa surged from US\$17billion in 2019 to nearly US\$40 billion in 2024, with fossil fuels still attracting roughly 70% of energy investment on the continent.[6] This indicates that while global and regional clean energy investment is accelerating, Nigeria's renewable sector continues to lag due to constraints such as policy inconsistencies, limited off-taker confidence, and challenging financial conditions.

This has created a dangerous funding vacuum. Nigeria is caught between a rapidly retreating fossil fuel finance landscape and a renewable energy promise that lacks sufficient commercial traction. Without bold and inclusive financing models, these vacuum risks becoming a structural trap, stalling the country's energy transition and prolonging its dependence on diesel generators and biomass - both environmentally and economically costly.

Yet, from a global equity standpoint, Nigeria's situation presents a compelling case for just energy financing. The country - like many African nations - has contributed minimally to historical greenhouse gas emissions and played no significant role in the depletion of the ozone layer. It can therefore be argued that Nigeria is entitled, as a matter of climate justice, to:

1. A transitional carve-out from fossil fuel defunding, particularly for gas as a bridge fuel;



Preferential access to green premium financing from climate funds, development banks, and philanthropic capital.

Both pathways are essential. Resolving the energy crisis cannot be achieved by prematurely abandoning fossil infrastructure without providing robust renewable alternatives. Access to energy is not a luxury - it is a development right. The fair and sustainable path forward must recognize Nigeria's dual imperative: to lift its people out of energy poverty while contributing to global climate goals in a way that is contextually fair and economically viable.

In this article, we critically examine the legal and policy frameworks shaping energy financing in Nigeria. We assess current mechanisms - such as public funding, private capital, and PPP models - and explore emerging solutions like the Africa Energy Bank (AEB). We also benchmark Nigeria's financing strategy against global best practices, offering targeted recommendations to bridge the funding divide and realign energy policy with national development goals and international climate commitments.

# LEGAL AND REGULATORY FRAMEWORK GOVERNING ENERGY SECTOR FUNDING



Nigeria's ability to unlock scalable, climate-aligned capital hinges on a legal framework that de-risks investment across both fossil and renewable energy projects. Recent legislative reforms - especially the Petroleum Industry Act and Electricity Act - aim to balance legacy energy interests with Nigeria's future as a green economy. Below are key instruments that shape this evolving landscape:

# PETROLEUM INDUSTRY ACT (PIA), 2021

The PIA establishes an investor-focused regulatory environment across Nigeria's oil and gas value chain. By replacing opaque regimes with clearer fiscal and administrative rules, the Act significantly improves project bankability in the upstream and midstream segments. Notably:

- Sections 92–95 govern licensing, asset transfers, and fiscal obligations, which enhance risk visibility for long-term capital.
- The creation of the Nigerian Upstream Petroleum Regulatory Commission (NUPRC)[7] and the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA)[8] consolidates oversight, reducing bureaucratic bottlenecks.
- By establishing clearer and more predictable fiscal terms, including specific incentives like lower royalties and tax holidays for gas, the Act actively incentivizes foreign direct investment (FDI) in gas infrastructure, a cornerstone of Nigeria's energy transition.

### **ELECTRICITY ACT, 2023**

Replacing the outdated Electric Power Sector Reform Act, 2005, the Electricity Act, 2023, marks a structural shift toward a decentralized, climate-forward electricity market, crucially enhancing the investment bankability of Nigeria's power sector. Key provisions designed to derisk investments and attract diverse capital include:

 Sections 70-74 mandate cost-reflective tariffs, enable standardized Power Purchase Agreements (PPAs), and offer incentives for private participation. These are pivotal for investment risk assessment, as cost-reflective tariffs ensure sustainable revenue streams for operators, mitigating financial viability concerns. Standardized PPA structures reduce contractual negotiation complexities and provide longterm revenue certainty by securing off-taker commitments, thereby improving project bankability. The incentives for market participation are designed to attract robust transition finance by fostering a more competitive and efficient electricity market.

- Section 80 establishes a continuing duty on the Nigerian Electricity Regulatory Commission (NERC) to promote electricity generation from renewable sources, thus explicitly paving the way for the adoption of climate-aligned funding models and attracting transition finance necessary for a sustainable energy future.
- The Act critically empowers states to create their own regulatory bodies and electricity markets.[9] This represents a fundamental development in Nigeria's decentralized power finance landscape, providing direct subnational entry points for capital. This framework allows states to tailor investment incentives and regulations, particularly in off-grid, embedded generation, and mini-grid systems, facilitating localized climate-aligned funding models and attracting specialized development finance.
- The inclusion of rural energy and renewable integration frameworks further boosts investment bankability for development-focused clean energy projects, aligning with national and global climate objectives.[10]

### NIGERIAN INVESTMENT PROMOTION COMMISSION (NIPC) ACT:

The Nigerian Investment Promotion Commission (NIPC) Act guarantees foreign investors unrestricted transferability of profits and capital[11], and protects them from expropriation[12], both critical assurances for energy-sector FDI. The Act supports investment in energy by awarding Pioneer Status Incentives (PSI)[13], attracting tax relief for qualifying renewable and gas

infrastructure projects. Through its One-Stop Investment Centre (OSIC), the NIPC aims to centralize registration and incentivization of investments-lending institutional support to developers seeking licenses, tariff approvals, and environmental permits. However, overlapping mandates with sector-specific regulators like NERC (electricity) and NMDPRA (mid/downstream petroleum) can introduce regulatory delays and uncertainty. The OSIC's coordination function is intended to alleviate these bottlenecks, but in practice, misaligned permit timelines and regulatory silos have slowed project rollout, especially for capital-intensive, long-term energy investments. Enhancing synergy across these agencies, clarifying regulatory handovers, and solidifying interagency collaboration are therefore central to unlocking predictable energy financing and accelerating project delivery.

### NIGERIAN OIL AND GAS INDUSTRY CONTENT DEVELOPMENT (NOGICD) ACT, 2010

Often overlooked in financing conversations, the NOGICD Act significantly shapes energy project structures - especially for upstream and gas-based infrastructure. It:

- Mandates local content thresholds for equipment, labor, and services, which investors must internalize in financial modeling.[14]
- Influences the allocation of equity and debt, particularly where foreign lenders seek enforceability and repatriation assurances in joint ventures and EPC contracts.

While it promotes domestic capacity, the Act may also constrain foreign capital flows unless mitigated through negotiated carve-outs or blended finance vehicles.

### CLIMATE FINANCE INSTRUMENTS AND FISCAL INCENTIVES



Nigeria's legal ecosystem has evolved to support green and transition finance, albeit with gaps in scale and coherence. Notable frameworks include:

- SEC Green Bond Guidelines (2018): Provide governance standards for project screening, reporting, and impact verification.[15] These guidelines enhance investor confidence in climatealigned instruments.
- Carbon Credit Frameworks: Anchored by Nigeria's
   Climate Change Act 2021 and coordinated by the
   National Council on Climate Change (NCCC), these
   frameworks support the generation of tradable
   carbon credits from emissions-reducing projects
   such as renewable energy and reforestation. While

aligned with Article 6 of the Paris Agreement, implementation remains in early stages, with regulatory and technical capacity still evolving.

- Nationally Determined Contributions (NDCs): Nigeria's NDCs envision ambitious renewable and energy efficiency targets, tied to conditional international financing. Legal clarity is needed around how projects qualify for concessional support under these commitments.
- Recent Finance Acts (2021–2023): Offer tax exemptions on renewable energy equipment, import duties, and capital allowances, which reduce the upfront cost of clean energy deployment.

# OPERATIONAL BARRIERS TO CARBON CREDITS AND GREEN BONDS IN NIGERIA

While Nigeria has introduced frameworks to enable carbon markets and green bonds, multiple regulatory and technical barriers continue to constrain their implementation.

For carbon credits, the market is still in its infancy. Although the Climate Change Act 2021 mandates the National Council on Climate Change (NCCC) to coordinate carbon trading mechanisms, [16] the absence of a national carbon registry and overlapping mandates



with the Department of Climate Change (DCC) and line ministries (e.g., Environment, Power, Agriculture) have led to jurisdictional uncertainty. A 2022 report by Carbon Limits Nigeria and UNDP identified critical gaps in technical capacity for Measurement, Reporting, and Verification (MRV), which hinders compliance with international standards such as Verra and Gold Standard. There is also no clear project accreditation process, which discourages private-sector developers from investing in carbon offset projects.

On green bonds, Nigeria issued Africa's first sovereign green bond in 2017, followed by a second tranche in 2019. However, private-sector uptake remains low. According to the Climate Bonds Initiative (CBI) and FMDQ 2023 reports,[17] operational challenges include structuring and certification costs, limited capacity among financial institutions to conduct environmental due diligence, and a lack of green project pipelines that meet eligibility and reporting criteria under the SEC's Green Bond Guidelines. Nigeria also does not yet have a national green taxonomy, which would standardize definitions and ensure alignment with global disclosure frameworks such as the EU Green Taxonomy or IFRS Sustainability Disclosure Standards.

These operational gaps constrain climate-aligned capital flows and limit Nigeria's ability to position itself as a credible destination for transition finance. Bridging these gaps will require regulatory reform, technical capacity building, and harmonization between climate policy and capital markets.

# INSTITUTIONAL ANCHORS AND COORDINATION GAPS

A mix of regulatory and quasi-sovereign institutions influence Nigeria's energy finance landscape. Effective coordination is vital for due diligence, investor protections, and project bankability.

- Nigerian Electricity Regulatory Commission (NERC):
   Oversees licensing, tariffs, and consumer protection in the power sector.
- Nigerian Upstream Petroleum Regulatory Commission (NUPRC): Regulates upstream oil operations.
- Rural Electrification Agency (REA): Catalyzes off-grid and mini-grid investment through viability gap funding, solar home systems, and donor-backed capital. It plays a central role in last-mile electrification.

- Infrastructure Concession Regulatory Commission (ICRC): Provides legal oversight for PPPs and concession agreements. Its due process mechanisms are essential to attract private capital for energy infrastructure.
- Federal Ministry of Finance, Budget and National Planning (FMFBNP): Crucial for sovereign guarantees, multilateral debt engagements, and fiscal incentives especially for MDBs and blended finance vehicles.
- CBN, SEC, and NIPC: Respectively regulate project financing instruments, capital market activities, and foreign investment protections, including repatriation rights and investment guarantees under the NIPC Act.
- Bureau of Public Enterprises (BPE): Drives privatization efforts, including in energy infrastructure.



### AFRICA ENERGY BANK (AEB): TREATY AND LEGAL IMPLICATIONS



Slated for launch in 2025, the Africa Energy Bank (AEB) represents a strategic shift toward African-led energy financing. Nigeria has committed to hosting its headquarters and contributing \$83 million in seed capital. The bank seeks to mobilize up to \$5 billion in capital to support energy projects across Africa, particularly in oil, gas, and renewables. [18]

### From a legal standpoint:

- Nigeria must ratify international treaty instruments to operationalize the Bank's extraterritorial privileges, dispute resolution mechanisms, and asset immunities.
- Strong coordination with the CBN, SEC, NIPC, and FMFBNP is required to enable capital inflows, enforceability of security instruments, and sovereign guarantees.

 Regulatory clarity on project eligibility, fund disbursement rules, and exit mechanisms will determine investor appetite and alignment with Nigeria's energy transition goals.

# STRATEGIC LEVERAGE OF AEB

Comparative experience from other African-led infrastructure finance institutions offers instructive lessons for the operationalization of the Africa Energy Bank (AEB). For instance, Afreximbank has successfully mobilized over US\$30 billion in trade and project financing across the continent, using a mix of debt, equity, and guarantee structures tailored to African market realities. Its Project Preparation Facility (PPF) and syndication capabilities have proven effective in derisking complex infrastructure deals in power, logistics, and energy.[19]

Similarly, Africa50, an infrastructure investment platform established by the African Development Bank (AfDB) and multiple African states, focuses on early-stage project development and co-financing. Since inception, it has invested in several landmark energy projects, including the Benban Solar Park in Egypt[20] and voltage substation upgrades in Senegal, by blending public and private capital and leveraging local currency instruments.

These models underscore the importance of technical assistance, project preparation funding, and regional co-ownership, all of which could inform the AEB's approach in crowding-in commercial finance for Nigeria's energy transition. Institutional credibility, predictable governance, and robust pipeline development have been central to the success of both Afreximbank and Africa50 - factors that the AEB must prioritize to avoid the pitfalls of undercapitalized and politically vulnerable finance vehicles.

# COMPARATIVE ANALYSIS OF ENERGY SECTOR FINANCING

### NIGERIA'S APPROACH

Nigeria relies on a combination of public and private funding to meet its energy investment needs, including:

Government Budget Allocations: Budgetary allocation is often inadequate and subject to fiscal constraints. In 2023, only 6.18% of the capital expenditure budget was allocated to the energy sector. In the alternative, government provides grants and subsidies to promote energy sector financing. An example of such is the Rural Electrification Fund (REF), set up for establishment of off-grid and rural electrification projects across the country.[21]

- Public-Private Partnerships (PPPs): These are guided by the Infrastructure Concession Regulatory Commission (ICRC) Act but face challenges due to weak contract enforcement and political risk, among others.
- Foreign Direct Investment (FDI): Though historically significant in the oil and gas sector, FDI has declined due to regulatory uncertainty and insecurity. However, recent reforms in the Energy sector by President Bola Tinubu seem to be paving the way for more investment into the sector. Particularly of note is the 248 percent increase witnessed in Q3 2024, where FDI in the sector rose to \$103.82 million.[22]
- Sovereign Green Bonds: Nigeria issued its first in 2017, valued at N10.69 billion (~\$29 million), and a second in 2019. However, liquidity in the green bond market remains low.



# DEVELOPING ECONOMY CASE STUDIES: LEGAL AND FINANCIAL PATHWAYS FOR ENERGY SECTOR FUNDING

### India : Blended Finance and Policy-Led Market Deepening

India has emerged as a leader among developing nations in mobilizing capital for renewable energy. Its strategy combines legal clarity, robust government backing, and innovative financial instruments:

- Legal Reforms: The Electricity Act and subsequent Renewable Energy Acts create a strong legal mandate for state utilities to procure renewables.
- Financial Innovation: India utilizes blended finance combining public funds, concessional loans, and private equity to de-risk large-scale solar and wind projects.
- Institutions: Sovereign-backed entities such as the Solar Energy Corporation of India (SECI) and Indian Renewable Energy Development Agency (IREDA) provide guarantees, PPAs, and access to green bonds.
- Outcome: Over 170 GW of renewable capacity has been installed, with India now among the top five global RE producers.[23]
- Challenge: India faced delays in land acquisition and grid interconnection for utility-scale projects, particularly in Rajasthan and Gujarat.[24] Additionally, state-owned distribution companies (DISCOMs) often defaulted on payments, threatening investor confidence. The government responded by introducing payment security mechanisms and mandating centralized auctions through SECI to minimize state-level risk exposure.[25]

## 2. Morocco ■: Structured PPPs and Sovereign-Backed Energy Planning

Morocco has positioned itself as a North African renewable hub through a mix of structured public-private partnerships (PPPs) and sovereign coordination:

- Flagship Framework: The Moroccan Agency for Sustainable Energy (MASEN) oversees legal structuring and financing for utility-scale renewables.
- Investment Tools: MASEN coordinates concessional funding from the World Bank, AfDB, and EU, while also anchoring commercial investments through guarantees and co-financing.
- **Legal Instruments:** Framework laws prioritize land acquisition, grid access, and offtake agreements.
- Outcome: Morocco's Noor Solar Complex is one of the largest in the world, powered by a robust legal and financing ecosystem that de-risked nearly \$2 billion in investment.
- Challenge: Morocco's early reliance on expensive concentrated solar power (CSP) technology made tariffs initially uncompetitive.[26] Moreover, limited local manufacturing and labor capacity hindered economic spillovers. In response, MASEN restructured its procurement model to include photovoltaic (PV) projects and initiated local training programs to boost skills and domestic participation.

## 3. South Africa **□**: Embedded Procurement and Just Energy Transition Financing

South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPP) offers a replicable model of competitive, legally transparent procurement:

- **Legal Design:** The program is underpinned by the Integrated Resource Plan (IRP), which gives long-term clarity to investors.
- Procurement Strategy: Open, competitive bidding rounds attract private capital through well-structured PPAs with government guarantees.
- Transition Justice: In 2022, South Africa secured \$8.5 billion in concessional climate finance through the Just Energy Transition Partnership (JETP)—with legal frameworks being revised to anchor this inflow.
- **Outcome:** Over 100 IPPs have been contracted, with increased localization requirements and financial closure driven by transparent legal commitments.
- Challenge: South Africa's REIPPPP faced disruptions between 2015 and 2018 due to Eskom's refusal to sign new PPAs, causing investor hesitation.[27] Additionally, grid capacity constraints in the Eastern Cape and Northern Cape have delayed project commissioning. The government addressed this by reaffirming procurement through legal commitments and launching grid expansion initiatives under the Integrated Resource Plan 2019.[28]

# KEY LESSONS AND COMPARATIVE TAKEAWAYS

| Dimension          | India   | Morocco   | South Africa  | Nigeria(Current)                                   |
|--------------------|---|---|---|--|
| Legal Clarity      | Dedicated RE laws<br>and standard PPAs              | Statutory MASEN<br>framework and land<br>acquisition laws | IRP and REIPPPP-<br>based legal<br>procurement<br>structure | Fragmented; state-<br>level clarity emerging       |
| Financing<br>Tools | Green bonds,<br>blended finance,<br>SECI guarantees | WB/AfDB loans, EU<br>grants, MASEN<br>coordination        | Concessional loans<br>(JETP), sovereign<br>guarantees       | Limited concessional<br>tools, weak de-<br>risking |
| Institutions       | SECI, IREDA   | MASEN, ONEE   | IPP Office, NTCSA   | NERC, REA, NUPRC,<br>but weak integration          |
| Outcome            | >170 GW RE capacity                                 | Flagship \$2B solar<br>complexes                          | >100 IPPs financed,<br>\$8.5B JETP                          | 86M without power;<br>funding vacuum<br>remains    |

# INNOVATIVE FUNDING MECHANISMS AND GLOBAL ALIGNMENT

# GREEN AND CLIMATE FINANCE INSTRUMENTS

#### • Green Bonds:

Nigeria's green bond market is still in its infancy. To attract institutional investors, the country must improve transparency, credit ratings, and verification of environmental outcomes. Establishing a Green Finance Registry or Climate Finance Dashboard - ideally under the CBN or DMO - could enhance credibility and track performance.

#### • Climate Funds:

Nigeria can access the Green Climate Fund (GCF), the Global Environment Facility (GEF), and Climate Investment Funds (CIF). Legal reforms are needed to fast-track the accreditation of Nigerian institutions to these funds. Lessons from countries like Morocco and Rwanda that have successfully accessed GCF funding should inform Nigeria's readiness strategies.

### • Carbon Credit Trading:

Nigeria is a signatory to the Paris Agreement and recently finalized the Carbon Market Activation Policy, aiming to unlock \$2.5 billion in high-integrity carbon credits by 2030.[29] The Climate Change Act 2021 provides the legal framework, but implementation requires the operationalization of MRV (Monitoring, Reporting, and Verification) systems, market oversight, and compliance infrastructure.

### BLENDED FINANCE AND DE-RISKING TOOLS

Blended finance - using public and concessional capital to catalyze private investment - is gaining traction globally. Nigeria, under the current administration, has proposed a Global Climate Investment Fund to support green industrial hubs, mini-grids, regenerative agriculture, and E-mobility infrastructure.[30] In addition, sovereign guarantees, partial risk guarantees (PRGs), and political risk insurance (e.g., MIGA) should be systematically deployed to de-risk projects and crowd-in private capital.



Furthermore, Nigeria should draw from global best practices such as Zambia's Scaling Solar[31] and Kenya's PAYG solar business models[32], adapting them to local needs. The use of fintech platforms and pay-as-you-go systems can expand energy access while enabling innovative consumer financing.

Local currency financing mechanisms - such as green sukuk or BOI-backed debt instruments - should also be developed to mitigate forex risk and attract pension fund participation.

# FINTECH-POWERED DECENTRALIZATION

Nigeria's booming fintech sector, now the largest in Africa with over 430 active companies as of early 2025 offers fertile ground for decentralized energy finance, particularly through Pay-As-You-Go (PAYG) solar models, micro-lending, and mobile payments.[33] For example, solar companies like Baobab+, SunFi, Infibranches, Lumos, Azuri, and OneWattSolar have embedded fintech into their operations, enabling consumers to pay daily, weekly, or monthly installments via mobile apps or USSD until ownership of solar home systems is achieved. [34] A BusinessDay study estimated that 15–30% of PAYG customers generate mobile payment and credit history for the first time through solar purchases, while providers earn over twice the revenue per user compared to traditional customers.[35]

Meanwhile, fintech lenders like Payhippo support solar value chains by offering inventory finance to installers and financing 70% of the end-user system cost-payable over 3 to 12 months.[36] However, regulatory constraints, such as CBN's restriction against mobile network operators offering financial services, limit deeper integration between solar providers and mobile-money platforms.[37] Nevertheless, the convergence of fintech innovation, improved consumer credit access, and decentralized payment infrastructure positions fintech as a powerful enabler of scalable, inclusive energy transition financing in Nigeria.

# ROLE OF SUBNATIONAL ENTITIES

The Electricity Act 2023 decentralizes power sector regulation, empowering states to develop independent electricity markets. Lagos, Edo and Enugu are among the first movers. This opens the door for localized investments in solar, embedded generation, and minigrids. However, regulatory fragmentation remains a risk. A National Framework for State Electricity Market Operations should be developed to harmonize legal standards, offtake agreements, and investor protections across states.

# STATE-LEVEL INNOVATIONS: CASE EXAMPLES.

#### Lagos State Electricity Law (LSEL) 2024

Enacted under constitutional amendments, the LSEL grants Lagos full regulatory control over generation, transmission, and distribution within the state. It creates two bodies, the Lagos State Electricity Regulatory Commission (LASERC) and the Lagos Electrification Agency (LSEA) to oversee licensing,[38] tariff setting,[39] enforcement, and targeted electrification initiatives. The law explicitly encourages smart grid infrastructure and embedded generation, including off-grid solutions, while also establishing dispute resolution mechanisms to bolster investor protections.

#### Interconnected Mini-Grid Projects in Epe (Lagos)

Under the Rural Electrification Agency's IMAS programme, Lagos in partnership with A4&T Power and Ikeja Electric launched a 0.88 MW hybrid solar-CNG minigrid in January 2023. Serving approximately 12,500 people across five communities, the project is designed to scale to 2MW and supports Lagos' goal of achieving 1GW of solar PV capacity by 2030.[40]

## • Enugu State Electricity Regulatory Commission (EERC)

Enugu became the first sub-national entity to formally assume electricity market regulation from the federal government. Founded under the Enugu State Electricity Law of 2023 and operational from late 2024, the EERC oversees licensing and market operations within Enugu State. [41] This institutional innovation reflects a maturing model for devolved energy governance

These examples illustrate how states are actualizing the promise of decentralization: Lagos through progressive legislation, smart grid planning, and off-grid pilot projects; and Enugu by establishing its independent regulator. However, the proliferation of state frameworks raises important questions about regulatory consistency, interstate coordination, and the role of the federal government in ensuring market interoperability and investment confidence.

# LEGAL AND POLICY REFORMS TO ENHANCE ENERGY FINANCING IN NIGERIA

### 1. Strengthening Regulatory Certainty

Investor confidence depends on clear, enforceable laws. Strengthening regulatory certainty requires robust enforcement of the Petroleum Industry Act (PIA) and Electricity Act, as well as elimination of functional overlaps between NERC, NEMSA, and REA. Consolidating mandates and issuing clear operational guidelines will improve investor clarity.

### 2. Expanding Fiscal Incentives and Investment Guarantees

Nigeria should review and rationalize its tax incentives, shifting towards performance-based incentives tied to sustainability metrics. Additionally, the finalization of Bilateral Investment Treaties (BITs)[42] tailored to the energy sector can enhance legal protections for foreign investors. The establishment of Energy Transition Credit Facilities, backed by the CBN and commercial banks, can further boost access to finance.

#### 3. Mainstreaming Climate Finance Policy

Nigeria must develop a National Climate Finance Strategy to guide access to global green funds. This includes building institutional capacity across FMEnv, CBN, and BOI, and training project developers to design bankable, climate-aligned energy projects. Financial intermediaries should also be mobilized to deliver blended finance at scale.

## 4. Strategic Leverage of the Africa Energy Bank (AEB)

To benefit fully from the Africa Energy Bank (AEB), Nigeria should enact enabling legislation and align the AEB's domestic operations with national development plans such as the National Integrated Infrastructure Master Plan (2020–2043). Legal coherence with CAMA, BOFIA, and the Foreign Exchange Act must be ensured. A national AEB protocol may also be necessary to clarify roles, ensure dispute resolution compatibility, and integrate funding pipelines.



### CONCLUSION

Nigeria's energy sector stands at a decisive crossroads. Despite possessing one of the continent's largest reserves of oil, gas, and renewable potential, the country continues to grapple with systemic underinvestment and persistent energy poverty. Unlocking this potential will require not just resources, but a bold reconfiguration of Nigeria's legal, regulatory, and financial architecture.

The impending launch of the Africa Energy Bank (AEB) offers a strategic opportunity - not just to restore confidence in fossil-sector funding, but to bridge the financing gap that currently limits renewable energy deployment and inclusive access. However, without decisive regulatory reforms, legal harmonization, and institutional strengthening, this opportunity may be lost.

To catalyze a new era of energy investment - both climate-aligned and commercially viable - Nigeria must:

- Close its energy access gap, recognizing that energy poverty is both a development and climate risk;
- Strengthen legal certainty, especially at subnational levels, where decentralized electricity markets are beginning to emerge;
- Leverage blended finance and de-risking instruments, enabling the flow of private and impact capital;
- Position itself not just as a participant, but as a continental leader in Africa's energy transition.

The way forward requires not incremental change, but structural transformation. A coherent, transparent, and forward-facing legal-financial ecosystem is the only path toward sustainable energy security, industrial growth, and economic justice.



[1] Odinaka Anudu. Nigeria's gas reserves hit record 210.5trn cubic feet, to last 93 years – NUPRC. Business Day. Published on April 12, 2025. Available at https://businessday.ng/energy/oilandgas/article/nigerias-gas-reserves-hit-record-210-5trn-cubic-feet-to-last-93-years-nupro/#google\_vignette Accessed on April 26, 2025.

[3] Doris Dokua Sasu 2024. Energy Sector in Nigeria – Statistics & facts. Available at https://www.statista.com/topics/11022/energy-sector-in-nigeria/#topicOverview Accessed on April 26, 2025.

[3] Omono Okonkwo, 2023. 86 million Nigerians lack access to electricity. Nairametrics Available at 86 million Nigerians lack access to electricity – Report - Nairametrics Accessed on April 27, 2025.

[4] Climatescope 2023 - Nigeria: Clean energy investment breakdown by year for 2017–2023. Available at <u>Climatescope 2024 | Nigeria</u>. Accessed on April 29, 2025.

[5] Ibid.

[6] Murat Temizer. Africa hosts one-fifth of world population but receives only 2% of global clean energy investments: Energy Terminal. Available at https://www.aa.com.tr/en/energy/renewable/africa-hosts-one-fifth-of-world-population-but-receives-only-2-of-global-clean-energy-investments/49702. Accessed on June 16, 2025.

[7] Section 4 PIA 2021

[8] Section 29 PIA 2021

 $[9]\,\mathrm{By}$  the combined reading of Section 2(2), 63(1) and 230(2-9) of the Electricity Act 2023.

[10] Section 80 Electricity Act 2023.

[11]Section 24 NIPC Act

[12]Section 25 NIPC Act

[13] Section 22 and 23 NIPC Act

[14] Section 3 of the NOGICD Act, 2010.

[15] Securities and Exchange Commission Green Bonds Issuance Rules, 2018.

[16] Section 4 (i) and (j) Climate Change Act 2021

[17] Green Bonds in Nigeria. The Nigerian Green Bond Market Development Programme Impact. Available at <u>Green Bond Impact</u> report APPROVED. Accessed on June 11 2025.

[18] Yunus Kemp. 2025. Africa Energy Bank: Afreximbank assesses Nigeria's readiness. ESI AFRICA. Available at Africa Energy Bank: Afreximbank assesses Nigeria's readiness - ESI-Africa.com Accessed on April 28, 2025.

[19] Afreximbank, 2018. Afreximbank Launches Facility to Raise Viability and Bankability of African Projects. Available at Afreximbank Launches Facility to Raise Viability and Bankability of African Projects - African Export-Import Bank. Accessed on April 30, 2025.

[20] African Development Bank Group, 2020. Infrastructure fund Africa50 helps Egypt's solar Power sector take off. Available at Infrastructure fund Africa50 helps Egypt's solar power sector take off African Development Bank Group. Accessed on June 16, 2025.

[21] Welcome 2 Africa International. 2024 Financing Energy Projects in Nigeria: Exploring Opportunities and Market Values.

[22] Wasiu Alli, 2025. Oil, Gas Sector Seen Attracting New Investments in 2025. Business Day. Available at Oil, gas sector seen attracting new investments in 2025 - Businessday NG Accessed on April 30 2025.

[23] International Renewable Energy Agency. Country Rankings. Available at https://www.irena.org/Data/View-data-by-topic/Capacity-and-Generation/Country-Rankings accessed on May 14, 2025. [24] Sarita C. S. and Sethuraman N. R., 2025. India allows extension for commissioning of certain solar power projects until December. Reuters. Available at India allows extension for commissioning of certain solar power projects until December | Reuters. Accessed on May 28, 2025.

[25] Arjun Joshi, 2022. State-Owned DISCOMS Continue to impede Renewables Growth. Mercom clean energy insights. Available at https://www.mercomindia.com/state-owned-discoms-continue-toimpede-renewables-growth Accessed on May 28, 2025.

[26] The World Bank. Middle East and North Africa Region Assessment of the Local Manufacturing Potential for Concentrated Solar Power (CSP) Projects. Available at https://documents1.worldbank.org/curated/en/543071468278941180/pdf/632180WP0MENA000Box0361508B0PUBLIC0.pdf Accessed on

June 4, 2025.

[27] Tsvetomira Tsanova, 2017. Investigation starts into Eskom's refusal to sign green PPAs | Renewable Now. Available at https://renewablesnow.com/news/investigation-starts-into-eskoms-refusal-to-sign-green-ppas-568213/ Accessed on June 18, 2025.

[28] Integrated Resource Plan (IRP2019) Available at <a href="https://www.gov.za/sites/default/files/gcis\_document/201910/42778gon1359.pdf">https://www.gov.za/sites/default/files/gcis\_document/201910/42778gon1359.pdf</a> Accessed on June 18, 2025.

[29] Olalekan Adigun 2025. Nigeria's Carbon Market Policy to unlock \$2.5 billion investments by 20230. Nairametrics Available at <u>Nigeria's</u> Carbon Market Policy to unlock \$2.5 billion in investments by 2030 – Tinubu - Nairametrics Accessed on April 30, 2025.

[30] Ibid.

[31] World Bank Group. Financial Solution Brief | Zambia Scaling Solar. Available at <u>BriefsGuaranteesZambiaScalingSolar.pdf</u> Accessed on May 14, 2025

[32] M-KOPA, 2019. Unlocking a financial pathway for underserved individuals through energy access. Available at https://efficiencyforaccess.org/wp-content/uploads/M-KOPA-pay-as-you-go-models.pdf Accessed on May 14, 2025.

[33] Fintech News Africa, 2025. Nigeria's Fintech Sector Surges 70% Despite Challenges. Available at <a href="https://fintechnews.africa/44869/fintech-nigeria/nigerias-fintech-sector-surges-70-despite-challenges/">https://fintechnews.africa/44869/fintech-nigeria/nigerias-fintech-sector-surges-70-despite-challenges/</a> Accessed on June 19, 2025.

[34] Chinwe Michael, 2023. These fintechs offer installmental payments for solar power | Business Day. Available at https://businessday.ng/technology/article/these-fintechs-offer-instalment-payments-forsolar-power/ Accessed on June 19, 2025.

[35] Ibid.

[36] Vanguard, Fintech empowers business owners, consumers with renewable energy. Available at https://www.vanguardngr.com/2023/10/fintech-empowers-business-owners-consumers-with-renewable-energy/ Accessed on June 19, 2025.

[37] CBN's Regulatory Framework and Guidelines for Mobile Money Services in Nigeria, 2021.

[38] Section 49 to 70 of the LSEL 2024.

[39] Section 104 of LSEL 2024.

[40] PM News, 2023. Available at https:// pmnewsnigeria.com/2023/02/06/lagos-begins-solar-mini-energyproject-in-epe/ Accessed on June 28, 2025.

[41] The Nations Newspaper, 2024. EERC assumes full regulation of Enugu electricity market. Available at <a href="https://thenationonlineng.net/eerc-assumes-full-regulation-of-enugu-electricity-market/">https://thenationonlineng.net/eerc-assumes-full-regulation-of-enugu-electricity-market/</a> Accessed on June 28, 2025.

[42] Natasha Doris. 2024. Nigeria launches review of bilateral investment treaties. African Law & Business Available at <a href="https://www.africanlawbusiness.com/news/21878-nigeria-launches-review-of-bilateral-investment-treaties/">https://www.africanlawbusiness.com/news/21878-nigeria-launches-review-of-bilateral-investment-treaties/</a>

#:~:text=The%20Nigerian%20administration%20has%20begun,Invest ment%20Promotion%20Commission%20Aisha%20Rimi. Accessed on April, 30 2025.



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