ENR ADVISORY

The Conduit Annual

Electricity & Renewables
2025 Review | 2026 Outlook

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GLOSSARY

Abbreviation	Meaning
AMCON	Asset Management Corporation of Nigeria
ATC&C	Aggregate Technical, Commercial and Collection Losses
BOI	Bank of Industry
BPE	Bureau of Public Enterprises
DisCo	Distribution Company
EKEDC	Eko Electricity Distribution Company
EV(s)	Electric vehicle(s)
GenCo(s)	Generation Company(ies)
IBEDC	Ibadan Electricity Distribution Company
MoU	Memorandum of understanding
MW	Megawatt – a unit of power capacity
MYTO	Multi-Year Tariff Order
NERC	Nigerian Electricity Regulatory Commission
NESI	Nigerian Electricity Supply Industry
NIEP	Nigeria Integrated Electricity Policy
NIRP	Nigeria Integrated Resource Plan
NISO	Nigerian Independent System Operator Limited
REA	Rural Electrification Agency
SEAP	Sustainable Energy Access Projects
TCN	Transmission Company of Nigeria

FOREWORD

Nigeria's power and renewable energy sector received accelerated momentum as the nation deepened its transition toward sustainable energy solutions. Comprehensive reforms and targeted incentives have established a foundation for significant commercial shifts across the power value chain, with a pronounced focus on decentralizing the grid and expanding renewable capacity.

The trajectory of this sector through 2026 will be primarily driven by the government's ability to advance the power infrastructure projects currently under development. A robust, bankable regulatory environment will be necessary to drive investment into the development of large-scale renewable energy resources. As the transition accelerates, the systemic integration of clean energy into the national mix remains a critical point of focus for both public and private stakeholders.

In this annual roundup of The Conduit, which we launched as our monthly newsletter in 2025 to track developments across the sector, we consolidate our insights into a comprehensive review. We discuss regulatory developments, notable transactions and projects across the electricity and renewables sector, and the key challenges that constrained performance during the year. We conclude with an outlook on anticipated regulatory issues and the market trends that are likely to shape the sector in 2026.

We hope that this publication provides context, clarity and insights for investors, operators and policymakers engaging with Nigeria's electricity and renewables landscape.

'Gbite Adeniji
Managing Partner

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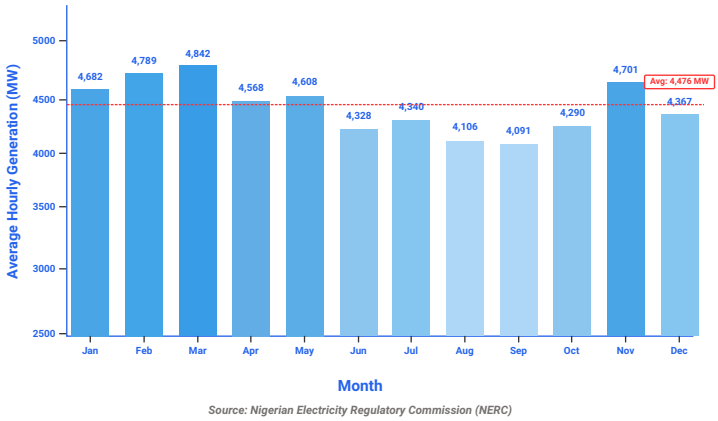
ELECTRICITY MARKET DYNAMICS

Electricity market performance in 2025 continued to reflect the structural tension between incremental reform gains and deep-seated capacity, liquidity, and infrastructure constraints. Policy and regulatory interventions improved revenue assurance and investor confidence; however, limited grid infrastructure, evidenced by recurring grid collapses, alongside gas supply shortfalls, persistent cost-recovery gaps and other structural inefficiencies, impacted overall market outcomes.

1.1 Electricity Supply and Generation Trends

Grid electricity supply remained constrained throughout 2025. Despite installed generation capacity in excess of 13,000 MW, according to NERC data, average daily generation remained under 5000 MWh/h in 2025. This significant gap between installed capacity and delivered power continued to be driven by gas supply constraints and transmission bottlenecks. As a result, grid electricity supply remained insufficient to meet the estimated 18,345 MW nationwide demand, reinforcing the sustained need for captive generation and distributed power solutions across residential, commercial, and industrial segments.



Source: Nigerian Electricity Regulatory Commission (NERC)

Figure 1: Average Hourly Electricity Generation

1.2 Tariff and Cost Recovery Dynamics

NERC continued to implement the service-based electricity tariffs under the Multi-Year Tariff Order (MYTO) framework. Customers in Band A, who are guaranteed a minimum of 20 hours of daily electricity supply, were subjected to higher tariffs closer to cost-reflective levels, with average tariffs exceeding ₦200/kWh. While these measures improved revenue performance within select customer classes, broader cost recovery remained challenged by foreign exchange volatility, rising gas prices, constrained collections and inflationary pressures.

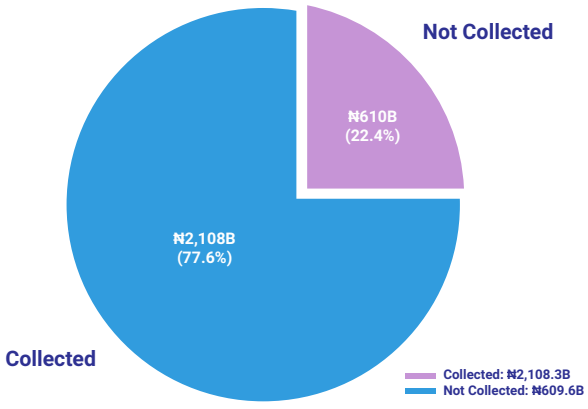
Service Brands	Minimum Hours of Supply
A	20
B	16
C	12
D	8
E	4

Figure 2: Tariff Bands and Service Level Commitment

1.3 Market Liquidity and Collections Performance

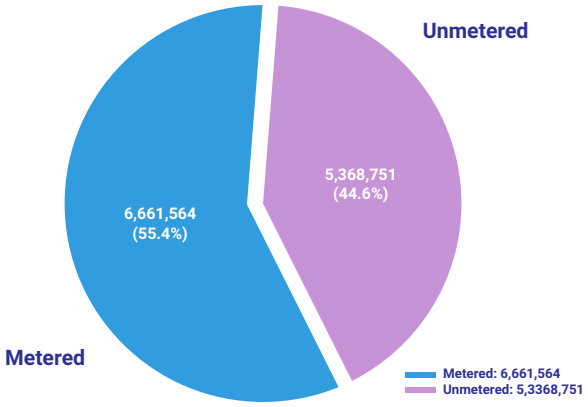
Market liquidity showed modest improvement in 2025, with collection efficiency improving from an average of 75.56% in 2024[1] to an average of 77% by Q3 2025, peaking at 85% in October 2025. This improvement is likely attributable to enhanced revenue collection measures, stricter enforcement against meter tampering and bypass, and the meter rollout under various Federal Government programmes, which has resulted in 56.06% of active customers being metered as of October 2025, up from 45.72% as of August 2024. Ikeja Electric, Eko Electricity Distribution Company and Abuja Electricity Distribution Company made impressive improvements within the year with Ikeja Electric achieving 100% collection efficiency in Q2.

Notwithstanding these gains, the electricity market continued to record material payment shortfalls, with NERC data estimating a shortfall over ₦600 billion in 2025 billings. These liquidity constraints continued to limit the ability of market participants to achieve cost recovery and fully meet contractual obligations across the value chain.



Source: NERC Data includes January to November 2025 only

Figure 3: Collections Efficiency Rate



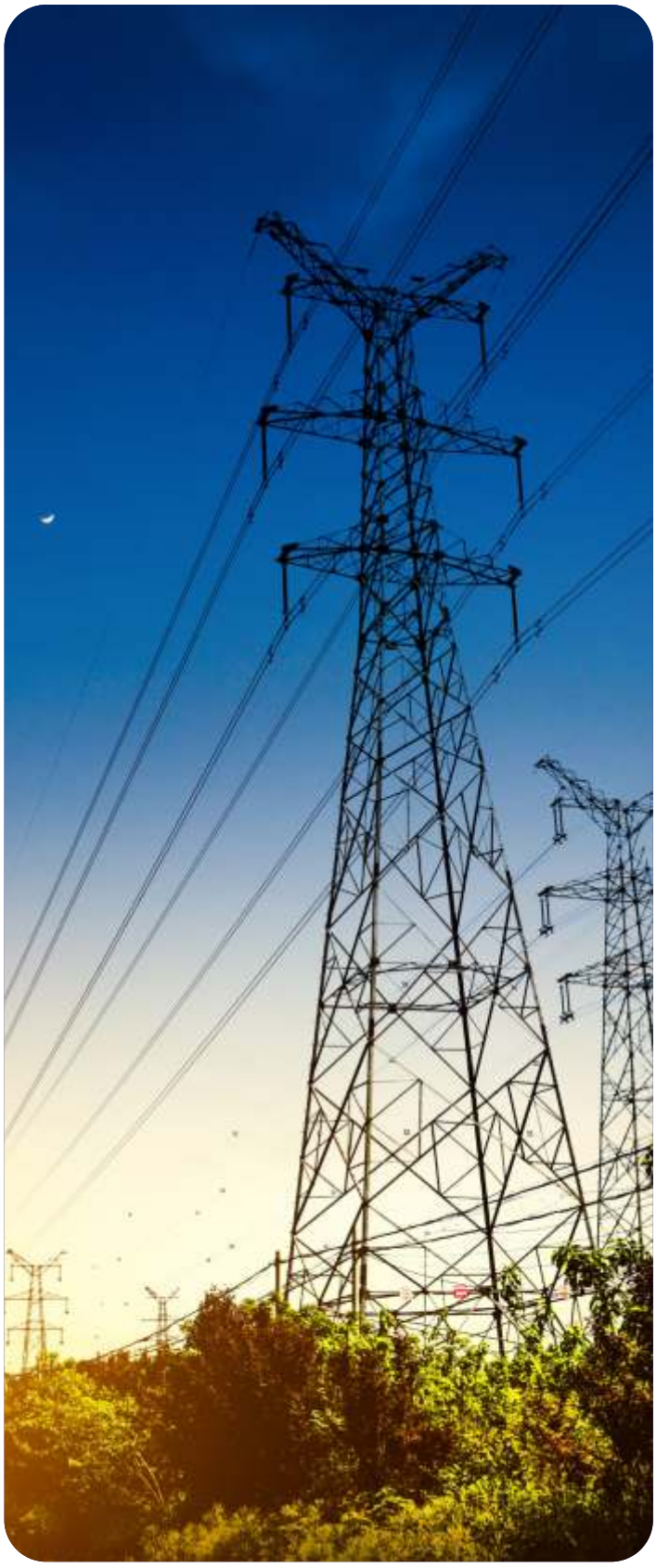
Source: Nigerian Electricity Regulatory Commission (NERC)

Figure 3: Metering Rate

1. NERC Annual Report 2024

1.4 Demand–Supply Gap

Despite incremental gains in grid generation and off-grid deployment, Nigeria's electricity demand–supply gap remained significant in 2025. As of 2023, it was estimated that 40% of the Nigerian population lack access to electricity.[2] Closing this gap is estimated to require approximately US$40 billion in investment, underscoring the scale of capital mobilisation required and the importance of regulatory certainty, private sector participation, and improved fundamentals for the electricity market.



2. World Bank: Tracking SDG 7: The Energy Progress Report https://trackingsdg7.esmap.org/country/nigeria

2

REGULATORY & POLICY DEVELOPMENTS

2025 saw the introduction of various initiatives and policies across national and state levels aimed at ensuring a more stable and investor friendly sector. The Federal Government, through the Ministry of Power, remained focused on building on the decentralised markets ushered in by the Electricity Act and consolidating the various laws necessary to ensure a seamless implementation of the 2024 amendments.

2.1 Structural Reforms

I Launch of NISO

These shifts crystallised through policy and structural changes, the first being the official launch of the Nigerian Independent System Operator Limited (NISO),[3] marking the operational split of the Transmission Company of Nigeria (TCN) into NISO and the Transmission Service Provider (TSP). This structural reform laid the groundwork for a more focused transmission framework within the expanding multi-level market.

I New Minimum Capital Requirement

Beyond structural changes, the Federal Ministry of Power introduced pivotal policy measures aimed at stabilising the sector. Most notably, it announced plans to enforce a minimum capital adequacy requirement as part of the 2028 licence renewal process for electricity distribution companies (DisCos).[4] The minister highlighted the need to address the under-capitalisation and the severe debt burden that has long constrained the operations and service delivery of the DisCos.

I Nigeria Integrated Electricity Policy (NIEP)

The Federal Ministry of Power unveiled the NIEP[5] and the Nigeria Integrated Resource Plan 2024 (NIRP), pursuant to its mandate under the Electricity Act. The NIEP is a comprehensive road map for reforming the sector and was developed to replace the outdated 2001 policy, setting a clear framework for sustainable electricity generation, transmission, and distribution and outlines a 21-year roadmap for power sector transformation. The NIRP provides a blueprint for optimising the country's electricity supply infrastructure at the least cost and provides guidance on energy development requirements to stakeholders.

I National Electricity Policy Coordination Framework

The Federal Ministry of Power also announced the commencement of the development of a National Electricity Policy Coordination Framework aimed at harmonising federal and state electricity markets. Once concluded, this framework will address the emerging duplicity of laws across states, enhance coherence and strengthen investor confidence as more states take on regulatory authority under the Electricity Act, 2023.[6]

3. https://statehouse.gov.ng/president-tinubu-approves-board-members-for-the-nigerian-independent-system-operator-niso/
4. https://www.arise.tv/nigeria-to-introduce-minimum-capital-requirement-for-discos-ahead-of-2028-licence-renewal/
5. https://nairametrics.com/2025/05/06/fg-approves-national-integrated-electricity-policy-to-reshape-power-sector-in-nigeria/
6. https://www.vanguardngr.com/2025/10/fg-to-develop-national-electricity-policy-coordination-framework-minister/

2.2 Legislative Reforms

2025 also saw a good number of legislative reforms that mirrored the executive policies. Both chambers of the National Assembly considered amendments to the Electricity Act, with the Senate focusing on closing regulatory gaps and addressing rising sector debt and vandalism, while the House of Representatives championed the integration of renewable energy into the grid and proposed the establishment of the National Authority for Renewable Energy (NARE) as a central renewable-energy regulator. The Senate also advanced a Bill to establish a legal and regulatory framework for electric vehicles and green mobility.[7]

2.3 NERC's Regulatory Activities in 2025

Following the landmark amendments ushered in by the Electricity Act, the Nigerian Electricity Regulatory Commission (NERC) continued to issue key orders and regulatory frameworks in 2025 aimed at consolidating sector decentralization, strengthening investor confidence, and improving transparency across the industry (NESI). These measures, which spanned tariff regulation, corporate governance, technical integration, revenue collection, and consumer protection are discussed below.

Reconstitution of the NERC Board

One of the most prominent updates out of NERC in 2025 was the President's approval of the reconstitution of the NERC board, appointing a new chairman, Dr Mulisiu Olalekan Oseni and commissioners to steer the Commission.[8] The reconstitution follows prolonged vacancies that had constrained regulatory decision-making, particularly on tariffs, enforcement actions, and market rule approvals, and was welcomed by industry stakeholders. The new board inherits complex issues including the need for cost-reflective tariffs, DisCo recapitalisation, grid reliability, and the management of transitional jurisdictional boundaries between national and state electricity markets.

Clarification of DisCo Asset and Liability Transfers Following Decentralisation

NERC issued detailed guidance on which assets and liabilities should transfer to subsidiary entities, providing a framework for managing legacy debts and ensuring continuity in operations. The Commission also issued updated regulations on electricity tariff reviews, formalizing processes under the MYTO methodology and minimizing the potential for arbitrary increases.

Digitisation of Electricity Revenue Collection and Tightened Enforcement Against Losses

NERC issued two major directives aimed at strengthening revenue collection and consumer protection. First, NERC introduced guidelines for digitised and transparent electricity revenue collection, mandating that DisCos engage only licensed third-party collection agents integrated with the Nigeria Inter-Bank Settlement System.[9] The Commission also imposed heavier penalties for meter tampering, unauthorized access, and bypass, reinforcing compliance and protecting revenue streams while safeguarding the rights of legitimate consumers.

7. https://naltf.gov.ng/electric-vehicle-bill-scales-second-reading/
8. https://statehouse.gov.ng/president-tinubu-reconstitutes-the-board-of-the-nigerian-electricity-regulatory-commission/
9. https://nerc.gov.ng/wp-content/uploads/2025/05/Guidelines-on-registration-and-engagement-of-3rd-party-collection-service-providers.pdf

Grid Code Review

In terms of technical and operational compliance, NERC established the Grid Code Review Panel to oversee amendments to the national Grid Code, which sets the technical standards for grid connection and use.[10] This followed NERC's official inauguration of the new 19-member Grid Code Review Panel in 2025, led by Nafisat Ali of the TCN and comprising members from GenCos, DisCos, and other sector agencies.

Corporate Governance Restrictions and Introduction of Targeted Consumer Subsidy Mechanisms

NERC also issued a new Code of Corporate Governance that is aimed to strengthen accountability and prevent conflict-of-interest by licensees. Specifically, the Code limits directors from holding board positions in more than two NESI companies simultaneously.[11] On the consumer side, the Commission announced plans to implement the Power Consumer Assistance Fund (PCAF) to provide targeted tariff relief for low-income households, schools, and hospitals, PCAF is funded through government contributions and levies from large power users, thereby replacing blanket subsidies and supporting equitable electricity access.

10. https://nerc.gov.ng/media/nerc-tasks-grid-code-review-panel-on-efficient-sector-operations/
11. https://nerc.gov.ng/wp-content/uploads/2025/05/Code-of-Corporate-Governance-for-NESI-2025.pdf

3

SPOTLIGHT ON STATE ELECTRICITY MARKETS

2025 marked a decisive acceleration in the decentralisation of Nigeria's electricity market, as several states moved from legislative intent to institutional and regulatory execution. Pursuant to the Electricity Act, NERC concluded the transfer of full regulatory oversight to a growing number of states bringing the total number of states with full autonomy to twelve – Abia, Enugu, Edo, Ekiti, Ondo, Ogun, Oyo, Imo, Lagos, Kogi, Nasarawa and Plateau States.

This transfer formally empowered state governments to regulate electricity generation, distribution and supply within their territories, signaling a structural shift from a federally centralised electricity market to multiple subnational markets operating within defined constitutional and statutory boundaries. In parallel with these regulatory transfers, several states like Delta, Niger, Osun and Gombe States have enacted state electricity laws, thereby commencing the formal process of assuming regulatory control.

Lagos State emerged as the most advanced state electricity market in 2025, positioning itself to operate a fully regulated and independent electricity system. Building on its earlier enactment of the Lagos State Electricity Law, the state announced plans to consolidate all power-related initiatives into a single integrated electricity strategy. Central to this framework is the Lagos Electricity Market (LEM), a digitally enabled market designed to independently track generation and consumption, enhance transparency and investor confidence.[12] The Lagos State government also issued new licenses to two new DisCos – IE Energy Limited and Excel Distribution Company Limited, a development that further builds on the momentum around the transition towards state-level regulation under the Electricity Act.

Outside Lagos, other states have advanced more decentralised and private-sector-led market models. Delta State officially opened its electricity market to private investors through the adoption of a mini-grid–centric framework, supported by the establishment of the Delta State Electricity Commission and a Rural Electricity Agency. Under this structure, licensed private operators are permitted to generate and distribute electricity within designated zones using gas or renewable energy sources, with the state acting primarily as regulator and facilitator.

12. https://thenationonlineng.net/lagos-to-launch-first-subnational-electricity-market-with-unified-plan/

While states remain at different levels of readiness, the combined effect of regulatory transfers, institutional establishment and market restructuring points to the emergence of multiple electricity markets operating concurrently within Nigeria. The coming years will test how these state-led markets coexist with federal institutions, manage regulatory overlaps, and deliver bankable frameworks capable of attracting sustained private investment.

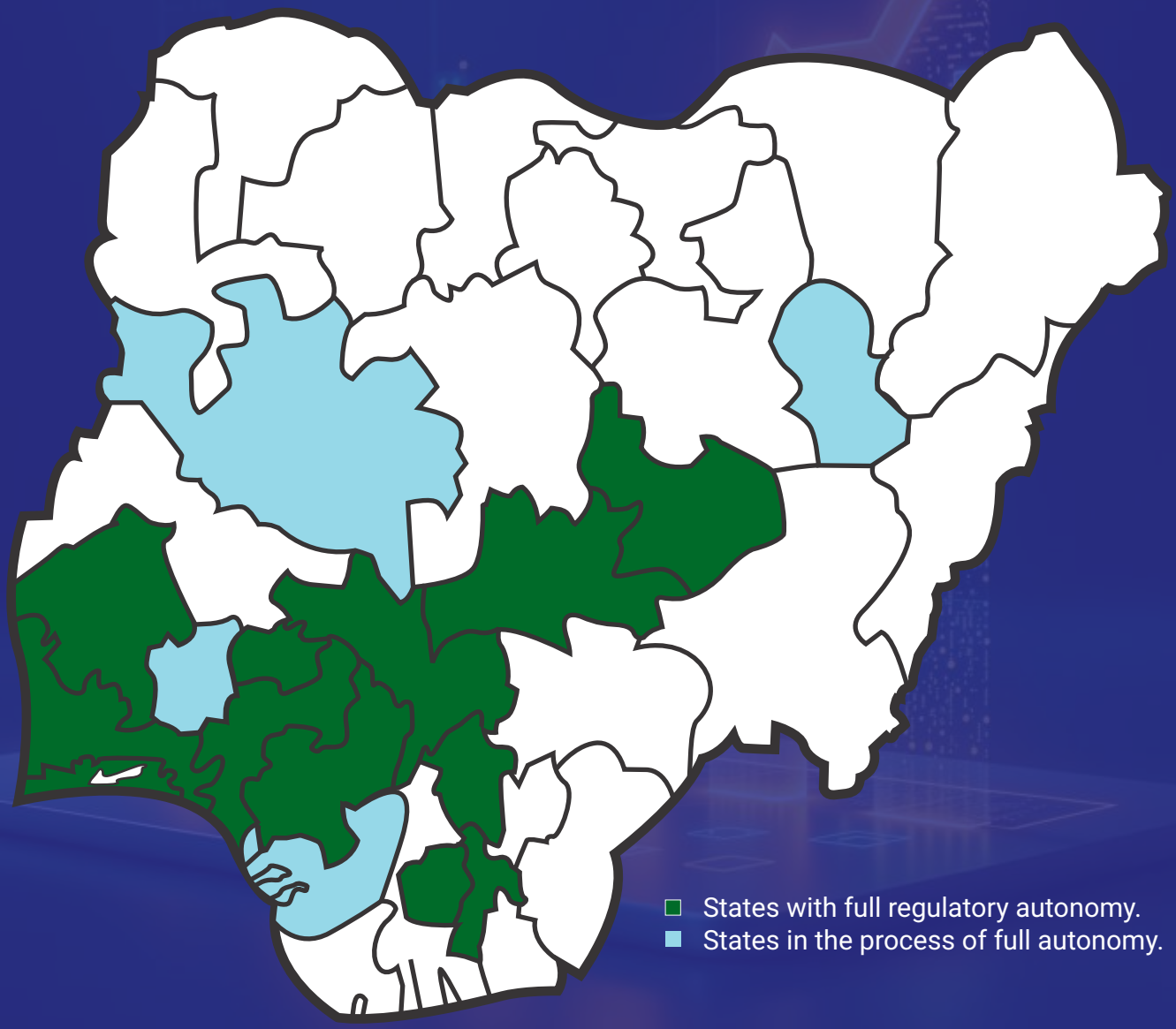


Figure 5: Status of Decentralisation Pursuant to the Electricity Act

4

NOTABLE INDUSTRY TRANSACTIONS AND PROJECTS

2025 witnessed a series of strategic transactions across Nigeria's electricity sector, reflecting the ongoing impact of the amendments of the Electricity Act, NERC directives, and the Federal Government's broader divestment and market reform agenda. Some of notable transactions and projects are discussed below.

4.1 Mergers and Acquisitions

100 Billion Sale of Ibadan Electricity Distribution Company (IBEDC)

AMCON confirmed the ₦100 billion sale of IBEDC to a preferred bidder, at nearly double the initial offer.[13] The transaction demonstrated robust market interest in well-capitalized distribution assets. However, it also faced legal opposition from civil society groups challenging the transparency and valuation process.

Transgrid Acquisition of 60% Stake in Eko Electricity Distribution Company (EKEDC)

Complementing the IBEDC sale, Transgrid Enerco Limited, a consortium comprising Axxela Limited, North South Power Limited, and the Stanbic IBTC Infrastructure Growth Fund, also completed the acquisition of a 60% stake in EKEDC from West Power and Gas Limited.[14] The acquisition is expected to enhance operational efficiency, expand distribution capacity, and reflects regulatory incentives under NERC's orders on asset delineation and corporate governance for subsidiaries created from existing DisCos.

MA'AM Energy Indirect Acquisition of Geregu Power

MA'AM Energy Limited acquired a 95% equity stake in Amperion Power Distribution Company Limited,[15] the majority shareholder in Geregu Power Plc – one of the successor power generation companies that emerged following the privatization of the power sector in 2013. The deal, which is estimated to be valued at US$750 million makes MA'AM Energy the controlling shareholder in Geregu Power.

13. https://www.vanguardngr.com/2025/07/amcon-sells-ibadan-disco-for-n100bn/
14. https://businessday.ng/energy/article/transgrid-enerco-acquires-60-of-eko-disco-in-n360bn-deal/
15. https://guardian.ng/news/maam-energy-takes-control-of-geregu-power-in-750m-ownership-deal/

4.2 Projects

Commencement of Phase II of The Siemens Power Project

The Federal Government announced the commencement of Phase II of the Siemens Power Project, a flagship initiative aimed at expanding Nigeria's electricity generation, transmission, and distribution capacity to 12,000MW. Phase II is expected to focus on upgrading critical transmission infrastructure and resolving network constraints that have historically limited the evacuation and distribution of available generation.[16] The development signals continued government commitment to the long-term stabilisation of the power sector, with an emphasis on infrastructure-led reforms to improve reliability, reduce system losses, and enhance overall market efficiency.

Commissioning of the 180MW Afam II Power Plant

Generation capacity was directly expanded with the commissioning of the 180MW Afam II Power Plant in Oyigbo, Rivers State.[17] Developed by the Sahara Group and Crescendough Nigeria Limited, this gas-fired facility represents a critical addition of stable generation to the national grid. Its entry into operation supports residential, commercial, and industrial power needs while contributing to overall national grid stability and supply.

Lincs Power 5MW Project Partnership with Ondo State

States leveraged the decentralization framework under the Electricity Act to attract private investment. Lincs Power Energy Solutions commenced construction of a 5MW power project in partnership with Ondo State aimed at increasing electricity supply and supporting local economic growth.[18] The project's groundbreaking ceremony was held on April 3, 2025, with plans announced to eventually scale the plant's capacity up to 20MW to meet growing demand in the state.

$328.8 Million Agreement with CMEC for Transmission infrastructure

The Federal Government entered into a $328.8 million agreement with China Machinery Engineering Corporation (CMEC) for the development of electricity transmission lines, aimed at strengthening grid capacity and improving power evacuation across key corridors.[19] The project is expected to address longstanding transmission constraints that have limited the effective delivery of generated power to distribution networks, particularly in areas with growing demand. This development aligns with ongoing efforts to reinforce the transmission infrastructure in the Nigerian Electricity Supply Industry, ensure efficiency and prevent stranded capacity in the grid.

Regional Grid Synchronisation

The West African Power Pool (WAPP) successfully completed a synchronisation test linking the electricity grids of Nigeria, Niger, Benin, and Togo with the rest of the West African power grid.[20] The test marks a key technical milestone in advancing regional power integration and cross-border electricity trading within the West African sub-region. The synchironization creates a single operational grid that enhances reliability across the region and opens access to donor funding for priority transmission projects.

17. https://punchng.com/tinubu-inaugurates-180mw-power-plant-in-rivers/
18. https://theelectricityhub.com/ondo-state-partners-lincs-power-on-5mw-electricity-project/
19. https://thenationonlineng.net/fg-power-cmec-sign-328-8m-agreement-for-transmission-line/
20. https://businessday.ng/news/article/wapp-completes-synchronisation-test-between-nigeria-niger-benin-togo-niso/

4.3 Financing Transactions

Federal Government 4 Trillion Bond Programme

In what may prove to be the most consequential financial intervention of the year, the Presidency approved a Federal Government–backed bond programme designed to clear the electricity market's estimated ₦4 trillion legacy debt owed to electricity generation companies.[21]

The issuance, which is the largest bond programme ever undertaken in Nigeria, marks a decisive attempt to clear long-standing payment arrears that have entrenched liquidity shortfalls across the value chain for over a decade.

Elektron Finance 200 Billion Bond for 30MW Lagos Plant

Elektron Finance SPV Plc launched a ₦200 billion bond program to fund the construction of a 30MW gas-fired embedded power plant in Victoria Island, Lagos.[22] The plant, developed by Victoria Island Power Limited (VIPL) in partnership with EKEDC and backed by major investors including Nigeria Sovereign Investment Authority (NSIA) and the Bank of Industry (BOI), will employ three high-efficiency gas engines and a dedicated 5km distribution network to provide reliable power to key commercial districts.

4.4 Key Takeaway

Taken together, these transactions point to improving liquidity and investor appetite across Nigeria's power value chain. Asset ownership is becoming dynamic with well-performing generation and distribution assets emerging as bankable and transferable within the evolving electricity investment landscape.

22. https://punchng.com/elektron-finance-spv-plc-successfully-launches-a-%E2%82%A6200-billion-bond-issuance-programme-and-closes-its-%E2%82%A64-64-billion-series-1-bond-issuance-under-the-scheme/

5

ENERGY TRANSITION INITIATIVES

Energy transition efforts in 2025 moved beyond policy formulations into large-scale project commitments, and innovative financing models designed to support long-term sustainability.

5.1 Policy-Led Interventions

Establishment of the Renewable Asset Management Company

A defining development in 2025 was the approval obtained by the Rural Electrification Agency (REA) to establish a renewable asset management company to warehouse renewable infrastructure assets valued at nearly $500 million with an objective to leverage these assets to raise up to 1 trillion in capital, enabling the REA to sustain electrification programmes independently of concessional loans and grants.[23]

Launch of the Next Generation RESCO Programme to Enhance Skills Development for Renewable Energy Technologies

The REA launched the Next Generation RESCO Programme – an initiative developed in partnership with Prado Energy, the National Power Training Institute of Nigeria and other stakeholders aimed at developing a skilled talent pipeline for the Renewable Energy Service Company (RESCO) Framework. The RESCO Framework[24] is a public-private delivery model designed to accelerate the deployment of off-grid energy solutions through private sector-led innovation framework.

The programme combines classroom learning with nine months of paid internship placements at leading RESCOs, with top-performing participants eligible for automatic job offers. This initiative is part of the Federal Government's efforts to strengthen local capacity in the off-grid renewable energy ecosystem, with the objective of ensuring that a greater share of the estimated US$40 million required to close Nigeria's energy access gap is retained and reinvested within the domestic economy.

Memorandum Of Understanding Between REA and Lagos State Government

The REA and the Lagos State Government signed an MoU to expand clean energy access in the state by powering public institutions with rooftop solar systems. The partnership aims to reduce reliance on diesel generators currently in use across Lagos State by deploying sustainable, distributed energy solutions. By targeting schools, hospitals, and government facilities, the initiative seeks to create demonstrable impact while also promoting the adoption of off-grid and embedded generation models that can be scaled to other sectors and geographies.

23. https://nairametrics.com/2025/03/11/rea-secures-approval-to-establish-renewable-asset-management-company-in-nigeria-targets-n1-trillion/
24. https://guardian.ng/features/fg-insists-on-local-solar-panel-manufacturing-to-retain-40b-access-fund/

Sustainable Energy Access Projects by the Federal Government

The Federal Government launched Sustainable Energy Access Projects (SEAP), a program aimed at delivering at least 5MW of decentralized clean energy to each of the country's 774 local government areas,[25] SEAP will support key sectors such as agro-processing, healthcare, SMEs, and transportation. SEAP is expected to create jobs, reduce emissions, and advance Nigeria's progress on the Sustainable Development Goals.

Bill on Electric Vehicles

The Senate in 2025 advanced a bill aimed at establishing a formal legal and regulatory framework for the adoption of electric vehicles (EVs) in the country.[26] The proposed legislation seeks to introduce fiscal incentives for EV assembly and importation, promote the development of charging infrastructure, and provide a policy basis for integrating electric mobility into Nigeria's transport and energy planning frameworks. While the bill remains at a relatively early legislative stage, its introduction reflects a growing recognition by policymakers of the role that transport electrification can play in reducing emissions, lowering fuel import dependence, and stimulating new industrial value chains linked to electricity demand.

Overall, energy transition activity in 2025 reflected a maturing approach that combines decentralised deployment, large-scale industrial projects, transition fuels, and structured financing. While challenges remain around coordination, implementation capacity and grid integration, the breadth and scale of initiatives undertaken in 2025 suggest that Nigeria's transition narrative is increasingly grounded in assets, capital and executable projects.

5.2 Renewable Energy Projects

Africa's First Floating Solar Power Project

Granville Energy and Mainstream Energy executed a Memorandum of Understanding for the development of Africa's first gigwatt-scale floating solar project at Kainji Dam[27]. This initial 100 MW phase is valued at $110 million, with the full-scale project envisioned to reach 1 GW at a total investment of $1.1 billion.[28] Upon completion, it would become the largest floating solar power plant and the largest single solar power plant in Africa, showcasing a hybrid solar-hydro generation model led by African companies.

$500 million clean energy partnership with Genesis Energy Holding

State-level participation in the energy transition also gained momentum. Katsina State entered into a $500 million clean energy partnership with Genesis Energy Holding for the development of solar, wind, hydro, mini-grid and gas-based projects aimed at supporting industrial growth and economic diversification.[29] The first project under this MoU was commissioned in April 2025, fully powering the Katsina State General Hospital with a solar and battery storage system. Early implementation also includes a hybrid system for the State Government Complex, with reported annual savings of over 3 billion, demonstrating the tangible impact of such partnerships on local economies and public infrastructure.

25. https://lpginnigeria.com/details/fg-launches-sustainable-energy-access-projects-seap-with-30mw-commissioning-in-ogun-state
26. https://naltf.gov.ng/electric-vehicle-bill-scales-second-reading/
27. https://businessreport.co.za/international/2025-10-28-granville-mesl-sign-mou-to-develop-africas-first-1gw-floating-solar-power-plant-at-nigerias-kainji-dam/
28. https://businessreport.co.za/international/2025-10-28-granville-mesl-sign-mou-to-develop-africas-first-1gw-floating-solar-power-plant-at-nigerias-kainji-dam/
29. https://punchng.com/katsina-govt-signs-500m-investment-deal-with-genesis-energy/

30MW decentralised facility in Sagamu, Ogun State

The Ogun state government commissioned a 30MW decentralised facility in Sagamu, Ogun State [30] alongside new independent Power Projects and minigrids, funded by a ₦3 billion world bank investment.[31] The facility as launched as part of the SEAP, an initiative aimed to deliver a minimum of 5 megawatts of clean, decentralized energy to each of Nigeria's 774 Local Government Areas.

Irish Firm to Build Solar Panel Production Plant in Nigeria

CDGA Consultants, an Irish firm operating in Nigeria through its local arm, Cork Nigeria Solar Energy Company (CNSEC), unveiled plans to set up a 200MW solar panel production facility within the Lagos Free Zone.[32] This initiative forms part of a broader effort to promote Nigeria's shift toward cleaner and more cost-effective energy sources by enhancing domestic manufacturing capabilities and equipping local technicians with specialised solar training. CNSEC disclosed its partnership with Italian firm Eco Progetti to set up the solar module line.

Kano Disco Begins Offtake of 10 MW Solar Power

Kano Electricity Distribution Company (KEDCO) commenced the offtake of 10 megawatts of solar energy from the Haske Solar Plant in Kano, following the signing of a Power Purchase Agreement with Haske Solar Company Ltd. The solar plant, which was built by the Federal Government and is Nigeria's largest grid-connected solar facility, will supply power to industrial customers within the Challawa Industrial Cluster. This partnership is a key part of KEDCO's strategy to enhance network efficiency and ensure energy security for businesses in its franchise states of Kano, Katsina, and Jigawa.

€7.6 Billion Green Hydrogen MoU in Akwa Ibom

The Federal Government, APPL Hydrogen Limited, and LONGi Green Energy signed a €7.6 billion memorandum of understanding (MoU) in respect of the development of a large-scale green hydrogen production facility within the Liberty Free Trade Zone in Akwa Ibom State.[33] The project positions Nigeria for significant investment in the clean energy export market and is a cornerstone development in the country's long-term energy transition strategy.

30. https://nairametrics.com/2025/04/15/fg-launches-30mw-shagamu-power-project-begins-nationwide-energy-access-in-774-lgas/
31. https://guardian.ng/business-services/ogun-to-unveil-electricity-distribution-company-new-power-projects/
32. https://guardian.ng/energy/irish-firm-to-build-200mw-solar-panel-plant-in-nigeria/
33. https://theelectricityhub.com/e7-6b-green-hydrogen-project-unveiled-in-nigeria/

6

KEY CHALLENGES WITHIN THE ELECTRICITY SECTOR

6.1 Infrastructure Challenges

Repeated Grid Collapse

The chronic instability and repeated collapse of the national grid remains the most visible and disruptive challenge confronting the power sector, with far-reaching economic and social consequences. Beyond the immediate impact of system outages, repeated grid collapses highlight deeper structural weaknesses within the transmission network, including ageing infrastructure, inadequate system protection, and constrained coordination across the value chain. From a market perspective, continued grid instability increases operational risk for Generation Companies, and weakens revenue recovery for DisCos. One of the immediate consequences is load rejection and consequently, stranded generation capacity, which in December 2025 reached 5-year high of 2275 MW.[34]

Until sustained investment, institutional reform, and system-wide coordination are achieved within the transmission segment, grid collapse is likely to remain a defining constraint on sector performance and a central obstacle to achieving a stable and commercially viable electricity market.

Vandalism

One of the most persistent challenges within the electricity industry in 2025 was the escalation of vandalism across critical electricity infrastructure, a trend that strained an already fragile grid. The year saw a steady pattern of attacks on transmission assets, with TCN reporting 178 towers destroyed in 42 acts of vandalism in the first and second quarter of 2025 alone.[35] These acts of vandalism have impacted distribution companies and customers. States such as Yobe and Borno saw extended periods of blackout, with inflated maintenance costs as most DisCos had to pay for additional security in some cases. Some states are beginning to exercise creative ways to stop vandalism while also exploring the regulatory freedoms granted to them by establishing specialised courts dedicated to electricity offences, designed to fast-track prosecution and close the gap between arrest and conviction that has traditionally weakened deterrence.

34. https://www.vanguardngr.com/2026/01/epileptic-power-stranded-generation-capacity-hits-2275mw-in-5-years/
35. https://www.thecable.ng/vandals-destroyed-178-electricity-towers-in-42-incidents-says-tcn-gm/

6.2 Liquidity Challenges

Liquidity Crisis and Growing Circular Debt

The power sector continues to face a significant liquidity crisis and growing circular debt, driven by long-standing payment shortfalls across the electricity value chain. Unpaid debts between gas suppliers, Generation Companies, and Distribution Companies have accumulated over time, reflecting structural weaknesses in revenue collection, and market enforcement. By 2025, outstanding sector liabilities had risen to nearly ₦4 trillion, a level that has continued to undermine confidence in the market and heighten investor caution. The silver lining here is the recent intervention by the government, which indicates a gradual effort to contain the scale of the problem. The Federal Government's 4 trillion bond programme, introduced to settle legacy debts, represents a critical step towards easing liquidity pressures on GenCos and gas suppliers and preventing further escalation of unpaid obligations. While the bond issuance does not in itself resolve the underlying causes of circular debt, it is expected to provide temporary relief and improve cash flow across the value chain. The effectiveness of this intervention will ultimately depend on complementary reforms, including improved DisCo capitalisation, enhanced collection efficiency, and stricter market discipline, without which the risk of debt re-accumulation remains a central challenge for the sector.

Metering Gap

Although the Meter Asset Provider (MAP) scheme and the National Mass Metering Programme (NMMP) have led to increased installed meter numbers over recent years, millions of customers remain unmetered, (see Table 3) particularly within densely populated urban centres and peri-urban communities. From a market perspective, inadequate metering remains one of the most critical impediments to liquidity improvement, as it directly limits revenue predictability, complicates tariff efficiency, and weakens the investment case for both distribution upgrades and downstream capital inflows.

Electricity Theft

The year saw repeated public disclosures by Distribution Companies of significant energy losses arising from illegal connections, meter bypassing, and tampering with network equipment. These losses are ultimately reflected in persistently high Aggregate Technical, Commercial and Collection (ATC&C) loss levels, which continue to exceed 40% in several franchise areas.

22. https://punchng.com/elektron-finance-spv-plc-successfully-launches-a-%E2%82%A6200-billion-bond-issuance-programme-and-closes-its-%E2%82%A64-64-billion-series-1-bond-issuance-under-the-scheme/

6.3 Other Challenges

I Non-Contract Enforceability of Contracts

Another persistent challenge within the electricity sector with respect to grid connected power is the absence of Power Purchase Agreements (PPAs), Gas Supply Agreements (GSAs), and related instruments that have achieved full contract effectiveness. Factors such as liquidity shortfalls, non-cost-reflective tariffs, weak payment discipline across the value chain, and insufficient credit enhancement mechanisms have constrained the ability of parties to satisfy contractual conditions precedent and perform on agreed commercial terms. As a result, power generation companies are unable to rely on PPAs as bankable instruments, gas suppliers face uncertainty around payment security, and lenders remain cautious about financing new projects without sovereign-backed assurances.

While the Federal Government's intervention through the partial activation of contracts, together with other negotiated interim arrangements has provided short-term stability, these measures do not substitute for fully enforceable, cost-reflective contract structures required for long-term sector bankability.

I Gas Supply Constraint

Despite having abundant natural gas reserves, severe gas supply constraints still pose a challenge to generation companies in Nigeria. Thermal power plants are responsible for over 70% of the electricity generated in Nigeria[36] and these plants are forced to deal with inadequate pipeline infrastructure, vandalism, and commercial disputes that limit domestic supply. Within the year, the gas supply challenge caused numerous challenges for gas suppliers. Transcorp cited gas supply constraints as a reason for the relocation of its turbines,[37] and in December 2025, vandalism of a major gas pipeline slashed supply to key power plants, drastically reducing electricity generation during the Christmas period and plunging many areas into darkness.[38]

36. https://nairametrics.com/2023/12/13/as-of-2022-70-5-of-our-electricity-is-from-gas-27-3-from-hydro-2-2-from-solar-and-others-adebayo-adelabu/
37. https://punchng.com/transcorp-power-relocates-four-turbines-to-delta/
38. https://punchng.com/gas-pipeline-vandalism-cuts-power-generation-niso/ssfully-launches-a-%E2%82%A6200-billion-bond-issuance-programme-and-closes-its-%E2%82%A64-64-billion-series-1-bond-issuance-under-the-scheme/

7

OUTLOOK FOR 2026

Looking ahead, the power and energy landscape is expected to be increasingly shaped by deeper private sector participation, a more active role for state governments, and a regulatory outlook that places greater emphasis on efficiency and performance. The emerging policies, transactions and initiatives by both private and state actors suggest a gradual reconfiguration of the sector's operational structure, with implications for both investors and regulators.

7.1 Outlook

DisCo Recapitlization

The Federal Government's announcement on increased capital requirements for electricity distribution companies ahead of the 2028 licence renewal marks a decisive policy shift in the regulation of the distribution segment of the power sector. This policy signals a move away from tolerance for undercapitalised operators and places emphasis on financial capacity as a prerequisite for participation in the market. This development is expected to influence investor behaviour well ahead of 2028, as DisCos begin to assess their positions against the anticipated thresholds and consider funding options to meet the new requirements.

In the medium term, the policy is likely to drive restructuring within the distribution sector, particularly for DisCos unable to raise the required capital. DisCos that are unable to meet the enhanced capital requirements may face forced equity injections, or potential loss of their licences, creating opportunities for new investors with stronger balance sheets to enter the market. Across the sector, the recapitalisation drive is expected to strengthen the financial foundations of the distribution sector, improve investment in infrastructure and reduce loss, and enhance revenue collection.

Increased Liquidity within the Sector

Recent developments around the recapitalisation of DisCos discussed above, the ₦4 trillion Presidential Power Sector Financial Reforms Programme (PPSFRP), and renewed plans to introduce selected power assets to the capital markets collectively indicate improved liquidity within the Nigerian power sector in the coming months. The PPSFRP, designed to settle historical payment arrears owed to GenCos and their gas suppliers, represents a critical intervention aimed at restoring confidence across the value chain and stabilising cash flows. When viewed alongside the recapitalisation drive for DisCos, these measures suggest a deliberate policy effort to address not only the symptoms of market illiquidity, but its underlying structural causes. If effectively implemented, these initiatives will encourage DisCos and GenCos to reinvest in infrastructure to increase generation, reduce losses and improve revenue collection. Over time, increased liquidity and access to capital should enhance bankability across the sector, improve investor confidence, and support the gradual transition towards a more commercially sustainable electricity market.

Renewable Manufacturing and the Expansion of Domestic Supply Chains

Renewable energy development and local manufacturing are expected to feature more prominently in the sector's outlook, building on increased activity recorded in 2025. Announcements around proposed solar panel manufacturing facilities by international and local players, including a planned 200MW solar panel production facility within the Lagos Free Zone and a larger 1,000MW solar photovoltaic panel manufacturing plant backed by the REA, point to a deliberate effort to deepen domestic participation in clean energy. These initiatives reflect a shift from a predominantly import-dependent renewable market towards local manufacturing. If supported by appropriate fiscal incentives, domestic manufacturing could also bring about the growth of ancillary industries, including component assembly, logistics, and technical services. Over time, the expansion of renewable manufacturing is likely to strengthen Nigeria's position as a regional clean energy hub, while improving the bankability of renewable projects and supporting broader energy transition objectives.

Increased Participation of State Governments

Another notable development shaping the outlook is the expanding role of state governments in the electricity sector, following the constitutional and legislative reforms that enabled the creation of state-level electricity markets. While a number of states have moved swiftly to enact electricity laws and establish regulatory institutions, others remain at varying stages of implementation, operating within transitional frameworks that continue to rely on federal oversight. In the coming year, increased clarity around regulatory boundaries, licensing processes, and market interfaces is expected to encourage more states to advance towards full operational autonomy.

For the states with autonomous markets, legislative initiatives such as the proposed establishment of the Ibile Energy Corporation underscore the intent of some states to move beyond regulation into direct investment across the energy value chain, including conventional oil and gas activities and newer clean energy solutions. Similarly, plans by states such as Enugu to develop coal-fired generation, albeit with an emphasis on modern technologies and lower environmental impact, highlight the diverse approaches emerging at the state levels.

Decentralized Power Solutions

The adoption of decentralised power solutions is expected to feature more in 2026, with mini-grids playing an increasingly prominent role in expanding electricity access and improving supply reliability. In the latter part of 2025, the Nigerian Electricity Regulatory Commission introduced two key regulatory instruments aimed at unlocking mini-grid development and establishing a clearer commercial and settlement framework for interconnected mini-grids.[39] These regulatory interventions are designed to reduce uncertainty around tariffs, grid interconnection, and compensation mechanisms, thereby addressing some of the key risks that have historically constrained private investment in decentralised energy solutions.

As implementation progresses, interconnected mini-grids are likely to complement the national grid by supplying embedded and localized power while reducing pressure on transmission and distribution infrastructure.

39. https://businessday.ng/energy/article/mini-grid-operators-to-pay-discos-under-new-nerc-guidelines/

I Adoption of Electric Vehicles

The legislative activity around electric vehicles and incremental policy shifts in the power and renewable energy sectors points to the potential for gradual but sustained growth in EV adoption in Nigeria. The Senate electric vehicle bill provides an important policy signal that could unlock further private sector interest and long-term planning. Although widespread consumer uptake remains constrained by cost, charging infrastructure, and grid reliability, pilot projects involving electric buses, two and three-wheeled vehicles, and corporate fleets suggest that early adoption is likely to be driven by commercial users and state-supported initiatives rather than private customers.

7.2 Key Takeaway

These developments point to a power and energy sector in transition, one that remains legally and operationally complex, but increasingly deliberate in its reform. The 2026 outlook favours investors with a long-term view, strong balance sheets, and the ability to navigate a decentralised regulatory environment.

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