

PwC's Annual Power & Utilities Roundtable (14th edition)

Theme:

The Electricity Act 2023

Powering Nigeria



Report on
proceedings
and outcomes



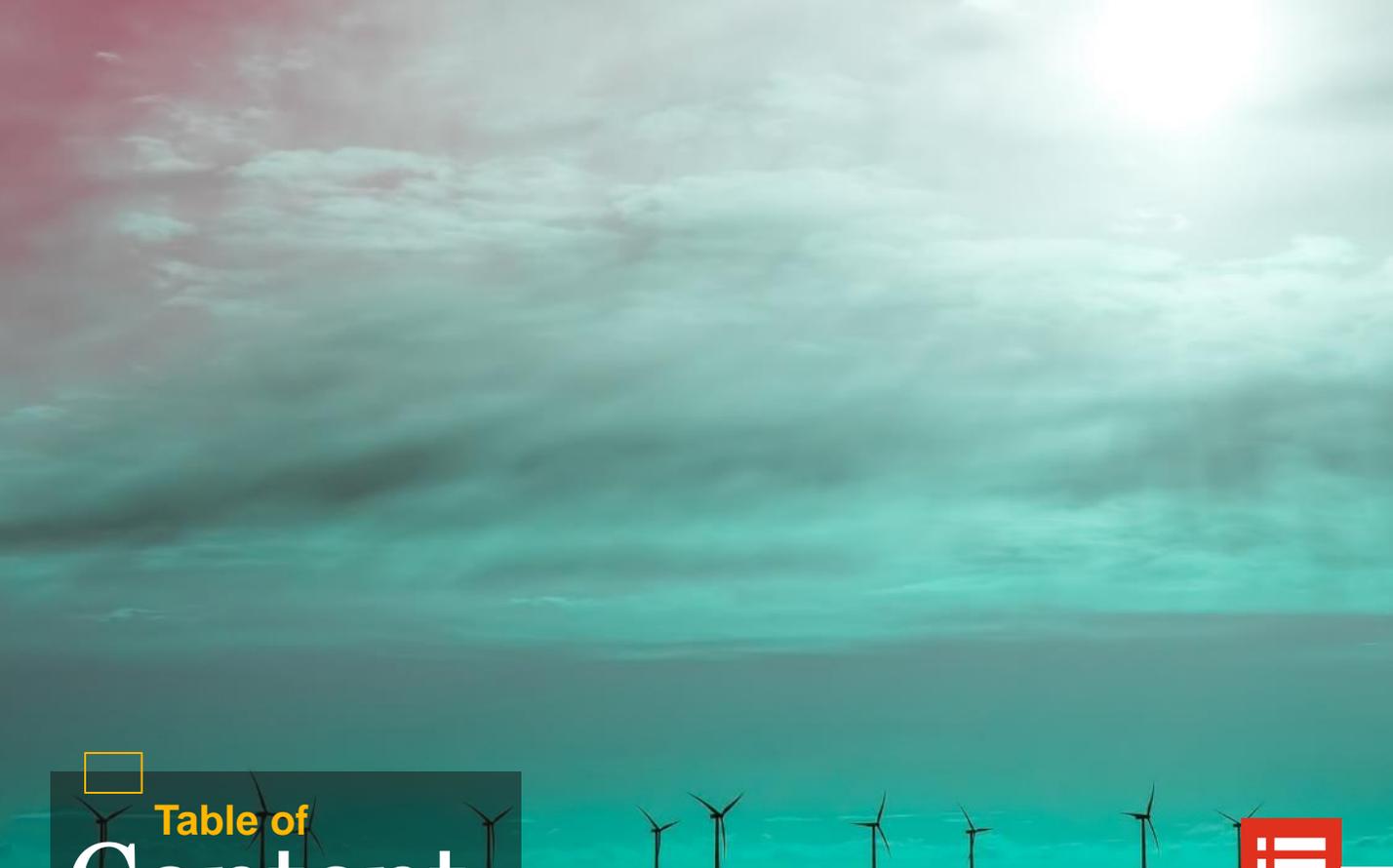


Table of
Content



■ Foreword	04
■ Setting the stage	05
■ Panel discussion	12
■ Expert audience insights	28
■ Conclusion	39
■ Contacts	44





Pedro Omontuemhen

Partner, West Market Area, Energy,
Utilities & Resources Leader, PwC

We're thrilled to share the report on proceedings and outcomes of our Annual Power and Utilities Roundtable 2023.

The roundtable coincided with COP 28, highlighting the urgency of climate action – especially in renewable energy.

With 4% contribution to global carbon emissions, Africa has the lowest emissions compared to other continents. Africa also has vast untapped natural resources and is dealing with significant energy poverty. The Electricity Act 2023 can play a pivotal role in addressing this challenge. It can help provide guidance on balancing the utilisation of our natural resources and reducing carbon emissions and outlining how Nigeria can generate, transmit, and distribute adequate power to meet the country's energy needs.

The keynote address and panel session deliberated on several pertinent questions concerning Nigeria's Electricity Act 2023, some of which include: What opportunities does the Electricity Act 2023 unlock?



Foreword



What are the challenges and how can it be addressed? And how do we capitalise on the opportunities to shape Nigeria's energy future?

The Electricity Act 2023 has the potential to attract crucial investments for the power sector's transformation. Capitalising on the opportunities requires deliberation on these critical questions and taking concrete actions. The objective of this roundtable is to raise these questions, encourage stakeholders to engage and propose solutions, and drive action towards adequate electric power supply.

The discussions at the 2023 edition of the roundtable showed that power sector stakeholders welcome the Electricity Act 2023 as a good step for consolidating the laws governing the Nigerian Electricity Supply Industry and establishing a policy framework that empowers state governments and investors.

However, there is more to be done to enhance the legislation and make it more responsive to the yearnings of industry stakeholders.



Setting the stage

PwC's Annual Power & Utilities Roundtable (14th edition)





Bimbola Banjo

Partner, Energy, Utilities & Resources, PwC Nigeria

Introduction

On 8 June 2023, His Excellency, President Bola Ahmed Tinubu, GCFR, signed the Electricity Act 2023 (“The Act”), repealing the Electric Power Sector Reform Act, 2005, and consolidating the laws relating to the Nigerian Electricity Supply Industry by providing a comprehensive legal and institutional framework for the power sector in Nigeria.

Recognising the significant implications of this legislation for the sector, PwC convened its annual Power and Utilities Roundtable on Thursday, 30, November 2023, under the theme “The Electricity Act 2023: Powering Nigeria”. This was the 14th edition of the annual roundtable and it provided industry leaders, executives, and stakeholders with the opportunity to discuss the Act, recommend solutions and shape the future of the electric power industry.

This publication is based on the recording of the roundtable’s proceedings; the transcription and insights from the panellists and other stakeholders have been edited for readability.

The Electricity Act 2023 is a comprehensive and insightful document full of valuable information. While swift adoption is desirable, it's crucial to ensure readiness through proper planning and preparation. This presentation provides the key highlights and insights into the Act to facilitate a robust panel discussion.

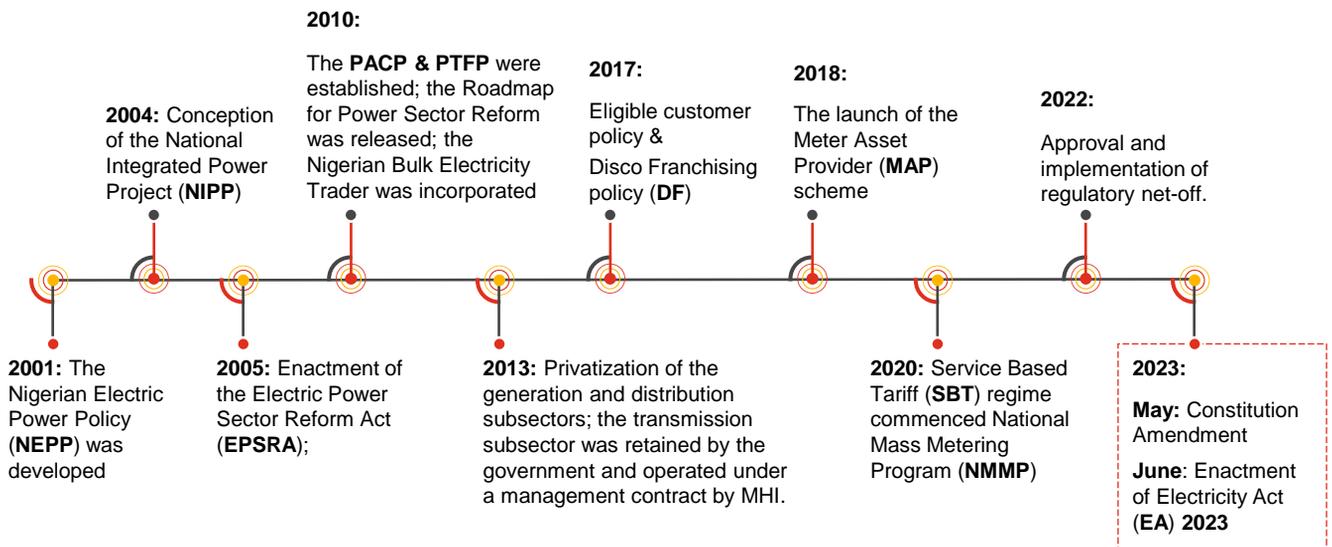
It is important that state governments exercise caution and carefully assess their preparedness for implementation. Adopting the Act will incur significant costs, from engaging legal and commercial advisors to investing in technology, human resources, and establishing state-level structures. To minimise these costs and maximise potential benefits, states should conduct a comprehensive evaluation of their electricity market and network infrastructure, accompanied by detailed technical and commercial feasibility studies.

This rigorous assessment should cover key aspects like regulatory implications, financial resources, and technical capabilities, to ensure they are adequately prepared to implement the Electricity Act 2023 effectively and reap its full rewards.






NESI has witnessed a number of key reforms and initiatives that have preceded the enactment of the Electricity Act (EA) 2023



Brief overview of Nigeria's electric power policy evolution

Over the past two decades, Nigeria's power sector has seen several reforms and initiatives driven by regulators, ministries, and industry players. From key policies like the Nigerian Electric Power Policy in 2001 to the privatisation of the generation and distribution subsectors in 2013, to more recent interventions like the launch of the Meter Asset Provider scheme in 2018, Service Based Tariff regime in 2020, and the Electricity Act 2023.

The evolution of the policy landscape in the power sector shows that significant progress has been made, but challenges remain. The Electricity Act of 2023 attempts to address some of these challenges and unlock new potential.

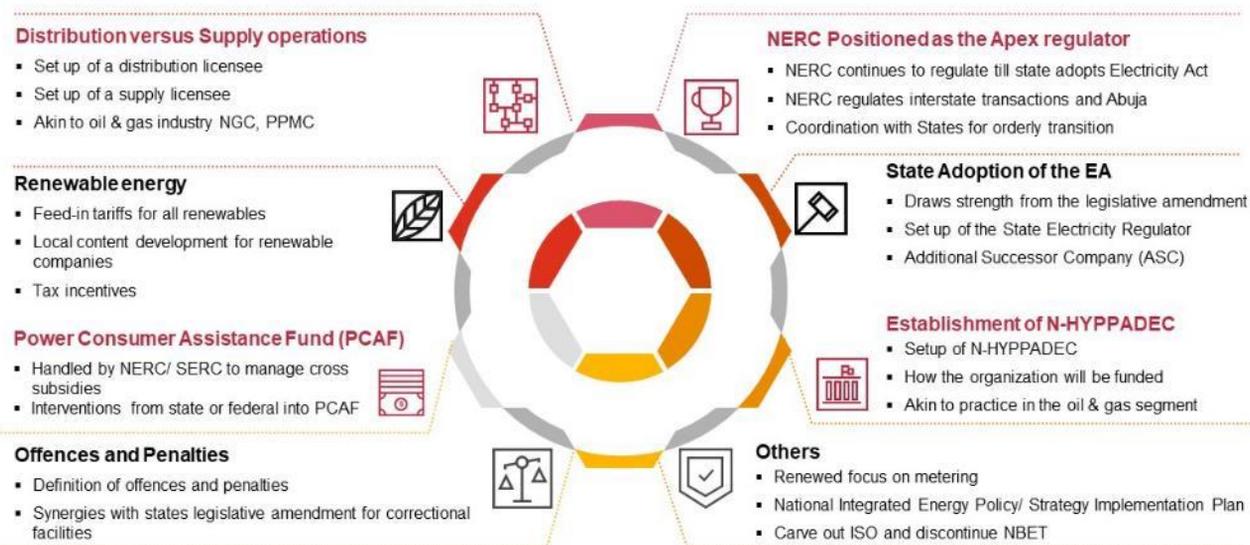
The Act empowers state governments to participate in areas previously reserved for the federal government, particularly transmission and distribution. The Act defines how states can participate, with different state Houses of Assembly playing a vital role. However, it envisages that successful state implementation will require significant support and close collaboration with the Nigerian Electricity Regulatory Commission (NERC).



Highlighting the key provisions



The Electricity Act 2023



Separating Distribution and Supply

The Electricity Act introduces a key restructuring by separating distribution and supply operations, granting licences to dedicated entities for each. This approach is similar to the Nigeria Gas Company Limited (NGC) and Pipelines and Products Marketing Company Limited (PPMC) model in the oil and gas industry, it simplifies management and enhances efficiency.



Renewable energy

The Act prioritises renewable energy through several initiatives. Feed-in tariffs offer financial incentives for renewable power generation, while local content development requirements and tax breaks encourage domestic participation in the sector.



Highlighting the key provisions



NERC Positioned as the Apex regulator

NERC retains its role as the apex regulator until individual states adopt the Electricity Act 2023. They continue to oversee interstate transactions and generation-to-distribution connections, working in coordination with states to ensure a smooth transition.



Power Consumer Assistance Fund (PCAF)

Managed by NERC and state regulators, the PCAF ensures fairness by balancing cross-subsidies across states. Both federal and state governments can intervene in the fund when necessary. This can be the vehicle that states can use to attract investments.



Offences and Penalties

The Act defines offences and associated penalties, promoting accountability within the sector. In addition, the states have increased autonomy, working with their legislature, to enact laws that strengthen their enforcement capabilities.





The Electricity Act 2023 has significant potential for transforming the power sector, however, it's important to understand what it's not:

What the Electricity Act 2023 is **NOT**

Cheap

Adopting the Act involves substantial financial investments. Engaging legal and commercial expertise, developing and establishing state-level regulatory bodies come at a significant cost, competing for limited state resources. Thorough due diligence and feasibility studies are crucial to ensure efficient resource allocation and project viability.

For political objectives

The Act is not intended to become a political dividend for the populace. Simply "setting-up" laws without a deep understanding of the local electricity market and adequate preparation can be futile. States must perform proper assessments and due diligence to ensure genuine commitment and successful implementation.

Foster regulatory chaos

Having vastly different electricity laws across states would be detrimental, creating market distortions and unfair competition. There is a need to ensure that regulation of electricity across the federation is fairly consistent and avoid regulatory capture.

The Electricity Act (EA) 2023 as enacted **IS**

Collaborative

The Act emphasises close collaboration between the Nigerian Electricity Regulatory Commission (NERC) and state-level SERCs to ensure coordinated oversight, smooth transitions, and consistent regulatory standards.

Partnerships between state governments and utilities are encouraged, fostering a united front for sector development and improved service delivery.

Designed to improve access

Involvement of state is expected to improve remote access. Especially with the involvement of the Rural Electrification Agency in collaboration with the local government.

National Integrated Electricity Policy

The Act is vital to planning the country's infrastructure needs in a coordinated manner. It also acknowledges the importance of collaborating with neighbouring countries within the West African Power Pool (WAPP).

Pro-renewables

The Act embraces a diverse range of renewable energy sources, including hydrogen, coal-based renewables, wind, and others, thereby helping to foster a cleaner and more sustainable energy future. It also encourages adoption and the development of a framework for widespread acceptance.





The opportunities

Creating the right investment vehicle

The Act empowers states to establish state-owned utilities, 'Successor Companies,' capable of attracting long-term investment through innovative structures.

Dedicated distribution and supply companies within states can act as special purpose vehicles (SPVs), drawing capital from state resources or private investors through primary or secondary markets.



Collaboration in fundraising

Many utilities require patient capital. With the Power Consumer Assistance Fund (PCAF) serving as a joint federal-state mechanism for targeted subsidies, the Act facilitates collaborative fundraising efforts.

Collaboration in knowledge exchange

Closer collaboration between SERCs and NERC fosters information sharing, enabling the development of more effective policies and improved customer satisfaction.

Collaboration in enforcement

States can utilise their existing security apparatus to develop specific infrastructure protection measures. Empowering State Houses of Assembly to determine optimal deterrence structures and leveraging constitutional amendments to establish dedicated correctional facilities bolsters robust enforcement across the sector.



Panel discussion

PwC's Annual Power & Utilities Roundtable (14th edition)



Panel discussion



The panel discussion was moderated by **Akinyemi Akingbade, Partner, Energy, Utilities and Resources, PwC Nigeria.**

The moderator-led panel session featured: Engr. Razaq Obe, Honourable Commissioner for Energy and Mineral Resources, Ondo State Government; Dafe C. Akpeneye, Commissioner Legal, Licensing, and Compliance, Nigerian Electricity Regulatory Commission; Mrs. Folake Soetan, Chief Executive Officer, Ikeja Electric Plc; Ugochukwu Obi-Chukwu, Founder/CEO, Nairametrics; and Daniel Mueller, Chief Operating Officer, InfraCredit.

Q

A

Tell us briefly what the Electricity Act is and what it means for Nigeria and Nigerians. Let's hear your view about the potential impact, opportunities, and challenges that the Act presents.



Engr. Razaq Obe
Honourable Commissioner
for Energy and Mineral
Resources, Ondo State
Government

Solving the electricity issue is crucial for Nigeria's economic growth and overall development. The failures of past governments are attributable to their inability to address this fundamental problem. The Electricity Act 2023 is a turning point, a watershed moment, and a chance to break free from past struggles. Without the previous bottlenecks, and with subnationals empowered, we welcome the decentralised state-level approach towards finding potential solutions.

The Act has empowered Ondo State to take the initiative and engage with the distribution companies ("DisCos"). The Act has given state governments the power to shape their electricity landscape, demand accountability and responsiveness from DisCos.



Panel discussion



Q **A** **With the Electricity Act, what is going to change in the relationship between DisCos and subnationals? And what is the Electricity Act bringing to the table for Nigerians?**



Mrs. Folake Soetan
Chief Executive Officer,
Ikeja Electric Plc

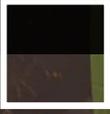
The Electricity Act 2023 is timely. I'm very excited about it. DisCos are very excited about it. The implementation will come with significant funding challenges, and a collaborative approach is vital, especially in securing funding.

The Act holds promise for improving energy access nationwide and contributing positively to the economy. However, there's a need to understand its implications after a decade of privatisation, and learn from past mistakes to foster growth.

DisCos are actively seeking collaborations with subnationals and playing their role in making sure that there's an enabling environment that ensures financiers or potential investors are able to make a return on their investment.



Panel discussion



What does the Act mean for Nigeria and Nigerians?



Ugochukwu Obi-Chukwu
Founder/CEO,
Nairametrics

The Electricity Act 2023 is another chapter in Nigeria's long pursuit of improved power supply. However, the Act is a positive step, especially after 18 years without amendments to the previous legislation.

Several stakeholders in the industry commend the Act for being comprehensive, which gives confidence about the potential for increased investment in the sector.

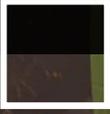
There's also a positive reception of the Act by state governments. It has created the enabling environment for serious states to attract investments in improved power infrastructure.

However, the Act's success depends on specific outcomes: delivering uninterrupted power, addressing estimated billing issues, and ensuring cost-reflective tariffs. These are the essential benchmarks for measuring success in the sector.

With the Act, the government demonstrates its prioritisation of the electricity sector, which is commendable. We're optimistic that the new Act will contribute to the success needed in a sector crucial for Nigeria's industrialisation.



Panel discussion



Share briefly what your expectations are concerning the Electricity Act 2023



Daniel Mueller, Chief Operating Officer, InfraCredit

The new Electricity Act consolidates various regulations (NEMSA, HYPPADEC, etc.) into one document, providing clarity and consistency for investors. A single piece of legislation that simplifies the legal landscape and reduces uncertainty is expected to boost investor confidence.

The Act allows for service-reflective tariffs regulated by the Commission, but also recognises bilateral agreements between willing buyers and sellers. This flexibility is particularly important, providing long-term guarantees for debts in the sector.

The Act makes it more difficult for unilateral changes to regulations that could disrupt these agreed-upon bilateral arrangements, further enhancing investor confidence.



Panel discussion



From a financier point of view, what is your expectation?



Daniel Mueller, Chief Operating Officer, InfraCredit

There have been two major recent changes that are seen as pivotal for attracting investment: service-reflective tariffs with flexible pricing arrangements, and constitutional empowerment for states to issue licences.

These changes provide new avenues for investment by allowing DisCos to collaborate and states to tailor electricity solutions to local needs.

However, to take advantage of the opportunity the Act provides, states need to take action promptly. As we saw with the privatisation policy, delayed implementation could lead to another government intervention.

States need to start delivering on their newfound powers to avoid further legal changes and ensure swift progress in the sector.



Panel discussion



Q **A** Everybody considers this Act as a brainchild of the NERC. Can you shed more light on what your expectations are and how this will benefit Nigerians?



Dafe C. Akpeneye -
Commissioner Legal,
Licensing and Compliance,
Nigerian Electricity
Regulatory Commission

A lack of investment, not flawed laws, hinders Nigeria's power sector. People seldom understand the quantum of investment that is required.

To bring one megawatt of generation capacity to the grid, you need 500 thousand to 1.5 million dollars. To build one kilometre of 330 kV line, you need about a million dollars and for a kilometre of 132 kV line, about four hundred thousand dollars. Investments will only follow certainty.

Previous reforms had their limitations, the privatisation policy was inadequate for regulating and supervising the market. The Electricity Act 2023 seeks to address these post-privatisation issues by codifying all the laws, strengthening the regulator, mandating planning through the integrated resource plan, and promoting good governance.

The Electricity Act 2023, as a constitution amendment, restores the states' authority in the power sector to pre-1999 levels. However, there is a potential conflict in the Act, between state autonomy provisions and federal oversight. It is important to avoid situations where there are 38 separate power laws in Nigeria, causing confusion and inefficiency. This is significant because the existing national electricity networks have state jurisdiction limitations that necessitate careful coordination to fulfil the mandates outlined in the Electricity Act 2023.

Despite the challenges and coordination required, Nigeria is in a better position today compared to the start of the reforms in the power sector over a decade ago.



Panel discussion



Q **A** **More than passing their own laws, and considering the challenge of liquidity and other significant investments required, how ready are the states in executing the Electricity Act?**



Engr. Razaq Obe
Honourable Commissioner
for Energy and Mineral
Resources, Ondo State
Government

Ondo State is ready to implement the Electricity Act despite the challenges. Understanding the potential implications arising from several sub-national laws is key. However, it's important to also focus on embracing the opportunities that open up in the power sector through the active participation of subnationals.

State governments cannot afford to wait for an ideal situation before actively participating as stakeholders in the power sector. Before implementation, states should seek support from advisors and energy consultants. In this regard, Ondo State has significant experience, from developing its own power sector governance framework in 2020 to collaborating with various stakeholders.

Ondo is also keen to collaborate with other stakeholders, including states and NERC, to create a workable model, avoid conflicting laws, and drive national economic growth.



Panel discussion



Q You deal with Nigerians, they exchange ideas and views on your platform. Do you want to tell us what your perception is about the readiness of the states?



Ugochukwu Obi-Chukwu
Founder/CEO,
Nairametrics

Several states are already collaborating with distribution, generating, and transmission companies to improve power supply within their regions. Nevertheless, it is crucial for state governments to thoroughly understand the challenges associated with providing electricity in their states before passing legislation in response to the Electricity Act 2023.

There's a need for enhanced collaboration between subnationals and DisCos. State governments should prioritise improving communication, understanding DisCos' challenges, and working together with DisCos to address the unique issues impeding uninterrupted power supply within their jurisdictions.

State governments play a pivotal role in supporting distribution companies to tackle challenges like electricity theft, identifying failure points, managing feeder disruptions, and ensuring efficient collections. These efforts are essential for the overall improvement of the electricity supply.

Recognising the substantial investments required in the sector, state governments must create appropriate incentives to attract investments, such as offering tax breaks or allocating land for power plant installations. Their involvement in facilitating efficient collections is integral for the recovery of investment costs.

Beyond merely passing laws, states should implement tangible actions, concentrating on practical measures that genuinely enhance power supply, with the ultimate goal of achieving 24/7 electricity.



Panel discussion



Q **A** **What kind of collaboration do you expect based on this Electricity Act that will make you run your business efficiently, deliver value to your stakeholders, and also enhance the lives of Nigerians.**



Mrs. Folake Soetan
Chief Executive Officer,
Ikeja Electric Plc

Significant investment is crucial for adequate power supply. In addition, DisCos struggle with energy theft, high cost of operation, and difficulty with recovering revenue and attracting funds for infrastructure upgrades.

The collaborations required to tackle these challenges include: States and DisCos' working together to address energy theft. This will significantly reduce losses and improve DisCo performance on collections.

Collaborations between state governments to create a business-friendly environment for investors. This requires a robust legal framework, but more importantly, a commercial ecosystem that attracts investment and allows for healthy returns.

We know customers are willing to pay for reliable service. Establishing an environment where investors can also directly recover returns from customers is vital; some banks even prefer this approach to direct investments in DisCos.

The question is whether there is political will to implement these solutions. Cracking down on energy theft with stricter penalties is essential: deterrence improves operational efficiency, attracts funding, and benefits everyone. By creating an enabling environment, we unlock significant investment potential and pave the way for a brighter future for the power sector.



Panel discussion



Q **A** **Given the potential for increased state involvement in the electricity sector under the Electricity Act 2023, what forms of collaboration do you envision between states, NERC and existing stakeholders (utility companies, investors, etc.)? What specific areas do you see this collaboration being most impactful?**



Dafe C. Akpeneye -
Commissioner Legal,
Licensing and Compliance,
Nigerian Electricity
Regulatory Commission

NERC is keen to continue collaborating with all stakeholders to achieve adequate electric power supply. However, collaboration alone isn't enough; funding is the key to unlocking the power sector. There were significant financial limitations that hindered previous collaborations from yielding the right results.

We need to work together to agree on how we attract this financing. The investments can also come from our local economy. While the power sector struggles for funding, vast sums of money flow into sports betting, even surpassing DisCos revenue in some cases. This raises an important question, which could be a potential solution: Is it possible to use social engineering through appropriate laws to redirect resources towards powering our nation?

States should not aim to play in the on-grid space due to significant financial requirements. They should identify their unique advantage, be it rural access, off-grid solutions, or specific areas within the grid.

A phased implementation of the Electricity Act 2023 will help to ensure consistency and prevent conflicts. We need a clear, central law that outlines regulator roles, industry standards, and collaborative frameworks.



Panel discussion



Q Many are concerned about the viability of the sector given the low electricity tariff coupled with the low level of revenue collection. **A** What role can NERC play in addressing these concerns to make the sector more attractive to investors? Do you see opportunities for collaboration, in the area of collection, improvement in technology, to address these challenges and create a sustainable electric power sector?



Dafe C. Akpeneye -
Commissioner Legal,
Licensing and Compliance,
Nigerian Electricity
Regulatory Commission

Regarding collaborations to improve collection efficiency, the Electricity Act 2023 has the potential to create a constitutional dilemma. When there are states that opt to manage their own tariffs, and others that rely on NERC (federal government) regulation, it could lead to a situation whereby federal funds are allocated to support some states but not others. This potential dilemma raises concerns and needs to be addressed.

We also need a unified strategy considering affordability, and a roadmap for gradually expanding national access to reliable power. At the moment, 24/7 power is not affordable for everyone. However, once scalability is achieved, and cost comes down, it becomes a benefit that's available to everybody. But planning, coordination, and getting all stakeholders to work together are very critical to achieve scalability.



Panel discussion



Q **A** We have a large number of people that can't afford power, and we heard from one of the panellists that to enjoy 24/7 power, they are charged N260 per kilowatt hour where he lives.
Is this sector bankable the way it's currently structured?



Daniel Mueller, Chief Operating Officer, InfraCredit

From our perspective, there is no bankability challenge. Tools exist to assess the bankability of power sector projects. There are tools to test the bankability of even challenging projects in areas that have never had electric power and it is difficult to ascertain demand. Any project that is focused on meeting the end customer's needs is bankable. And we have invested in several, including hydropower on-grids, solar mini-grids, and off-grid IPPs.

To secure investments, players in the sector should focus on satisfying the needs of the end-customer. They should identify a target market and prove their service commitment by focusing on delivering 24/7 power to specific customer groups.

The industry needs to prove its ability to deliver on 24/7 power and efficient distribution. Enhanced communication, customer focus, and scalable projects are key to building trust and attracting investments.



Panel discussion



Q **A** **Given the inflationary pressures we have witnessed in recent years, and potentially going forward, do you still hold the same level of confidence in the sector's bankability? Additionally, Nigeria's growing population and poverty levels raise widespread concerns about affordability, with a substantial portion of the population living below the poverty line, and a struggling middle class. Can you elaborate on your thoughts on these challenges with regards to the bankability of the sector?**



Daniel Mueller, Chief Operating Officer, InfraCredit

In the past two years, events like the Ukraine-Russia war and COVID-19 have impacted global inflation and generally made investments riskier. However, there are still opportunities to invest.

Gas availability plays a crucial role in the bankability of the sector. The commencement of NLNG gas supply to the domestic market in the last few years has equipped players in the industry because it is a resource that was not available to them before, increasing investor confidence.

Investors assess bankability based on the spending capacity of their target communities or markets. And you will find that residential users, despite having a lower ability to pay, have a higher willingness due to limited alternatives.

Players in the industry need to properly assess their target market and start with smaller, more profitable areas to prove their model before expanding. This is because lenders may initially finance only the most financially stable segments of a project.

Successful smaller projects can be scaled to reach more customers. In the long run, the larger projects that offer economies of scale will make affordability for everyone more achievable.



Panel discussion



Q **A** **There is a need to have diverse pricing models, even within a state. This may present potential fairness concerns for the public. However, when it comes to project selection for attracting investment, please share how you prioritise projects based on scalability and their potential to quickly attract investment to your state?**



Engr. Razaq Obe
Honourable Commissioner
for Energy and Mineral
Resources, Ondo State
Government

Ondo state will not directly invest in projects but create a friendly environment to attract and protect investor interests.

There is a correlation between the collection rate and the metering rate. It is essential that DisCos ensure that all customers have prepaid meters. Metering is crucial to understanding consumer data and holding them accountable.

The metering challenge contributes to energy theft. Of which, enforcing strong punishments and discouraging the “Nigerian factor” of interfering, ending with due process will be key. Achieving this will depend on creating public awareness and facilitating behavioural change by reframing electricity as a service from the people (“Ina Aye”) and not a benefit from the government (“Ina Ijoba”) to foster a sense of responsibility.

The provision of prepaid meters by DisCos will help to address this behaviour. Metering will also eliminate arbitrary estimated or inflated bills, increasing DisCos transparency and consumers' trust.

Active sub-national government partnerships with DisCos and swift punishments for electricity theft will discourage system gaming and improve overall efficiency.



Panel discussion



Q **A** Why are DisCos not metering all customers? Because we have been on this metering issue for the past four to five years. What is really the issue?



Mrs. Folake Soetan
Chief Executive Officer,
Ikeja Electric Plc

Metering customers is DisCos' responsibility. However, liquidity issues have hindered progress. The regulator introduced the Meter Asset Provider scheme to bridge the gap, but inflation and forex have driven up meter costs.

It is important to address the misconception that DisCos are averse to metering. Ikeja Electric significantly improved its collections as a result of its metering drive. The benefits to DisCos from metering are enormous. Estimated billing leads to a loss of revenue and customer dissatisfaction. Adequate metering improves collections, reduces theft, and simplifies operations.

DisCos are working with different stakeholders and are committed to universal metering as a solution to improve revenue, customer relations, and overall efficiency.



Panel discussion



Q **A** **Why is the price of meters not keeping pace with inflation and other macroeconomic indices? Why do we need to wait for more than six months before NERC reflects these macroeconomic changes in the meter prices? Don't you think we need to change the time required for the review to reflect the economic challenges?**



Dafe C. Akpeneye -
Commissioner Legal,
Licensing and Compliance,
Nigerian Electricity
Regulatory Commission

A key lesson from my transition from the private to the public sector is how vastly different my experience is from others. Nigeria has diverse realities and demands context-specific solutions that work for everyone. Utilities are monopolies; there has to be a mechanism for the regulator to adjust tariffs for fairness and stability. The decision on the six-month tariff review was based on stakeholder engagement and Nigeria's social, political, and economic realities. In today's context, the six-month tariff review is what is feasible. And even implementing the six-month review was challenging because of the legal cases that stalled the reforms. Frequent tariff adjustments to keep up with dynamic macroeconomic factors, although appealing, wouldn't work in our current political economy.

We must balance affordability with Nigeria's development and avoid potential social divisions between those who can afford power and those who cannot. From our perspective, discriminatory models in the power sector that are solely focused on making profit harm social cohesion and hinder growth.

Addressing the metering gap, which is a downstream end-customer problem, requires stakeholder support. States can play a crucial role in closing the metering gap and supporting innovative transitional solutions. This requires coordinated efforts for impact. All stakeholders working together towards shared goals is key to achieving meaningful, positive impact for the customers and Nigeria's development.



Panel discussion



Q **A** **Now that we have heard from the regulator and key players in the industry, shouldn't we as Nigerians start moderating our expectations?**



Ugochukwu Obi-Chukwu
Founder/CEO,
Nairametrics

Most sectors are driven by capitalism, unlike in the power sector. The focus should be on delivering 24/7 power, not controlling metering or tariff. The sector needs a market-driven approach, not socialism.

There are examples of private players who are deploying innovative solutions that can address collection issues. There's a company focuses on metering residential estates to manage their utility collection. It's achieving business growth by offering flexible payment options that account for dynamic macroeconomic factors. That is the kind of business-oriented approach that we need in the industry.

Metering is arguably the most important aspect of the value chain. It will be counterproductive to saddle the DisCos with that responsibility or to think that capping the prices for meter purchases will close the metering gap.

This is one area the Electricity Act 2023 could improve on. It is also important to note that metering alone isn't enough to solve collection problems. Data and analytics, customer enumeration, and investing in the technology to understand customer data are crucial. Utopian affordability isn't feasible. By taking a step-by-step approach, state governments can subsidise meters for specific groups, but market forces should determine prices.



Panel discussion



Q **A** **How ready is Ikeja DisCo for the potential unbundling of distribution from supply and having subsidiaries in Ogun and Lagos states?**

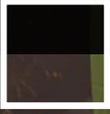


Mrs. Folake Soetan
Chief Executive Officer,
Ikeja Electric Plc

Our franchising model is similar to this recommendation from the policy. We are ready for that unbundling. It has the potential to improve our operational efficiency. And we have also been collaborating with Lagos State on a similar model.



Panel discussion



Q **A** What other things do you like to see put in place, maybe in the form of regulation that can enhance the objectives of the Act?



Engr. Razaq Obe
Honourable Commissioner
for Energy and Mineral
Resources, Ondo State
Government

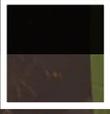
Stakeholders must continue to collaborate to improve the Act and ensure a 24/7 supply of electricity in Nigeria. The Electricity Act 2023 has already started fostering collaboration in the sector. For example, there's a forum of state commissioners for energy, which is a first in Nigeria's history.

It's potentially inefficient to have a distribution company in each state. Ondo State is keen to collaborate regionally, which may mean working with only two DisCos in the South West. Doing this will help to leverage economies of scale for improved performance.

State governments are committed to collaborations that will enhance the implementation of the Electricity Act 2023. Many states, including Ondo, have started to establish a ministry of energy towards achieving this.



Panel discussion



Q **A** **What other things do you like to see put in place, maybe in the form of regulation that can enhance the objectives of the Act?**



Mrs. Folake Soetan
Chief Executive Officer,
Ikeja Electric Plc

The Electricity Act 2023 is commendable. An amendment that codifies a "handshake" between the state and federal regulators is necessary. The federal regulators have deep industry knowledge and valuable experience that a collaboration is crucial to achieving the Act's goals.

Ikeja Electric is committed to implementing the Act and the development of the sector.



Panel discussion



Q **A** **What other things do you like to see put in place, maybe in the form of regulation that can enhance the objectives of the Act?**



Ugochukwu Obi-Chukwu
Founder/CEO,
Nairametrics

The Act's support for renewable energy is commendable, and we are keen to see the implementation lead to widespread solar power adoption in homes and communities.

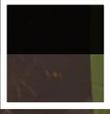
This could potentially impact on the overall pricing, helping to offset the regular grid power tariff.

Evaluating Nigeria's metering strategy is crucial; the current model, which relies on imported meters, is inefficient. A national strategy focusing on having local meter assembly plants or investing in meter manufacturing is essential, considering the potential economic benefits, including job creation.

Another area is digital transformation. In this regard, it's important for the Act to foster collaboration between stakeholders. Lagos State's data collection and management efforts are commendable. However, it's vital to harness that data and use it to enhance stakeholder performance in the sector. For example, data integration—a central database similar to the CBN's open banking system—would improve accessibility for renewable energy investors and streamline customer data management across the sector.



Panel discussion



Q **A** What other things do you like to see put in place, maybe in the form of regulation that can enhance the objectives of the Act?



Daniel Mueller, Chief Operating Officer, InfraCredit

There is a need for a clear and effective dispute resolution mechanism to address regulatory disputes and prevent inconsistencies in regulatory decisions. The dispute resolution panel for Multi-Year Tariff Orders (MYTOs) was useful and had potential.

It's essential to have a strong dispute resolution panel with the authority to intervene and prevent double regulation or inconsistent decisions. There's currently a potential risk of regulatory abuse and players receiving conflicting demands and fines from different entities.



Panel discussion



Q

A

Moderator's insights:

What other things do you like to see put in place, maybe in the form of regulation that can enhance the objectives of the Act?



Akinyemi Akingbade,
Partner, Energy, Utilities
and Resources, PwC
Nigeria.

A regulation that addresses the sector's over-dependence on foreign exchange is required. The passage of the Electricity Act offers an opportunity to increase the local content of the sector, develop capacity, and create jobs. The local production of solar panels and meters should be encouraged.



Panel discussion



Q **A** **What other things do you like to see put in place, maybe in the form of regulation that can enhance the objectives of the Act?**



Dafe C. Akpeneye -
Commissioner Legal,
Licensing and Compliance,
Nigerian Electricity
Regulatory Commission

We need to be mindful of legislating domestication of jobs within the power value chain. The focus should be on market-driven decisions based on skills and areas Nigeria has a competitive advantage. Avoiding the pitfalls of conflicting and diverse state laws, requires a strong national Electricity Act. This Act should be comprehensive, covering all aspects of the sector from generation to distribution. Within this framework, states should have control over distribution activities as per the constitution. However, a central law is crucial to establish clear boundaries and responsibilities for all stakeholders. It should outline the hierarchical structure of regulatory bodies, define national standards and regulations, and facilitate smooth cooperation between different levels of government and agencies.

With limited expertise including legal and economic in the power sector value chain, there's a need to address issues of capacity building. This requires investment in building local capacity through targeted education and institutions. The electricity sector requires a dedicated funding institution. Given the sector's reliance on long-term investments, like infrastructure development, a dedicated power bank, similar to India's, would provide the patient capital needed for sustained progress. The concept of "host community" in the Electricity Act 2023 requires a clear and comprehensive definition to avoid confusion and unintended consequences.

To attract long-term investment to the electricity sector, we need to continue fostering a stable and market-driven environment. This includes both renewable energy integration and utilisation of gas for base load generation. By implementing our Integrated Resource Plan (IRP), we can achieve this balance and build a sustainable, reliable power sector for the future.



Expert audience insights

PwC's Annual Power & Utilities Roundtable (14th edition)



Expert audience insights



Akinyemi Akingbade, Partner, Energy, Utilities, and Resources, PwC Nigeria, moderated the expert audience discussion.



Why are DisCos not metering every customer? Because we have been on this metering issue for the past four to five years. What is really the issue? In addition, please share your metering experience so far.

A

Deolu Ijose

Managing Director, Benin
Electricity Distribution
Company

Meters, like most infrastructure in the power sector, cost money. And the sector needs significant investments to develop. How do we attract these investments? By creating an enabling environment—the right policies and programmes—and the execution of these programmes.

In this regard, there have been several programmes. The Meter Asset Provider Scheme initially helped, but exchange rate fluctuations and depleted provider resources stalled progress. There's also a need to revisit Multi-Year Tariff Orders (MYTOs), a programme initiated by the regulator to review tariff prices based on macroeconomic fundamentals, every six months.

The Meter Asset Fund (MAF) offers potential, but affordability remains a concern, especially in rural areas. The mismatch between revenue and cost continues to discourage investors. State governors have a role to play in prioritising power access and should consider subsidising meter costs for their people rather than the usual palliatives.

Despite bottlenecks, DisCos are keen to meter their customers, especially because they incur a significant loss of revenue from the capping methodology on estimated billing. The perception of DisCos wanting to avoid metering is inaccurate.



Expert audience insights



There is a provision in the Electricity Act that talks about the decoupling of distribution licence, into distribution and supply licences. How do you think that will work out for DisCos, the present licence holders?

Because the provision was also crafted in a way that they can exit at any point in time. Does that help with the kind of investment that we're trying to attract into this sector? Does it give certainty to investors?

A

Engr. Olalere Odusote
Former Honourable
Commissioner for Energy
and Mineral Resources,
Lagos State.

This simple answer is, yes. Not all aspects of what is captured under the distribution licence today constitutes itself into a natural monopoly. The separation of regulated and unregulated activities prevents cost distortion and attracts investment by ensuring fair competition.

On frequent tariff reviews, more often than not, it only leads to price increase, which isn't market driven. Prices should be determined by inputs and competitive factors. Also, it's challenging that most of our inputs in the power sector are denominated in foreign currency, which isn't helpful and needs to change.

On data management, Lagos State has multiple agencies that manage and collect customer data including, LAWMA and LASRA. DisCos working together with state governments will help resolve the problem of customer enumeration and identity management.



Expert audience insights



Engr. Olalere Odusote
Former Honourable
Commissioner for Energy
and Mineral Resources,
Lagos State.

Lagos State was keen to participate in enhancing and developing the Electricity Act 2023 to make it more robust for all stakeholders. The electricity sector operates in a cycle: attract investment, increase efficiency, improve collections, improve profitability, attract more investment. Lagos has started focusing on attracting investment first. To attract investment, Lagos is keen to adopt a regulatory framework that helps to develop a transparent tariff methodology, and not one that determines the tariff.

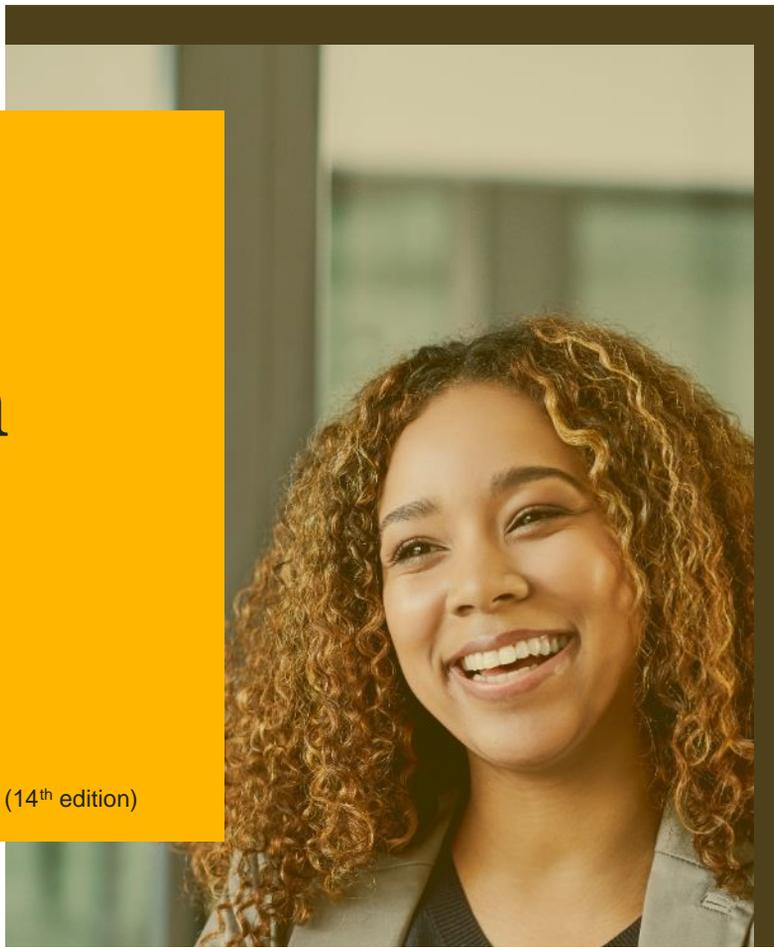
The question about states' participation, and potential multiple regulations, and interventions to subsidise cost becomes clearer when we understand that regulation is not the same thing as ownership. We can regulate without owning the infrastructure. The regulation must simply ensure that it positions the entire sector to attract additional investments by making it open and market driven. Lagos State has created an integrated resource plan mapping investment needs across the energy value chain based on a 20-year energy demand forecast. This provides clarity and attracts investors looking for clear opportunities.

Instead of directly setting tariffs, the regulator should provide a transparent methodology for calculating them. This removes political influence and fosters investor confidence, preventing repeat of past disruptions.



Conclusion

PwC's Annual Power & Utilities Roundtable (14th edition)



Conclusion



It is our sincere hope that the deliberations from this roundtable will provide actionable insights for stakeholders in the industry including federal and state governments, legislators, DisCos, GenCos, TCN, financiers and all other power sector players.

The takeaways from the roundtable discussions highlights key themes, gaps, and recommendations for policymakers, regulators, industry players, and other stakeholders to consider for the development of a more robust, sustainable, and inclusive power sector in Nigeria.



Market-driven solutions:

- Emphasis on attracting investment, improving efficiency, and achieving sustainability through market-driven approaches.
- Decoupling regulated and non-regulated activities within DisCos, promoting renewables, and using data-driven decisions were suggested.



Dispute resolution and regulatory clarity:

- Call for a clear and empowered dispute resolution mechanism and predictable regulatory frameworks.
- Importance of minimising the risk of regulatory abuse from having diverse state laws and agencies to help build investor confidence.



State government collaboration:

- Importance of collaboration between states and the federal government for improved governance and efficiency.
- Regional DisCo consolidation models and coordinated regulatory frameworks were proposed.



Capacity building:

- The importance of investing in local skills, particularly in legal and regulatory aspects of the power sector.
- The need for financial institutions focused on the power sector.



Infrastructure investment and grid development

- Recognition of the need for significant investments in meters, grid expansion and upgrades, especially for renewable energy integration.



Conclusion



Gaps and considerations

- A robust national legal framework that defines clear roles and responsibilities between state and federal regulatory bodies and ensures consistent national standards.
- Specific implementation plans needed for proposals like decoupling models and dispute resolution panels.
- Balancing market forces with social responsibility to ensure equitable access and affordability.
- Robust data protection frameworks needed to address data privacy and security concerns.
- Careful consideration of funding mechanisms and governance for dedicated power sector institutions.
- Phased plans for renewable energy integration to ensure grid stability and energy security.



Recommendations

Government (National & Subnational):

- **Facilitate harmonisation:** Work towards consistent regulations across the industry, covering licensing, standards, market rules, and codes.
- **State readiness assessments:** Conduct baseline assessments to understand state needs, set goals, and ensure long-term viability of state electricity markets.
- **Stakeholder engagement:** Hold sessions to foster collaboration among market participants and achieve a sustainable NESI.
- **Legislative review:** Consider legislative amendments to the Electricity Act to avoid industry disruptions.
- **National integrated plan:** Develop a new national plan that incorporates the establishment of state electricity markets.
- **Investment incentives:** Create initiatives to attract investment into the sector, while removing barriers to entry.

DisCos:

- **Engage with regulators:** Collaborate with government and regulators to ensure compliance and advocate for supportive policies.
- **DisCo disaggregation:** Adopt a fair allocation methodology for asset division when creating subsidiaries.
- **Subsidiary strategies:** Develop strategies for each subsidiary that address their specific state contexts.



Conclusion



Recommendations (Cont'd)

GenCos:

- **Engage with government and regulators:** Work with government and regulators to understand industry plans and ensure compliance.
- **Power Purchase Agreements (PPAs):** Renegotiate contractual frameworks with PPA partners as states establish new markets.

TCN (Transmission Company of Nigeria):

- **Engage during unbundling:** Collaborate with government and stakeholders during TCN's unbundling into ISO and TSP (Independent System Operator & Transmission Service Provider) to ensure compliance.

Financiers:

- **Risk assessment and monitoring:** Continuously analyse the industry and balance risk with potential returns, focusing on operational and liquidity concerns.
- **Regulatory review:** Periodically assess and stay informed about the evolving regulatory landscape.
- **Identify opportunities:** Engage with governments at all levels to explore potential financing opportunities.





Contacts



Pedro Omontuemhen

Partner and Energy, Utilities & Resources Leader
pedro.omontuemhen@pwc.com



Bimbola Banjo

Partner, Energy, Utilities & Resources
abimbola.banjo@pwc.com



Akinoyemi Akingbade

Partner, Energy, Utilities & Resources
akinoyemi.akingbade@pwc.com



Habeeb Jaiyeola

Partner, Energy, Utilities & Resources
habeeb.jaiyeola@pwc.com



Ibubelem Ikiroma

Associate Director, Energy, Utilities & Resources
ibubelem.ikiroma@pwc.com



Ayo Akinduyite

Associate Director
Tax Reporting & Strategy
ayo.akingduyite@pwc.com



Akolawole Odunlami

Senior Manager, Strategy Advisory
akolawole.d.odunlami@pwc.com

Contact details

pwc_nigeria

PwC_ng

PwC_Nigeria

PwCNigeria

ng_pwc.enquiry@pwc.com





Thank You



At PwC, our purpose is to build trust in society and solve important problems. We're a network of firms in 151 countries with more than 360,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com.

©2024 PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.