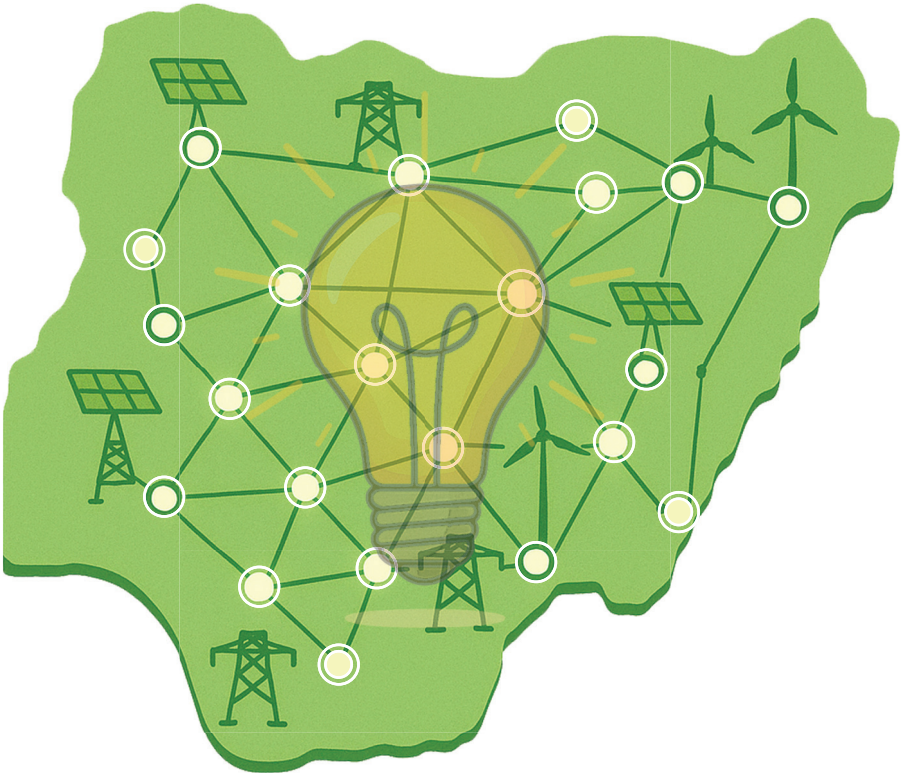
UKNiAF

United Kingdom Nigeria Infrastructure Advisory Facility

STATE ELECTRICITY MARKET HANDBOOK



UK International Development

Partnership | Progress | Prosperity

TETRA TECH

International Development

Contents

- A Toolkit for Establishing State Electricity Markets Under the Electricity Act 2023
- Bridging Nigeria’s energy access gap, one ‘middle child’ at a time
- Economic & bottom tier prospects in Nigeria’s 2023 Electricity Act: What’s your appetite?
- From Policy Dialogues to Policymaker Coalitions
- The Power Shift: UKNIAF’s lessons from Nigeria’s Integrated Resource Plan process
- Transitioning to state electricity markets

A Toolkit for establishing State Electricity Markets under the Electricity Act 2023

NIGERIA GOVERNORS' FORUM

A Toolkit for Establishing State Electricity Markets Under the Electricity Act 2023

March 2024

UKNIAF United Kingdom Nigeria Infrastructure Advisory Facility

TETRA TECH International Development

NIGERIA GOVERNORS' FORUM

UK International Development

Partnership | Progress | Prosperity

Contents

Acronyms 3

Foreword 4

About this Toolkit 5

Background and Rationale 6

Part 1: States Yet to Take Action on Electricity Act 2023 8

Part 2: States with an Electricity Policy and Considering Further Steps Under the Electricity Act 15

Part 3: States with an Electricity Law and Considering the Next Steps or Are Evaluating the Adequacy of Their Electricity Law 21

Part 4: States with an Electricity Law and Established Regulator Ready To Transition 33

Part 5: Checklist for States 35

- Key Considerations for Establishing a State Electricity Market: Scenarios and Sensitivitie 35
- Steps to Establishing a State Electricity Market 35
- Recommended Actions and Expected Outcomes 36

Indicative Matters/Topics to be Considered in Drafting an Electricity Policy or Law 40

- Additional Questions for Consideration 40

Acronyms

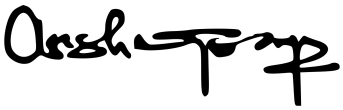
1999 Constitution	Constitution of the Federal Republic of Nigeria, 1999 (as amended)
The Act	The Electricity Act, 2023
ADR	Alternative Dispute Resolution
ALECO	Assets, liabilities, employees, and contractual rights/obligations
ASDC	Additional Successor Distribution Company
BPE	Bureau of Public Enterprises
CAMA	Companies and Allied Matters Act, 2020
CLL	Concurrent Legislative List
CPR	Consumer Protection Regulations or Customer Protection Regulations
DISCO	Distribution Company
DR	Dispute Resolution
EA	Electricity Act, 2023
ERERA	ECOWAS Regional Electricity Regulatory Authority
ERF	Electricity Regulatory Framework
FCCPA	Federal Competition & Consumer Protection Act
FG	Federal Government
IEDN	Independent Electricity Distribution Network(s)
IEDNO	Independent Electricity Distribution Network Operator(s)
IETN	Independent Electricity Transmission Network(s)
IETNO	Independent Electricity Transmission Network Operator(s)
IRP	Integrated Resource Plan
ISO	Independent System Operator
NCP	National Council on Privatization
NERC	Nigerian Electricity Regulatory Commission
NSEMSP	Nigeria Sub-National Electricity Markets Support Program

Foreword

This Toolkit is not only a timely development, it is also a brilliant and significant contribution to the body of work around the revolution happening in the electricity ecosystem. It is also a testament to the enduring partnership between the Nigeria Governors' Forum (NGF) and the Foreign Commonwealth and Development Office (FCDO) on the one hand and the United Kingdom Nigeria Infrastructure Advisory Facility (UKNIAF) on the other.

The Toolkit provides a simple and non-intimidating approach to explaining the rather complex concepts around the Electricity Act 2023. It offers in very plain language, a response to the wide range of questions that have agitated stakeholders and players, including the general public, since the passage of the Electricity Act 2023. We have no doubt that this user-friendly document provides the answers to the myriad of questions that exist at different levels, but especially at the subnational level on the realities of establishing a subnational electricity market. The Nigeria Governors' Forum is confident that the Electricity Act 2023 presents a compelling development in a looming revolution in the electricity space in Nigeria and this document provides a rare opportunity to address knotty issues around the subject and at the same time de-mystify the seeming complex content.

This Toolkit is a great resource and reference point for States to deploy as they plan their transition to independent electricity markets. We commend the UKNIAF and the NGF for this worthy initiative and look forward to more groundbreaking contributions as we jointly take on this task of coordinating a robust implementation of the Act in the States.



Asishana Bayo Okauru, Esq
Director General
Nigeria Governors' Forum

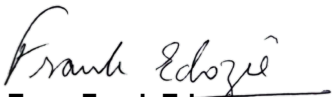
About this Toolkit

This Toolkit addresses some of the questions that various State Government representatives have asked following the passage of the Electricity Act 2023. By the combined effect of the provisions of sections 2(2), 63(1), 230 (2 – 9) of the Electricity Act, the respective States of the Federal Republic of Nigeria are now empowered to establish their own electricity markets along with regulatory structures to oversee electricity activities within their jurisdictions.

This new reality has a range of implications and introduces some opportunities, even as it also comes with challenges, all of which affect various stakeholders in the sector in different ways. Some of these opportunities and implications are addressed in this Toolkit through a methodology that combines a Question & Answer template with a checklist of relevant steps that State governments need to consider as they think through the ideal design of their various respective State electricity markets.

The questions in this Toolkit were collated from the discussions held at the Nigeria Governors' Forum/British High Commission Roundtable in October 2023, where Governors, Commissioners for Energy, and senior energy sector players from 20 States were present. Based on the Nigeria Governors' Forum/DT Global State Readiness Survey, the toolkit groups the States into the following 4 categories: States that have not yet done anything about the Electricity Act; States that already have a policy but no law yet and are considering next steps; States that have a State Electricity Law and are considering next steps; and States that have a law, a State Electricity Regulator and are considering next steps. A set of questions and answers have been provided for each category.

The practical, user-friendly approach to framing these questions and answers is intended to ensure that different stakeholders at different levels and with varying degrees of awareness can adapt the Toolkit depending on the context in which they work. We hope that this will provide some clarity and guidance that will help translate rhetoric into action across the electricity delivery value chain for the States of the Federation.



Engr. Frank Edozie
Power Component Lead
UKNIAF

Background and Rationale

On 25th – 26th October 2023, UKNIAF supported the Nigeria Governors' Forum and the British High Commission to successfully organise and conduct the first Roundtable on the Subnational Electricity Markets under the Electricity Act, 2023. The Roundtable theme was *"The Electricity Act 2023: Implications and Opportunities for State Electricity Markets*", and it aimed to enable State Governments to dialogue on potential pathways for accelerating electricity access for their citizens, as envisaged in the new Electricity Act. This was in furtherance of UKNIAF's mission to provide targeted technical assistance to support the creation and development of sub-national electricity markets in Nigeria.

The discussions at the Roundtable broadly covered a number of thematic areas, including market design; DisCos' current liabilities, balance sheet issues and the refocusing of responsibilities; State level collaboration with FG electricity sector MDAs and how it might work; investment needs and opportunities; the prospects for the formation of sub-national/regional power pools; regional and global best practices and the implications of this evolution for current energy transition arrangements. At its conclusion, participants ranked the various States in attendance according to their preparedness to undertake the evolution. Findings from this exercise highlighted disparities in the readiness and understanding amongst States of the Act itself and the possible pathways to creating a sub-national electricity market.

The crux of the Electricity Act 2023, as States contemplate taking steps towards establishing their electricity markets, lies in Sections 1(s), 2(2), 63(1) and 230(2)-(9). Particularly, navigating the specific transition processes mandated in S.230(2)-(9) requires the application of a number of cross-cutting legal, commercial, finance, technical/engineering and even political skillsets applied by policymakers and would-be regulators along with potential investors and donors in the States. Some States, admittedly very few, possess some of these resources. None, however, possesses all these skillsets in the range and depth, or a roadmap sufficient and clear enough to proceed with assurance to develop, set out and implement an electricity market design that best suits it. In addition, a number of other States may struggle due to varying levels of high-level executive commitment to the sector.

It was understood that several States are currently in the process of formulating policies and/or passing Bills. It was also understood that the States possess different levels of capability and would evolve their electricity market transition process at their own pace. Nevertheless, the State Commissioners were unanimous in requesting some formal guidance on the steps required to progress individual evolutionary steps, knowing full well that while different States must make decisions based on their contextual realities, some key actions will be generic regardless of which State is in question. It was also understood that some States may, in addition, require coordination with neighbouring States. Accordingly, at the end of the Roundtable, the State Commissioners affirmed that it would be useful for the NGF to help States develop a non-prescriptive toolkit that provides practical guidance around issues such as:

- The practical meaning of the Act for States;
- The overarching issues that the States need to consider, including:
    - An electricity market design that addresses individual State peculiarities;
    - Forms of commercial and financing frameworks that could underpin these market designs;
    - Policy, legislation, and institutions required for setting up subnational markets;

    - The opportunities for regional collaboration between States;
- The extent and type of technical and financial support available to interested States and how this can be accessed; and
- The provisions of the Act that are relevant to Nigeria's low carbon transition and how they may be applied at the State level.

Accordingly, UKNIAF is working with the NGF to produce this Toolkit. It will be domiciled at the NGF, providing all 36 States and other stakeholders with general guidance on the matters noted above that can be customised by States according to their specific circumstances. Collaborating with the NGF enables buy-in by high-level State decision-makers, particularly Commissioners responsible for Energy/Power and Governors, allowing them to thoroughly define their peculiar interests and embody these in policies and laws that are feasible and sustainable.

Informed by responses to the Nigeria Governors' Forum/DT Global State Readiness Survey, the toolkit groups the States into the following 4 categories:

a) States that have not yet done anything about the Electricity Act;
b) States that already have a policy but no law yet and are considering next steps;
c) States that have a State Electricity Law and are considering next steps; and
d) States that have a law, a State Electricity Regulator and are considering next steps.

A set of questions and answers have been provided for each category, intended to guide States in formulating their next-step actions.

A checklist of Key Considerations for establishing a State Electricity Markets, and a set of Additional Questions for Consideration are provided for further guidance to States.

Part 1: States Yet to Act on Electricity Act 2023

	QUESTION	ANSWERS
1	**What does the 1999 Constitution say about Electricity in my State?**	The 1999 Constitution of the Federal Republic of Nigeria (the "1999 Constitution") empowers States to make laws in connection with the generation, transmission, and distribution of electricity within their territories (regardless of the coverage of a national grid system in the relevant State). Specifically, provisions relating to electricity fall under the Concurrent Legislative List (CLL) and can be found in Paragraphs 13 and 14 of the Second Schedule, Part II of the 1999 Constitution (as amended). This means that as a concurrent legislative matter, both the National Assembly and the State House of Assembly may make laws for electricity, including generation, transmission, and distribution of electricity, but States may only do so in regard to electricity business conducted entirely and only within the territory of their States. Although electricity had always been an item in the Concurrent Legislative List of the 1999 Constitution (meaning both the National Assembly and State Houses of Assembly could legislate on the same), State Houses of Assembly were prior to recently, only empowered to make laws in areas not covered by a national grid system', which created huge ambiguity about what precisely States could do and effectively deterred State electricity markets from being established. The Constitution was, however, amended (The 5th Alteration (No. 17) of the 1999 Constitution) and now allows State Houses of Assembly to make laws for the generation, transmission, and distribution of electricity in areas covered by a national grid system within that State. This amendment paves the way for your State Government (through its House of Assembly) to make laws covering the entire electricity value chain within your territory, without any restriction by the Federal Government or laws made by the National Assembly.
2	**How does the new Electricity Act affect my State?**	Like the 1999 Constitution, the Electricity Act recognises the rights of your State to develop and regulate its electricity sector/market within its territory, subject to the State House of Assembly passing a law to that effect. In summary, the Electricity Act decentralises the legal and regulatory environment in the power sector and gives your State the powers, through

		relevant laws made by its State House of Assembly, to regulate the electricity-related activities within its territory.
3	**Does my State need to do anything different because of this new Act?**	No, your State does not have to do anything differently because of the Electricity Act. While the Electricity Act allows States to enact their electricity laws, there is no legal obligation or requirement to do so. Indeed, not all States will pass an electricity law. The EA, 2023, is, however, a very significant evolution in Nigeria's electricity sector, and it does require the State leadership at the highest level to think differently about electricity and how its delivery to citizens of the State can be better managed. At a minimum, States must consider electricity in a different light than it previously did. The EA compels each State to seriously consider the strategic value of having a State-regulated electricity sector. In other words, it is essential to consider if the attainment of its strategic socio-economic goals is worth the investment in the time, effort, people and expense of developing a State electricity sector The State leadership should appreciate that the State "electricity sector" comprises what we would call a "market" (the commercial supply of electricity) and the activities around the extension of access by deploying public resources (State, Federal and donors) to subsidising the extension of access to previously deprived areas of the State. Each component should be peculiarly considered by each State Government.
4	**What are the various steps to take;** **Who is responsible to take each step;** **When, ideally, should each step be taken; and,**	If your State wishes to take over the regulation of its electricity market, it needs to: a. Ideally, develop an electricity policy (which would be the result of research around its needs, plans, strategy, power needs and audits, regulatory system, financing mechanics, and investor-attractiveness, amongst other issues); b. Then, subsequently, pass a law that (amongst other things) establishes an electricity market. Such law would also be the legal basis for implementing the policy mentioned above (as policies by themselves are not justiciable or enforceable in court) c. Establish the Regulator and other relevant institutions, which could include an Independent System Operator (ISO) and

	What outcomes are to be desired from each action?	any commercial entity deemed appropriate, depending on the proposed market design. d. Set up other relevant structures to support the institutions created, and these could include emergency management systems, appropriate technology backbone, amongst others e. In accordance with Section 230, EA, 2023, deliver a formal notification to NERC and to the NCP, which triggers the mandate on both FG entities to undertake specific actions that would culminate 6 months later in the transfer of regulatory responsibility over electricity business in the State from NERC to the State regulator. f. It is germane to note that within forty-five (45) days of receiving formal notification of the enactment of the law, NERC shall draw up and deliver to the State regulator a draft order setting out a plan and timeline for transition of the regulatory responsibilities from NERC to the State regulator, which transition shall be completed not later than six (6) months from the date on which the formal notification was delivered to NERC.
5	**What is the difference between having an electricity policy and having an electricity law? Are they not the same?**	An electricity policy is not the same as an electricity law. An electricity policy spells out the overall aims, objectives, desires, and plans of the State in connection with its proposed electricity market and will cover several issues, some of which are highlighted in the checklist in Part 5. Developing an electricity policy is generally considered the precursor to making an electricity law. Electricity law is the ''vehicle'' for implementing electricity policy. Hence, the electricity law should ideally be consistent with the electricity policies of the State and evolve as the policy itself evolves. Laws are also enforceable, unlike policies which are not enforceable in court (non-justiciable). Furthermore, laws create legal rights, duties, and obligations that help enforce/ implement policies- which are themselves, just desires or expectations.

6	**Is it compulsory for my State to produce our electricity policy and law, set up our regulatory framework and establish our electricity market?**	It *is not compulsory* for your State to produce its electricity policy, pass its own electricity law, set up its electricity regulatory framework (ERF), or establish its electricity market. Your State may only wish to produce its electricity policy without passing an electricity law. However, without passing an electricity law that should expressly include establishing a regulatory framework, your State cannot legally set up its electricity regulatory framework. Where your State chooses not to pass its electricity laws, the Electricity Act 2023 will be the subsisting law for that State and NERC, its Regulator, but it needs to be noted that NERC's activity should ideally be in accord with the State's electricity policy.
7	**What types of resources do we need to do the three things above?**	Your State would require human capital, whether from within or from outside the State, to help with the development of policy/law, regulatory framework, and market. A significant amount of baseline data is also essential to undertaking realistic policy development. Data sets include demography, socio-economic indices, and the definition and status of electricity infrastructure. Your State would also need technology and collaboration with States that have moved ahead. Prior to proper set-up, it may also be necessary to have a budgetary allocation and support from civil society and academia from a research point of view. Private-sector collaboration will also be a key resource.
8	**If we set up our own electricity market, will we always have light?**	Establishing your State electricity market will not necessarily provide electricity immediately to the citizenry in the quantity and quality that they deserve. However, if well established, an electricity market could set a clear pathway to achieving reliable universal electricity access to the citizenry by catalysing investment into building and operating electricity networks across the State.

9	**Can we afford to set up our own market, given that we are not a rich State?**	A State wishing to establish its own electricity market does not need to have all the required capital hands-on. All States can establish electricity markets within their territories. The question is whether such a State can attract investments into its electricity power sector or do other things to make that market viable. A State may choose only to create the enabling market environment for the private sector to provide suitable investments and resources to the State electricity market. At the minimum, the State electricity law should provide legal and regulatory clarity, amongst other key provisions, to private sector investors who need to be assured of the safety of their investments and a return on their investment.
10	**Has any other State done this, and how did they get it done?**	Several States have either passed their electricity laws or are in the process of passing their electricity laws and taking other steps to notify the relevant bodies/ institutions of their State'' intention to take over the regulation of the electricity supply industry in their States. However, no State is yet to take over completely. Some States that have made progress include Ekiti, Ondo, Enugu, Lagos, and Edo. Enugu State has established its electricity policy and legal/regulatory framework; nominated Commissioners for the Enugu Electricity Regulatory Commission and had them screened and cleared by the State House of Assembly and is now in the process of physically establishing the Commission. We also understand that the Enugu State Government has formally notified NERC as required by S.230(2), EA, 2023, and discussions are ongoing with the prospective first licensee of the State's nascent electricity market. These are major developments that all States should watch with keen interest. The Nigeria Governors Forum (NGF) recognises that not all States will have the technical and financial resources to develop their State electricity markets. In this regard, the NGF has established the Nigeria Sub-National Electricity Markets Support Program (NSEMSP) to mobilise and provide technical assistance to States.

11	**Are there things we might collaborate with other States to do at this stage?**	Under the NSEMSP, the NGF is facilitating robust collaborations between States and the Federal Government (Federal Ministry of Power, Nigerian Electricity Regulatory Commission, the National Assembly, etc). *It is germane to note that, whilst it is feasible operationally to operate regionally with other States (e.g. nine DisCos currently operate "regionally"), constitutionally, this is not permissible as there would be interstate operations to be regulated by NERC. Regional arrangements can exist only where legal, regulatory, and constitutional changes are made.* 1. There are indeed a number of opportunities for collaboration focused on enabling State markets to be established, take off and function as smoothly as possible. Such opportunities include the following: 2. NGF is interacting with NCP via NEC (also chaired by VP) regarding setting up State subsidiaries. 3. Working together, either as States covered by specific DisCos to interface with the REA and the relevant DisCos regarding targeted interventions in their States to bring investments to provide electricity access to their various deprived communities. 4. Forming regional power pools to undertake regional IRPs and attract investment into fuel supply, generation, and transmission infrastructure to serve said regions.
12	**Where can we get the help, we need?**	The Nigeria Governors' Forum (NGF) recognises that not all States will have the technical and financial resources to develop their State electricity markets. In this regard, the NGF has established the Nigeria Sub-National Electricity Markets Support Program (NSEMSP) to provide technical assistance to States. Moreover, the NGF is actively facilitating robust collaborations between States and the Federal Government (Federal Ministry of Power, Nigerian Electricity Regulatory Commission, the National Assembly, etc) to ensure cohesiveness and sustained impact.
13	**Questions to be considered where a State decides not to establish its electricity market?**	There are a number of secondary questions to be considered where a State decides not to develop its electricity market. These questions are crucial in the light of the need to develop each State's economic capacity for development. These questions include the following: i. If the State chooses not to establish its electricity market now, WHEN does it envisage to do so?

ii. With NERC continuing to regulate electricity business in our State, are we nevertheless entitled to determine the policy framework within which NERC does this?
iii. What impact will choosing not to create a state electricity market have on the State as a whole?

We note specifically, in the above regard, that in an ideal situation, ALL STATES (whether such state intends to develop its electricity sector or not) should have a State electricity policy that answers the question "Do we need to have an electricity market now?" and proceed to enact policy initiatives in accord with whatever answer is given in such policy.

Part 2: States with an Electricity Policy and Considering Further Steps Under the Electricity Act

QUESTIONS		ANSWERS
1	**We already have an electricity policy framework document in my State. Is there a need to enact a new electricity law?**	Whilst the EA permits your State to develop policies and frameworks with respect to the generation, transmission, and distribution of electricity within its State, there is no obligation for your State to make its own laws in this regard. The above notwithstanding, it is ideal that where an electricity policy framework exists, a law should be passed to implement it. As such, until a State establishes its own electricity market laws, NERC will continue to regulate electricity business exclusively within that State. States such as Ekiti, Ondo, Edo, and Enugu have already enacted electricity market laws and may commence regulation of their markets upon completing the process stated in the EA and itemised in Part 1 above. Lagos and Kaduna, on the other hand, have submitted their respective electricity bills to their legislatures. However, these bills are yet to be passed. While the scope of the EA extends to all parts of the Federation, it recognises the State House of Assembly's power to legislate on electricity within the boundaries of their territory and clearly States that such laws made within the scope of the Constitution (as amended), shall not be invalidated by the Act [Section 2(2) of the Act]. However, in States without such laws or legal and institutional frameworks for regulating the licenses or related electricity services, and which rely on the national grid for their electricity operations, NERC will continue to regulate. The Federal regime will also continue to apply to the supply of electricity across State lines and cross borders with other countries.

2	**If we decide to establish a State electricity market and develop a State electricity policy and law, what types of issues should these cover?**	Your State policy should provide a bird's eye view of the plans and strategy for your electricity market and the undertaking of all electricity business within that market. It should also indicate market design, institutions, stakeholders, and the attendant administrative, commercial, regulatory, and financial frameworks within which they are to function, define strategic objectives and address the various issues that are likely to arise on the path to attaining those objectives. Your State law should then define specific mandates that enable or empower specific stakeholders to work to attain those objectives. This includes making provision for a regulator and other relevant institutions and public sector bodies. Your State policies and laws should also clearly establish the various antisocial acts and behaviour in the sector that are criminalised; and the law must be specific about the punishment to be imposed on offenders for such behaviour. In relation to offences and consequent punishment already stated in the Act, the State law may repeat them verbatim and impose the same or stricter punishment. The State law may also establish other offences separately. The State may also establish its electrification agency which will be focused on ensuring that State funds are provided to ensure the electrification of the State's identified "unserved and underserved" areas. Furthermore, your State law should be clear, consistent, and investor-friendly by guaranteeing tariffs, anti-expropriation, allowing for international arbitration and such other items that investors will find attractive. The Act can also be a guide to those other items which the State may want to include in its policy and law.
3	**Does having an electricity law and State Regulator mean that NERC and other federal executive, operating and/or regulatory bodies will no longer be involved in the electricity sector in our State?**	NERC and other federal institutions will have little to no involvement in your State once you have fully taken over the establishment and regulation of the electricity market. The Act envisions a National Electricity Market regulated by NERC co-existing with State Electricity Markets in each State with their own Electricity Regulators. Therefore, power generation, distribution, and transmission projects will fall under any of three (3) categories of regulation:

		The first category will be electricity business carried on within the geographical boundaries of a State that the State's electricity regulator shall regulate. The second category will be the electricity business carried out between two or more states, which NERC shall regulate. The third category covers projects within the geographical boundaries of a State that is yet to establish its own electricity regulatory framework, in which case NERC shall continue to regulate until such a framework is in place, at which point S. 230(2)-(9) of the Act shall apply. Similarly, in relation to technical standards regulated by NEMSA, as with NERC, this will continue until such time as the State creates its equivalent of NEMSA. This may be the State regulatory agency or a separate entity.
4	**Is private investment important in State electricity markets, and what types of incentives might attract investors to our State power sector?**	Yes, private sector investment is critical for the success of your State's electricity market. The quantum of financing typically needed to deliver 1MW of capacity across the electricity value chain (fuel supply, generation, transmission, and distribution) typically ranges between $3m - $4.5m depending on a number of variable factors. Similarly, the commercial and financing transactions necessary to raise such capital and sell the output into the State market are also complex and interconnected and require the application of project advisory capacities that many State Governments do not possess in-house and capital that they do not have available and cannot raise. It, therefore, becomes imperative for literally every State, just as it has been with the Federal Government in the national wholesale market, to set up their markets in such a way that private sector operators and capital providers are incentivised to invest in them. Incentives for investors include: • Provision of/support for credit enhancement instruments. These could include liquidity backstop instruments to successor DisCos obligations and other instruments to mitigate risks which are out of the control of the project sponsor. • Template land lease/acquisition process for power infrastructure, including ROW • Pre-negotiation with the Federal Government to obtain specific incentives on federal-level financial statutory obligations such as applicable taxes, duties, etc.

		• State tariff framework, which offers a competitive return to the investor • Simplification of the entire regulatory process and minimisation of the cost of doing business and/or obtaining these approvals.
5	**What types of electricity market designs are feasible for Nigerian States, and when should we start to consider what the ideal design for my State would be?**	In considering the type of electricity market design that a state will undertake, it is essential for such a state to consider the appropriate models to serve its urban populations and its deprived (unserved/underserved) populations, respectively. These factors should be taken into critical consideration as early as the policy-making stage of the State. A State may require more than one (1) design model, depending on its demographics, socio-economic status and, possibly, landmass. Typically, there are two separate models, which are the private models and the State-enhanced (or public model), for the urban and the deprived (unserved and underserved) populations, respectively. For the Urban population, the private model is considered the best approach as the State takes on a limited role (if necessary) in creating credit enhancement instruments. For the deprived populations, on the other hand, we note that State funds should be employed to reduce the cost of capex in programmes that collaborate with REA, donors, licensees, and the communities themselves.
6	**How can we ensure that we will make revenue by setting up our electricity market and having our State regulator?**	It is essential to state that the establishment of State electricity markets should not be used as an avenue by States to prey on licensees to enhance their internally generated revenue. Where such is the case, investors may be discouraged from participating in such electricity markets. States should rather consider that a significant increase in electricity supply will ultimately increase the socio-economic development of such a State wholistically. This is because it will ensure improvement in production, investor-friendly environments, and reduce business costs, amongst others. Ways your State can make revenue include:

		• One-off revenue sources which include the issuance of licences (generation, transmission, and distribution). • The benefits of State-level statutory financial obligations (such as PAYE) would accrue to the State governments. • Regulator-imposed fines and annual operating fees, too (These, however, do not compare to efficiency savings gained from reduced dependency on self-generation and the increase in productivity from increased kilowatts per hour consumed per capita. • Furthermore, there are indirect financial benefits when the power sector improves the ease and cost of doing business. More businesses will be profitable and there will be more taxes for your State.
7	**Are there things we can collaboratively do with other States at this stage?**	The EA does not permit interstate electricity distribution. However, States may collaborate on the following: • Collaborations needed to develop public sector human/management/regulatory capacity; to ensure DisCos are decentralised and to ensure that FG officials and MDAs do not act to delay States that wish to go ahead. • Shared knowledge which will support the establishment of frameworks, regulations, and laws in the power sector. • Rural electrification initiatives. • Upon the establishment of States' electricity markets, States may collaborate to form regional power pools, although these will be regulated by NERC
8	**Where can we get the help, we need?**	Donor technical assistance programs are available to provide support. This Toolkit also provides some guidance. You may also seek the assistance of States that have made appreciable progress. States need to undertake a serious-minded and realistic political economy assessment exercise and critically analyse the attitude of ALL relevant FG MDAs/entities (not only NERC) to determine if the attitude of each institution is supportive, opposed, or neutral, and develop their policies and plans accordingly. We also note that the States' critical needs at this stage are technical assistance for reform and market restructuring and contributions to "rural electrification" funds. The Federal Government's capacity in both is rather limited (especially as it concerns providing technical assistance for reforms) and the

		implications of this must be clearly analysed and mitigated by each State as early as possible.

Part 3: States with an Electricity Law and Considering the Next Steps or Are Evaluating the Adequacy of Their Electricity Law[1]

QUESTIONS		ANSWERS
1	**Now that we have an Electricity Sector Framework, what other things do we need to consider?**	Your State will need to check that all or most of the below have been appropriately put in place: a. A skeletal conceptual design of the electricity market. b. A demand study or preferably an integrated resource plan that maps demographic and socio-economic data with engineering data and thereby enables credible financial/investment plans to be developed c. An Electricity Market Policy Consultation Committee to map out and flesh out the implementation of (a) above, which may entail consultations, explanatory workshops, comments, and feedback for the development of the final draft of the conceptual market design policy d. Preparation and Approval of the final draft of the State's Electricity Policy and Electricity Market Transition Plan. This may include developing a transition plan if diverting from a federal electricity market structure to a State electricity market structure. e. Legal and Institutional Framework based on the electricity plan/policy, which may necessitate constituting a committee in this regard or expanding the referenced committee in (c) above. The consultation process will also be critical at this stage. f. Draft and follow the legislative process for the passage of the relevant legislation, i.e., the State Electricity Law. g. Set up relevant institutions mandated by the State Law. h. Roadmap for implementation of the electricity market

[1] The term "Electricity Sector Framework" as used in this document refers to the establishment of relevant institutions (including the regulator) together with an electric power policy and the primary law. What has been established by a State before now may or may not be adequate.

		i. Implementation of the transition plan j. Formulate subsequent regulations, market rules, codes, etc., based on the legal and institutional framework established. k. Continuous Training and Capacity building for relevant institutions, market participants and service providers l. Declaration of electricity market start date. *It must be noted, however, that the market will have to go through such stages as may be indicated in its electricity market transition plan in commencing its operations.* It is important that the formal process set out in the Electricity Act (as surmised below) of informing NERC, the BPE and the relevant distribution company in the State of your readiness to take over the regulation of the electricity market in your State must be followed.
2	**Having established an Electricity Sector Framework, what does the Electricity Act require us to do?**	**Steps Required and the Relevant Provision(s) of the Electricity Act** **1.** The House of Assembly enacts a law formally establishing the State electricity sector and all relevant public and private sector entities clearly defined and stated to undertake for the State all aspects of generation, transmission, system operation, distribution, supply, and retail of electricity, including designing and implementing plans for extending access to the unserved and underserved areas of the State. **Sections 2 (2)(a); 63; 230 (2) EA, 2023** **2.** Deliver an appropriately worded formal notification of the enactment of the electricity law to the Commission (NERC), and request to transfer regulatory authority over electricity operations in the State to the State regulator. **Section 230 (2)(c) EA, 2023.** **3.** Deliver the same formal notification to the successor electricity distribution licensee, with a copy to the National Council on Privatisation through the Bureau of Public Enterprises, requesting them both to ensure that the successor company takes the following steps **(Section 230(2)(d) EA, 2023):** • Within 45 days of receiving formal notification of the enactment of the law in the relevant State, NERC should draw up and deliver to the State regulator a draft order

		setting out a plan and timeline for the transition of regulatory responsibilities from NERC to the State regulator. This transition should be completed within 6 months from the date on which the State has made a formal notification. **Section 230(3) EA, 2023.** • The successor company responsible for electricity distribution in that State is required to, within two months of receiving a formal notification from NERC, incorporate a subsidiary electricity distribution company under the Companies and Allied Matters Act (CAMA); and transfer the assets, liabilities, employees, and relevant contractual rights and obligations of the successor company in that State. **Section 230(4) EA, 2023.** **4.** Establishment of a State electricity market. **Sections 2 (2)(c)(e); 230 (2) EA, 2023.** **5.** Grandfathering of licenses previously granted by NERC to entities operating entirely within the State. This is a vital part of the transition plan but is worth listing and mentioning separately because it is a vital element of the transition—section **63 (2)(b) EA, 2023.** We note that it is essential for States to reflect very carefully and determine their respective approach to existing licensees. Whether such licences should continue as is (grandfathered) or the licenses should be re-issued with terms, conditions, and tenures anew.
3	**Apart from setting up institutions and agencies, what other steps do we need to take at this stage?**	1. States that elect to create their own electricity markets must follow the process within the Electricity Act 2023 (EA) for moving from Federal (Nigerian Electricity Regulatory Commission – NERC) to State regulation 2. Evaluating the scope of the State law vis the Toolkit 3. Develop an Integrated Resource Plan (IRP) where this has not been done 4. Re-orientation and Creating Awareness of the State Policy and Law 5. Stakeholder Engagement for Potential Licensees and Market Participants

		6. Develop a Public Private Partnership Framework to Attract Investments 7. Review the adequacy of existing dispute resolution mechanisms 8. Develop robust capacity-building systems 9. Propose a structure for regional electricity operations 10. Draft and review Regulations/Rules/Codes for rollout within the State 11. Develop a structure for intra State Market Operator (MO) /System Operator (SO) / Transmission System Provider (TSP) 12. Develop consumer protection regulations 13. Develop Health & Safety Codes 14. Draft a robust and unambiguous Licensing Regime 15. Develop a framework for distribution operations within the State 16. Ascertain the debt position of additional successor DisCo and develop an MDA Debt Payment framework for outstanding debts and future energy usage 17. Design Franchise, Mini-grid, IEDN/ IETNO, Investment in Electricity Networks mechanisms 18. Design Tariffs and Subsidies methodology 19. Incorporate Renewable Energy (RE) into the energy mix 20. Develop a framework to incentivise Metering 21. Create a framework for implementing rural electrification and collaboration with REA. 22. Find avenues to efficiently deploy Technology
4	**Overall, what are the things my State should do in**	1. **States that elect to create their own electricity markets must follow the Electricity Act 2023 (EA)** process for moving from Federal (Nigerian Electricity Regulatory

establishing its electricity market

Commission – NERC) to State regulation. The previous question has outlined the requirements of the EA for a State that intends to exercise its right to create a State electricity market. An interested State must then follow through on the steps mandated by S.230 (2) – (10), as explained above, i.e.:

a. Deliver a written notification to NERC that it has (i) enacted a State law to provide for the establishment of a State electricity market, (ii) established a State electricity regulator and appointed a governing body and staff for the entity
b. Request NERC to transfer regulatory authority over electricity operations within the State to the State regulator
c. Deliver a written notification of the events in (a) and (b) above to the relevant successor electricity distribution licensee in that State with a copy to the National Council on Privatization (NCP) through the Bureau of Public Enterprises (BPE) requesting that the successor DisCo takes the steps in (e) below
d. Engage with NERC to obtain a draft order outlining the plan and timeline for the transfer of regulatory responsibilities from the Commission to the State regulator. The Draft Order is expected to be issued within 45 days of (a) above, and the transition plan from Federal to State regulator shall be completed no later than 6 months from the date that the State delivers the formal notification in (a) above to the Commission.
e. The relevant successor DisCo within the State is required to incorporate an additional successor company subsidiary that would take over all the assets, liabilities, employees, and contractual rights/obligations (ALECO) of the successor DisCo within the State.
f. This incorporation and transfer of ALECO is expected to be completed within 2 months of the successor DisCo receiving a formal notification from NERC.
g. Engage with the NCP/NERC, who are required to ensure that (e) above is done timeously.

2. **Evaluate the scope of the State Law compared with the advice proffered in the Toolkit**: where a State has already **created** its own Electricity Sector Framework; the State should examine the contents of the extant electricity policy, law, and institutions against the provisions of the Toolkit to

determine the adequacy of the existing framework and identify gaps that would form the basis for any future amendments either or both the extant Policy and Law.

3. **Develop an Integrated Resource Plan (IRP) where this has not been done**: An IRP is a document that assesses the State's current and future electricity needs and provides a comprehensive plan to meet these needs. An IRP is detailed enough to identify the requisite investments in the electricity sector, focusing on optimising the investments that allow the State to meet the energy demand as efficiently as possible.

4. **Create Awareness of the State Policy and Law through a deliberate stakeholder engagement and public communication plan:** The State must be prepared to explain the State **Electricity** Framework, which comprises the policy, law, and institutions, to the different stakeholders (including the general public) so that they become familiar with the contents. These explanations should extend to the areas or activities that will still be covered by federal regulation, such as electricity generation within the State that is sold interstate.

5. **Undertake Stakeholder Engagement with Potential Licensees, Market Participants, Investors and Financial Intermediaries**: Creating a competitive electricity market requires bringing together multiple players and stakeholders. As such, the State must explain its plans to transition to State regulation, how this would differ from the existing regulatory framework, and the roles that each stakeholder would play under the State regulatory framework.

6. **Develop PPP Framework to Attract Investments:** Attracting private investments into the electricity market should be one of the objectives of the State when creating a subnational electricity market because this will allow the State to focus more on creating an enabling environment. As such, a legal/ regulatory framework within or outside the State electricity law should enable the flow of funds into the State. This framework should be brought to the attention of target investors through roadshows and other means.

7. **Evaluate Extant Dispute Resolution and Administration of Justice Mechanisms:** Closely related to attracting investments into the State in general and the electricity

sector, in particular, is the need for State governments and institutions to continuously demonstrate respect for the sanctity of contracts and the rule of law. The dispute resolution (DR) mechanisms should be easily accessible and affordable, reflect fair hearings, and promote timely dispensation of justice. State DR mechanisms should also recognise and incorporate alternative dispute resolution (ARD) mechanisms. A State should review its framework for the administration of justice to eliminate bottlenecks and delays.

8. **Design Structures for Capacity Building:** Due to the technical nature of the electricity sector, competent personnel will be required to provide oversight of the relevant institutions apart from the State electricity regulator. In addition, **continuous** professional development will be required to bring personnel up to speed on global best practices, trends, etc. A State should be prepared to collaborate with qualified domestic and foreign training institutions to develop and sustain the capacity of its personnel. Building capacity should commence as part of the State's transition plan.

9. **Delineation of Intra–State Electricity Operations:** While all intra-state electricity operations will be regulated within the State, the Commission will still regulate inter-State operations.

10. **Propose Regional Electricity Collaboration:** The State can also propose a draft framework for Inter-State Collaborations for endorsement by the Commission and contiguous States. The Commission will necessarily regulate these because they fall outside the scope of the State electricity market. However, note that this step is not on the critical path to creating a State market.

11. **Review/Draft Regulations/Rules/Codes:** Apart from the State Electricity Framework, the State will require numerous rules, codes, and regulations to provide details that are not covered by State law and policy. States should, therefore, immediately commence a review of the extant rules, codes, and regulations issued by the Commission to domesticate and adopt them upon transfer of regulatory responsibility from the Commission. This will accelerate the transition process since a vacuum must not exist after regulatory responsibility is transferred

12. States should ensure cohesion between the laws, regulations, rules, and codes at the federal and subnational levels for various reasons, including safety, creating regional markets, and attracting investments.

13. **Design the framework for the intra-State Market Operator (MO) /System Operator (SO) / Transmission System Provider (TSP):** States creating their electricity markets will need to design frameworks for market settlement and dispatch of energy for intra-state electricity operations. Similar to (10) above, this step is not a prerequisite to creating a State market at the outset.

14. **Develop Consumer Protection Regulations:** Electricity is a product that needs to be handled carefully to prevent harm to consumers. As such, strong consumer protection regulations and structures for escalating complaints and enforcing compliance should be established by States. States have the benefit of reviewing the existing frameworks under the NERC Customer Protection Regulations 2023 and the Federal Competition & Consumer Protection Act.

15. **Review and Adopt Health & Safety Codes:** Closely related to the issuance of standard codes/ regulations and consumer protection but important enough to deserve special mention is the issue of safety standards, which must be developed and enforced by the State regulator to protect life and property. States should work with the Commission and the Nigerian Electricity Management Services Agency (NEMSA) on the domestication of NEMSA services within the State in addition to State-initiated frameworks.

16. **Develop Licensing Regime**: The State must create a transparent and unambiguous licensing regime that avoids rate seeking but promotes harmonious collaboration between licensees/ market participants in generation, transmission, distribution, and trading intra and inter-state. Activities and operations initiated, conducted, and concluded within the State fall within the regulatory ambit of the State regulator

17. **Distribution Operations**: As a State transitions from federal to State regulation, the State, in conjunction with the additional distribution company, should commission a customer enumeration and asset identification/ mapping to

ascertain, at handover, the customer population within the State; assets belonging to the additional successor DisCo and those (if any) belonging to the State. The outcome of this exercise will facilitate accurate decision making by the State government and Regulator

18. **Ascertain Debt Position/ Develop Framework for MDA Debt Payment:** The State must understand the debt position of the additional successor DisCo post regulatory handover, the contribution of the State government and its agencies to the debts and provide a framework for how these debts will be settled timeously.

19. **Design Frameworks for Franchises, Mini-grid, IEDN/ IETNO, and Investment in Electricity Networks:** States should design frameworks for franchising, mini-grids, independent electricity distribution networks (IEDNs), independent electricity transmission networks (IETNs) and investments in electricity networks that provide opportunities for ring-fenced investments.

20. **Design methodology for cost-reflective Tariffs and Subsidies**: To ensure that a viable State electricity market is established, the State regulator should develop a robust methodology for determining and adjusting cost-reflective tariffs.

21. **Incorporate Renewable Energy (RE) into the State's energy mix:** The State policies and laws should incorporate RE into the energy mix for the State in view of climate change and the global transition to cleaner energy sources, Nigeria's net zero targets (2060) and the significant funding available for clean energy projects.

22. **Metering:** This is key to the State electricity market viability. The State should have strong policies, interventions and regulations that incentivise investment in metering.

23. **Rural Electrification:** The State should develop a framework for increasing energy access to unserved and underserved communities by promoting rural electrification whilst harnessing the resources available through collaboration with the Rural Electrification Agency

24. **Use of Technology:** State should find ways to incorporate technology into the design of their electricity markets in ways

		that promote efficiency, eliminate errors and manual processes where possible. 25. **Implementing the State Policy and Law:** Upon transfer of regulatory responsibility to the States, the institution created by the State (for this purpose) must commence the orderly implementation of the contents of its policy, law, and IRP.
5	**Does NERC have a role to play in setting up any of our institutions?**	Yes, NERC has a role in setting up your Regulator and ensuring that your State's distribution company is correctly set up. Section 230 (2) of the Electricity Act provides that 1. Within 45 days of receiving a formal notification that a State has enacted its electricity law, NERC is required to *draw up and deliver to your State regulator, a draft Order setting out a plan and timeline for the transition of regulatory responsibilities from the Commission to the State regulator.* This is required to vest the State's Regulator with the regulatory powers and responsibilities needed to implement the State's electricity law. **2.** NERC is also required to give formal notification to the successor company responsible for electricity distribution (the existing "DisCo") in the State to**:** a. Incorporate a subsidiary additional electricity distribution company under the Companies and Allied Matters Act ("the additional successor company") b. Transfer thereto the assets, liabilities, employees and the relevant contractual rights and obligations of the successor company in that State. This is necessary to ensure that electricity distribution is seamless, notwithstanding the transfer of the assets and interests of the DisCo to the additional successor company.
6	**Are there things we can collaboratively do with other States at this stage?**	The EA does not permit interstate electricity distribution. However, States may collaborate on the following: • Collaborations to develop public sector human/ management/regulatory capacity; to ensure DisCos are decentralised and to ensure that FG officials and MDAs do not act to delay States that wish to go ahead. • Shared knowledge which will support the establishment of frameworks, regulations, and laws in the power sector. • States may collaborate on rural electrification initiatives**.**

		Upon the establishment of States' electricity markets, States may collaborate to form regional power pools, although these will be regulated by NERC
7	**Where can we get the help, we need?**	The Nigeria Governors' Forum (NGF) recognises that not all States will have the technical and financial resources to develop their State electricity markets. In this regard, the NGF has established the Nigeria Sub-National Electricity Markets Support Program (NSEMSP) to provide technical assistance to States. Moreover, the NGF is facilitating robust collaborations between States and collaborations with the Federal Government (Federal Ministry of Power, Nigerian Electricity Regulatory Commission, the National Assembly, etc). We recommend that once the State establishes its electricity framework with an investment-enabling environment, it can also begin soliciting foreign and indigenous investments while establishing good collaboration with other States. Other specific agencies that can also be of great assistance in this regard include: • **The Federal Regulator (NERC**) for collaboration (as may be applicable). The Commission is available to offer guidance to States that opt to transition to the State regulatory authority. • The **Commissioners for Energy Forum**: NGF will include States that have transitioned to State electricity markets and can share their experience • Other **regional regulatory authorities across Africa** that are similar to ERERA. • **United Kingdom/ Nigeria Infrastructure Advisory Facility (UKNIAF**) programme comprising of two main components: Power and Infrastructure Finance aimed at enhancing Nigeria's capability in planning, financing, implementing, and sustaining climate-smart infrastructure. • **The World Bank Power Sector Recovery Operation (PSRO)** focused on enhancing the reliability of electricity supply, attaining financial and fiscal sustainability, and improving accountability. • **USAID Power Africa Program** aims to achieve four primary objectives: boosting private investment; enabling new off-grid connections to cleaner power sources; enhancing the enabling environment for private sector engagement in the power sector; and enhancing liquidity across the power sector.

- **German Cooperation Nigerian Energy Support Programme** aimed at enhancing reliability and environmental sustainability of electricity supply by focusing on improved data management and electrification planning.
- Private energy consultants
- **External donors and funding agencies such as the National Association of Regulatory Utility Commissioners** who can provide Technical Assistance in the set-up process of the State electricity markets.

Part 4: States with an Electricity Law and Established Regulator Ready To Transition

	QUESTIONS	ANSWERS
1	**Now that we have an electricity sector framework and are ready to withdraw from NERC's oversight, what does the Electricity Act require us to do next?**	The State government should: 1. Deliver a formal notification to NERC that it has enacted a law to provide for the establishment of a State electricity market and, has established a State electricity regulatory authority, and 2. Deliver formal notification of the enactment of the law and establishment of the regulatory agency to the relevant successor distribution company, with a copy to NCP via BPE, requesting them to ensure that the company, upon receiving formal notification from NERC, within two (2) months establishes a subsidiary company and transfers its assets, liabilities, employees and contractual rights and obligations in the State to that subsidiary company.
2	**What specific resources do we need to equip our State Regulator and other relevant institutions with?**	Personnel with the necessary legal, economic, financial, technical and communications capabilities and an adequate understanding of electricity markets and regulation
3	**Are there things we can collaboratively do with other States at this stage?**	Yes. Collaboration with other States is desirable to promote a reasonable consistency of approach and to explore the potential for sharing resources. There is an ongoing legal obligation to foster beneficial relationships between State regulatory agencies.
4	**Is there any need to organise further stakeholder consultations at this stage?**	In the initial stages, the key relationships will be with NERC, NCP/BPE and the relevant distribution company, but good working relationships with other sector players will be important for the ongoing operation of the State electricity market, and it will be desirable to keep them abreast of developments.
5	**Does NERC still have any relevance to us? If the answer to the above is**	Yes, NERC will continue to regulate the national wholesale electricity market, i.e., the inter-state trade of electricity or trade across State borders. NERC and NEMSA will also continue to be

	yes, what is NERC's relevance?	responsible for technical regulations where the State makes no such regulations. NERC is also obligated under S.230(10) to work with State regulators to establish a formal platform for mitigating regulatory risk at both national and State levels. Apart from its role in establishing the State market, NERC will have an ongoing role in regulating the wholesale electricity market and influencing policy and standards across the sector.
6	**Are other institutions previously relevant to our electric power needs as a State under the centralised regime still relevant?** **If the answer is in the affirmative, what institutions are relevant, and what are their relevance?**	Yes, to the extent that your State or market participants transact outside its territory. For example: a. The Nigerian Electricity Management Services Agency (NEMSA) is responsible for standards and safety that apply throughout Nigeria. b. The Rural Electrification Agency (REA) is responsible for extending mini-grids and standalone devices to areas far flung from the grid. More broadly, the State will continue to be affected by national energy and environmental policy.
7	**What types of innovative measures might we adopt to get electricity to more people in the State?**	There may be scope for smart systems based on decentralised generation. Innovative approaches to financing may also be feasible.
8	**Where can we get the help, we need?**	The Nigerian State Governors' Forum has established a Power Desk within the NGF Secretariat to advise State governments. The Nigeria Sub-Electricity Market Support Program (NSEMSP) supports States in the development of electricity structures and markets.

Part 5: Checklist for States

Key Considerations for Establishing a State Electricity Market: Scenarios and Sensitivities

1. Integrated Resource Planning: [An IRP can/may also be initiated AFTER developing the electricity policy and passing its electricity law. *It is preferable for the law to create institution(s) tasked with creating the IRP*].
2. Development of Electricity Policies that will serve as directional maps in setting up the State's electricity market and stipulating the following;
    a. market design and the nature of State regulation
    b. sector funding
    c. gender issues
    d. energy/ fuel sources
    e. investment promotion
    f. energy transition issues
    g. sustainability
    h. bird's eye view of what the sector should look like as it matures, together with an outlook
3. Development of a competitive electricity market;
4. Enacting fair electricity laws that promote local and foreign investment, Public-Private Partnerships, federal and State collaboration, give full protection to consumers, and cohesion;
5. Upholding existing contracts, which will give the sub-national governments credibility with future investors; (It is essential to note, per the Electricity Act, that the transition process does not impose an obligation on States to uphold such contracts; however, it is advisable to do so).
6. Stakeholder engagements;
7. Adoption of a cost-effective tariff and pricing structure;
8. Ensuring proper procedures for adjudication of disputes;
9. Managing overlaps amongst policies, laws, regulations, rules, and market practices;
10. Promoting energy access and rural electrification using conventional sources of energy and more renewable energy sources to promote Nigeria's Energy transition;
11. Moderate State involvement in key aspects of the electricity value chain;
12. Ensuring local content involvement; and
13. Issues relating to engineering, commercial operations, finance/accounting, legal/regulatory compliance, and HR arising from the decentralisation of DisCos/ setting up of State subsidiaries that fall outside the direct control of State executive or legislative bodies yet still significantly affect them. The State electricity MDAs have the right to be kept informed about the progress of resolving these issues.

Steps to Establishing a State Electricity Market

1. Develop and approve the State Electricity Policy (Governor and State Executive Council). The Ministry, Department, Agency, or such other similar body established by the State ("MDA") in charge of electricity should take the lead in preparing the policy document.
2. Start the drafting process for the State Electricity Bill. The core drafting team should include the following:
   a. State Ministry of Justice
   b. State MDA responsible for electricity
   c. State Ministry of Finance/Economic Planning
   d. Ministry of Rural Development (where applicable)
   e. State Investment Agency (if applicable)
   f. State Rural Electricity Board (if applicable)
   g. Internal and External technical resource persons (where deemed necessary)
   h. States are also advised to make ample recourse to the NGF to assist in this regard.

3. Hold stakeholder engagements on the draft Electricity Bill and make necessary changes to the draft Electricity bill
4. State Executive to submit draft Electricity Bill to House of Assembly for the legislative process to commence
5. Pass the Electricity Bill by the House of Assembly and sign the bill into law
6. Establish a State Electricity Regulatory Commission as prescribed by the State electricity law.
7. Recruit Commissioners and staff of the State Electricity Regulatory Commission and start them on relevant capacity development programmes as soon as possible.
8. Notify NERC, BPE/NCP, and Successor DisCo of the passage of the State electricity law and the formal establishment of the State Electricity Regulatory Commission as prescribed by the Electricity Act 2023.
9. Issue transition notices to NERC to transition the electricity regulatory framework to SERC. Transition notices are to be copied to the BPE/NCP and the Successor DisCo; and develop a Plan B on what to do if NERC chooses not to collaborate with the State in the transition process and deliver a draft transition workplan/Order to the State regulator.
10. Develop licensing regulations and other regulations for the market
11. Develop market rules for the State Electricity Market
12. Issue licenses to eligible Licensees as provided by the State electricity law, under a transparent licensing process
13. Commence full market operations with the commencement of licensing activities of State market players

Recommended Actions and Expected Outcomes

Action to Take		Party responsible for the Action	When it is to be taken	Expected Outcome
1	**Develop and approve State Electricity Policies**	• State Ministry of Power / Energy • State Executive Council	Ideally, before commencing drafting of the State Electricity Law	State Electricity Policy Document
2	**Enact a State Electricity Law**	• State Ministry of Justice • State Ministry of Power / Energy • State Ministry of Finance/Economic Planning • Ministry of Rural Development (where applicable) • State Investment Agency (if applicable) • State Rural Electricity Board (if applicable) • External technical resource persons (where applicable) • Stakeholders in the electricity sector within the State • State House of Assembly		Gazetted State Electricity Law
3	**Establish and set up a State Electricity Regulatory Commission (the "SERC")**	• State Ministry of Power • State Executive Governor • House of Assembly (to confirm nominees for Commissioners if so, provided in the law)	Within the period established by the State Electricity Law	Appointed Commissioners for the SERC
4	**Set up other institutions established by the State Electricity law**	• State Executive Governor	Within the period established by the State Electricity Law	State Electricity Board
5	**Give formal notice to NERC and request that NERC transfer regulatory authority over electricity operations in the**	• SERC	After the establishment of SERC	Post Transition notice

Action to Take		Party responsible for the Action	When it is to be taken	Expected Outcome
	State to the State regulatory authority.			
6	**Deliver formal notice of the above to the relevant DisCo and NCP (via BPE)**	• SERC	After the establishment of SERC	
7	**Receive a transition plan and timeline for the transition of regulatory responsibilities from NERC to the State regulator.**	• NERC	45 days	Transition plan and timelines from NERC
8	**Develop a Plan B on what to do if NERC chooses not to collaborate with the State in the transition process**	• SERC	Prepared upon the delivery of a formal notice notice of the above to the relevant DisCo and NCP (via BPE). To take effect upon the failure of NERC to transfer regulatory authority to SERC	
9	**Conclude takeover regulatory responsibilities from NERC**	• SERC • NERC • DisCo	6 months from delivery of formal notice to NERC	
10	**Issue new license to subsidiary DisCo**	• SERC	Upon conclusion of step 8	New license
11	**Develop licensing and other regulations for the market**	• SERC		
12	**Develop market rules for the**	• SERC		

Action to Take		Party responsible for the Action	When it is to be taken	Expected Outcome
	operations of the State Electricity Market	• Ministry of Energy/Power		
13	**Issue licenses to eligible Licensees as provided by the State electricity law, under a transparent licensing process**	• SERC		New licensees

Indicative Matters/Topics to be Considered in Drafting an Electricity Policy or Law

1. Preliminary Provisions
2. Specific Policy Objectives and the Ways and Means for Attaining Them
3. State Electricity Market Institutions, Players and their Roles and Relationships
4. The Vital Elements and the Development of a Credible, Sustainable State Electricity Market
5. Establishment, Functions and Powers of the State Electricity Regulatory Entity
6. Generation of Electricity
7. Transmission of Electricity
8. Distribution And Supply of Electricity
9. Tariff Methodologies
10. Electricity Subsidies and their Application
11. Gender, Poverty and Social Inclusion
12. Citizens'/Customers' Rights and Their Protection
13. The Identification of Unserved and Underserved Areas of the State and the Methodology for their Electrification
14. Climate Change, Renewable Energy, Energy Efficiency, and the Energy Transition
15. Offences and Penalties
16. Miscellaneous Provisions

Additional Questions for Consideration

Below are certain areas considered crucial in establishing State electricity markets; but the State may not be the most appropriate party to address them. However, these questions require critical consideration and may fundamentally affect the pace of the State's evolution to the establishment of its electricity markets. They are not exhaustive but are highlighted to encourage States to take them into account and consider how to get the relevant FG MDAs to implement answers to them. They include:

1. Establishing technical boundaries between State subsidiaries;
2. Apportionment amongst the Additional Successor DisCos constituent subsidiaries of staff and movable stock/assets and the criteria and qualifications to be applied in answering these questions;
3. Setting up opening accounts and Financial Statements, particularly the apportionment of liabilities;
4. Novating PPAs, TCN DUOS contracts, MO/SO Market Participation Agreements, vesting contracts, ongoing service, and supply contracts;
5. Novating/grandfathering extant NERC licenses (or even issuing new licenses?)
6. Other Stakeholder and likely attendant financial implications.

Bridging Nigeria’s energy access gap one ‘middle child’ at a time

UKNIAF
United Kingdom Nigeria Infrastructure Advisory Facility

Women on the Grid Hub

BRIDGING NIGERIA'S ENERGY ACCESS GAP, ONE 'MIDDLE CHILD' AT A TIME

November 2024

THE MINI-GRID AS 'THE MIDDLE CHILD'

By Jumoke Delano

When you flip a switch, do you ever wonder how the electric power reaches you? Most people think of two options: the national grid ("Up NEPA!") with its estimated 5,000MW available capacity and self-generation using diesel generators (approx. 42,000MW capacity installed) or solar home systems.

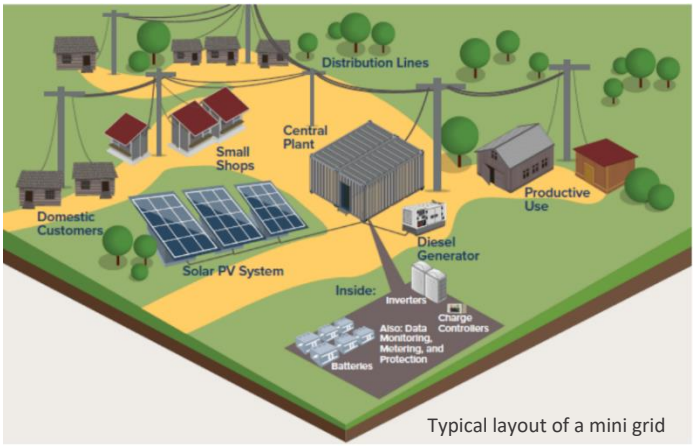
But what about the often-overlooked "middle child" of energy access—the mini-grid? Adaptable and innovative but not historically the center of attention in the electricity delivery

value chain, mini-grids are the unsung heroes in electricity supply. This is especially true considering Nigeria's huge energy deficit (about 92 million people lack electricity access).

What is a Mini-Grid?

A mini-grid is an independent power system that generates and distributes electricity to localized areas like estates, villages, markets, schools, hospitals and plazas.

These systems can operate in isolation or interconnect with a distribution network. Often powered by renewable energy sources like solar or wind, mini-grids are particularly effective in areas where the primary grid is unreliable or inaccessible.



Typical layout of a mini grid

The Case for Mini-Grids

While mini-grids are gaining traction, greater adoption is necessary to accelerate energy access. As subnational electricity markets develop, mini-grids present a viable pathway for Sub-National control of power generation, transmission, and distribution. Mini-grids offer:

Reliable Power Supply: They provide consistent, scalable electricity for households, businesses, and community services.

Resilience and Independence: Mini-grids remain operational during national grid failures, minimizing blackout risks.

Quick Deployment: Mini-grids, unlike lengthy grid extension projects, can be operational within months.

Cost-Effectiveness: They eliminate the need for expensive long-distance transmission infrastructure, making them ideal for remote locations.

Scalability: Mini-grids are modular and can expand with growing community demand.

Ease of Installation: Pre-designed components and local labour simplify setup.

Attract Funding: Initiatives like the World Bank's DARES project highlight their appeal for sustainable development financing.

Eco-Friendly: Using renewables and mini-grids reduces diesel reliance and lowers carbon emissions.

Economic Boost: They empower businesses, enable digital connectivity, and drive local economic growth.

How They Work

Mini-grids can supply power directly to remote locations or connect to a centralised grid. The customer reach per mini-grid can be as little as 20 and as many as over 500 customers. They can be powered using solar, hydro wind, or biomass and operated by large utility companies, private companies, communities, or a community/ government hybrid. The Rural Electrification Operations and Maintenance Guidelines (2023), which UKNIAF supported, advocates the latter model because this leverages the strengths of each group.

The Road Ahead

Addressing Nigeria's energy access challenge will require a balanced approach combining grid extensions, mini-grids, and standalone solar systems. With a 2060 universal access goal and a problematic national grid, this 'middle child' certainly requires more attention than it currently receives.

UKNIAF
United Kingdom Nigeria Infrastructure Advisory Facility

Women on the Grid Hub

INTERCONNECTED MINI-GRIDS AND THE ELECTRICITY ACCESS GAP: THE WHAT'S AND HOW'S

By Habiba Ali

At Sosai Renewable Energies Company, we have direct experience nurturing 'the middle child'. We build mini-grid solutions in communities and have, over the years, become a forerunner in implementing the Interconnected Mini Grid (IMG).

The Kaura Namoda Case Study

Kaura Namoda is a Local Government Area in Zamfara State, Nigeria. It has an area of 868 km^2 and a population of 281,367 at the 2006 census. In 2020, we were one half of a team selected to deliver an interconnected mini-grid in Kaura Namoda under the Rural Electrification Agency's (REA's) Interconnected Mini Grid Acceleration programme (IMAS). IMAS was a joint initiative of the REA (REA) and the Nigerian Energy Support Program 2 (NESP). It was implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in collaboration with The Federal Ministry of Power, Works, and Housing, funded by The European Union and the German Government.

.

How We Implemented the Project

We combined resources and expertise rather than trying to implement independently.

In 2019, Sosai and Protergia, two of Nigeria's leading renewable energy companies, formed a joint venture (JV), a Solar-Powered Developer called Sosai-Protergia, to develop and operationalise an interconnected mini-grid. The partnership aimed to combine the complementary strengths of both companies into a formidable JV.

The Sosai-Protergia JV signed a Tripartite Agreement with the local community and Kaduna DisCo.
As part of the project, a grant from NESP provided the distribution assets required for the initiative. The project's initial focus is on the Sabongeri and Kungurki suburbs, which have approximately 14,000 inhabitants and 3,741 buildings. These areas include over 308 small and large businesses, both formal and informal, that require a reliable power supply to meet their growing service demands.

Under this model, the JV purchases electricity in bulk from Kaduna DisCo while also generating energy locally as a grid supplier. Metered connections enable the community to pay NERC-approved tariffs for greener and more reliable electricity. This dual approach ensures an improved supply while reinforcing the local grid's sustainability.

The project aims to extend its impact across the seven zones of the emirate.
This involves metering previously unconnected households and businesses, reinforcing existing distribution infrastructure, and replacing poles and transformers. The enhancements are expected to increase daily electricity supply from four to twenty-four hours, significantly improving the quality of life and supporting local economic growth. The introduction of proper metering and remote monitoring further allows

The Challenge with this Middle Child

The Kaura Namoda project was delayed for some time. In addition to the COVID-19 pandemic, one of the reasons for the delay was the time it took to move equipment to the community. This is a challenge, which mini-grid developers often grapple with as they try to reach previously left-behind communities.

An Increasingly Relevant Family Member

Part of the learning from the Kaura Namoda project is that Nigeria cannot meet its energy access goals without large-scale deployment of mini-grids.

IMG projects help to mitigate and navigate sector-specific challenges relating to liquidity, metering, and high technical and commercial losses. They also catalyse economic participation through local participation in operations and maintenance, which is especially critical, where the national grid requires serious investment to achieve stability and reliability.

Economic & bottom tier prospects in Nigeria's 2023 Electricity Act: What's your appetite?

UKNIAF
United Kingdom Nigeria Infrastructure Advisory Facility

Women on the Grid Hub

Economic & bottom tier prospects in Nigeria's 2023 Electricity Act: What's your appetite?

November 2024

The 2022 Constitutional Amendment expands the power of Nigeria's 36 States to generate, transmit and distribute on-grid electricity. Before this amendment, State governments' powers were mostly limited to off-grid electricity supply

A buffet of economic opportunities

By Barr. Jumoke Delano

The Electricity Act 2023, along with changes to Nigeria's constitution, offers a variety of new economic opportunities for investors, businesses, and professionals in Nigeria's Electricity Supply Industry (NESI). With States now able to make their electricity laws, the market is becoming more decentralized, creating space for new players.

Picture the NESI as a grand buffet with different stations, each offering a different dish or opportunity in the power sector. Let's explore the options on offer.

A Contractors' Feast: Supplying Goods & Services

The first station is for contractors and suppliers. To keep the system running, NESI requires a steady supply of goods like transformers, meters, and equipment.

There's also demand for IT consultancy, automation, maintenance, and revenue assurance services. If you are in the business of providing hands-on services or equipment, this is the perfect dish for you.

The Bite-Sized Appetizer: Small-Scale Projects

For those who prefer smaller, bite-sized portions, you can start with smaller-scale investments in franchising or mini-grids. These projects allow you to test a business idea before scaling up. Sosai Renewables set up two ten-kilowatt solar mini-grids, two solar dryers, and solar kiosks in the Baawa and Kadabo communities in Kaduna State. By tracking the positive effects of these installations, such as reduced CO2 emissions and better health, the team has shown how improved energy access can benefit other communities in the area.

The Main Course: Large-Scale Investments

The buffet offers large-scale investment opportunities in power generation, transmission, and distribution for those with an enormous appetite. Building power plants or transmission/ distribution networks, such as independent electricity distribution networks (IEDN) and independent electricity transmission networks (IETN), require significant capital. Of note is Solad Integrated Power Solutions Ltd and Viathan Engineering Ltd collaboration on Solad's flagship project at Sura market, Lagos, to provide 1000+ small businesses with reliable and affordable power from Viathan's gas generation plant.

The Light Lunch: Passive Investment

The buffet offers large-scale investment. Not everyone is that hungry. If you prefer to let your money work for you, there's a station for passive investment. You can invest in electricity networks and earn a return without having the responsibility of running a distribution, transmission, or generation company.

The Trader's Special: Electricity Trading

The buffet offers electricity trading for those who like to buy and sell like brokers. You can buy energy in bulk from power generators and sell it to distribution companies or retailers. This can be done in both small and large scales.

The Clean Eater

This station is for you if you prefer a greener, healthier option. As demand for off-grid solutions like solar power grows, there's an opportunity to provide clean, renewable energy options to customers. This helps to reduce Nigeria's carbon footprint and meet growing customer demand for alternative power. One example is where Abuja Electricity successfully collaborated with the Rural Electrification Agency and Powergen Nigeria Ltd to install an interconnected hybrid solar 0.352MW mini-grid in Toto Community, Nasarawa State.

An Employment Potluck: Job Opportunities

Finally, the buffet offers many employment opportunities for job seekers. With the electricity sector expanding, there are jobs for professionals from all disciplines—engineering, sciences, arts, and more.

Conclusion

The Electricity Act 2023 has set the table with a buffet of opportunities in Nigeria's power sector. Whether you are an investor, contractor, professional, or job seeker, there's something for everyone. Visit the Nigerian Electricity Regulatory Commission (NERC) or the Rural Electrification Agency (REA) websites to learn how you could take a seat at the table.

The future of Nigeria's energy sector is bright—so what's your craving?

The proof of the jollof rice is in the eating

By Dr. Stella Odiase

I am not about to start a sub-regional war with a discussion as to whether jollof rice originated in Senegal or whether jollof rice from Ghana tastes better than Nigerian jollof rice. As someone with friends and family in each country, I will stick with the idea that 'it depends on how the rice decides to taste on a given day.' After all, sometimes the meal doesn't turn out as tasty as the cook hoped it would, and this happens even for the best chefs; too much or not enough salt, too much water or oil or too little; all sorts of ingredients thrown in at random, and the resultant pot of 'what on earth is this that we cannot eat.' Sometimes, the same thing happens in policy making – the good intentions don't translate into practical use.

I agree with Jumoke about the variety of economic options presented by the Electricity Act 2023. Still, the regular man or woman on the street may wonder what's in it for me. Rest assured that at least three things are on the menu for you.

No food poisoning allowed

The Act emphasises the importance of Consumer Protection, which the Nigerian Electricity Regulatory Commission (NERC) is responsible for enforcing. This is reinforced by the proposal to establish the Power Consumer Assistance Fund, a mechanism for subsidising the cost of electricity for low-income customers.

Communal dining is encouraged

A decentralised electricity sector provides a platter that encourages community associations to incorporate energy retail companies. This opportunity has the potential to reach more numbers of last-mile electricity customers while at the same time fostering a sense of ownership and responsibility, which could help minimise electricity theft.

Steamaco*, a smart metering technology company shared a live experience during the October 2023 Roundtable for State Governments on sub-national markets. The Roundtable was facilitated by UKNIAF and co-convened by the Nigeria Governors' Forum (NGF) and the British High Commission. Steamaco described a successful collaboration between a rural community, a distribution company (DisCo), and themselves that improved collection efficiency from 40% to 100%. They also trialed an AI app that detected power theft within two days of occurrence.

Women are welcome

Thirdly, the Act also references the need for the Federal Ministry of Power, Rural Electrification Agency, Nigerian Electricity Regulatory Commission, and the National Power Training Institute of Nigeria to 'promote gender mainstreaming'. Even though the Act does not clarify what this means for the Power sector, and gender does not mean 'women', any policy reference to gender mainstreaming presents an opportunity to ensure equitable access to public goods and services.

It's on the menu, but does it exist?

To continue the food analogy, a menu is sometimes just a collection of photoshopped images that are unavailable when you request them. Whatever the case, it is the responsibility of whoever puts the menu together to ensure the availability of advertised products. The Electricity Act intends to facilitate a Power sector that works for Nigerians regardless of socio-economic status. In this case, the Federal Ministry of Power is the Menu designer.

Conclusion

It is difficult to gauge how well the jollof rice tastes if one does not know about it or only hears of it but cannot afford or access it in real life. The challenge for the Federal Ministry of Power is making more Nigerians aware that the buffet is open, which dishes are available, who is invited to dinner, and how ordinary Nigerians can get to the buffet table. Otherwise, many Nigerians will wonder, does it all taste as lovely as it looks on the menu?

* https://steama.co/case-study1

Women on the Grid Hub

From Policy Dialogues to Policymaker Coalitions

UKNIAF

United Kingdom Nigeria Infrastructure Advisory Facility

From Policy Dialogues to Policymaker Coalitions

April 2024

By Stella Odiase[1] and Khadijat Baba-Muhammad[2]

With the [Electricity] Act, more questions have been thrown up than answers, but this roundtable will bring some of the answers.

His Excellency, Governor Abdul Razaq Abdul Rahman

The Nigeria Governor's Forum (NGF) and the United Kingdom Nigeria Infrastructure Advisory Facility (UKNIAF) organised the Roundtable on the Electricity Act of 2023 to discuss the Act and its implications for states in real life terms.

His Excellency, Governor Abdul Razaq Abdul Rahman chaired the event, which was attended by 23 different states, illustrated in the map.

His Excellency's reflections around reconciling some of the provisions in the Act with the practical realities in Nigeria's power sector resonated with the Roundtable participants. In the same way, the Act's central idea of a decentralised electricity market rang true with the participants. .

The Roundtable aimed to facilitate a policy conversation around the practical steps state governments need to take or be aware of to implement subnational electricity markets. Many meetings and workshops around the Electricity Act have brought together sector experts and agencies but not state governments. This was the first (and to date only) time, since the Act was passed, that a meeting of state governments was convened to discuss the new law. This Roundtable provided an opportunity to create awareness about the institutional building blocks required to establish subnational markets and potentially build a critical mass of actors from the states to facilitate follow-up discussions and initial steps.

Unpacking transformational change

Concerns of the state delegates were raised in questions like "W*hat happens to the sector's legacy debts?", "Does every State need to set up a sub-national market*?", and *"How do we address the capacity deficits required to set up State markets?"* The capacity deficits within states were raised several times during the Roundtable, indicating how critical human resource capacity is to ensure the transformational impact of the Act within Nigeria.

But what is transformational change? Different organisations have varying descriptions of transformational institutional change. It explains change that is both deep and pervasive,[3] as well as change that affects not just an institution but also the outside environment.[4] The International Climate Fund (ICF) provides a comprehensive guide for measuring transformational institutional change but recognises that the term is multi-dimensional and, in some ways, subjective.[5] In the ICF guidance, transformational change is described as "change that catalyses further changes". The guidance further provides that transformational institutional change can be measured through indicators like political will and local ownership, potential to increase capacity and capability as well the extent to which an initiative creates leverage for others to act.

What does success look like?

Since transformational change is a means to an end, its ultimate measure of success is the extent to which this change translates to concrete results on the ground, even if these might be incremental. Two occurrences of progress towards transformational change resulted from the Roundtable.

The first instance was a significant step from rhetoric to action. Building a critical mass of better-informed state level stakeholders, knowledgeable about the implications of sub-national electricity markets was a Roundtable objective. The State Commissioners of Energy at the event took the issue further by forming the State Commissioners of Energy Forum. The Forum will take forward the Roundtable recommendations and next steps. This important advance enables states that were not able to attend the Roundtable to access the wealth of material and information disseminated and signifies a high level of political will when it comes to actioning some of the principles in the Electricity Act. It also represents an important next step in the policy conversation around sub-national markets.

So far, the Energy Commissioner's Forum has made it possible for the State Energy Commissioners to participate in some policy dialogues at federal level, which has further raised awareness for more state policy makers. When the Forum did not exist, it was normal to see individual Commissioners attend random events. The situation has changed with more state policy makers able to access relevant information about a critical national policy issue. The Forum has also (with the Nigeria Governors' Forum support) developed an engagement roadmap for attracting investor interest in the states and providing the opportunity for peer learning and networking.

In the second instance the Nigeria Governors' Forum, with UKNIAFs support, produced a Toolkit on Sub-national Markets for the State Commissioners of Energy Forum. With this toolkit, individual states have practical, easily accessible guidance to support them in:

1. Conducting internal status stocktake to establish a baseline of State capacity to establish a sub-national electricity market.
2. Setting up a mechanism for defining a state roadmap to sub-national electricity (including establishing policy, legislation, and regulatory institutions).
3. Defining specific cross-state collaborations, possibly along distribution network lines.

The toolkit can be accessed here.

Facilitating the progression from Policy Dialogue to Policymaker Coalition

In UKNIAF we have learned several lessons regarding facilitating far reaching and sustainable transformational change. The first is that while the term coalition is typically associated with non-governmental actors, not with policy makers, transformational institutional change needs to be driven by groups of policy makers or policy maker coalitions.

Secondly it is important to leverage emerging policy moments as this will likely rally potential policy champions around a cause, which they can commit to. For instance, the Electricity Act and how it affects states had been a topical issue and something which most power sector stakeholders were keen to discuss. This served as a drawcard for State Energy Commissioners to attend the Roundtable.

It is also useful to partner with a country level focal point, which policy makers respect as this reinforces the credibility of the policy engagement process and mobilises the participation of policy makers. With the Roundtable, the Nigeria Governors' Forum was key to mobilising the attendance of the states and their Energy Commissioners. The fact that the event was advertised as a collaboration between the NGF, and a respected international donor partner (FCDO) was important for securing a commitment by state governors or those delegated by them to attend.

It is very important to avoid creating the perception of 'talking at' policy makers during a dialogue or public facing event. This sometimes happens when the agenda for a policy discussion is packed with technical experts presenting numerous slides. This can result in key policy voices being stifled and practical challenges not being addressed. It can also stifle the emergence of the type of policymaker coalitions mentioned above. At the Roundtable there was more than one 'all State' panel discussion session where state government delegates provided updates on the issue at hand. This eventually led to the formation of the Forum of Commissioners of Energy.

While the above considerations are not prescriptive, they represent key learnings from over four years of providing infrastructure advisory support in a context with multiple challenges and competing interests.

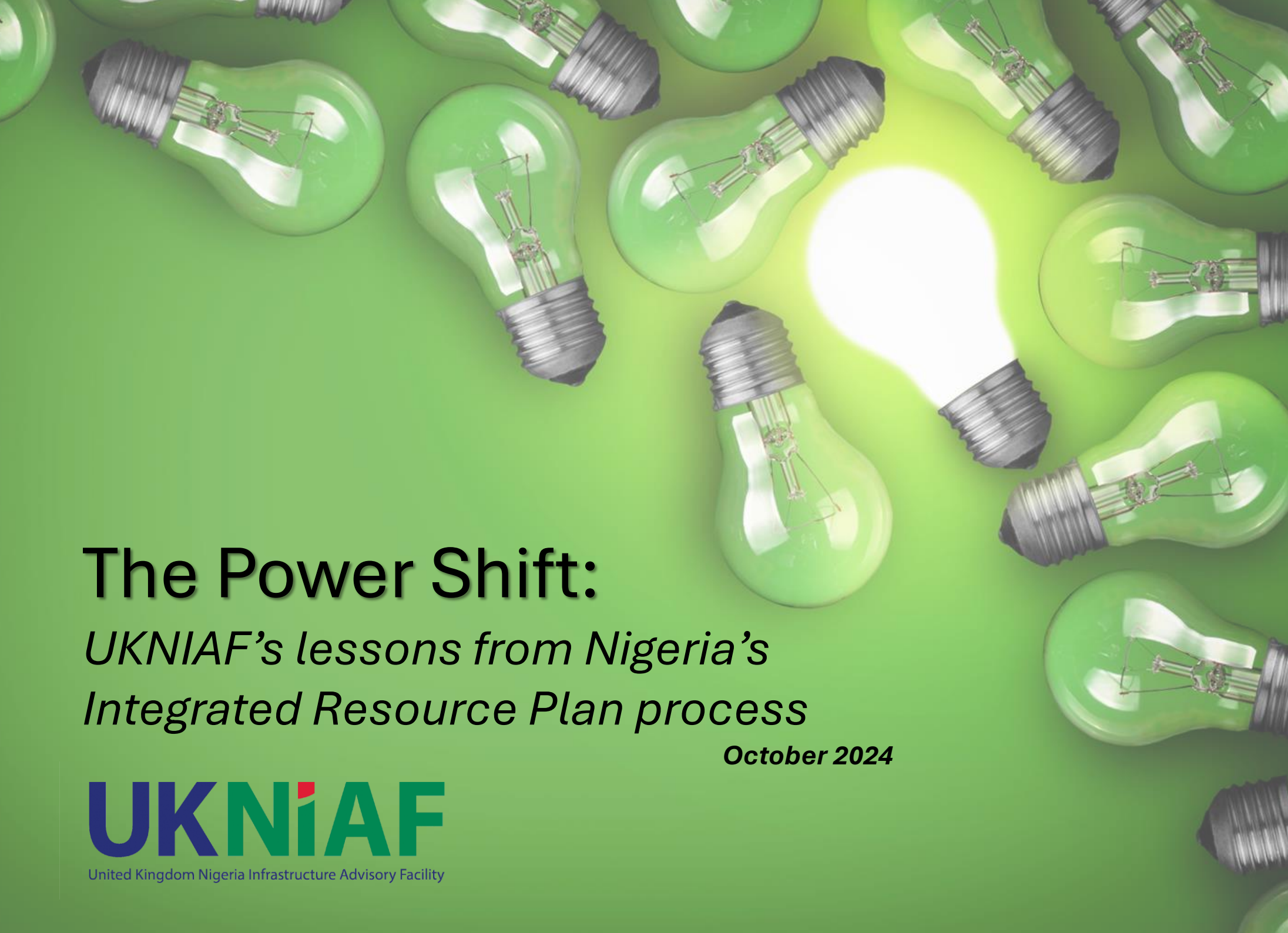
Conclusion

The October 2023 Roundtable on the Electricity Act of 2023 served as a platform for discussing Nigeria's energy policy, focusing on the involvement of state governments in implementing subnational electricity markets. This meeting led to the creation of the State Commissioners of Energy Forum, which aims to encourage ongoing dialogue and action among the states. The development of this forum and the associated toolkits for policymakers are steps towards practical changes in Nigeria's power sector, in line with the objectives of the Electricity Act.

References

1. Cross Cutting Adviser, UKNIAF 2. MEL Director, UKNIAF. 3. https://tinyurl.com/3zhue6f4 4. https://tinyurl.com/mu9uf57b 5. https://tinyurl.com/4zdyz3r5

The Power Shift: UKNIAF's lessons from Nigeria's Integrated Resource Plan process



The Power Shift:

UKNIAF's lessons from Nigeria's Integrated Resource Plan process

October 2024

UKNiAF

United Kingdom Nigeria Infrastructure Advisory Facility

Contents

How we worked ....

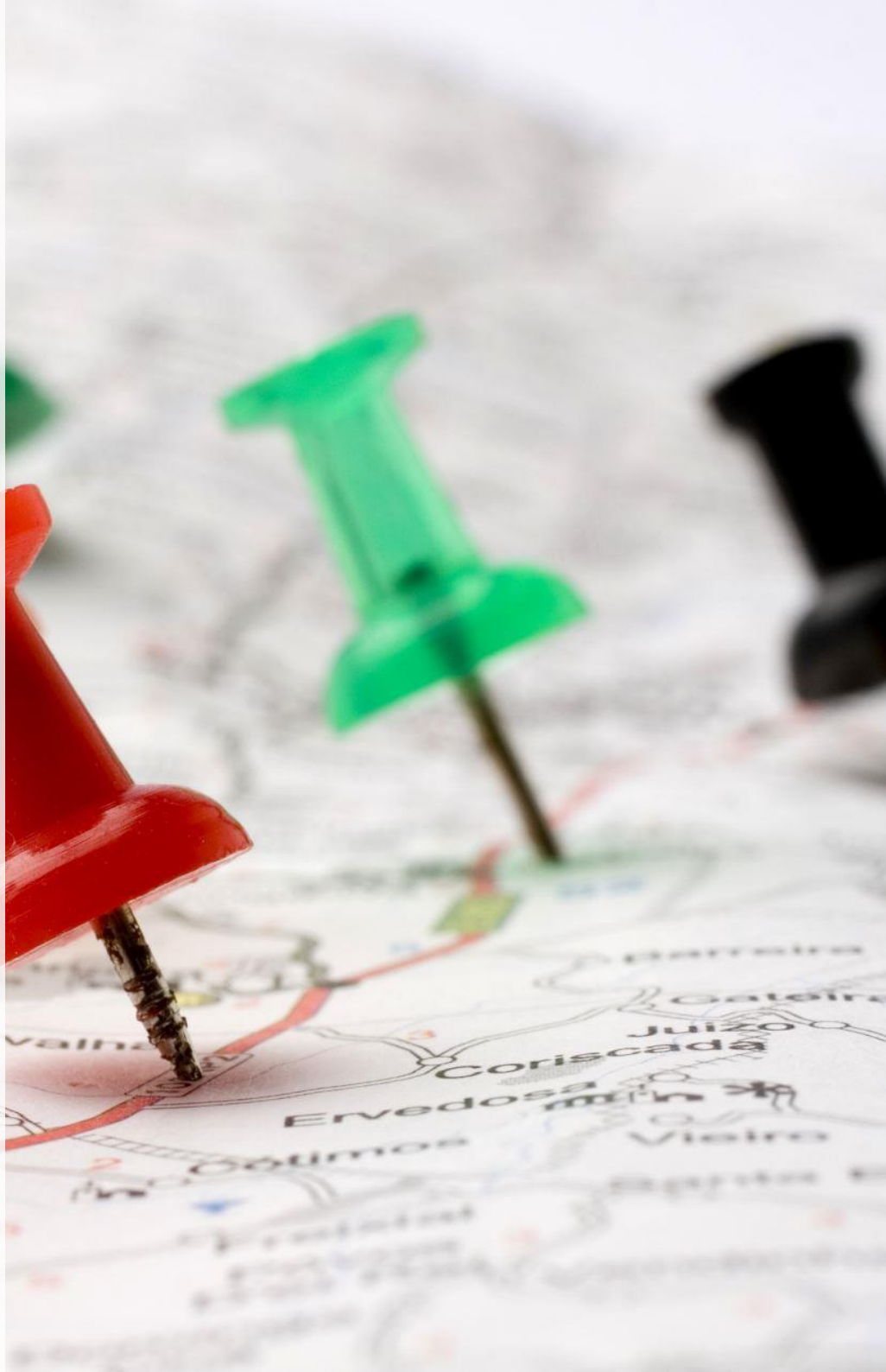
What we achieved...

Challenges we faced...

Lessons we learned...

Other things to think about...

> *“The IRP serves as the map that guides [our] journey, ensuring that the country follows the best and most efficient path for its energy needs.”*



*As UKNIAF we **learned several lessons** helping to develop the national Integrated Resource Plan which will guide the future of Nigeria's power sector.*

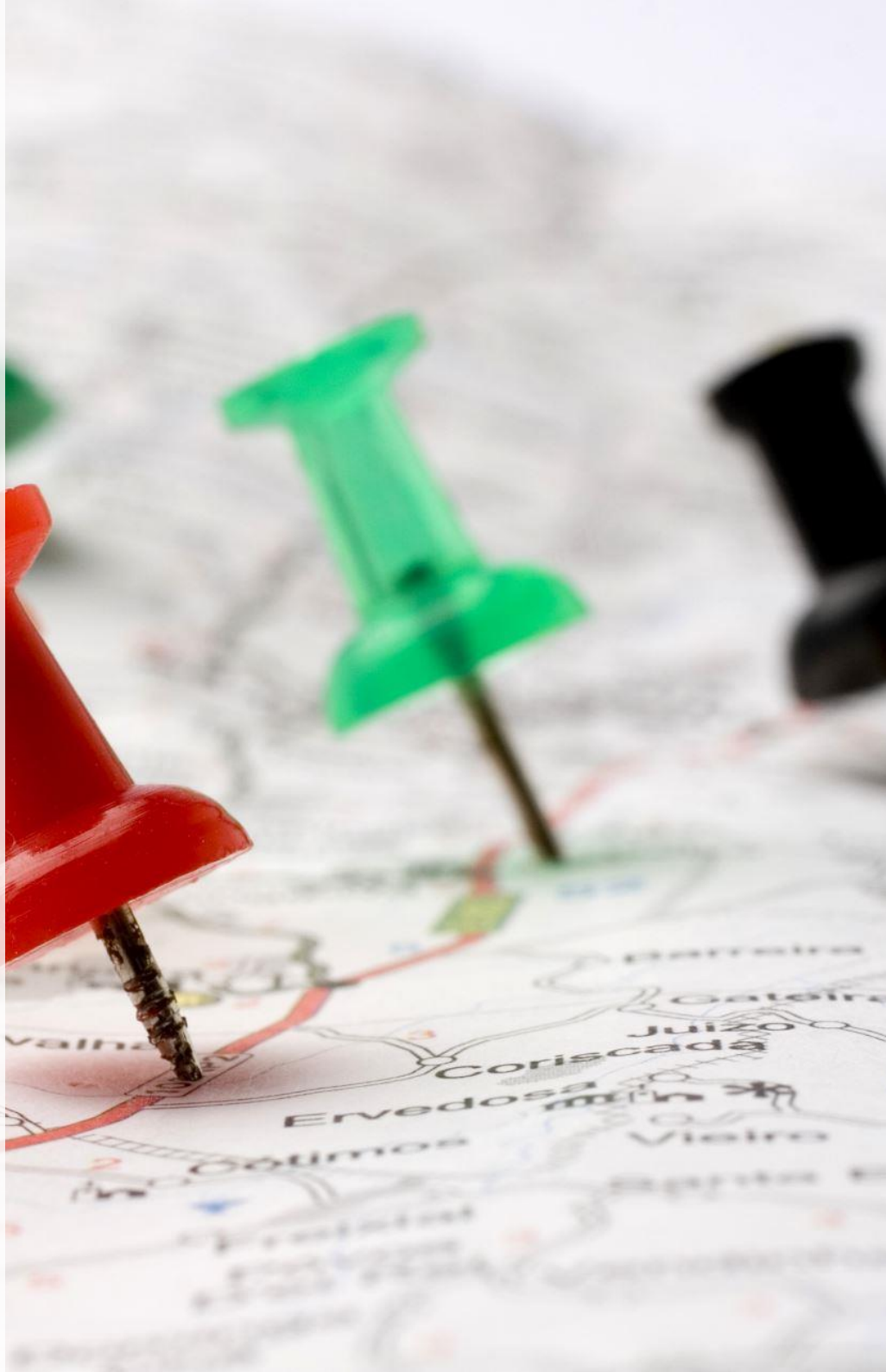
We learned lessons related to:

***HOW** we worked…*

***WHAT** we achieved…*

*The **CHALLENGES** we faced…*

*The **CHANGES** we influenced…*



> *[The IRP] is a road map. A road map for the country, to guide our energy sector in terms of production, distribution, and planning.*

The Integrated Resource Plan (IRP) is a comprehensive and flexible roadmap for planning Nigeria's future power needs and supply. It helps the country plan how to meet its growing power demands in a way that is affordable, sustainable, and aligned with its environmental goals.

By carefully managing resources and planning for the future, Nigeria aims to ensure that everyone will have access to power in a way that supports economic growth and protects the environment.

This journey is a marathon, not a sprint, and we have not completed the voyage, but we have learned these lessons to learn along the way.

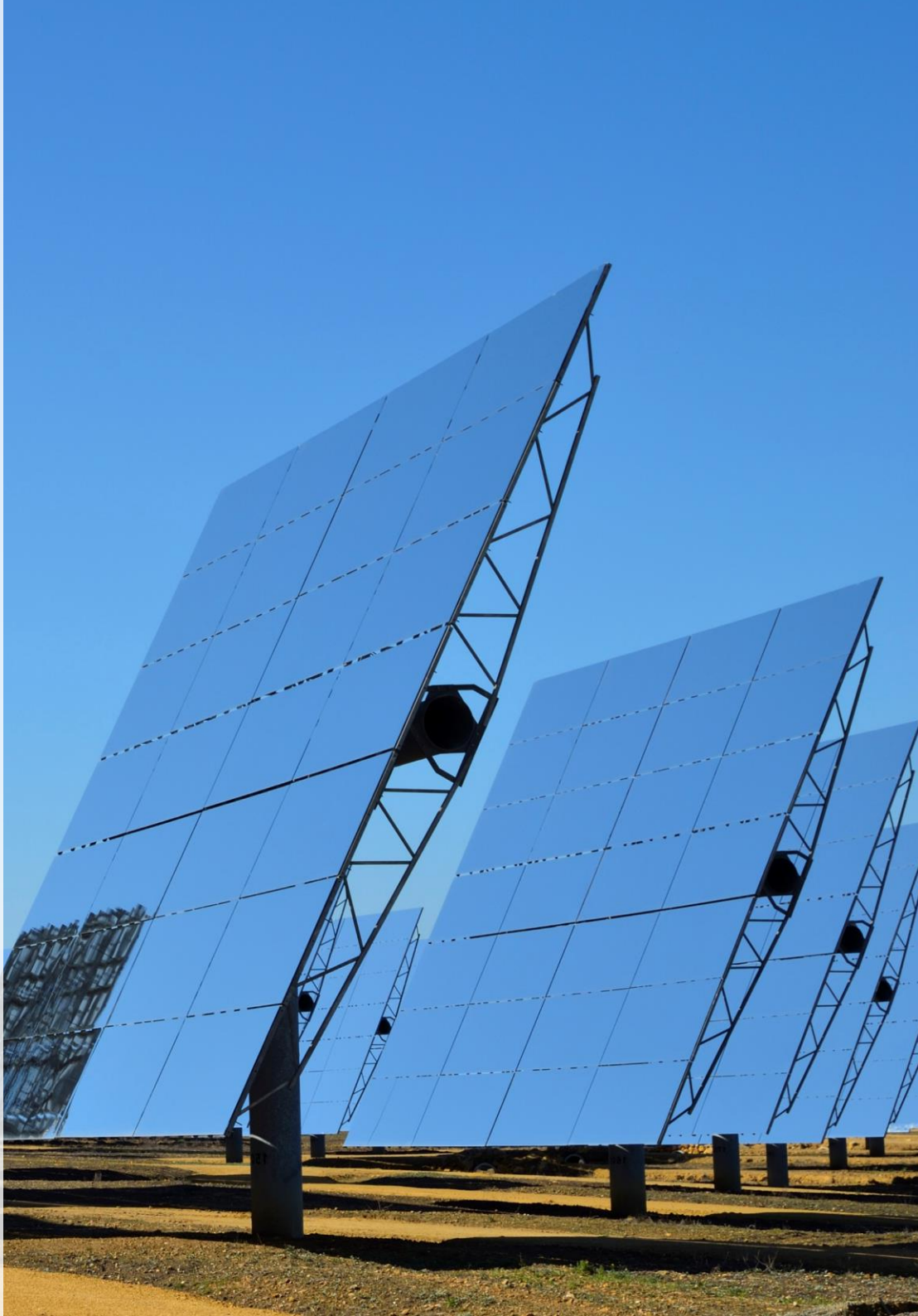
How we worked...

We sought to build consensus and not promote a singular agenda. We strived to facilitate discussions between a wide range of stakeholders within a historically fragmented sector. Agencies within the power sector tended to operate in silos, often competing for resources and influence. We succeeded in bringing these disparate players together through a series of stakeholder engagement meetings and workshops.

We made decisions at two levels. We had a governance structure involving two key levels: a steering committee composed of high-level decision-makers, such as ministers and senior officials, and a working group that included senior executives from the public and private sectors responsible for operational details, detailed discussions, and input at each project milestone. This structure ensured that decision-making was both strategic (through the steering committee) and operational (through the working group), allowing the project to receive feedback at multiple levels, and allowed for greater involvement from various participants, creating a sense of ownership and alignment with the overall objectives of the IRP.

We started off being co-creative in our decision making and design. In early stages stakeholders were invited to contribute data and feedback, ensuring the project was sector-driven. For example, volunteers from various institutions were invited to participate in the working group, ensuring that the process was inclusive. This also allowed for shared ownership of the project and helped align the objectives of different stakeholders. The working group was instrumental in selecting scenarios as well as sensitivities to be run, running simulations, and providing feedback on forecasts, ensuring that the IRP was both accurate and reflective of Nigeria's unique context.

> "It's one of the most meaningful pieces of work I've been involved with."



We strived to be inclusive and adapted after reflection. We made a concerted effort to include stakeholders who had traditionally been more difficult to engage, such as activist groups representing the generation and distribution companies (Gencos and Discos). These groups, while often vocal critics of the sector's planning efforts, were integral to creating a comprehensive IRP. Their inclusion signalled that the IRP was a serious, inclusive process aimed at addressing the country's diverse power needs. This approach helped to build a more cohesive and representative consensus around the project. We also realised that we were not gender representative and took steps to change this.

We looked to learn lessons from others. The IRP process considered both international best practices and Nigeria's local realities, acknowledging that a one-size-fits-all approach would not work.

> "It's been a learning process ... they've been a real pleasure to work with."

We adapted the process, as our circumstances changed. The steering committee was slow to materialise, primarily due to changes in leadership within the Ministry of Power, and because of the change in administration there was reluctance to continuing with a project that had been started under another administration. Overcoming this resistance required diplomacy and persistence from the project team, resulting in the convening of the first steering committee meeting, solidifying the governance structure.

We sped up our process. When the Electricity Act was passed and the Minister of Power had to present a plan to the National Assembly and the Presidency, there was an increased urgency for us to continue our work. We needed to accelerate our efforts to accommodate the new requirements and timeframes. Further the IRP needed to be presented as a national policy document, raising the importance of our delivery.

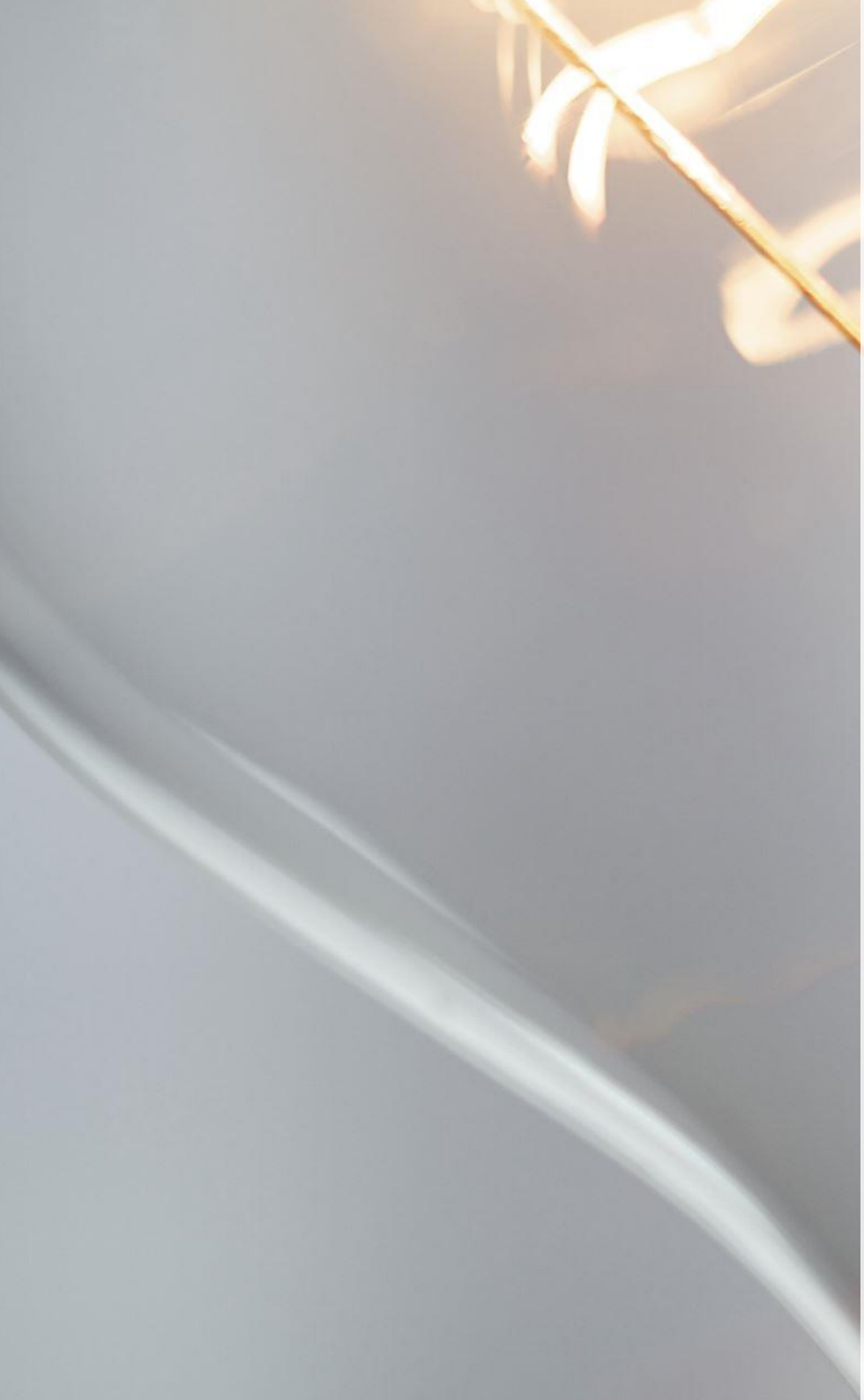
What we achieved...

Collaboration and diversity was a strength of the project. Developing the IRP brought together diverse stakeholders and development partners from the power, environmental, and policy sectors, each contributing their unique expertise to the plan. Respecting the diverse viewpoints, and placing value placed on the different contributions was crucial in harmonising the various perspectives to form a coherent IRP. For a project of this scale, facilitating this collaboration was essential .

The collaboration brought together stakeholders that had not previously worked together. Historically, Nigeria's power sector has been plagued by a lack of consensus on how to address its many challenges. The IRP created a space and opportunities for varied stakeholders to share knowledge and build consensus. This engagement created joint ownership and commitment, essential for the IRP's long-term vision.

Flexibility allowed us to take advantage of unanticipated events. Although unplanned, the linking of the IRP with the Electricity Act of 2023 requirements, which mandated the creation of a national integrated electricity policy, and a strategic implementation plan was serendipitous. This alignment ensures that the IRP does not exist in isolation but is part of a broader governmental effort to reform the power sector. By communicating the importance of the IRP and its linkage to the national policy, to key government officials, we ensured the IRP would serve as a foundational document for future policy decisions and a critical component of Nigeria's power future.

The profile of important conversations around social and environmental issues was raised. Part of our discussions focussed on the "just transition". This served as an entry point for deliberations on climate change, social inclusion, and gender. By leveraging the political momentum of this global dialogue, we were able to introduce these issues into the national conversation, connecting them with Nigeria's unique power challenges such as how the extraction of gas from the Niger Delta or the use of hydropower from northern Nigeria had significant social implications for local communities. By framing these concerns within the broader context of climate change and power policy, the IRP brought attention to often-overlooked issues like the impact of power production on local communities and equitable power transition.



Priority pathways and goals were identified. The widespread use of diesel and petrol-powered generators for self-generation was identified as a major problem because of high emissions and high costs. A clear objective was set to phase out this practice. Participants noted that this clarity was a critical achievement, giving policymakers a concrete goal to work.

Professionalism and inclusion in the team was pivotal. The teamwork and responsiveness of the team members to collaborative processes was notable and underpinned the quality of the work. It was evident that the careful selection of team members, including technical consultants and stakeholders, played a key role in ensuring that the project met its objectives. In early stages our discussions were dominated by men, with women largely absent or silent. Through deliberate effort we created a more inclusive environment, leading to the establishment of the "Women on the Grid" initiative, illustrating how the collaborative, professional approach went beyond technical matters and ventured into social and gender inclusion.

> "It's one of those projects where you can see the government taking it and running with it, with plans for years to come."

The practical nature of the project's sustainability was pervasive throughout. Developing the IRP did not rest on academic ideas but progressed these to real life by outlining practical solutions for government to implement. The ability to model impact numbers and embed progressive policies like climate action and gender inclusion into the planning documents was significant. The government not only agreed with and bought into the IRP plans but continued to build on them.

Personal takeaways were also apparent. Being involved in drafting the IRP saw several participants broaden their understanding of the power value chain and seeing things from a more holistic perspective. Personal skills also flourished with the importance of perseverance and fortitude being apparent, sharing how "determination makes you achieve the entire project."

Challenges we faced...

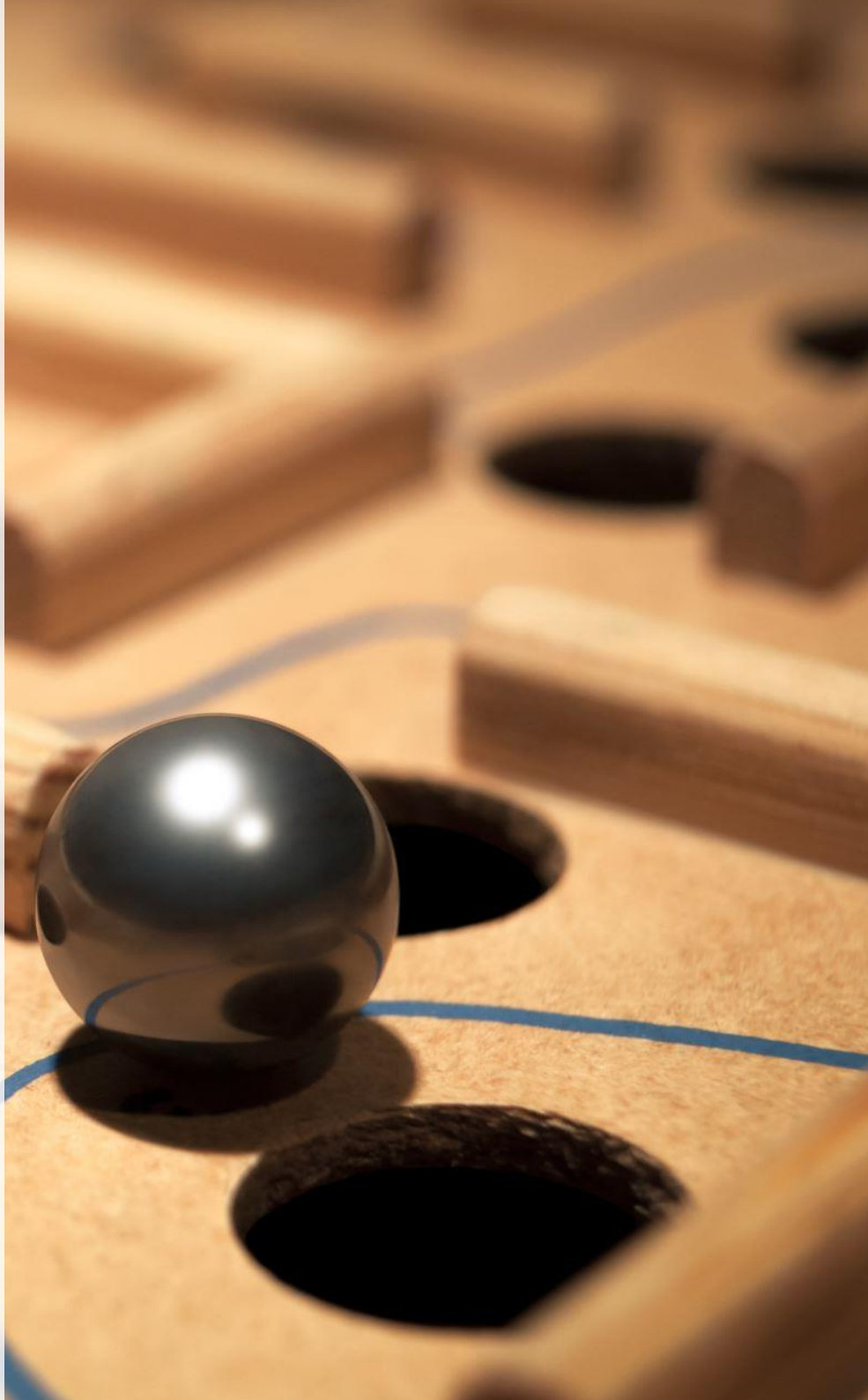
From the outset, the project needed to address structural, communication, and stakeholder engagement challenges, requiring the cooperation of entities with differing priorities and long-standing operational silos, to ensure that a cohesive and comprehensive IRP could be developed. Many of these were primarily due to the complexity of the country's power sector and the numerous institutional stakeholders involved.

The sector is fragmented. Historically, key agencies such as the Energy Commission of Nigeria (ECN), the Transmission Company of Nigeria (TCN), and the Nigerian Electricity Regulatory Commission (NERC) had operated in independently from one another. Each has its own mandate, resources, and goals, affecting the creation of a unified national energy strategy. For example, ECN had been largely excluded from past power planning efforts.

Developing the IRP brought these critical players to the same table through engagement workshops and stakeholder meetings, ensuring relevant voices were included in the planning process. This marked a significant step forward in overcoming the sector's deeply entrenched fragmentation.

Differing agendas meant different expectations and priorities. Throughout the process, managing differing expectations among stakeholders was a constant challenge. The fragmentation described above exhibits in varying institutional outlooks and urgencies. For example, NERC and the Ministry of Power, have clear objectives tied to their institutional work plans, including ensuring energy sufficiency, improving regulatory oversight, and promoting competition in the power sector. Through ongoing dialogue and consultation, we worked to bridge these gaps, ensuring that the final plan balanced diverse interests.

Opinions on prioritising power sources were mixed. The Energy Commission advocated for nuclear power as part of Nigeria's long-term energy strategy. Others viewed nuclear power as unrealistic, given the current political and economic landscape. Coal was seen by some as a technically viable option for meeting Nigeria's immediate power needs, but international environmental concerns, prioritised by some stakeholders, made it difficult to secure funding for coal-fired power plants.



We balanced these competing interests by focusing on more achievable goals. Natural gas was offered as a practical transition fuel that could meet Nigeria's immediate power needs while also addressing some of the environmental concerns. This allowed the project to move forward despite disagreements.

We had different ideas about project timelines. Some stakeholders were sceptical about the ambitious electrification targets set by the IRP and were concerned about the feasibility of achieving the targets within the proposed timeframes. They urged caution. Other stakeholders promoted more aggressive timelines. The project team had to navigate these differing perspectives by finding a middle ground that was both ambitious yet realistic.

Unexpected legislation was passed. An unexpected challenge was the passage of the Electricity Act 2023, providing both a legislative framework for the IRP, and creating new pressures. The Act required the Minister of Power to present a formal energy policy and strategic implementation plan to the National Assembly and the Presidency, turning what had initially been a technical exercise into a politically charged process. This added urgency to the project and required the IRP team to accelerate their efforts to ensure the plan was completed on time and aligned with the new legal requirements.

There was an unexpected need for political lobbying. The new administration was reluctant to implement a predecessor's legacy project, creating a potential major setback. We lobbied to convince the new Minister as to the importance of the IRP, securing his commitment to the project.

A lack of reliable data was a significant challenge. The IRP required vast amounts of data from various sources, including power generation, transmission, and distribution companies, as well as energy consumption patterns. However, collecting this data was difficult. Many stakeholders were reluctant to share their data, viewing it as a form of power or leverage. Some of the required data simply did not exist. Other data sets were incomplete or inaccurate.

To overcome this, we employed a two-pronged approach: we were persistent in data requests, and we leveraged the authority of the Minister of Power and NERC to compel stakeholders to share the necessary information. In some cases, when data could not be obtained, we ran simulations and estimates based on global standards. Although this approach helped to mitigate the data challenge, it underscores the importance of having accurate and comprehensive data at the start of such projects.

By focusing on building consensus and balancing competing interests, we collectively succeeded in creating a long-term power plan that addressed both Nigeria's immediate needs and its future energy security.

Lessons we learned...

We might have cast our net wider. We might have thought about broadening the involvement of stakeholders to include – from the start – more representatives from academia and industry, especially those responsible for the long-term management of the IRP. By including these groups, the project could benefit from their specialised knowledge and long-term research capabilities.

We should have implemented a stakeholder communication strategy. While the working group was set up as the primary stakeholder engagement mechanism, it was not enough. Stakeholders outside the working group who initially contributed felt disconnected from the project and expressed confusion about the project's status after a year and a half of no communication. This gap in communication created the perception that the project was stagnating or had been abandoned. We brought in a dedicated communications coordinator to improve stakeholder engagement and public awareness, recognising the importance of continuous stakeholder engagement and transparent communication, especially where there are multiple stakeholders across different sectors.

We would have been more cognisant of stakeholders' institutional requirements from the beginning. We should have copied invitation letters to working group members to the CEOs of the agencies involved. This would have ensured that agencies remained aware of the project's progress and could adjust their participation accordingly.

We should have kept the stakeholder institutions up to date. Instead of relying on the communication of our working group technical members, we should have had more frequent, deliberate interactions with the leadership of relevant institutions. Leaders often have a broader perspective that could have contributed to more informed decision-making. Regular consultations would have fostered better ownership of the IRP among institutional stakeholders easing our process of seeking buy-in for major decisions.

We could have understood our operating context more fully. If we had conducted a political economy analysis (PEA) before project inception it would have helped identify key players, their interests, and any potential barriers to success, enabling us to tailor our approach more effectively.

Our reputation and track record are valuable. A change in government led to delays and a possible lack of continuity. Our reputation within both the technical and the political circles carried sufficient weight for us to effectively lobby for the continuation of the project.

We may have better mitigated against political risk. Political sea changes can impact on critical national projects and there is a need to insulate them as best possible from these influences. This project was not adversely affected, just slightly delayed, but earlier planning might have better mitigated the risks. We could have looked to speed up the project's delivery to complete it within a single administration's tenure. We might also have ensured key government officials are fully briefed on the project's national importance.

> “Perhaps if I were to make any change…that's something I would have integrated … Hear the voices of the people.”

We would have broadened our data gathering process. In hindsight we think we could have broadened our public consultations in two directions. Firstly, to gather opinions beyond the technical experts and collect feedback and input from the demand side of the power sector, such as consumers, gaining insights into their needs. Secondly, to reflect on the needs of the individual states to better understand their processes and better equip them to create their own plans mirroring the national plan. This would ensure states power solutions are tailored to their unique needs and contexts, managing their own power markets effectively and providing power to underserved populations.

> Nigerians don’t live in the FCT; we live in states. And electricity is now a state responsibility at the retail level.

We might have thought of providing more granular detail. The IRP is a long-term document outlining the country’s proposed power journey for the next 40 years. Bus some think there is an opportunity to set up clear milestones that reflect short- and medium-term timeframes. for the project. This will encourage easier tracking of progress and identification of detours from the proposed path. A clearer map with regular indicators will also allow implementers to make necessary adjustments along the way.

We could have better leveraged our international and local expertise. While the IRP benefitted from consultants based internationally, having the highly skilled technical team based in Nigeria may have improved the project’s effectiveness, allowing for more timely and efficient communication and faster response times. Local experts may have been better positioned to understand the nuances of Nigeria’s power sector and work more closely with national stakeholders, and embedding local experts within the team may have added a lot of value.

We would look at process to embed the IRP, ensuring sustainability. The IRP needs to become an integral part of decision-making in the power sector informing investment decisions, regulatory approvals, and policy-making. It also needs to be regularly reviewed ensuring applicability and appropriate focus, in accordance with its statis as a living document. One way of resolving is to institutionalise it within the federal and state with resourced oversight but allowing it to be and ensuring reporting against agreed performance metrics.

> It’s one thing for us to design an IRP, launch it, publish it, and take pictures…but how we ensure the implementation part … is key.

Other things to think about...

Capacity Building and Local Expertise: A key improvement identified by multiple respondents was the need for better local capacity building. There was a consensus that the technical stakeholders, particularly those who would manage the IRP after its completion, needed more training on the modelling tools and analysis used in the project.

The absence of this kind of local expertise was seen as a significant gap, with some respondents suggesting that this lack of capacity could affect the project's long-term sustainability. By integrating local technical experts from the outset, the project would not only benefit from their local knowledge but also ensure that these experts are better equipped to handle future iterations of the IRP. Moreover, local involvement could help to foster a sense of ownership over the project, ensuring that it is maintained and updated effectively.

Localisation of Technical Expertise: Another suggestion was to ensure that the technical aspects of the project are more rooted in local institutions. One respondent noted that it would have been better to house the consultants responsible for developing the IRP within the Ministry of Power, rather than having them work remotely.

By embedding the technical team within the ministry, the project could have benefitted from closer collaboration between the consultants and the government officials responsible for implementing the IRP. This approach would also ensure that the local team fully understands the tools and templates used in the project, making it easier to manage the IRP after the consultants have left.

> “The plan itself [should be] fully housed in the Ministry of Power... all the templates would be fully understood by the ministry staff and the team that will be working on it.”

> We as a country [need] our own philosophy behind the plan… that will influence the plan … because energy planning is not on its own.

Philosophy and vision should underpin the plan: It was felt that there was need for a clear philosophy or vision to underpin the IRP. One respondent pointed out that national energy planning should be aligned with a broader vision of what the country wants to achieve, whether that is industrialisation, improving power access, or achieving environmental sustainability. By establishing a clear, nationally agreed-upon philosophy behind the IRP, the project could be better aligned with the country's long-term goals. This vision would help to guide the project and ensure that all stakeholders are working toward the same objectives.

Focus on Training and Sensitisation: Finally, there was a strong emphasis on the need for continuous training and sensitisation of stakeholders. As one respondent noted, the IRP is a complex document that requires an in-depth understanding of both technical and regulatory issues. Sensitisation efforts could help build broader support for the IRP, ensuring stakeholders understand its importance and are committed to its success. Continuous training would ensure stakeholders are familiar with the IRP and are able to use it effectively in their decision-making processes.

> [The] training of key technical stakeholders on the modelling and analysis tools … is vital for informing decisions and improving processes.

What did we change...

Changes in behaviour: Several changes in institutional behaviour were noted. One respondent highlighted how the engagement with tools and systems became more effective toward the end, suggesting a shift in how the Ministry of Power, and the regulator now manage such tools.

Another respondent discussed the institutional transformation within NERC regarding the IRP. Previously divisions within the organisation tended to work in isolation without a broader understanding of the overall plan and its significance. As more people within NERC became aware of the IRP, it appeared to contribute to this improved collaboration, although managing this is an ongoing process.

Change in emphasis regarding climate finance: Federal and sub-national governments were reported to have begun to change the way they approached mobilising private finance, with a stronger emphasis on aligning climate-smart infrastructure projects with private sector participation

> “[Using] the IRP ... with our investors on what policies and regulations they require and need in terms of how they can key into the IRP to implement it.”

Changes in awareness and strategic thinking: At the federal level, respondents reported that stakeholders have become more attuned to the idea of integrating PPP frameworks into the national strategy. This shows an increasing willingness to embrace private sector involvement in infrastructure development.

It was also highlighted that there was increased awareness of the importance of having a strategic approach to planning for electricity and power. It was suggested that previously the Ministry of Power had been disconnected from broader planning processes, but the IRP process had prompted a more integrated approach, leading to a shift in how the ministry plans power resources. This more structured approach to power and infrastructure project preparation was influenced by UKNIAF tools to identify and develop appropriate projects. This change marked a significant shift in how the ministry engages with technical assistance and capacity-building efforts.

.

> “The key stakeholders have welcomed the possibility of … improving the identification, preparation and development of infrastructure projects to make them attractive to private investment; and facilitating access to climate finance.”

UKNiAF

United Kingdom Nigeria Infrastructure Advisory Facility

learn more at www.ukniaf.ng

UK International Development

Partnership | Progress | Prosperity

TETRA TECH

International Development

Transitioning to State Electricity Markets

TRANSITIONING TO STATE ELECTRICITY MARKETS

January 2025

BUILDING BLOCKS AND EMERGING LESSONS

By Barr. Jumoke Delano

As a child, I loved playing with building blocks. The different colours, shapes, and sizes fascinated me. With creativity, I would build beautiful structures limited only by my imagination. But there was one thing I found frustrating: running out of blocks just when my masterpiece was taking shape. I had to either search for more blocks, adjust my design, or plead with my parents for a new set (which rarely worked!).

Sometimes, I spent my time dismantling structures I had built to rearrange the blocks into something entirely new. This experience reminds me of the evolving State Electricity Markets (SEMs), where diverse building blocks are essential to creating viable electricity ecosystems

The Big Picture

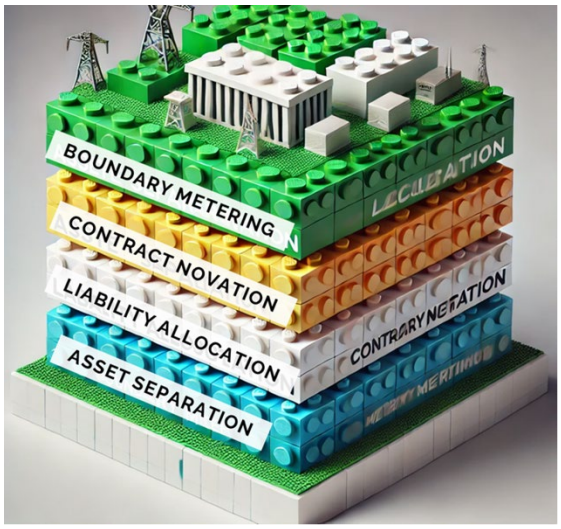
When a Nigerian State seeks to establish its own electricity market, the journey is not unlike building with blocks. The Electricity Act lays out specific requirements:

1. Enact a State electricity law.
2. Establish a State Electricity Regulatory Commission (SERC).
3. Notify the Nigerian Electricity Regulatory Commission (NERC), the distribution company providing services to the State (SDC), and the Bureau of Public Enterprises (BPE).

Once these steps are initiated, NERC issues a **Transition Order** (a starter kit) to the SERC and SDC. This Order directs the SDC to separate its assets, liabilities, employees and contracts in its coverage area, and transfer the relevant portion in the State creating its electricity market to its subsidiary company (SubCo). This is a process of dismantling existing building blocks to create new structures.

The Building Blocks

Several foundational pieces in the starter kit are essential for developing a state electricity market:



1. **Asset Separation**: The assets of the SubCo must be separated from those of SDC otherwise the State Regulator cannot approve tariffs or even regulate effectively.
2. **Liability Allocation**: It is also important to clarify the liabilities of the subsidiary company because this provides an accurate opening balance for accounting purposes.
3. **Contractual Novation**: Prorated components of existing contracts need to be transferred to the SubCo.
4. **Boundary Metering**: This involves providing meters at boundary points to measure the energy entering or leaving the State. This will ensure energy accounting and invoicing.

Whilst the Transition Orders issued by NERC in respect of Enugu, Ekiti, Ondo, Imo have expired, the process of separating the assets, liabilities and contractual obligations is still ongoing. The Commission met recently with the SERCs and SDCs to discuss the methodology for the separation.

Just as I relied on corner piece blocks to strengthen my childhood structures, SEMs require additional building blocks. While the Transition Order provides a foundation, the States need to integrate more blocks to ensure stable and sustainable markets, e.g. the States need to ensure that the SubCos operate independently, and not as a department of the SDC. SERCs also need to engage in ongoing stakeholder consultations as opposed to one-off events, develop investment frameworks, customer protection arrangements and agree what types of policies, tariff structures and regulations are best suited to the State.

All of these require the dismantling and rearranging of blocks which some SDCs may be reluctant to do for understandable reasons. UKNIAF's work providing technical assistance to the SERCs continues to make it clear the need for SERCs to incorporate the additional items mentioned above, in addition to the items under the Transition Order.

Building State Markets requires patience, creativity and a clear vision. With the right blocks in place and a commitment to collaboration, States can construct resilient electricity markets that serve their communities and drive economic growth.

MUST EVERY CHILDHOOD INCLUDE BUILDING BLOCKS? By Dr. Stella Odiase

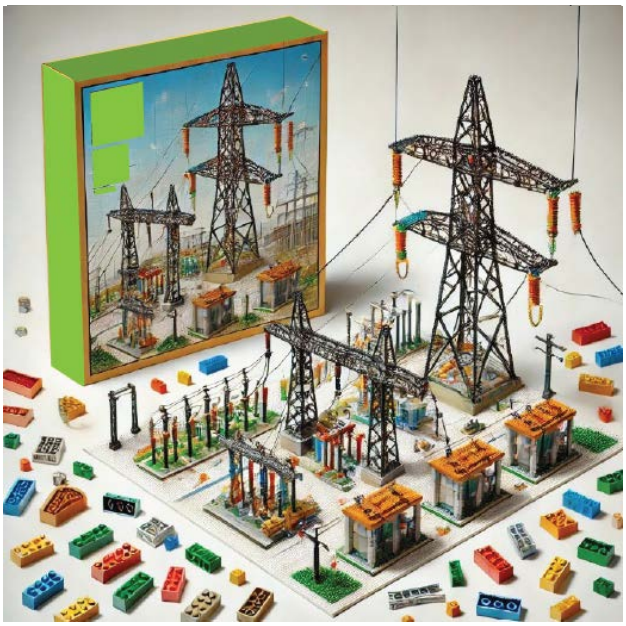
Unlike Jumoke, my recollection of playing with building blocks is not a happy one, as I found building blocks to be rather frustrating as a child. Especially if they were Legos which you needed to piece together. It was the same aversion I had for jigsaw puzzles: you just couldn't rush your way through because to get the right piece in the right place and recreate the image on the packet, thoughtfulness, care, rigour (and therefore time) are all required. The time spent being thoughtful and rigorous was no fun at all, why could it all just not be much easier. I was to learn much later in life that any successful venture requires the same type of thoughtfulness, care and rigour. Of course, as a child, struggling to put the pieces together, I did not understand this and was preoccupied with a different set of perplexing questions.

How Come the Absence of One Little Piece Distorts the Image?

Just as one missing block in a child's box of play blocks or Legos can lead to a grotesque image, the building blocks for a State Electricity Market must be in place for these emerging markets to work.

One of the challenges which the States currently face is ensuring the process is properly sequenced. For instance, rushing to produce a State Law without an initial stocktake or audit that clarifies contextual realities in a State could lead to a mismatch between what the Law says on paper and the type of market required to meet energy access needs of citizens in real-life terms.

Why Do I have to Produce the Image on the Packet?



There were times when my 4-year-old self just wanted to declare herself a champion after trying unsuccessfully to put those annoying blocks in the same form which they appeared on the packet. It was just too much effort and who said it was wrong to do a victory lap for even just trying so hard. However, I noticed there was a difference when my mum said, 'well done, keep going' and when she did the loud cheering. The latter scenario meant a treat was in store which was more rewarding.

In trying to set up subnational markets, the States deserve a 'well done, keep going' for each building block that falls in place. So far however there has been some loud cheering instead, which is a bit of a distraction. Writing a State Electricity Law is a milestone that deserves a 'well done'. However, the image on the pack is not yet complete because a State Electricity Law is not an end but a means to an end. The end goal here is for States to explore multiple channels for reducing energy poverty through improved electricity access for the over 85 million Nigerians who are currently estimated to have no electricity access[1]. Until this estimate reduces, the self-congratulations are very premature.

Not all children play with building blocks. Some grew up playing with other items and are none the worse for it. Therefore, while the Electricity Act can help improve things in Nigeria's Power sector, there is critical question at play as to whether every State MUST absolutely transition to a State market. The States are giving each other deadlines for writing their laws but setting up a market is much more than having a Law in place. Besides there is no provision in the Act that says every single State must set up an electricity market. It reminds me of being presented with the box of blocks, being told to sit and play with them because they were a 'good toy' to play with and asking, '**Do I have to**'?

The response for States wondering whether they absolutely need to set up State Markets is '**No you don't.**' Improved electricity access for citizens is the goal but setting up a State Electricity Market is not the lone pathway to accomplishing this goal. Consultations, innovation, collaboration with other States, the private sector and stakeholders can help with identifying and opening these other pathways.

[1] Lighting Up Africa: Nigeria Can Show the Way

Scan the QR codes to access the thought pieces online

A Toolkit-for establishing State Electricity Markets

Bridging Nigeria's energy access gap, one 'middle child' at a time

Economic & bottom tier prospects in Nigeria's 2023 Electricity Act 2023

From policy dialogues to policymaker coalitions

The Power Shift: UKNIAF's lessons from Nigeria's Integrated Resource Plan process

Transitioning to State Electricity Markets

UKNiAF

United Kingdom Nigeria Infrastrucure Advisory Facility

Learn more at ukniaf.ng

12 Usuma Street, Maitama, Abuja, Nigeria