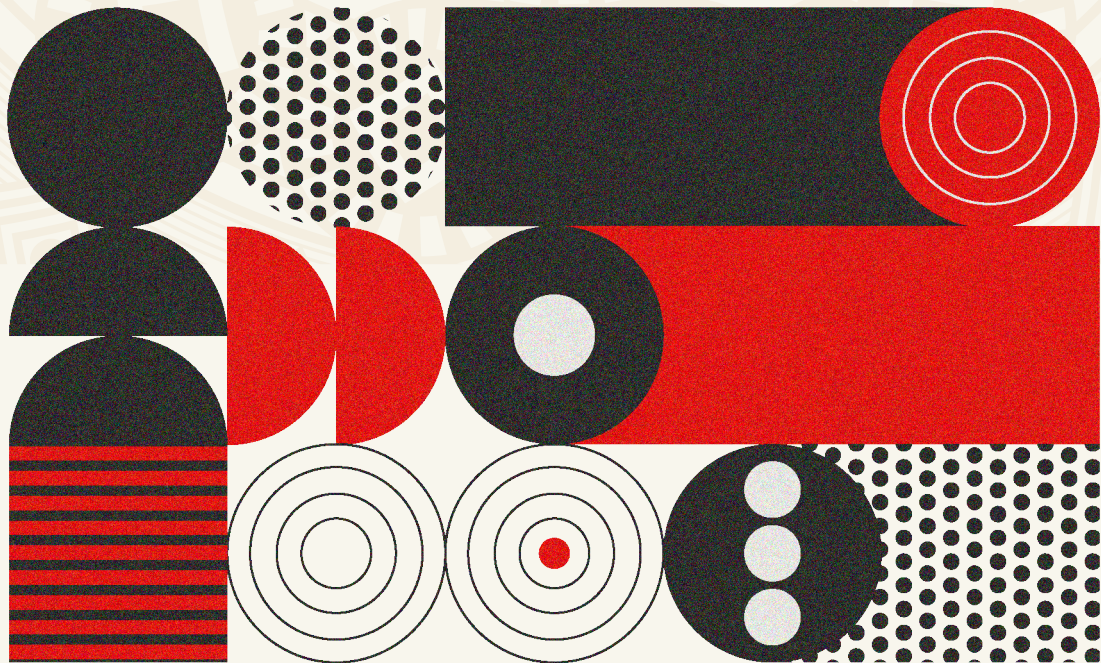


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# CLIMATE FINANCE AND GREEN TRANSITIONS IN AFRICA: NIGERIA CASE STUDY

*Derisking and Macrofinance  
Perspectives*





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## Abstract

Nigeria faces the intertwined challenges of energy poverty and the imperative for a low-carbon transition, set against the backdrop of evolving national development strategies and increasing financialisation of infrastructure. This study analyses Nigeria's energy policy trajectory and its macro-financial context for energy financing and critically evaluates the role and consequences of derisking mechanisms favoured within the dominant global finance paradigm. Tracing the country's path from state-led developmentalism through structural adjustment and privatisation to the contemporary embrace of Public-Private Partnerships (PPPs), the study examines key energy sector reforms and policies such as the Renewable Energy Master Plan, the Decade of Gas initiative, and the Energy Transition Plan. It maps the financing landscape and analyses the proliferation of derisking tools, categorising them into two categories: transnational concessional guarantees and locally de-risked guarantees. The findings highlight the mixed outcomes of power sector privatisation and demonstrate, through a detailed case study of the Azura Edo IPP, how derisking strategies transfer significant fiscal risks and contingent liabilities to the Nigerian state. The study concludes that while derisking aims to attract private capital, it primarily shifts risk rather than eliminating it, potentially locking Nigeria into unsustainable financial commitments and reinforcing dependencies that may obstruct, rather than enable, a sovereign and just green developmental path.

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## List of Acronyms and Abbreviations

AfDB	African Development Bank
AGTF	Africa Growing Together Fund
BII	British International Investment
Bol	Bank of Industry
BOT	Build-Operate-Transfer
BPE	Bureau of Public Enterprises
CBN	Central Bank of Nigeria
CFBF	Climate Finance Blending Facility
COP27	27th Conference of the Parties
DBN	Development Bank of Nigeria
DGS	Domestic Gas Supply
DisCo	Distribution Company
DRE	Decentralised Renewable Energy
EPSRA	Electric Power Sector Reform Act
ETP	Energy Transition Plan
FMP	Federal Ministry of Power
GACN	Gas Aggregation Company of Nigeria
GenCo	Generation Company
GMP	Gas Master Plan
GSAA	Gas Supply and Aggregation Agreement
ICRC	Infrastructure Concession and Regulatory Commission
IDA	International Development Association
IMF	International Monetary Fund
IPP	Independent Power Producer
JVs	Joint Ventures
MDB	Multilateral Development Bank
MMcfpd	Million Cubic Feet per Day
MOE	Ministry of Environment
MWR	Ministry of Water Resources
NBET	Nigerian Bulk Electricity Trading Plc
NDPHC	Niger Delta Power Holding Company
NEPA	National Electric Power Authority
NELMCO	Nigerian Electricity Liability Management Company



NEMSA	Nigerian Electricity Management Services Agency
NERC	Nigerian Electricity Regulatory Commission
NESI	Nigerian Electricity Supply Industry
NEP	Nigeria Electrification Project
NIPP	National Integrated Power Project
NSIA	Nigeria Sovereign Investment Authority
NUEE	National Union of Electricity Employees
PHCN	Power Holding Company of Nigeria
PIDG	Private Infrastructure Development Group
PIA	Petroleum Industry Act
PPA	Power Purchase Agreement
PPP	Public-Private Partnership
PRG	Partial Risk Guarantee
PSGP	Power Sector Guarantees Project
REA	Rural Electrification Agency
REMP	Renewable Energy Master Plan
REDCAJU	Rethinking Developmentalism for Climate and Social Justice
SAP	Structural Adjustment Programme
SDGs	Sustainable Development Goals
TCN	Transmission Company of Nigeria
WB	World Bank

## 1. Introduction

This study, part of the REDCAJU Project's exploration of progressive macro-financial approaches for a Green Developmental State in Africa, examines Nigeria's experience. It illustrates two distinctive modes of investment derisking operational in Nigeria's energy sector: transnational concessional guarantees (e.g. the Azura Edo IPP) and local Power Purchase Agreements (PPAs) within a broader global ideological shift known as the Wall Street Consensus (Gabor, 2020). These mechanisms are not mere technical solutions but form part of a financialised development paradigm that mobilises private capital through public risk absorption, with significant implications for Nigeria's fiscal sovereignty, development trajectory, and energy transition goals.

The main argument of this paper is that while derisking mechanisms are intended to attract private capital, Nigeria's dependence on derisking has primarily served as a transfer of fiscal risk and contingent liabilities from private investors to the Nigerian government. This study shows that industrialisation by derisking has failed to stabilise the Nigerian power sector and has instead created unsustainable financial burdens for the state, exemplified by the over N4 trillion debts owed by the Nigerian Bulk Electricity Trading (NBET) company and the US\$1.2 billion contingent liability from the Azura-Edo IPP. The study concludes that this model reinforces Nigeria's dependencies and hinders a sovereign green transition, arguing for a shift towards a green developmental framework rooted in public ownership and the disciplining of capital.

This paper traces the evolution of Nigeria's economic governance from post-independent state-led development through structural adjustment to its current era dominated by Public-Private Partnership (PPP)-based infrastructure delivery. The study also provides an evaluation of the costs, institutional logistics, and long-term sustainability of the country's derisking strategies in the power sector. Using the Azura Edo Independent Power Plant (IPP) as a case study for the analysis of Nigeria's broader PPA regime, this study assesses the ultimate consequences of derisking for Nigeria's energy transition and macroeconomic stability.

## 2. Background: Historical and Conceptual Context

### 2.1 *Postcolonial Developmentalism and the Role of the State*

Since gaining political independence in 1960, Nigeria's approach to national economic development has undergone several ideological shifts. The early years were defined by state-led industrialisation through national development plans. The First National Development Plan (1962–1968) focused on agricultural, industrial, and trade sector growth, alongside human capital investment (Rivikin, 1962). The Second Plan (1970–1974) was aimed at post-war reconstruction following the Nigerian Civil War, while the Third Plan (1975–1980), buoyed by abundant oil revenues, sought economic diversification and indigenisation.

Despite these ambitions, the plans were constrained by limited implementation capacity and global shocks. The oil price collapse in the late 1970s severely affected the Fourth Plan (1981–1985), leading to rising external debt and inflation (Iheanacho, 2014). As fiscal pressures mounted, Nigeria adopted the Structural Adjustment Programme (SAP) in 1986, which was promoted by the IMF and World Bank. The SAP reoriented Nigeria's economic model towards market liberalisation, privatisation, and export promotion, sidelining the state in favour of private capital (Central Bank of Nigeria, 2000).

Structural Adjustment-era reforms were institutionalised through laws such as the Privatisation and Commercialisation Decree of 1988 and the Public Enterprise Act of 1999 (Kalejaiye & Lawal,



2013). However, these reforms weakened public investment and social service delivery, while failing to produce structural transformation. The failure of market reforms to generate inclusive growth or industrial transformation led policymakers to seek new tools to attract private capital while retaining some degree of public oversight. This shift laid the groundwork for the rise of Public-Private Partnerships.

## **2.2 The Wall Street Consensus and the Derisking Turn**

The expansion of PPPs in Nigeria aligns with what Gabor (2020) terms the Wall Street Consensus, a global development model that replaces direct public investment with strategies that 'derisk' private capital through guarantees, subsidies, and concessional finance. Unlike the Washington Consensus' emphasis on fiscal austerity and deregulation, the Wall Street Consensus promotes public-private financial engineering to mobilise investment.

In Nigeria, this approach was institutionalised through the Infrastructure Concession and Regulatory Commission (ICRC) Act of 2004 and the establishment of the ICRC in 2008. The government's 2007 Seven-Point Agenda prioritised infrastructure as a growth driver, with PPPs envisioned as a central delivery vehicle (Akpoghome and Nwano, 2019). By 2023, the ICRC oversaw a portfolio of more than 250 federal projects, with transportation and agriculture dominating. Joint Ventures (JVs) and Build-Operate-Transfer (BOT) models were common. Empirical data from the REDCAJU which covers the energy sector from generation to distribution in Nigeria provide a clear case study of this trend: As of 2024, the sector comprises 51 key power projects, mobilising over 15,000 MW of capacity under various concessions and Power Purchase Agreements (PPAs).

However, this expansion introduced new fiscal complexities. While appearing to transfer risk to the private sector, many projects relied on government guarantees, foreign exchange support, or revenue commitments, shifting contingent liabilities back to the government. The specialised nature of derisking is evident in the power sector data, where numerous projects explicitly have payment guarantees from the Nigerian Bulk Electricity Trading Company (NBET) as a key financial mechanism. The PPP approach, while marketed as efficient and private-sector-led, often involves public backstopping of commercial investments, particularly in capital-intensive sectors such as energy and transportation (Romero, 2015). Similar studies from Eurodad (2018) found that in an analysis of PPP projects across four continents, every project examined resulted in high financial costs for the public treasury and placed an excessive risk burden on the public sector, and citizens by extension.

## **2.3 Energy Infrastructure and the Cost of Derisking**

The energy sector epitomises the tensions within Nigeria's derisking model. Following the 2013 privatisation of its national power utility, generation and distribution were taken over by private firms. However, low-cost recovery tariffs and weak distribution performance have since discouraged investment. To make projects bankable, the Nigerian government has used Power Purchase Agreements (PPAs) with take-or-pay clauses and tariff shortfall subsidies to guarantee revenues for private generators.

PPAs are the foundational instrument for a 'local derisking' strategy, which is defined by the government as assuming the primary financial risk through its own sovereign capacity and institutions (namely, NBET). In this model, Nigeria assumes the financial risk of securing private investments. Although they facilitated capacity additions, they also created significant public liabilities. Payment arrears to generation companies and financial stress in the NBET highlight the unsustainable fiscal burden. As of April 2025, the total debt owed by NBET company to all the

Generation Companies (GenCos) for power supply grew to over N4 trillion (Izuaka, 2025). This burden is also felt by individual generators. For example, as of May 2025, the state-owned Nigeria Delta Power Holding Company (NDPHC) alone was owed some N600 billion by NBET, which severely disrupted its operations (Adigun, 2025). This entire fiscal burden is locked in by the PPA structure, particularly the ‘take-or-pay’ clauses for specific IPPs, which obligate the state to pay US dollar-denominated capacity payments, even if the power generated is not used due to grid limitations (Nwabughioqu, 2022).

The Azura-Edo Independent Power Plant, on the other hand, exemplifies ‘transnational concessional derisking’. This model, defined as an additional layer of guarantees built on top of a local PPA, is provided by Multilateral Development Banks (MDBs) to mitigate risks that foreign investors deem the sovereign alone cannot cover. Thus, while Azura also has a PPA with NBET, its ‘transnational’ character comes from the crucial addition of a World Bank Partial Risk Guarantee and a Put and Call Option Agreement (PCOA) with the Nigerian government. Azura was Nigeria’s first project-financed Independent Power Producer (IPP). While often cited as a success in mobilising foreign capital, the project imposed significant contingent liabilities. Nigeria now faces a contingent liability estimated at US\$1.2 billion, linked to its obligations under the PCOA. The table below summarises the major ownership and financing structures underpinning Nigeria’s energy projects. It illustrates how state-led, concessionally derisked, and locally derisked models operate across various actors and instruments, reflecting a layered approach to risk allocation and investment mobilisation.

**Table 1: Ownership and Risk Structures in Nigeria's Power Sector**

Ownership Model	Derisking Framework	Key Actor(s)	Financing Source	Derisking Mechanism	Examples
<b>State-Owned</b>	Sovereign (Local)	Niger Delta Power Holding Company (NDPHC)	Government budget & public funds	Implicit sovereign guarantee; some concessional support	NIPP plants (e.g. Calabar, Geregu II)
<b>Privately Owned (IPP)</b>	Transnational	Independent Power Producers (local/international)	Private equity, loans, MDB co-financing	Power Purchase Agreements (PPAs); Partial Risk Guarantees via (e.g. World Bank, AfDB)	Azura-Edo IPP, Qua Iboe, Afam VI, AES Barge
<b>Concessionally Derisked</b>	Transnational	Private operators, backed by MDBs	Private & MDB guarantees	Partial Risk Guarantees (e.g. World Bank, AfDB)	Egbin PRG, Seven Energy gas supply for Calabar NIPP
<b>Locally Derisked</b>	Local (Private)	Private developers + domestic institutional investors	Local currency bonds (e.g. pension funds)	InfraCredit local guarantees, blended finance	InfraCredit-backed DRE mini-grids; REA/NEP projects
<b>Hybrid Public-Private</b>	Sovereign (Local)	Public-private JVs (e.g. NLNG)	Equity from state & private sector	Varies: commercial terms with some implicit state backing	DISCOs, NLNG (Nigerian LNG Ltd), Zungeru (prior to privatisation)

Source: Author's elaboration



Together, the use of the fiscally burdensome PPA system and the high-stakes transnational guarantee model illustrates Nigeria's dual-track derisking strategy. They raise urgent questions regarding fiscal sustainability, policy autonomy, and the alignment of energy financing with national development goals. The following sections explore these dynamics through a case study analysis and institutional review.

### 3. Nigeria's Energy Policy and Financing Framework

#### 3.1 Previous Policies in Nigerian Energy

Nigeria's energy sector has been shaped by a series of key policies and legislative reforms since the early 2000s, aimed at transitioning from a state-dominated model to one driven by private investments.

The foundation was laid by the 2003 National Energy Policy, which set a broad vision for a sustainable and efficient energy sector based on resource diversification and private participation (Federal Republic of Nigeria, 2023). This was followed by two major, yet distinct, power sector initiatives. The state-led National Integrated Power Project (NIPP) was launched in 2004 as an emergency measure to address persistent power shortages (World Bank, 2016). In contrast, the landmark 2005 Electric Power Sector Reform Act (EPSRA) aimed to attract private capital by unbundling the state monopoly, the National Electric Power Authority (NEPA), into separate generation, transmission, and distribution companies. The EPSRA also established the Nigerian Electricity Regulatory Commission (NERC) to oversee the newly liberalised market (Akabuiro, 2021). In the same year, the Renewable Energy Master Plan (REMP) was developed to promote clean energy through fiscal and market incentives, setting ambitious targets to increase the share of renewables in the nation's energy mix (Ajayi and Ajayi, 2013).

Despite a clear focus on reform, the electricity sector continues to struggle with poor pricing and inconsistent supply (Arowolo and Perez, 2020). Attention shifted to the gas sector with the 2008 Nigerian Gas Master Plan (GMP), which sought to develop infrastructure and establish market-driven pricing to position Nigeria as a regional gas hub (Ugbo, 2013). To address persistent power issues, the 2010 Power Sector Reform Plan was introduced to accelerate the privatisation process initiated by EPSRA (Adoghe et al., 2023). However, its goals were undermined by the need for massive infrastructure investment, financial instability from low tariffs, unreliable gas supplies to power plants, and transmission bottlenecks (Ayansola et al., 2023; Olaniwun Ajayi, 2025).

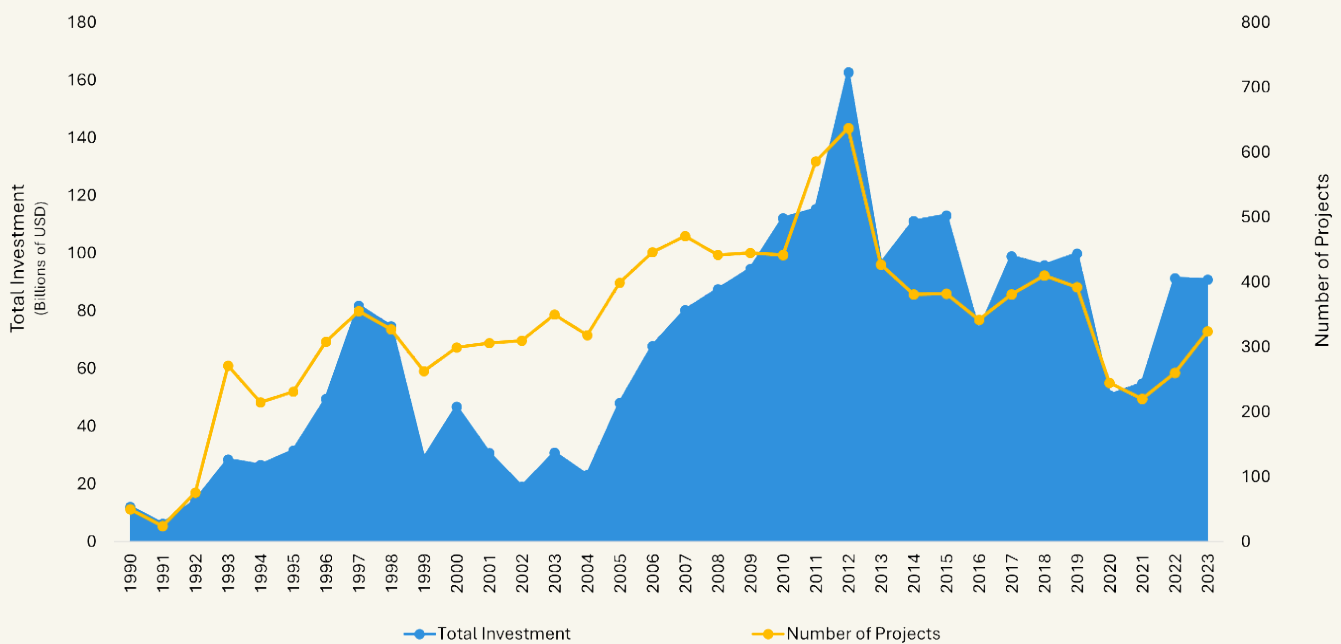
A significant overhaul of the petroleum industry came with the 2021 Petroleum Industry Act (PIA), designed to address the poor governance and weak regulation that had long plagued the sector (Ene, 2018). The PIA aimed to create a more conducive environment for investment by introducing new fiscal terms, improving host community relations, and providing specific incentives for gas development (Mbah, 2024; Gavin, 2022). Building on this, the government launched the 'Decade of Gas' initiative in 2021 and a comprehensive Energy Transition Plan (ETP) in 2022. These recent policies firmly position natural gas as a critical transition fuel on the path to achieving Nigeria's goal of net-zero emissions by 2060. The ETP emphasises the crucial need for over US\$410 billion in private and international investment to address energy poverty and drive industrial growth, with Sustainable Energy for All (SEforALL) reporting that over US\$3.6 billion has already been raised for its implementation.

### 3.2 The Rise of Derisking

Historically, governments have primarily financed infrastructure development, but in recent decades, there has been an increasing reliance on private sector involvement and the financialization of infrastructure. International financial institutions, especially the World Bank, have promoted this shift by encouraging Public-Private Partnerships (PPPs) and making derisking central to attracting private investment into public projects. This approach prioritises the facilitation of private capital flows over strengthening public financing mechanisms (Van Waeyenberge, 2015), as illustrated in the 2014 World Bank background paper for the G20. This paper championed PPPs and innovative financial instruments, such as guarantees provided by MDBs, to leverage public institutions and draw equity and debt financing (Romero, 2017). This approach assumes that large institutional investors, such as pension and sovereign wealth funds, hold vast reserves of capital seeking secure, long-term, and profitable investment opportunities.

Between 1990 and 2023, the World Bank's Private Participation in Infrastructure (PPI) database recorded 9,066 projects, totalling approximately US\$2.2 trillion in investments. The data reveal an overall increase in projects and investment volumes, albeit with significant fluctuations. Since the early 1990s, infrastructure investment through PPPs has expanded steadily, peaking between 2010 and 2012. After 2015, while capital inflows remained volatile, the number of projects undertaken did stabilise.

Figure 1: Private Participation in Infrastructure – Global (1990 – 2023)

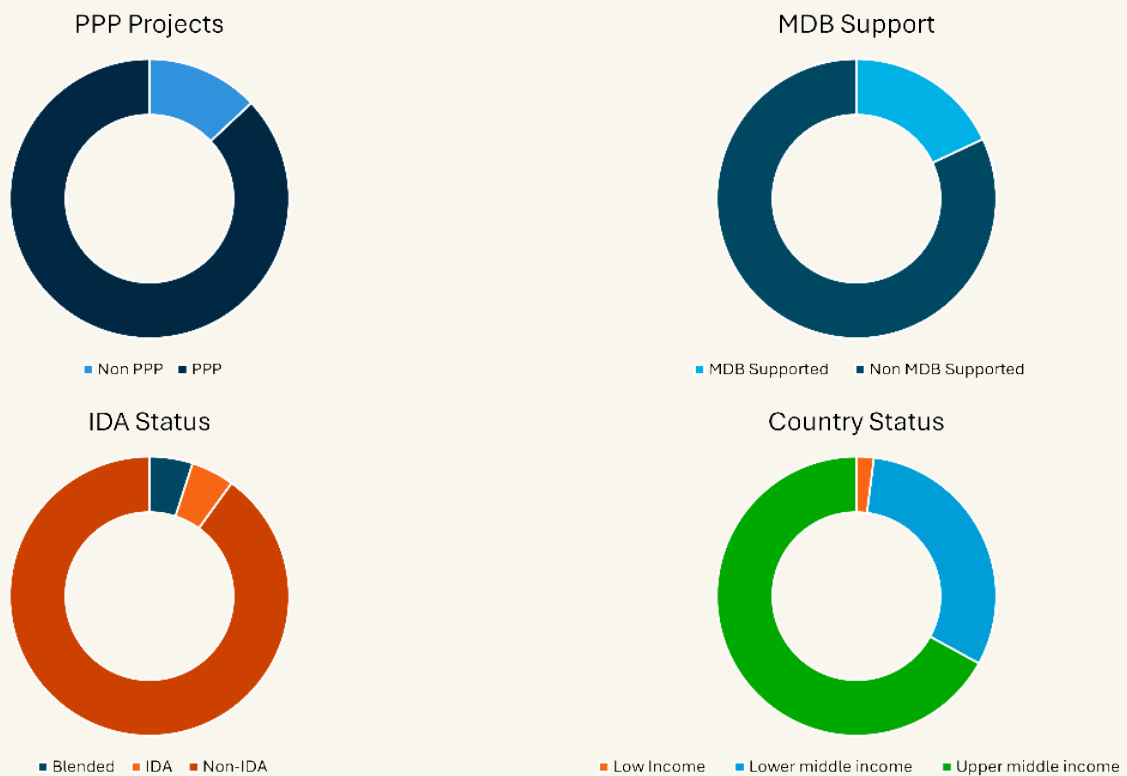


Source: Private Participation in Infrastructure (PPI) - World Bank Group

A significant concern with the rising prevalence of PPPs in infrastructure development is the prioritisation of financial returns over long-term outcomes, and subsequent reinforcement of dependencies between developing economies and international investors. The data show a high concentration of infrastructure projects as PPPs with limited Multilateral Development Bank (MDB) support, indicating a shift towards financial models emphasising private capital mobilisation over broader development goals, especially in non-IDA financing countries.



Figure 2: PPI Project Composition and Support Analysis



Source: *Private Participation in Infrastructure (PPI)* - World Bank Group

The distribution of projects across low-, lower-middle-, and particularly upper-middle-income countries reinforces this pattern, focusing on markets with higher potential returns to investors. Consequently, lower-middle- and low-income countries will likely need to adopt de-risking strategies to attract private investment, potentially increasing their dependence on financial instruments designed to mitigate investor risk rather than addressing long-term development priorities. Upper-middle-income countries may also need to implement de-risking mechanisms to remain competitive in attracting private capital, especially in sectors with higher perceived risks.

One such instrument gaining prominence in the electricity sector is the Power Purchase Agreement (PPA). The electricity sector attracts the extremely high levels of investment, and PPAs and Energy Purchase Agreements (EPAs) have become fundamental to structuring PPPs. A PPA is a contract between a power producer (seller) and a power purchaser (buyer, often a public-sector entity), in which the producer agrees to sell and the purchaser agrees to buy a specific quantity of electricity over a defined period.

PPAs are frequently paired with or integrated into Build-Operate-Transfer (BOT) or concession agreement PPPs, in which the project company must design, build, operate, and maintain the power plant according to the agreed-upon specifications. In a PPA, the private investor is compensated through a tariff, typically split into two components: a capacity payment covering construction costs and ongoing operational expenses, and an energy payment accounting for the actual electricity generated, mainly covering fuel costs (Yescombe, 2007).

The distinguishing feature of a PPA-based PPP is its risk-sharing mechanism. Unlike standard PPPs, where demand-side risk may fall on private investors, PPAs shift this risk to the public sector. The purchasing entity, often a government-linked utility, is obligated to pay a set fee, regardless of actual power consumption, ensuring a stable revenue flow for private investors.

Power Purchase Agreements (PPAs) originated in the United States in the late 1970s and the 1980s as a tool to encourage independent power production during deregulation. Their adoption expanded in the United Kingdom during the 1990s as part of electricity sector privatisation in the UK. More recently, PPAs have played a crucial role in Africa's efforts to attract private investment in energy infrastructure. There has been increasing emphasis on PPAs supporting renewable energy projects across the continent, reinforcing their role in de-risking sustainable energy investment.

By integrating PPAs into the broader framework of financial de-risking, governments and multilateral institutions can refine investment strategies that prioritise investor security. However, the growing reliance on such instruments raises questions about their long-term implications for the competing imperatives of securing investments and ensuring equitable energy access.

The derisking framework reallocates financial burdens from private investors to public institutions rather than eliminating risks. This pattern is evident in the World Bank's Guidance on PPP Contractual Provisions, where governments assume responsibility for various contingencies, from force majeure events to performance failures by private contractors (Mann, 2019). The de-risking state enhances 'investability' by restructuring economic conditions, socialising financial risks, and privatising profits. This is accomplished through the strategic use of price mechanisms and regulatory measures to attract private capital by limiting investors' exposure to potential losses by transferring risks onto public institutions (Mason, 2023), thus reinforcing a development finance model that prioritises investor confidence over broader economic stability.

This strategic shift extends beyond traditional monetary and fiscal policy, as governments rely on financial markets to shape investments in critical sectors such as energy, housing, transport, and natural resources. By transforming these domains into asset classes, the state deepens its dependence on private finance, reinforcing the infrastructural power of financial actors in development planning (Gabor, 2022). This process raises questions about the long-term sustainability and equitable distribution of benefits from infrastructure projects, especially in developing economies.

Framing infrastructure development as a market-driven investment opportunity rather than a public good raises fundamental questions about its long-term sustainability, accountability, and potential for deepening financial dependencies between developing economies and international investors. Lord Stern emphasised the necessity of "the right kind of finance, at the right scale, at the right time" for development finance under the Sustainable Development Goals (SDGs) (Gabor, 2022). However, the current trajectory of derisking policies raises concerns about whether these objectives prioritise long-term developmental outcomes over financial returns to investors.

### **3.3 Institutional Landscape**

Policymakers set the strategic direction and regulatory frameworks for the energy sector. The Federal Ministry of Power (FMP) leads national policy formulation and implementation, while state ministries handle local planning. The Nigerian Electricity Regulatory Commission (NERC) regulates licencing, tariffs, and industry standards in Nigeria. The Ministry of Water Resources (MWR) oversees hydropower licencing, and the Ministry of Environment (MOE) is responsible for renewable energy policies and environmental assessments in the country. These bodies create a regulatory environment to enhance efficiency and attract investment.

Enablers provide essential support and infrastructure for the operation of the electricity sector. The Rural Electrification Agency (REA) expands electricity access in underserved areas, and the Gas Aggregation Company of Nigeria (GACN) facilitates gas supply for power generation.



The Nigerian Bulk Electricity Trading Plc (NBET) manages power-purchase agreements, and the Transmission Company of Nigeria (TCN) oversees grid management. The Nigerian Electricity Management Services Agency (NEMSA) ensures technical standards and safety, while the Nigerian Electricity Liability Management Company (NELMCO) handles legacy debt issues.

Industry participants are directly involved in power generation, transmission and distribution. Independent Power Producers (IPPs) generate electricity alongside successor Generation Companies (GenCos), which emerged from the privatised Power Holding Company of Nigeria (PHCN). Successor Distribution Companies (DISCOs) deliver electricity to end-users, while NIPPs provide additional generation capacity. Oil and gas companies supply fuels for thermal power generation. These participants form Nigeria's electricity supply chain, ensuring nationwide power delivery.

### **3.4 The Rise of Derisking in Nigeria**

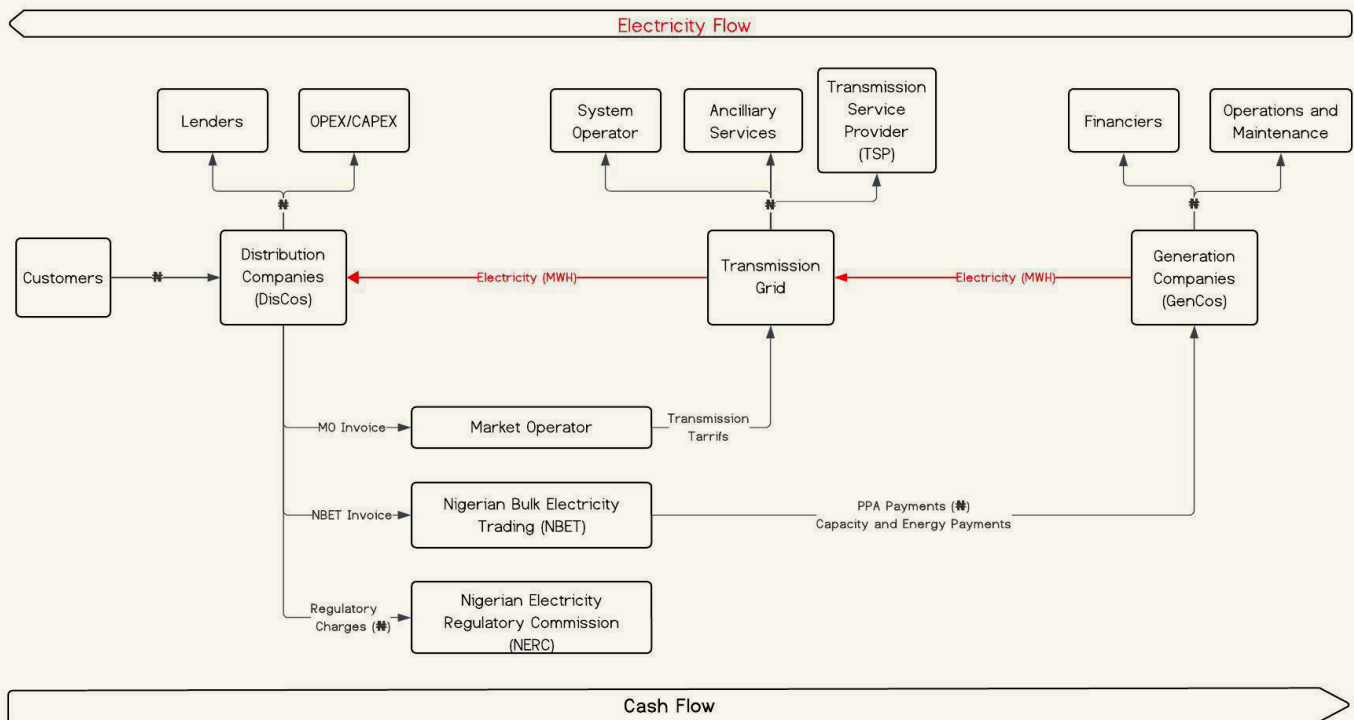
Derisking is central to Nigeria's energy policy and infrastructure development. It mitigates investment risks through guarantees, policy frameworks and financial instruments designed to attract private sector participation. Nigeria's power sector exemplifies the evolving nature of derisking, transitioning from early Power Purchase Agreements (PPAs) to more complex risk-sharing mechanisms.

#### **3.4.1 PPAs and IPPs: The Evolution of Nigeria's Power Sector and Derisking Challenges**

The current challenges facing Nigeria's electricity market are rooted in its long history of failed reform. Despite these setbacks, the country has made significant attempts to restructure its power sector to achieve energy security. The 2005 Electric Power Sector Reform Act (EPSRA) was a landmark piece of legislation that unbundled the state-owned monopoly, the National Electric Power Authority (NEPA), into 18 independent companies, which were initially held by the Power Holding Company of Nigeria (PHCN), a transitional entity. This foundational reform paved the way for the full privatisation of most Generation Companies (GenCos) and the partial privatisation of Distribution Companies (DisCos) in 2013. This officially ended the state's monopoly over the sector, transitioning distribution to a hybrid public-private ownership model.

The privatisation reform was built around a key financial-engineering body, the Nigerian Bulk Electricity Trading Plc (NBET). Established in 2010, NBET was designed to be the central derisking institution by acting as a creditworthy, government-backed bulk buyer that would mitigate payment risk. For the largest-scale projects aimed at attracting international finance, NBET's take-or-pay Power Purchase Agreements (PPAs) were further derisked using transnational tools. A prime example is the Azura-Edo IPP, where the PPA was backstopped by World Bank Partial Risk Guarantees (PRGs), a mechanism essential for securing the international private investment the government desperately sought.

Figure 3: Generation and Distribution Chain of the Nigerian Electricity Market



Source: Adapted from Anyanechi (2017).

However, this transnational derisking model created a massive fiscal crisis due to a severe currency mismatch. NBET was contractually obligated to pay GenCos the equivalent of 100% of their invoices, which were dollar-indexed to cover foreign currency costs for fuel and financing. As the Naira devalued, these costs of these invoices spiralled. In contrast, NBET was receiving only a fraction of its payments in fixed Naira from the struggling, partially privatised Distribution Companies (DisCos). This created a massive, unpayable gap: as of early 2025, the total debt NBET owed to GenCos had spiralled to over 4 trillion (Izuaka, 2025). This unsustainable fiscal burden was the primary persistent bottleneck that forced a radical policy change.

In response to this crisis, the Electricity Act 2023 represents a fundamental shift from the transnational derisking model. The Act's most crucial change is the scaling back of NBET's intermediary role, pushing the market toward direct bilateral trading between GenCos and DisCos. This transition is not a reshaping of derisking; it is an explicit transfer of risk from the state (NBET) to the private sector (GenCos). While intended to increase market efficiency, it removes sovereign-backed guarantees and replaces them with direct exposure to the financial instability of individual DisCos.

This new structure directly impacts the 'local/transnational' framework. It effectively halts the creation of new large-scale, transnational-style IPPs, as the government is no longer willing to provide sovereign backing. This leaves a two-tiered market where a few legacy transnational projects (like Azura-Edo) remain a protected fiscal burden, and a new "market risk" model is employed for all other generators, who must now find ways to manage counterparty risk on their own. As of June 2025, seven of the 36 states in Nigeria controlled their electricity markets, with another 11 in the process of transitioning (Aina et al., 2025).

Another contributor to financial instability is the direct consequence of the DisCos' Hybrid Public-Private ownership structure. Because the state retains a 40% stake in these 'privatised'



operators, it is implicitly forced to cover their operational shortfalls. While private operators hold 60%, the remaining 40% public share is legally held by the Federal Government through, the Bureau of Public Enterprises (BPE) and the Ministry of Finance Incorporated (MOFI)). Importantly, the Federal Government does not hold this 40% stake for itself alone; it holds it in trust for all three tiers of government – the Federal Government, all 36 State Governments, and all 774 Local Government Areas (LGAs) (Izuaka, 2024). This ‘in trust’ arrangement deeply embeds the entire Nigerian state in DisCos’ financial health. As the Federal Government is the custodian of public equity on behalf of the entire federation, it is implicitly forced to cover operational shortfalls with public subsidies.

While intended to increase market efficiency, it replaces the prior, albeit imperfect, sovereign-backed guarantees with direct exposure to the financial instability and creditworthiness of individual DisCos. GenCos now face greater demand and price risks, as their revenue stability is directly tied to DisCos’ ability to collect tariffs and make timely payments.

This new structure demands more robust direct contractual arrangements and places significant pressure on GenCos to manage their counterparty risks. Notably, a few legacy PPAs, such as those with Azura-Edo, Omotosho, Olorunsogo, Afam VI, and Okpai, remain in place, but new generation projects must operate under a stricter market logic. As of June 2025, seven of the 36 states control their own electricity markets, with another 11 in the process of transitioning (Aina et al., 2025).

Table 2 quantifies the fiscal impact of this flawed model. It illustrates the significant tariff gap, the difference between the cost of electricity and the amount of DisCos are allowed to charge, that exists across the sector. The public subsidies required to fill these gaps are the implicit state guarantees that define this model. This is not a sustainable reform but rather a persistent pricing misalignment that shifts the ultimate financial risk from private operators back to the Nigerian state.

**Table 2: Tariff Gap Values by Distribution Company (2025)**

	<b>End-use Tariffs (₦/kWh)</b>	<b>Cost-reflective Tariffs (₦/kWh)</b>	<b>Tariff Gap (₦/kWh)</b>
Abuja Distribution Company	117	199	82
Benin Distribution Company	117	203	86
Eko Distribution Company	118	194	76
Enugu Distribution Company	115	204	89
Ibadan Distribution Company	117	206	89
Ibom Utility Distribution Company	-	-	-
Ikeja Distribution Company	115	190	75
Jos Distribution Company	116	214	98
Kaduna Distribution Company	113	213	100
Kano Distribution Company	116	209	93
Port Harcourt Distribution Company	115	206	91
Yola Distribution Company	120	289	169

Source: REDCAJU Data

Building on the shift to bilateral trading, the second major development has been the decentralisation of regulatory authority. Under the new Electricity Act, states within the Nigerian Federation are gaining control over their electricity markets. This creates new dynamics in market governance, regulations, and investment risks. One example is Akwa Ibom State, which has

established its own power distribution company, Ibom Utility. This entity will compete directly with the Port Harcourt Distribution Company (PHDC), which currently serves Akwa Ibom, Rivers, Cross River, and Bayelsa States (Ibom Standard, 2024). The state also owns Ibom Power, one of the country's earliest IPPs, and plans to enter bilateral agreements with distribution companies in neighbouring states to off-take approximately 150 megawatts of available generation. This introduces regulatory complexity, potentially inconsistent tariff structures, and direct commercial competition, all of which increase risk for existing DisCos.

Decentralisation of the Nigerian Electricity Supply Industry (NESI) also creates opportunities for state-level de-risking, as individual states can now develop tailored regulatory frameworks, localised incentives, and potentially even offer specific guarantees to attract investments that help them remain commercially competitive. However, this also introduces challenges related to varying state capacities and the need to ensure consistency in regulatory application as well as effective interstate coordination. Despite a 70% increase in energy sector spending between 2023 and 2024, the national currency has declined in relation to the US Dollar, resulting in persistent funding constraints (Daggash, 2024) and inefficiencies are likely to persist even at the state level.

At the same time, the Nigerian government is gradually withdrawing fiscal support from the power sector amidst growing pressure to privatise state-owned assets and eliminate electricity subsidies. This move comes as the government faces staggering liabilities, including over ₦2 trillion in legacy debt to Generating Companies (GenCos) and an additional ₦450 billion owed to Distribution Companies (DisCos) in unpaid subsidies from 2024 alone.

An analysis of the 2024 data reveals a critical flaw in the current hybrid public-private ownership framework: The subsidies designed to stabilise the sector are not aligned with the performance of the DisCos in paying their invoices from the bulk buyer, NBET. This creates a fragmented incentive structure that fails to reward efficiency or penalise poor revenue collection.

**Table 3: DisCo Subsidies vs. Payment Efficiency (2024)**

	Subsidy (₦B)	Total Invoiced (₦B)	Payment Efficiency (%)
Abuja Distribution Company	286	233	92%
Benin Distribution Company	170	121	83%
Eko Distribution Company	232	210	99%
Enugu Distribution Company	162	104	87%
Ibadan Distribution Company	237	165	90%
Ibom Utility Distribution Company	-	-	-
Ikeja Distribution Company	273	246	94%
Jos Distribution Company	118	51	76%
Kaduna Distribution Company	129	62	36%
Kano Distribution Company	136	66	82%
Port Harcourt Distribution Company	150	96	86%
Yola Distribution Company	68	9	94%

Source: REDCAJU Data

The misalignment shown in the table above is significant. For instance, Eko DisCo, the top performer with 99% payment efficiency, receives a smaller subsidy (₦232 billion) than the lower-performing Abuja DisCo (₦286 billion for 92%) and Ikeja DisCo (₦273 billion for 94%).



In addition, the case of Kaduna DisCo, which receives ₦129 billion despite a collection efficiency of only 36%, points to a severe lack of accountability. As these misaligned subsidies are phased out, DisCos will be fully exposed to revenue shortfalls, further intensifying liquidity constraints and increasing their financial risk.

Compounding these internal sector challenges are the significant macroeconomic pressures that continue to undermine de-risking efforts. Between 2023 and 2024, two major devaluations of the Naira contributed to an inflation surge of nearly 25%. This eroded the real value of tariff payments and increased the cost of imported materials for energy infrastructure development. In response, the Central Bank raised the Monetary Policy Rate to 27.5%, pushing interbank lending rates to over 28% by mid-2025.

These intersecting crises have created a severe liquidity crunch. High borrowing costs impair the financial health of both GenCos and DisCos, while GenCos face additional struggles with foreign exchange constraints for maintenance, unreliable gas supply, and inefficient grid management issues. Together, these factors make private investment in Nigeria's power sector increasingly precarious and complicate efforts to ensure revenue stability and cost recovery for all market participants.

### **3.4.2 Partial Risk Guarantees**

Partial Risk Guarantees became a pivotal element of Nigeria's infrastructure development in 2013, especially in the energy sector. The AfDB initiated the Partial Risk Guarantee (PRG) programme, approving US\$184.2 million to mitigate risks from government payment obligations under PPAs and encourage private sector investment in the newly privatised power sector (AfDB, 2013). The World Bank supported the Egbin Power Plant Gas Supply PRG with US\$145 million for a 10-year Gas Supply and Aggregation Agreement (GSAA) among PHCN, Egbin Power PLC, and Chevron Nigeria Ltd., ensuring a stable fuel supply for Nigeria's largest power station (Emejo, 2013).

From 2014 to 2019, the World Bank's Nigeria Power Sector Guarantees Project (PSGP) reinforced derisking. It aimed to boost electricity supply, attract private power generation investment, and improve distribution efficiency through Partial Risk Guarantees (PRGs) (World Bank, 2021). These guarantees enhanced the creditworthiness of the Nigerian Bulk Electricity Trading (NBET) company, supported the privatisation of gas-fired and hydropower Generation Companies (GenCos), which in turn aimed to improve the power supply available to Distribution Companies (DisCos) in Abuja, Benin, Eko and Ikeja. Notable PSGP-backed projects include the Azura-Edo and Qua Iboe Power Plants.

Nigeria began leveraging Partial Risk Guarantees in 2013, aligning with the Wall Street Consensus, which promotes financialised solutions to global challenges by derisking private investments through public guarantees and subsidies. These guarantees, provided by institutions such as the AfDB and World Bank, aim to mitigate risks associated with government payment obligations under Power Purchase Agreements (PPAs) and enhance investor confidence. However, the continued accumulation of government debt to GenCos despite PRGs raises questions about their effectiveness.

In 2016, Nigeria's federal government and Seven Energy signed a US\$112 million World Bank PRG agreement to secure up to 130 million cubic feet per day (MMcfpd) of natural gas for the 560 MW Nigerian Integrated Power Project (NIPP) in Calabar, aiming to boost power generation capacity (ASU, 2016; Financial Nigeria, 2016). In 2017, the Nigeria Sovereign Investment Authority (NSIA) partnered with GuarantCo, a Private Infrastructure Development Group (PIDG) entity, to establish

InfraCredit. InfraCredit, a AAA-rated entity, provides guarantees to enhance local currency debt instruments for infrastructure projects, enabling pension funds and insurance companies to invest despite regulatory constraints (InfraCo Africa, 2025). In 2024, the AfDB executed a US\$15 million capital infusion into InfraCredit, following a US\$10 million investment in 2020, to strengthen InfraCredit's capital base and attract private sector financing across key infrastructure sectors, including power generation, renewable energy, telecommunications, healthcare, housing, and transport (InfraCredit, 2024).

Nigeria's domestic banking sector plays a limited but aligned role in derisking. The country has one major development bank, the Bank of Industry (BoI), and the Development Bank of Nigeria (DBN), both of which support long-term lending. However, these institutions remain undercapitalised relative to infrastructure needs and often rely on donor-supported credit enhancements. Domestic commercial banks are largely risk-averse (Shittu, 2019) and geared towards short-term lending. With limited local currency infrastructure finance, both development and private banks tend to participate in energy projects only when public guarantees, multilateral risk coverage, or blended finance are involved. These tendencies reinforce the derisking model, in which private financial actors depend on public institutions to absorb long-term risks.

While PRGs were intended to secure payment streams, they primarily addressed symptoms rather than the root causes of Nigeria's power sector liquidity crisis. This reflects a key critique of the Wall Street Consensus: public resources shield private investors from risk, yet systemic financial strains persist due to underlying structural inefficiencies and fiscal constraints. The fact that some beneficiaries of these guarantees are now owed substantial sums by the government highlights the limitations of financialised de-risking in a market where deeper institutional reforms remain unaddressed.

### **3.4.3 Renewable energy: the new derisking frontier**

Building on derisking efforts in traditional power generation through PPAs and PRGs, Nigeria has increasingly focused on renewable energy as a critical component of its energy mix and development strategy. This shift reflects a global trend towards sustainable energy solutions and the recognition of Nigeria's vast renewable resource potential. However, the unique challenges of renewable energy projects, such as technological uncertainties, grid integration issues, and decentralised solutions, have led to the use of derisking as a tool to attract private sector investment.

In 2018, the Nigerian Mini-Grids Partnership, led by the Rural Electrification Agency, sought to accelerate the deployment of renewable energy mini-grids in underserved areas. This partnership highlights the need for diverse financing. The REA adopted a comprehensive risk mitigation approach by establishing regulatory frameworks, providing technical assistance, disseminating data, and facilitating access to grants and results-based financing (Mini-Grids, 2018). To support the REA's goal of universal energy access by 2030, significant financial commitments have been made. In 2020, the AfDB and the Africa Growing Together Fund (AGTF) pledged US\$200 million, complementing the World Bank's US\$350 million commitment. This brought total funding for the Nigeria Electrification Project (NEP) to US\$550 million, aiming to de-risk and scale-up an estimated US\$660 million in private sector investment for mini-grid and off-grid solutions (Nweke-Eze, 2022)

Innovative financing mechanisms have been developed to facilitate private sector participation in the broader renewable energy landscape. British International Investment (BII) provided InfraCredit with a US\$30 million risk-sharing and blended local currency co-financing facility through the



Climate Finance Blending Facility (CFBF). This facility includes a US\$20 million local currency counter-guarantee and a US\$10 million concessional loan designed to support decentralised renewable energy (DRE) projects originated and guaranteed by InfraCredit (Nwachukwu, 2024).

Nigeria's Energy Transition plan exemplifies how derisking has become central to development financing in Nigeria. In 2022, Nigeria announced its target of reaching net zero by 2060. The plan outlines emissions reduction strategies across five sectors: power generation, transportation, oil and gas, clean cooking and industry. The estimated cost is US\$23 billion, framed as an investment opportunity across the value chain. Of this, US\$17 billion is to be sourced from the private sector and US\$6 billion from the government. To attract private investment, up to US\$2 billion of public investment is earmarked for guarantees and de-risking instruments to attract private investment. These funds are strategically allocated to stimulate private sector participation in key project areas, including up to US\$1 billion for power generation, US\$300 million for transmission and distribution infrastructure, US\$500 million for gas commercialisation, US\$150 million for clean cooking initiatives, and US\$50 million for healthcare sector decarbonisation (Nigeria Energy Transition Plan, 2022). However, as of 2025, the full US\$2 billion public derisking fund has not been deployed as a single, fully capitalised instrument. Instead, the ETP's derisking strategy for 'investable renewables' has been implemented primarily through more targeted, parallel programs. The most successful of these is the Universal Energy Facility (UEF), an ETP implementation vehicle managed by Sustainable Energy for All (SEforALL) (PR Newswire, 2023). The UEF provides results-based grants to private companies for verified new energy connections to the grid. This has led to tangible outcomes, such as the deployment of 733 stand-alone solar systems for productive use in businesses (SEforALL, n.d.). In contrast, the large-scale US\$1 billion component earmarked for utility-scale power generation has been deployed much more slowly. This fund has not been clearly assigned, having been stalled by Nigeria's broader macro-financial challenges, a combination of inadequate financing for projects, a severe infrastructure deficit in the national grid, and a lack of clear political prioritisation over fossil fuels (Olaniwun Ajayi LP, 2025).

Derisking strategies have become increasingly important in Nigeria's development landscape and show no signs of slowing down. Development finance institutions, such as the AfDB, as recently emphasised at the 2023 OPEC Fund Forum, highlight the need to stimulate capital deployment from the private sector by derisking projects and lowering transaction costs.

### **3.5 The Power Sector's Unique Trajectory: Late Privatisation and the Embrace of De-risking**

Nigeria's energy policy has evolved from state-led development through incomplete liberalisation to a financing model centred on derisking. While the 2005 EPSRA and 2013 privatisation aimed to stimulate private participation, systemic risks and fiscal bottlenecks persist. However, this transformation was neither linear nor immediate in nature.

During the Structural Adjustment Programme (SAP) period, Nigeria's utilities, including power, were slated for commercialisation, not outright privatisation. This approach aimed to retain state ownership while instilling commercial discipline. While entities like Nigerian Telecommunications Limited (NITEL) experienced relative success under this model, others, such as state-level water works, failed, and the power sector, particularly NEPA, achieved only partial commercialisation by 1990. The full privatisation of the power sector did not occur until 2013, despite the reform frameworks introduced in the early 2000s. This delay stemmed from a combination of factors: institutional resistance from trade unions, such as the National Union of Electricity Employees (NUEE), the sheer complexity of managing nationwide generation, transmission, and distribution, and deep-rooted infrastructural and regulatory weaknesses. These challenges severely limited the pace and depth of reforms.

The unbundling of the PHCN and subsequent privatisation did not mark a clean shift from state-led models to derisking regimes. Instead, these reforms coincided with a global transition, driven by institutions such as the World Bank, towards financialised infrastructure development, where public guarantees, blended finance, and risk-transfer instruments are used to attract private capital to the sectors. The rise of derisking tools and local instruments, such as InfraCredit, reflects Nigeria's integration into this global trend. While these tools have helped mobilise private participation, they do not eliminate risk; rather, they reallocate it, often to public institutions and to taxpayers. This raises critical questions regarding the long-term sustainability, accountability, and developmental equity of Nigeria's current energy financing model.

Nigeria's macroeconomic fragility constrains the effectiveness of its derisking framework. With a revenue-to-GDP ratio of just 9.4%, well below the sub-Saharan average, and a projected debt burden of 187.79 trillion by 2025, up from 134.30 trillion in mid-2024 (Alli, 2025). The state's capacity to absorb contingent liabilities is severely limited. As of Q1 2025, roughly 47.28% (US\$45,975.02 million) of public debt is denominated in foreign currency, exposing Nigeria to exchange rate shocks and complicating repayment. As public guarantees proliferate under derisking models, these systemic pressures threaten fiscal sustainability and limit the long-term credibility of sovereign risk absorption. In addition, access to affordable financing is complex. Interest rate spreads have increased over the past few years, reaching a record high of 19% from 6% (Moses-Ashike, 2025). Domestic institutions exhibit a cautious risk appetite for large-scale energy projects, while international investors are deterred by political and economic instability. Currency volatility, inflationary pressures, and fiscal constraints compound these challenges, creating significant barriers to long-term energy project financing.

## 4. Case Study: The Azura Edo IPP and the Fiscal Cost of Transnational Derisking

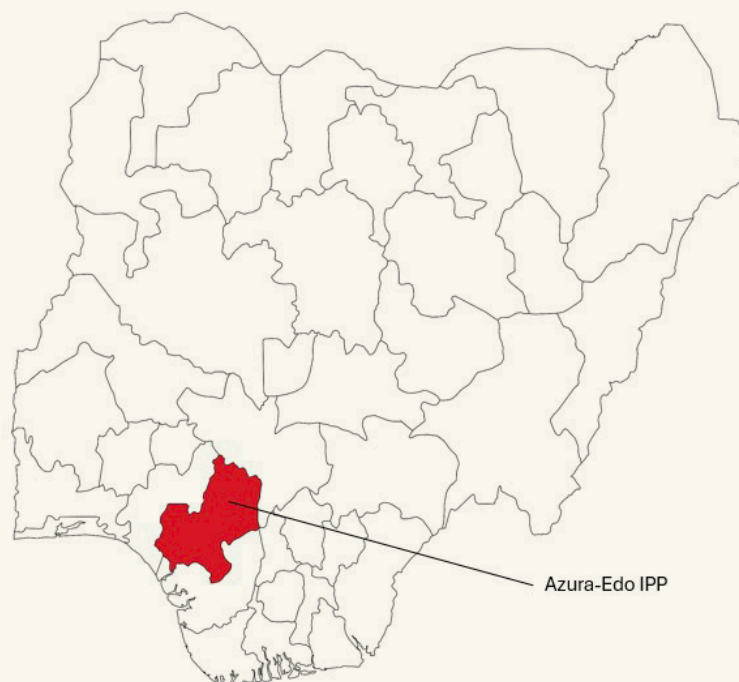
The Azura Edo Independent Power Project (IPP) is a landmark in Nigeria's energy sector as the first fully project-financed power plant. To attract private investment, it used sovereign-backed guarantees, World Bank PRGs, and take-or-pay power purchase agreements. These derisking mechanisms secured financing but also created significant fiscal obligations for the Nigerian government to honour. This case study examines the Azura IPP as a landmark example of a transnational derisking model. It analyses how this specific model shaped the project's financing structure, the severe fiscal burden imposed, and its broader economic implications. This section contrasts Azura's formal guarantee-backed approach with the locally financed and informal strategies prevalent in the rest of Nigeria's power sector. This comparison highlights key lessons on balancing energy investment with fiscal sustainability and explores whether Nigeria's derisking approach is viable for future projects.

### 4.1 Project Overview

The Azura-Edo Independent Power Plant (IPP) is a 459 MW gas-fired facility near Benin City, Nigeria. It reached financial closure in December 2015 and began operations ahead of schedule in December 2017. The project aimed to meet urgent electricity demands and aid Nigeria's transition towards a less carbon-intensive economy.



**Figure 4: Location on the Azura-Edo IPP**



The development of the Azura-Edo IPP was initiated by a consortium of international and African investment firms. While the original equity consortium included Amaya Capital/American Capital Energy & Infrastructure (ACEI), Africa Infrastructure Investment Managers (AIIM), and ARM-Harith Infrastructure Fund, the ownership structure has since changed. ACEI, AIIM, and ARM-Harith have since exited this project. The consortium was later joined by Actis-General Atlantic and the Africa50 Fund (AGF, 2016; Africa50, 2019), with the Edo State Government retaining a minority stake. It is worth noting that some of the initial equity owners were later named in the Panama and Paradise Papers investigations for their use of offshore entities, although they denied any wrongdoing (Olawoyin, 2018).

Construction was undertaken by the Julius Berger/Siemens Consortium. Gas supply was secured through a 15-year agreement with Seplat Petroleum Development Company. The generated power is sold exclusively to the Nigerian Bulk Electricity Trading Plc (NBET) under a 20-year Power Purchase Agreement (PPA), which includes a take-or-pay clause. The PPA was reinforced by a Put Call Option Agreement (PCOA) with the Federal Government of Nigeria, providing additional financial security and risk mitigation.

The Azura-Edo IPP project required approximately US\$900 million, securing US\$876 million through US\$190 million in equity and US\$686 million in debt from various financial institutions. Commercial banks, including Rand Merchant Bank, Standard Chartered Bank, Siemens Bank, Standard Bank, and KfW IPEX Bank, contributed US\$230.6 million. Development Finance Institutions (DFIs) such as IFC, FMO, DEG, Proparco, Swedfund International, OPIC, the Emerging Africa Infrastructure Fund, British International Investments (BII, formerly CDC Group), and the ICF Debt Pool provided US\$262.5 million in senior debt, plus US\$65 million in subordinated debt. An additional US\$120 million in concessional funding was secured from Nigeria's Bank of Industry (BOI), which disbursed funds from the Central Bank of Nigeria's Power and Aviation Intervention Fund (World Bank, 2014). The World Bank Group, through the IBRD and MIGA, provided guarantees that reduced risks for lenders, covering payment defaults, debt mobilisation difficulties, and political risks, which were crucial for attracting the diverse financial institutions needed for the project.

## 4.2 Derisking Strategies Used

The Azura-Edo IPP project, which is critical to Nigeria's energy needs, was underpinned by a robust system of financial guarantees. These guarantees provide financial security to investors and stakeholders, addressing the inherent challenges of the nation's power sector.

### 4.2.1 Partial Risk Guarantees

To bolster the project's bankability, Partial Risk Guarantees (PRGs) from the International Bank for Reconstruction and Development (IBRD), the World Bank's lending arm, were utilised. The IBRD's support included guarantee coverage of at least US\$325 million (Clifford Chance, 2016). This support was structured to mitigate the key risks for lenders.

A significant portion of this guarantee backed a senior commercial tranche of over \$200 million arranged by Standard Chartered Bank. Specifically, the IBRD provided a debt-mobilisation guarantee of up to US\$118 million and an additional loan guarantee, both of which helped secure commercial debt (MIGA, 2024). Additionally, the IBRD provided a payment guarantee of up to \$120 million to backstop the payment obligations of the Nigerian Bulk Electricity Trading Plc. (NBET) under the Power Purchase Agreement (PPA). This liquidity support also backed a letter of credit issued by JP Morgan on behalf of NBET.

While these guarantees were crucial for mobilising private capital in a high-risk market, they also highlighted the project's dependence on the support of multilateral institutions. This raises questions about the long-term sustainability of such projects, as the guarantees do not resolve the fundamental structural weaknesses in Nigeria's power sector.

### 4.2.2 Sovereign Risk Guarantees

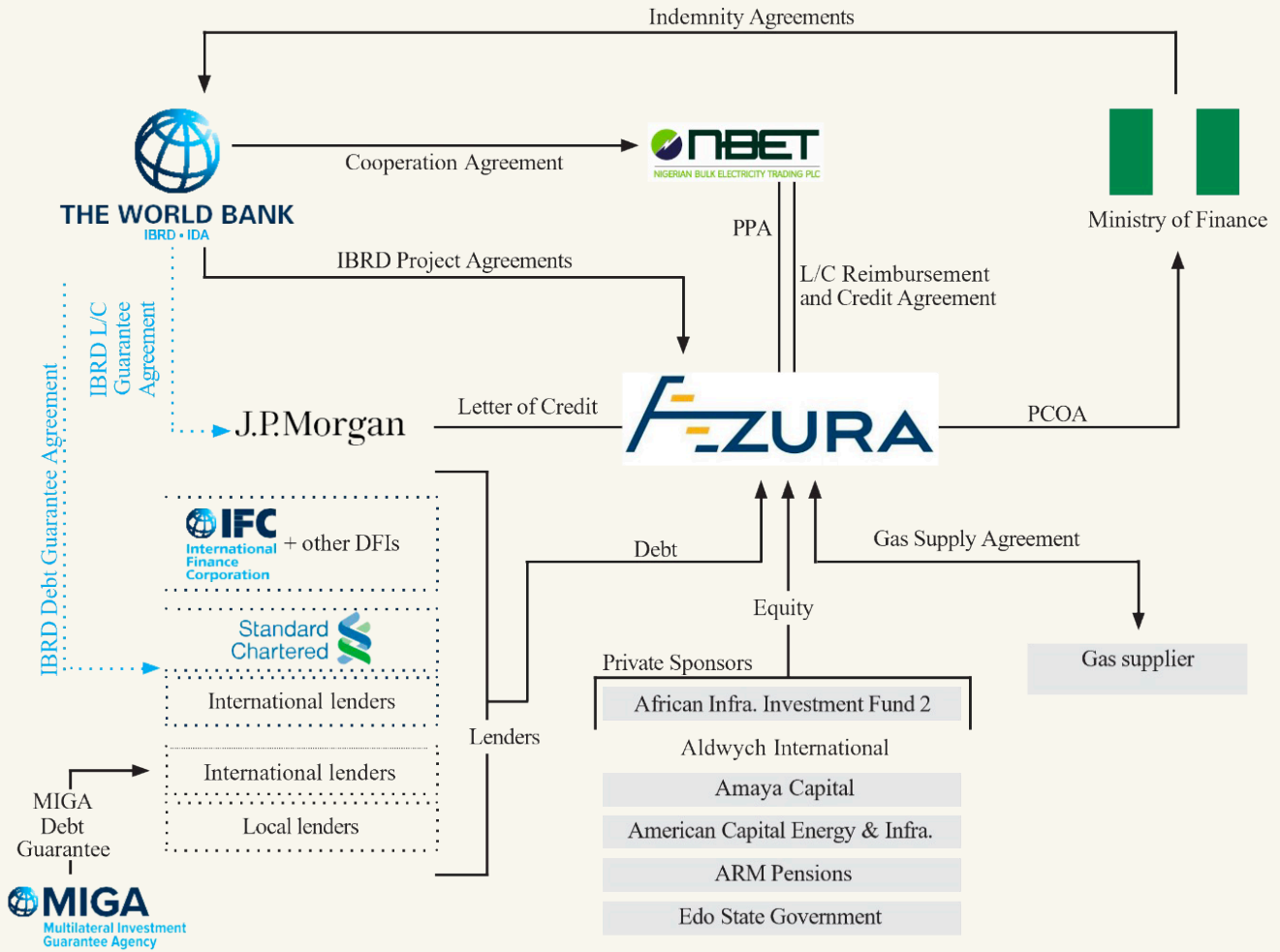
Attracting private capital to the Azura-Edo IPP required addressing Nigeria's energy sector risks. The project's financial structure is centred on a Power Purchase Agreement (PPA) with Nigerian Bulk Electricity Trading, including a take-or-pay clause. This ensured predictable revenue by obligating the NBET to pay for contracted electricity capacity, regardless of consumption. However, recognising NBET's potential vulnerabilities, additional safeguards were necessary.

Initially, the Nigerian Federal Government (FGN) hesitated to provide sovereign guarantees. Instead, it developed an innovative mechanism: the Put and Call Option Agreement (PCOA). This allowed the project company to 'put,' or sell, the power plant (or its shares) back to the FGN in cases of premature PPA termination. The FGN was obligated to pay a price which would at least cover the project's outstanding debt. The PCOA structure provided a government-backed exit strategy, mitigating risks without direct sovereign guarantees.

Complementing these measures, a US\$492 million guarantee from the Multilateral Investment Guarantee Agency further reduced perceived risks by covering equity investments and potential political instability in the country.



Figure 5: Azura-Edo IPP Initial Guarantee Structure



Source: World Bank (2018)

### 4.3 Fiscal Costs and Risks

While Partial Risk Guarantees (PRGs) for the Azura project successfully attracted private capital by reducing investment risk, they simultaneously created substantial contingent liabilities for the Nigerian government. Given the financial instability of the state buyer, NBET, the risk of these guarantees being called in was high, threatening to strain public finances.

Initially hailed as a landmark, the Azura agreement became a significant fiscal burden, locking Nigeria into substantial contractual obligations. These included a high tariff of 10.1 cents (USD) per kilowatt-hour, a potential US\$1.2 billion exit fee, and guaranteed monthly payments of US\$30–\$33 million for power, even if it could not be transmitted (Adebulu, 2019). The 2016 currency crisis magnified these risks by inflating the Naira equivalent of dollar-denominated payments, a factor not originally accounted for in the tariff structure (Akwagiyam and Carsten, 2018).

This financial pressure led the government to extend its 701 billion loan fund to Azura in 2017 to avoid breaching World Bank-backed agreements. In response, other generating companies sued the Federal Government, alleging discriminatory treatment and demanding the payment of 1 trillion in debt (Akpan, 2018). The situation escalated, with Azura Power West Africa Limited demanding payment of arrears by 25 October 2024 and threatening to invoke the PRG. This action could trigger a sovereign default, leading to a downgrade of Nigeria's credit rating and the potential seizure of its assets abroad (Adebulu, 2024).

This predicament is notable because a previous administration had refused to sign the PRG, citing these very risks to Nigeria's assets (Adoke, 2019), only for a new administration to approve it a year later. The current administration, describing the take-or-pay agreement as "killing us", now appears prepared to challenge Azura's threats (Adebulu, 2024). Consequently, the Azura saga has prompted a policy shift, with the government expressing reluctance to offer sovereign guarantees for future power projects (Okafor & Mozie, 2018). The escalating tensions highlight the urgent need to reassess Nigeria's energy financing strategies, especially regarding the use of PRGs and derisking logic in its proposed Energy Transition Plan.

#### **4.4 Contrasting Models of Derisking in Nigeria's Power Sector**

The Azura-Edo Independent Power Plant stands out as one of the most structured and risk-mitigated investments in Nigeria's electricity sector, but it is far from typical. Its financial architecture, which includes long-term guarantees from the International Bank for Reconstruction and Development (IBRD), the Multilateral Investment Guarantee Agency (MIGA), and the Nigerian Federal Government through a Put Call Option Agreement (PCOA), was designed to attract international capital and assure revenue stability through a take-or-pay Power Purchase Agreement (PPA). However, most Nigerian power sector projects do not share this profile. Instead, they operate within a fragmented landscape of informal, discretionary, or locally derived risk mitigation practices.

During the 2013 privatisation process, most power assets were acquired by Nigerian investors and financed through domestic capital. According to industry assessments at the time, this demonstrated that Nigerian banks could provide long-term funding to critical infrastructure sectors, especially as international capital remained hesitant to engage with Nigeria's power market (Oxford Business Group, 2014). These locally financed assets did not benefit from the layered risk guarantees that made Azura bankable, however. Rather, risk absorption occurred through indirect methods, including reduced asset pricing, inconsistent regulatory enforcement, and limited-service obligations.

The contractual landscape further distinguishes Azura-Edo from the broader energy sector. Azura's 20-year take-or-pay agreement with the NBET provides predictable revenue, even in the event of underutilisation. In contrast, most GenCos operate under undertake-and-pay contracts, interim PPAs, or transitional arrangements. As of 2024, only five PPAs were classified by NBET as fully effective (NBET, 2022), and only Azura consistently received 100% of its invoices. This consistency is reportedly enabled by direct intervention from the Federal Ministry of Finance, a level of support not afforded to other operators in the sector. In the same year, NBET's average payment efficiency to GenCos was 64%, illustrating the systemic revenue risk faced by other producers (NBET, 2022).

The experience of the Qua Iboe Power Plant further illustrates the limitations of replicating the Azura model in Nigeria. Despite initial support from the World Bank and plans to implement a similarly structured PPA and PCOA, the Nigerian government declined to sign off on the risk guarantees due to concerns over contingent liabilities. This led to the withdrawal of World Bank support in 2019 and has since stalled the project indefinitely (Adebulu, 2020). The Qua Iboe case reflects the growing state's reluctance to assume the fiscal responsibilities associated with formal derisking mechanisms.

Meanwhile, in much of the NESI, risk is managed through less-structured means. These include discounts on asset sales during the 2013 privatisation process, lenient treatment by regulators, and the inclusion of broad force majeure clauses in contracts, such as those reportedly used in the



Yola DisCo case (BPE, 2018). In some instances, corruption and political connections function as informal risk shields (U4 Anti-Corruption Resource Centre, 2023). Domestic banks have also contributed to derisking by offering debt forbearance to struggling GenCos (Aja, 2020), while the government frequently supports critical infrastructure, such as transmission upgrades, which benefit private operators by lowering their exposure to operational and logistical constraints. For example, President Bola Tinubu met with the chairmen of GenCos to appeal for patience, pledging to resolve the longstanding debts owed to them, which had reached an accumulated figure of 4 trillion as of April 2025 (The State House, 2025). While this action is a form of government intervention to absorb risk, it also highlights the ongoing liquidity challenges in the sector.

Azura-Edo's performance was exceptional. Between 2023 and 2024, it maintained an availability factor of 91%, compared to a national average of 32% (NBET, 2022). It is also regarded as a producer of last resort, often relied upon when other plants are unable or unwilling to supply the power. However, this level of performance is not solely a function of superior operations but is closely tied to the project's unique financial protections and revenue certainty.

The contrast between Azura and the rest of the sector highlights the structural divide in risk management in Nigeria's power sector. While Azura exemplifies formal, rules-based derisking supported by multilateral institutions and the sovereign, most other projects depend on flexible, less transparent, and often politically mediated forms of risk absorption. These practices may reduce risk in the short term but can perpetuate inefficiency and fiscal opacity. As Nigeria moves towards its energy transition objectives and contemplates further expansion of the power sector, it will be critical to consider how future financing can be made more sustainable and equitable without repeating the fiscal burdens associated with projects such as Azura-Edo.

## 5. Policy Recommendations

Nigeria's energy sector is deeply entangled in a financing model that reinforces its role in the global carbon economy: "industrialisation by derisking." Under this logic, the state assumes financial risks to attract private investment, while profits remain privatised. This approach reproduces Nigeria's dependency as a commodity exporter and exacerbates its macro-financial vulnerabilities. Rather than facilitating transformation, it entrenches the country's peripheral position in the unequal ecological exchange. To escape this cycle, Nigeria must adopt a green developmental framework. One that disciplines capital, reclaims public ownership over key infrastructure, and retools macro-financial institutions to align fiscal, industrial, and monetary policies with long-term development objectives (Gabor & Sylla, 2023). In the current context of economic fragility and climate urgency, this is not simply a proposition but a practical necessity.

### 5.1 *Public Ownership as a Foundation for Structural Transformation*

The dysfunction of Nigeria's privatised power sector signals the need for a "big green state" (Gabor & Braun, 2023) to take control. Derisking has failed to stabilise the sector, with many electricity distribution companies (DisCos) reporting losses, the persistent revenue shortfalls faced by generation companies (GenCos), and the state's failure to attract investors for the NIPP assets, all signal the deep dysfunction of the privatised power sector. Under such conditions, continuing to absorb private sector risk through derisking mechanisms offers limited returns and exposes the state to growing fiscal liabilities. Rather than continuing to prop up a failing system, the Nigerian government should consider reclaiming public ownership of insolvent assets and strategically expanding its role in power generation and distribution. This is not a call to recreate past inefficiencies but to reassert democratic control over infrastructure critical to development.

Publicly owned and financed energy projects can be aligned with industrial and social electrification goals by prioritising local productive demand, such as agro-processing, manufacturing, and rural electrification. This approach must be accompanied by clear public interest mandates centred on affordability, decarbonisation, and universal access.

## **5.2 Disciplining Capital Through Public Mandates**

The prevailing discourse around public-private partnerships, collaboration, and conditionalities fails to grasp that carrots alone are insufficient. While derisking has mostly served as a set of carrots to lure investment, private finance must be governed through sticks, not merely incentivised. In an environment where private capital is scarce, risk-averse, and already struggling with poor balance sheets, the state cannot rely on negotiated conditionalities to shape investments. Instead, capital must be disciplined using clear and binding mandates. These include mandatory local content sourcing, carbon disclosure rules, limits on profit repatriation and profit-sharing agreements, and enforcement. These are not merely technocratic add-ons but essential tools for ensuring that any private participation serves national development. Where private investors are unwilling or unable to comply, particularly in critical sectors such as energy, the state must be willing to step in directly as a financier, owner, and operator.

## **5.3 Mobilising Domestic Finance and Reducing External Vulnerabilities**

### **Project Overview**

Nigeria's ability to finance structural transformation and deliver a just energy transition is constrained by its reliance on external capital. Although capital inflows increased in 2024, they were primarily driven by short-term portfolio investments. These flows remain volatile and pro-cyclical, offering limited support for long-term infrastructure or green industrialisation. Meanwhile, foreign direct investment continues to decline, falling from US\$ 4.7 billion in 2011 to less than US\$ 900 million in 2023, with most of it concentrated in hydrocarbons. Investor concerns regarding exchange rate instability, fiscal fragmentation, and insecurity have only compounded this retreat. As Volz et al. (2022) note, developing countries that rely heavily on external financing are structurally exposed to sudden stops, rising sovereign spreads, and constrained policy spaces in times of crisis.

Rebalancing towards domestic sources of finance is therefore not a technical fix but rather a macro-financial restructuring exercise. Nigeria's current public revenue effort remains among the lowest in the world, with non-oil tax revenue hovering around 4–5% of GDP. While tax reform and subsidy reallocation remain essential to broadening fiscal space, a deeper transformation is needed in the architecture of domestic capital mobilisation. Central to this is the development of local currency bond markets, which could serve as a source of long-term, more stable financing for large-scale public investment. If well-governed, these markets can help reduce currency mismatches, cushion against external shocks, and channel domestic savings into productive infrastructure and climate adaptation. As Volz, Akbar and Ashford (2021) argue, the local currency route is critical for debt sustainability and for building macroeconomic autonomy in the context of the energy transition.

However, the development of the local currency bond market is not inherently progressive. If designed primarily to attract foreign institutional investors or developed under the guise of financial deepening initiatives driven by multilateral institutions, these markets risk reproducing the same dependencies they are meant to offset. Nigeria's domestic debt market is already skewed towards short tenors and high yields, crowding out developmental financing. Moreover, state governments face legal and institutional barriers to issuing long-term subnational bonds, further limiting infrastructure financing outside of federal channels.



To shift this trajectory, local bond market development must be integrated into a broader, green industrial strategy. This involves aligning the mandates of key public institutions, such as the Debt Management Office, Central Bank, and infrastructure agencies, to support climate-aligned investment through targeted bond issuances. These instruments should prioritise lending to development banks, energy utilities, and green SOEs, not merely crowding in private capital. Regulatory frameworks must ensure that long-duration, patient capital is deployed in the service of social and ecological goals, not just financial returns. This type of domestic mobilisation, rooted in strategic planning and public coordination, is central to reducing external vulnerability and restoring the fiscal and monetary space needed for an ambitious energy transition.

#### **5.4 Reclaiming Development Finance**

In 2024, the Central Bank of Nigeria (CBN) announced a significant strategic shift and decided to cease direct involvement in development finance interventions. This decision was framed as a return to the Bank's core mandate of ensuring monetary and price stability, with the acting Central Bank Governor noting that such interventions had blurred the lines between the monetary and fiscal environments (Fakoyejo, 2023). Since gaining independence, the CBN has been pivotal in channelling credit to strategic sectors such as agriculture, manufacturing, and infrastructure, often employing targeted interventions to direct capital to these critical areas. However, these interventions have faced criticism, with some arguing that they expanded the money supply and exacerbated the already high inflation. Programs like the Anchor Borrowers' Program have been criticised for low loan recovery rates and not always reaching their intended beneficiaries. The new administration highlighted the need for institutional expertise, contending that the CBN lacked specialised knowledge to manage these diverse programs effectively. Although the future remains legally uncertain, the CBN has suggested transferring these activities to development finance institutions, jointly owned by the Ministry of Finance and CBN, and private financial institutions (Tunji, 2024). While critics of these intervention programs have valid points, rather than withdrawing from development finance, there is an opportunity to rethink how the central bank intervenes, especially in the context of climate change and energy transition. Increasing evidence indicates that central banks are not immune to climate risks, with impacts varying across risks and countries. These risks can hinder CBN's objectives, necessitating a focus on self-protection while supporting the government's net-zero target. Extensive research exists on the approaches that central banks can adopt to support a green developmentalist state (see, for example, Batten et al., 2016; Volz, 2017; Campiglio et al., 2018; Battiston & Monasterolo, 2019; Dafermos, et al., 2020; Dikau and Volz, 2021).

In Nigeria, one of the most apparent risks is the transition risk that could arise from a global shift away from fossil fuels, given that over 80% of the export revenue comes from crude oil sales. As a result, the CBN cannot remain institutionally indifferent to climate risk. The Bank for International Settlements (2020) argues that central banks must broaden their mandates to include climate-related financial stability risks, which it terms "green swans." In Nigeria, this could involve creating or adopting a green taxonomy and consolidating over 20 development finance initiatives into a focused set aimed at supporting green credit allocation and financing green industrial development in support of a green developmental state. Such a shift is not unprecedented. Other emerging market central banks, including those in Bangladesh, Brazil, and China, have explicitly integrated green objectives into monetary and credit policies using tools such as directed lending quotas, green bond frameworks, and refinancing facilities (Roy et al., 2020). Nigeria should draw lessons from these cases to build a proactive, climate-aligned monetary framework.

However, rebuilding development finance cannot fall solely on the CBN. The Development Bank of Nigeria (DBN), which is currently focused on micro, small, and medium-sized enterprises, must be retooled to play a more strategic role in financing the green transition. Development banks have historically served as key vehicles for structural transformation, particularly when market incentives are misaligned with the national development goals (Mazzucato, 2013; Gabor, 2021). The DBN should be empowered to support domestic industrial upgrading, invest in low-carbon infrastructure and co-finance public sector projects with high developmental returns.

To do so effectively, the DBN will require greater capital backing, a revised mandate aligned with climate objectives, and closer integration with national industrial and climate policy strategies (UNCTAD, 2021). Its operations should be transparent, domestically accountable, and capable of mobilising finance through strategic planning and public-sector partnerships, rather than relying solely on market mechanisms. This also means resisting the donor-driven model that redefines development banks as passive facilitators of private investment rather than as active leaders in long-term public investment (Gabor, 2021).

Taken together, the CBN's retreat from development finance and the underutilisation of the DBN reveal a broader institutional disjuncture between Nigeria's financial system and its urgent development needs. Reclaiming development finance in both the monetary and fiscal spheres is essential for enabling long-term planning, fostering economic resilience, and accelerating a just and green transition.

## 6. Conclusion

Derisking is not merely a financial tool; it is a political strategy that mirrors and amplifies the state's withdrawal from its developmental responsibilities. In Nigeria, derisking has failed to deliver on its promise of structural transformation. It has neither stabilised the power sector nor enhanced the economy's resilience to climate and macroeconomic shocks. Instead, it has transferred fiscal risk from private investors to the state, intensified Nigeria's dependency on volatile external capital, and reinforced its peripheral role in the global economy. By treating investor confidence as a proxy for development, derisking promotes a technocratic vision that obscures deeper structural contradictions and reproduces patterns of dependency.

Although often presented as pragmatic, derisking rests on the flawed assumption that private capital, when properly incentivised, can drive long-term development, even in contexts where its interests, capabilities, and investment horizons diverge from national priorities. In Nigeria, these mismatches are particularly significant. As an oil-dependent and import-reliant economy with a weak productive base and limited fiscal space, Nigeria faces constraints that market-led interventions cannot resolve. However, derisking assumes a world in which governments can align public policy with private finance without fundamentally altering the structural conditions that deter investment in the first place.

This logic is further entrenched in Nigeria's Energy Transition Plan, which relies heavily on derisking techniques such as guarantees to attract private capital. While the plan outlines ambitious goals for decarbonisation and energy access, it does so largely through instruments that replicate the same investor-first logic that has failed to deliver structural transformation elsewhere in the economy. The energy transition cannot be entrusted to private actors alone. Achieving a just and sustainable transformation will require the state to do more than incentivise markets; it must actively govern them. This means reclaiming the state's capacity to mobilise and allocate capital for socially and ecologically vital ends. It also requires expanding the fiscal and



monetary policy space to enable direct public investment in infrastructure, public goods, and green industrial capacity. This is the essence of green developmentalism: not simply using public tools to de-risk private investment but building state institutions capable of shaping the economy in the public's interest.

Nigeria's climate and development strategy must move beyond investor-oriented reform. Instead, a coordinated public strategy that rebuilds productive capacity, expands access to essential services, and secures long-term economic resilience is needed. This requires macrofinancial coordination that aligns fiscal, monetary, and industrial policies with structural transformation. Industrial deepening must be central, not merely in rhetoric, but through targeted investments, technology support, and the cultivation of local value chains. A redistributive fiscal policy must also underpin this transformation, ensuring that state resources are directed towards equity-enhancing and future-oriented public goods, including green infrastructure and universal access to energy.

The goal should not be to engage investment for its own sake or to reassure markets but rather to build sovereign capacity. While derisking may ease investor anxieties, it does not address Nigeria's underlying structural challenges: vulnerability to volatile capital flows, dependence on fossil fuel exports, a weak domestic industrial base, and overreliance on foreign exchange. These are problems that markets cannot solve, and technocratic financial engineering only obscures. A climate-aligned and socially inclusive future will only be possible if Nigeria shifts from absorbing risks on behalf of private capital to confronting risks through public planning, coordination, and investment. The objective is not the greening of the architecture of global financial subordination but rather the construction a new economic model rooted in justice, sovereignty, and structural transformation.

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## Appendix: Subnational PPPs in Nigeria

This appendix presents detailed data and analysis of subnational PPP activity in Nigeria

Figure 6: Status of ICRC Projects Under Custody as of July 2024

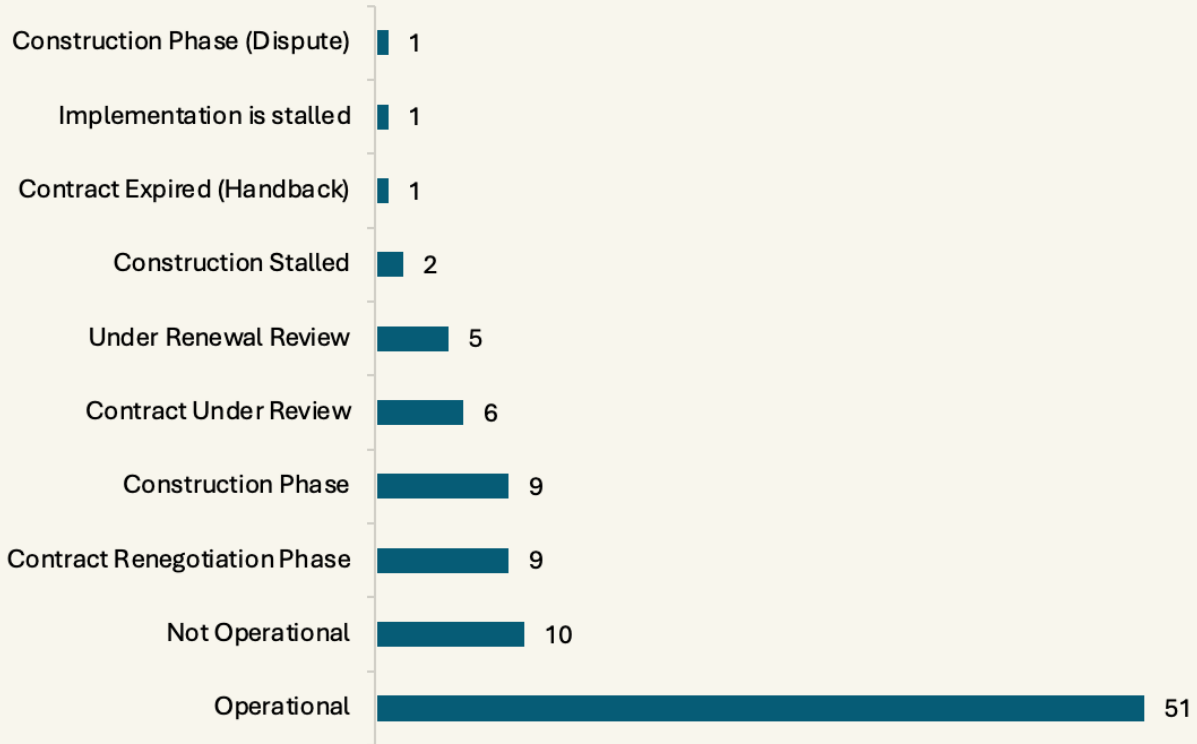
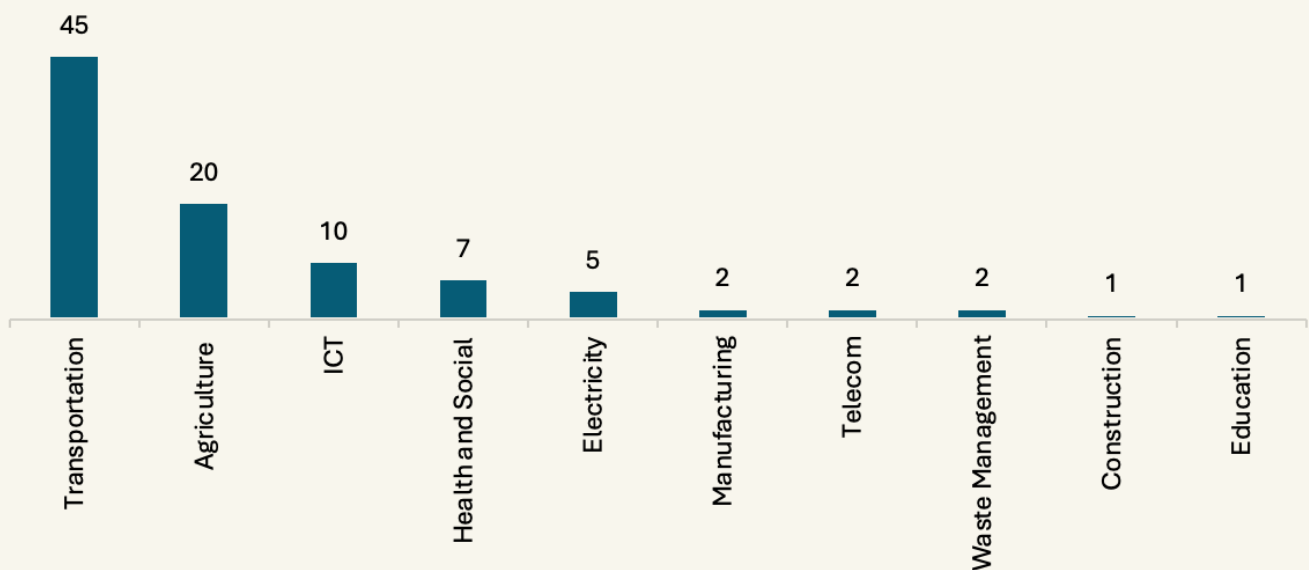


Figure A 1: Status of ICRC Projects Under Custody as of July 2024

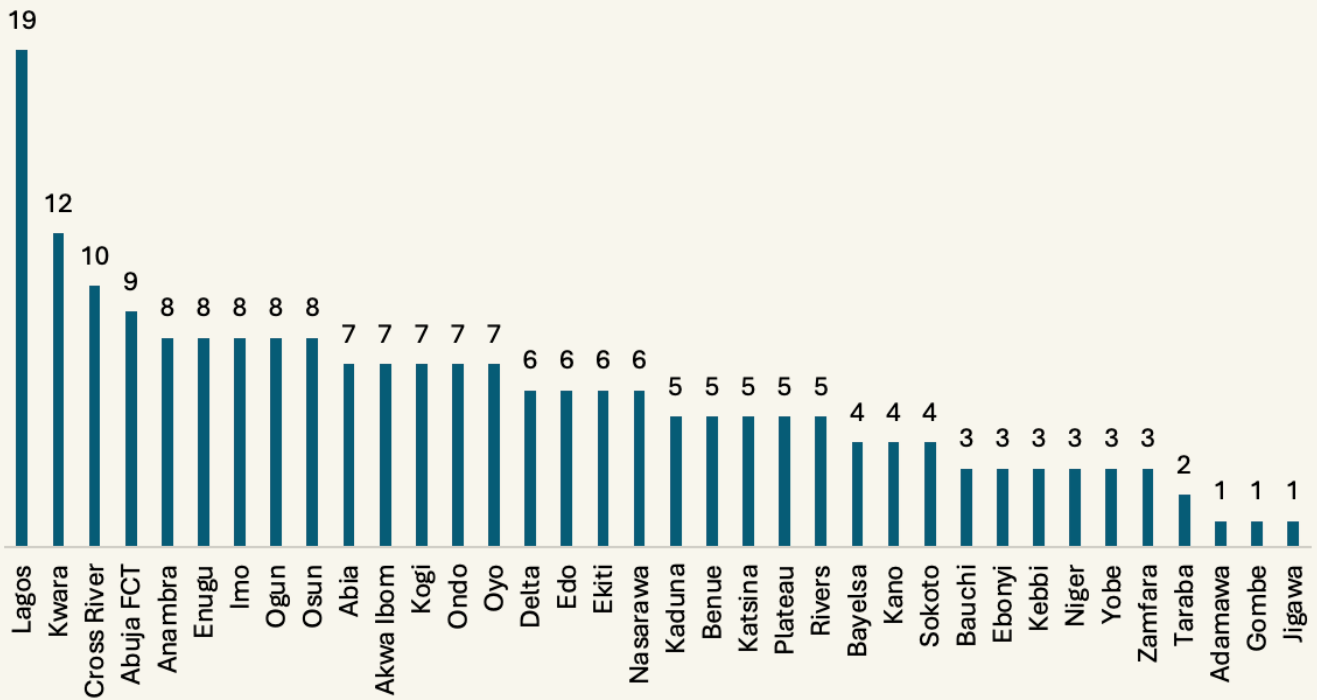
Source: ICRC (2024)

Figure 7: Sectors of ICRC Projects Under Custody as of July 2024



Source: ICRC (2024)

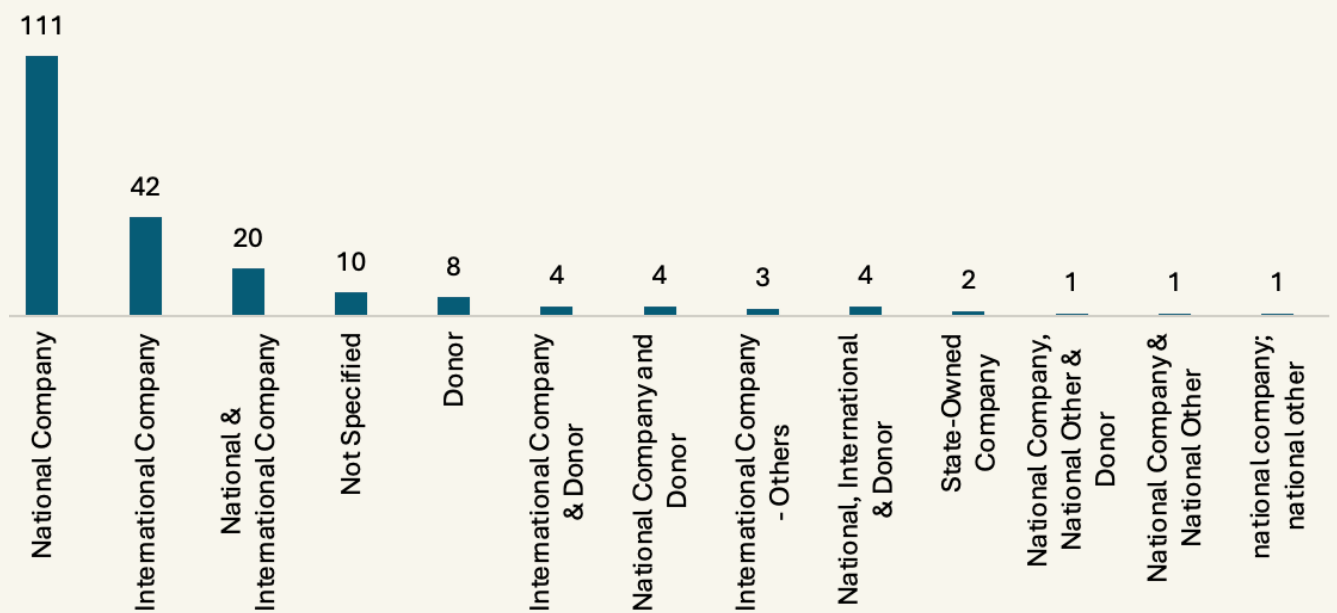
Figure 8: Location of Sub-national PPPs in Nigeria between 1999 and 2022



Source: Roelofs (2024)

PPPs are increasingly used for subnational infrastructure development, with Lagos, Kwara, and Rivers States as examples. Lagos, via its 2011 PPP Law and the evolving Office of Public-Private Partnerships (OPPP), has pioneered projects such as the Blue Line Rail and Toll Road Concessions. In 2009, Rivers State’s Public-Private Participation in Infrastructure Development Law established the Rivers State Bureau for Public-Private Partnerships (BPPP) to oversee private sector involvement (Isete, 2024).

Figure 9: Types of Partnerships Used for Sub-national PPPs between 1999 and 2022

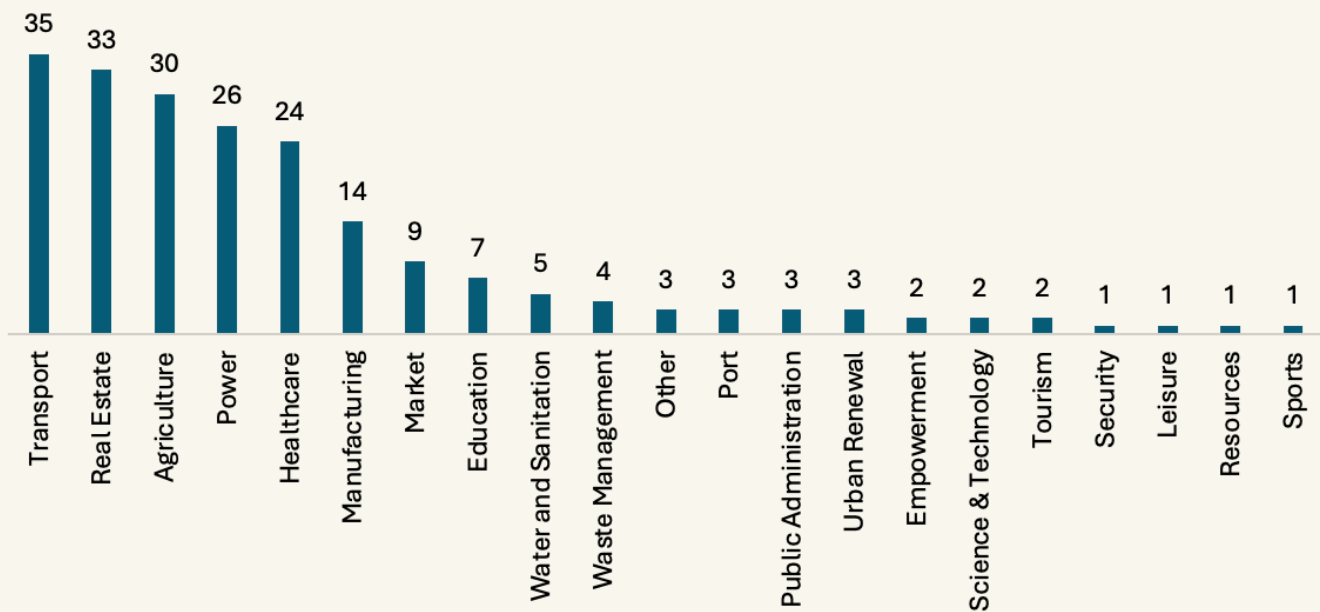


Source: Roelofs (2024)



The mapping of subnational PPPs in Nigeria between 1999 and 2022 by Roelofs (2024) reveals significant state-level activity, with 209 projects recorded. The dataset shows 65 ongoing, 58 completed, 14 abandoned, and 72 whose status is classified as unknown. Lagos State leads with 19 projects, followed by Kwara, Cross River, and Abuja FCT with fewer projects. The wide distribution across states suggests broad PPP adoption, but disparities may indicate variations in capacity or the investment climate. Partnerships mainly involve national companies, highlighting the strong participation of the local private sector.

Figure 10: Types of Partnerships Used for Sub-national PPPs between 1999 and 2022



Source: Roelofs (2024)

A review of subnational projects by sector shows concentrations of PPP projects in transportation, real estate, agriculture, power, and health care. The first documented PPP project was the Eti-Osa Lekki Call for proposals in 2000, with a concession agreement signed with Lekki Concession Company Limited (LCCL) in 2006 and completed in 2011. The project was a landmark PPP that aligned with Lagos State's master plan and national development strategy (AfDB, 2008).



# **CLIMATE FINANCE AND GREEN TRANSITIONS IN AFRICA: NIGERIA CASE STUDY**

*Derisking and Macrofinance  
Perspectives*