UNLOCKING PRIVATE CAPITAL FOR NIGERIA'S ENERGY TRANSITION

From Insight to Implementation: Mapping the Path Ahead

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ENERGY TRANSITION COUNCIL & CLEAN TECHNOLOGY HUB

Executive summary

On 30 March 2026, senior leaders from Nigeria's financial services, energy and development sectors convened in Lagos for a high-level closed-door dialogue. *Energising Finance: A Private Sector Dialogue on Powering Nigeria's Energy Future* brought together asset managers, commercial banks, development finance institutions (DFIs) and investors with energy developers, regulators and government representatives. The session was convened by the Energy Transition Council (ETC) and Clean Technology Hub (CTH), with five concrete objectives:

1. To elicit the funding priorities and preferred financing instruments of Nigeria's leading financial institutions and compare them with government policy priorities
2. To provide a clear, data-driven overview of the private investment opportunities embedded in Nigeria's Energy Transition and Investment Plan (ETIP)[1]and National Energy Compact[2]
3. To identify the key barriers preventing domestic financial institutions from deploying capital into the energy sector at scale
4. To co-create practical financing mechanisms and risk mitigation instruments (including local currency financing facilities, guarantee schemes and securitisation of receivables) that can unlock local capital
5. To forge a clear joint roadmap and concrete next steps for a public-private partnership that will accelerate private investment in Nigeria's energy future.

The convening confirmed three shared diagnoses:

1. **Nigeria faces a bankability, not a capital gap** as substantial pools of domestic and international capital are available; it is the pipeline of investment-ready projects that is insufficient.
2. **Closing this gap requires coordinated action** across project preparation, financing structures and regulatory certainty.

[1] Sustainable Energy for All (SEforALL), Nigeria Energy Transition and Investment Plan (PDF), May 2025.
[2] World Bank Group, Nigeria Mission 300 Accelerated Energy Solutions (AES) Compact (PDF), 2026.

3. **Scaled deployment of investment in both distributed renewable energy (DRE) and grid infrastructure** are equally essential.

The roundtable also identified priority actions to move from insight to implementation:

1. **Build a bankable pipeline at scale** – led by CTH, DFIs and the Rural Electrification Agency (REA) – by establishing structured project preparation support, developing aggregation platforms that bundle sub-threshold projects into institutional-grade vehicles, and advancing the operationalisation of Nigeria's Carbon Market Activation Policy[3] and the Nigerian Climate Investment Platform (NCIP).[4]
2. **Ensure regulatory certainty** – through work led by the Nigerian Electricity Regulatory Commission (NERC), the Federal Ministry of Power and state electricity regulatory commissions – by developing transparent multi-year tariff reform pathways that give investors predictable revenue forecasts, by building subnational regulatory capacity to operationalise the Electricity Act 2023,[5] and by establishing an annual Nigeria Electricity Regulatory Environment scorecard to create accountability and investor transparency across states.

Doing so will then allow the Federal Ministry of Finance, the Central Bank of Nigeria (CBN), Pension Commission (PenCom) and the Securities and Exchange Commission (SEC Nigeria) to mobilise domestic and international capital, by directing a share of the recapitalised banking sector's capital towards renewable energy, scaling blended finance instruments and leveraging Nigeria's growing institutional climate finance architecture (including the Bank of Industry's accreditation as a National Implementing Entity of the Adaptation Fund in September 2025,[6] the Development Bank of Nigeria's status of Direct Access Entity for the Green Climate Fund (GCF)[7] and the NCIP).

This briefing is intended for investors, financiers, policymakers and development partners working on Nigeria's energy transition – particularly those seeking to understand where capital deployment is most constrained, what is already being done and where coordinated action can have the greatest near-term impact. The priority actions identified here will be further progressed towards deal-making and capital commitments at the Nigeria Climate Finance and Investment Summit, convened by CTH in August 2026.

1. The gap between ambition and delivery

Nigeria faces the world's largest energy access deficit, with over 85 million people remaining without electricity, despite having approximately 12 GW of installed grid capacity of which only 4–5 GW is typically delivered. Nigeria clearly does not lack energy demand – rather, it needs to rapidly

[3] Office of the Special Assistant to the President on Climate Change (OSSAP-CC), Nigeria's Carbon Market Activation Policy (Draft) (PDF), April 2025.
[4] Federal Ministry of Finance, Nigeria, FG Unveils Climate Investment Platform to Unlock $500m in Green Finance, 14 May 2025.
[5] Federal Republic of Nigeria, Electricity Act 2023 (PDF), June 2023.
[6] Bank of Industry (BOI), BOI Accredited by Adaptation Fund as Nigeria's National Implementing Partner, September 2025.
[7] Green Climate Fund (GCF), Development Bank of Nigeria (DBN) Accredited Entity Profile, approved 16 July 2024.

and sustainably expand generation capacity to satisfy a 17,520 MW demand.[8] As of 2022, renewable energy represented only 26% of electricity supply and 39% of total energy supply (if one includes biomass for non-electricity purposes such as cooking and heating).[9]

Consequently, the country has articulated ambitious targets for its energy transition. Under the Mission 300 (M300) initiative – a global effort to connect 300 million Africans to electricity by 2030 – Nigeria's National Energy Compact commits to universal electricity access by 2030, a 50% renewable energy share and the mobilisation of US$23.2 billion, of which US$15.5 billion is expected to come from the private sector. The Electricity Act of 2023 further signals a structural shift towards a decentralised, market-driven power sector. To consolidate the country's climate finance architecture, in 2025 the federal government launched the NCIP, an initiative to mobilise up to US$500 million for climate-relevant infrastructure, resilience and adaptation projects, including renewable energy.

Yet translating policy ambition into investable pipelines and transformative programmes remains the defining challenge. The most recent data[10] shows that the private sector accounts for 30% of total climate finance in Nigeria, primarily driven by corporate climate investments, largely for small-scale solar PV.

Against this backdrop, a focused engagement with Nigeria's financial sector was convened for to help bridge this gap between policy ambition and capital deployment. The CTH and ETC's roundtable was therefore designed as a step towards action, providing the basis for charting a timebound roadmap and concrete next steps to help advance public-private collaboration and unlock additional private investment in Nigeria's clean energy transition.

2. The investment landscape: a US$15.5 billion opportunity

Nigeria's energy transition is regarded by many as Africa's most significant capital deployment opportunity, with its ETIP estimating that US$500 billion will be required in incremental investment by 2060 to achieve net zero emissions. The NCIP aims to mobilise part of this through the efforts of the National Council on Climate Change (NCCC), the Nigeria Sovereign Investment Authority (NSIA) and the GCF; however, the NCIP is expected to have wider impact by improving[11] project bankability, reducing fragmentation and crowding in capital for large-scale mitigation and adaptation efforts.

Nigeria's National Energy Compact (under the M300 initiative) focuses on a particular facet of the country's energy transition, as noted above: that of achieving universal electricity access. The Compact calls for a total sector funding of US$32.7 billion, needed by 2030, in order to achieve its goal. Of that total, US$15.5 billion is meant to come from the private sector, broken down across key asset classes as follows:

- US$10.5 billion for DRE – mini-grids and stand-alone solar
- US$5.1 billion for improvements to distribution infrastructure

[8] Sustainable Energy for All (SEforALL), Nigeria SE4ALL Action Agenda.
[9] International Renewable Energy Agency (IRENA), Nigeria Renewable Energy Statistical Profile (PDF) – note 97% of the 39% of total energy were from bioenergy.
[10] Climate Policy Initiative (CPI), Landscape of Climate Finance in Nigeria 2025, 2025.
[11] AfriPoli, Nigeria's Climate Transition in 2025: Moving from Ambition to Delivery, 2025.

- US$5.3 billion for further work across transmission, generation and clean cooking solutions.

Once raised, these funds will be allocated towards concrete opportunities. Nigeria needs to replace existing dirty and expensive fossil petrol and diesel generators which currently supply up to ten times more electricity than the national grid; they require US$8 billion[12] to fuel annually.

Another opportunity comes from only 40% of installed grid capacity currently being utilised:[13] this is to ensure that available power is converted into reliable, billable electricity that reaches paying customers. That means revitalising and expanding electricity transmission infrastructure and minimising aggregate technical, commercial and collection losses (ATC&C) among electricity distribution companies (DisCos) – which amounted to 35% in quarter 4 of 2025.[14]

Exploiting the generator displacement and off-grid market opportunities alone has the potential to generate at least US$8 billion in revenue annually.[15] Similar possibilities exist in cooking, transportation, industry and other sectors; together, these represent a significant opportunity to unlock transformative economic, social and climate returns.

3. Key insights: three pillars of a well-functioning renewable energy investment market

Structured plenary and breakout discussions at the roundtable identified a set of interlocking challenges and practical solutions, organised around three pillars: regulatory and policy consistency, finance and capital mobilisation, and project preparation, bankability and aggregation.

3.1 Regulatory and policy consistency

Policy uncertainty is one of the most significant deterrents to long-term investment. Frequent changes to electricity tariff structures, unclear signals on cost-reflective pricing, and uneven, inconsistent and limited implementation of the Electricity Act 2023 by states could weaken investor confidence.[16]

In fact, Nigeria's electricity tariffs remain below realistic levels, with only 15% of customers paying cost-reflective tariffs,[17] resulting in annual subsidy obligations estimated at nearly US$1.3 billion annually[18] – creating fiscal pressure as well as weakening the financial viability of the power sector as a whole.

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[12] ZE-Gen, Understanding Nigeria's Fossil Fuel Generator Challenge (PDF), January 2026, p. 7.
[13] Nigerian Electricity Regulatory Commission (NERC), 2025 First Quarter Report (PDF), July 2025, p. 17.
[14] Nigerian Electricity Regulatory Commission (NERC), 2025 Fourth Quarter Report (PDF), April 2026, p. 5.
[15] Rocky Mountain Institute (RMI), Nigeria Minigrid Investment Report, 2018, p. 9.
[16] Examples can be found in: Leadership, States slashing power tariff must be ready to pay subsidy, minister, 2025; VerivAfrica, The Electricity Act One Year Later: Has Nigeria Truly Decentralised Power Governance?, 20 October 2025; Punch Nigeria, Electricity Act: What Are States Waiting For?, 29 April 2026.
The Guardian Nigeria, Electricity consumers worry as 16 states falter on decentralisation, 18 March 2026
[17] The Electricity Hub, Are Cost-Reflective Tariffs Working?, 12 December 2025.
[18] Punch Nigeria, Electricity Subsidy Nears N2tn Yearly, 7 January 2026.

The federal government has already taken steps towards making investment in the power sector more attractive. In April 2026, the President approved a ₦3.3 trillion (US$2.2 billion) payment plan[19] to settle verified debts owed by the federal government to power-sector operators, accumulated between February 2015 and March 2025. Already, 15 power plant operators have signed settlement agreements for the government to pay out a total of ₦2.3 trillion (US$1.5 billion).

At a sub-national level, as more state governments gain full regulatory oversight over their electricity markets, it becomes more important for all of them to create dedicated investment promotion agencies or functional one-stop investment centres which many currently lack. Since 2025, African Export–Import Bank (AFREXIM) and the Forum of State Investment Promotion Agencies of Nigeria (FoSIPAN) have collaborated on building the capacity of states' existing investment promotion agencies;[20] this has covered areas such as project packaging, Public-Private Partnership (PPP), risk-sharing, deal structuring, foreign direct investment (FDI) strategy, investor aftercare and others. DFIs and institutions like AFREXIM could further provide dedicated capacity building programmes on attracting renewable energy investments, in collaboration with state electricity regulatory commissions, state rural electrification agencies and their federal counterparts.

Stronger regulatory enforcement by NERC and state electricity regulatory commissions would help address collection inefficiencies, improve compliance across the electricity value chain and reduce the risk of future payment shortfalls, creating a more predictable investment environment.

In summary, advancing private capital mobilisation will depend on action in three areas:

1. **Stable, credible electricity tariff reform pathways** that provide long-term revenue predictability for investors
2. **Consistent implementation of the Electricity Act 2023**, including sub-national regulatory capacity building supported by development partners and the federal government, and creation of dedicated investment promotion agencies or functional one-stop investment centres at the state level
3. **Stronger regulatory enforcement by NERC and state electricity regulatory commissions** to reduce collection inefficiencies and improve compliance across the value chain.

3.2 Finance and capital mobilisation

Nigeria's domestic financial system holds significant liquidity: banking sector capitalisation was ₦10.5 trillion (US$7.2 billion) in 2025,[21] and pension fund assets reached ₦28.04 trillion (US$20.2 billion) in January 2026.[22]

Pension assets now represent the country's largest pool[23] of investible capital and the main driver for investment outside FDI. Yet pension funds' investment in infrastructure remains at only 1.3% of

[19] State House of Nigeria, Power Sector Reform: President Tinubu Approves N3.3 Trillion Payment Plan to Restore Reliable Electricity, 6 April 2026.
[20] Afreximbank, Afreximbank LinkedIn Post on Power Sector Financing, July 2025.
[21] TechCabal Insights, How Nigerian Banks' Market Capitalisation Tripled to ₦10.5tn in Six Years, 15 April 2025.
[22] Nairametrics, Pension Assets Reach ₦28.04 Trillion in January 2026 as Fixed Income Dominates, 6 March 2026.
[23] Pension Fund Operators Association of Nigeria (PenOp), PenOp Infrastructure Report 2025, p. 33.

total assets under management[24] – often preferring debt to equity or hybrid infrastructure funds in order to minimise risk. Pension fund administrators (PFAs) report that this is due to the lack of truly bankable projects.[25] Thus, all six renewable energy and off-grid energy bonds invested into by PFAs and with Infracredit guarantees between 2017 and 2022 have been brownfield investments.

Following the recent recapitalisation of Nigeria's banking sector,[26] commercial banks also hold substantial capital that could be deployed toward renewable energy projects. The challenge is therefore not capital availability; it is capital mobilisation.

Domestic investors highlighted several structural barriers:

- **Tenor mismatch** – energy infrastructure requires long-term capital, but most banks operate on short-term deposit bases
- **Off-taker risk** – in 2025, quarterly DisCos' collection efficiencies ranged between 74% and 81%,[27] creating persistent uncertainty around actual revenue streams
- **Limited investment vehicles** – pension fund frameworks and the risk appetite of PFAs still impose constraints that prevent fund allocation to early-stage or illiquid energy assets.[28]

International investors face a different but complementary set of concerns. Currency risk – particularly given significant naira depreciation[29] in recent years – increases the cost of foreign-denominated capital and weakens project economics[30] for developers of DRE whose revenues are in naira. Blended finance structures that share or absorb currency risk are therefore important enablers for international capital deployment. A few such facilities have emerged in recent years, such as the US$20m Renewable Energy Blended Facility (REBF)[31] and the Climate Finance Blending Facility (CFBF),[32] which provide local currency financing to hedge against naira volatility.

Priority solutions identified at the roundtable include:

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[24] Nairametrics, Pension Funds as Nigeria's Hidden Infrastructure Engine for Development, October 2025.
[25] Pension Fund Operators Association of Nigeria (PenOp), PenOp Infrastructure Report 2025, p. 41. PFAs prioritise protecting their capital and achieving returns over impact, which disqualifies early-stage assets even if they may promise high social impact.
[26] African Business, Nigeria Concludes ₦4.65 Trillion Bank Recapitalisation Programme, 8 April 2026.
[27] Nigerian Electricity Regulatory Commission (NERC), Quarterly Reports for Q1–Q4 2025. Aggregate DisCo collection efficiency was 74.39% in Q1, 76.07% in Q2, 80.70% in Q3 and 79.36% in Q4.
[28] According to PenCom, Revised Regulation on Investment of Pension Fund Assets (PDF), September 2025, infrastructure in which pension fund assets are to be invested must have a minimum credit rating of 'A' issued by at least two rating agencies, one of which shall be a rating agency incorporated in Nigeria and registered with its Securities and Exchange Commission. Infrastructure projects must also have high ticket sizes: minimum project size of ₦10 billion or US$7.4 million for infrastructure bonds and ₦20 billion or $14.8 million for infrastructure funds.
[29] African Exponent, Top 10 Most Volatile African Currencies in 2025, 7 July 2025.
[30] Energy for Growth Hub, The Quantifiable Advantages of Local Currency on African Energy Projects, 10 June 2025.
[31] BusinessDay, Nigeria's renewable energy sector gets $20m blended finance push, 30 March 2026.
[32] British International Investment (BII), Climate Finance Blending Facility Limited, last updated March 2026.

1. **Mobilise domestic pension funds** through dedicated infrastructure investment vehicles by expanding de-risking instruments such as credit guarantees by DFIs (which have been shown to incentivise PFAs to invest in infrastructure projects)[33].
2. **Encourage commercial banks** to increase lending to renewable energy projects, as well as to establish dedicated specialist in-house capacity to assess projects and de-risk renewable energy financing.
3. **Expand blended finance and dedicated local-currency facilities** to de-risk DRE projects, reduce foreign exchange exposure and improve access to long-term financing.
4. **Leverage Nigeria's growing institutional climate finance architecture**, including the Bank of Industry's recent accreditation by the Adaptation Fund and the Development Bank of Nigeria's Direct Access Entity status with the GCF and the NCIP.

3.3 Project preparation, bankability and aggregation

Across all discussions, one conclusion was repeated: the bottleneck is not capital, it is the pipeline. Developers frequently approach financiers without having feasibility studies, proven track records or clear revenue models.

A recurring theme was the gap between technical competence and financial readiness. Many project developers bring genuine expertise in project design, engineering and implementation, and may have successfully delivered their first projects from their own balance sheets. But self-financing early projects is a fundamentally different undertaking from raising external debt or equity for Special Purpose Vehicles (SPVs). When developers approach financiers, they often encounter a different set of requirements entirely: formal financial models, audited accounts, demonstrated cash flow projections, high minimum-ticket sizes, clearly defined security structures and risk allocation frameworks that satisfy institutional due diligence.

The cost of project preparation is, therefore, often significant, and such costs often have to be financed before funding for the project itself is secured. Bridging that gap, from technically capable developer to financeable borrower or investee, is where many promising projects stall. As project preparation costs – typically 5–10% of total project value – are chronically underfunded.[34] Only a handful of facilities provide project preparation finance in Nigeria. These are limited in scale and accessibility – with many either primarily oriented toward public sector and regional infrastructure, focused on larger-ticket and government-backed projects, or embedded within specific programmes rather than being stand-alone, open facilities.

From the perspective of institutional investors, on the other hand, most Nigerian energy projects fall below their minimum-ticket sizes: these are driven by the economics of due diligence, and evaluating, structuring and monitoring a smaller investment requires nearly as much staff time and legal costs as a larger one.

Solutions recommended at the roundtable to overcome these barriers include standardised project templates, aggregation platforms and portfolio-based financing approaches that bundle multiple smaller projects into investable vehicles – directly matching the scale requirements of institutional capital. The challenges in the Nigerian context are twofold:

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[33] Pension Fund Operators Association of Nigeria (PenOp), PenOp Infrastructure Report 2025, September 2025, pp. 28, 34.
[34] Infrastructure Consortium for Africa (ICA), ICA Project Preparation Facilities (PPF) Study Report, p. 49.

1. **Aggregation requires a trusted intermediary** with the technical capacity to identify, screen and standardise projects across developers – and currently few such intermediaries exist at the scale needed.
2. **Aggregation assumes a pipeline of projects already sufficiently prepared** to be able to be bundled. The prior question – how early-stage companies get from promising concept to aggregation-ready asset – is what the market currently has no answer to.

CrossBoundary Energy Access (CBEA) is the most directly relevant model on the continent for the first challenge. It operates as a fund manager that aggregates off-grid energy assets across multiple African markets into a single investment vehicle, currently with a portfolio of around US$70 million across several countries, mainly in East and Southern Africa. It conducts due diligence, structures the investments and presents a diversified portfolio to institutional investors. There is a need for DFIs and philanthropies to provide the patient anchor capital for aggregators to expand their activities to Nigeria. CBEA itself has released tools and resources[35] for other institutions to replicate its approach.

The proposed Climate Innovation Bridge Facility (CIBF), being developed by CTH, is aimed at addressing the bankability gap. The CIBF, featured at the roundtable, is a planned aUS$10 million blended finance vehicle to systematically transition early-stage climate ventures into investment-ready entities. It sits deliberately upstream of the aggregation solutions described below in Section 4, intervening at the stage where most Nigerian energy companies currently stall: after the initial concept has been proven, often on the developer's own balance sheet, yet before the project is structured well enough to satisfy lenders' or investors' due diligence.

Without a facilities of this kind, the aggregation intermediaries called for may have nothing sufficiently structured to aggregate. No facility in Nigeria at present precisely replicates the CIBF's proposed combination of technical assistance grants, early-stage debt and portfolio aggregation for climate-focused Small and Medium-sized Enterprises to address the preparation-to-aggregation pipeline.

4. From dialogue to action: sector-specific pathways

The three constraints identified above – regulatory inconsistency, capital mobilisation barriers and weak project pipelines – do not affect all parts of Nigeria's energy sector equally. They interact differently depending on the scale, location and structure of a given investment, and the pathway to addressing them varies accordingly.

Two investment segments emerged from the dialogue as the most immediate priorities, each responding directly to a different dimension of the market-level diagnosis:

1. DRE, which offers the fastest route to closing some of Nigeria's energy access gap precisely because it bypasses the grid constraints and revenue assurance failures that make large-scale utility investment so difficult
2. Grid and utility-scale finance, where structural reforms to transmission, distribution and metering infrastructure are the prerequisite for any serious long-term private investment in the power sector.

[35] CrossBoundary, Open-Sourcing Infrastructure Finance for Mini-Grids (PDF), October 2023.

These are not competing priorities and this section sets out the specific pathways and recommended actions for each of the two segments, drawing directly on the solutions identified by participants during the breakout sessions.

4.1 Distributed renewable energy and last-mile access

Nigeria requires at least 6,000 minigrids[36] and 5 million solar home system[37] connections to achieve universal electricity access. Current deployment rates are significantly below this threshold, and (as mentioned) over 85 million people remain without electricity.

Key recommendations from the roundtable are:

1. **Scale local manufacturing and assembly of balance-of-system components** to reduce cost volatility and foreign exchange risk over time. Through the efforts of the REA, Nigeria secured approximately US$425 million in private sector investment in 2025[38] to establish eight renewable energy manufacturing facilities. Such projects could be further supported if government and development partners created demand certainty – through long-term procurement commitments under programmes like the Nigeria Electrification Project (NEP)[39]– that gives manufacturers the forward visibility needed to justify capital investment in local production capacity.
2. **Build on existing programmes such as the Distributed Access through Renewable Energy Scale-Up (DARES) initiative** funded by the World Bank,[40] which is expected to mobilise over US$750 million in concessional financing. A major goal of DARES is to turn renewable energy companies into larger and more commercially viable Renewable Energy Service Companies (RESCOs) that own large portfolios of mini-grids and solar PV systems,[41] able to attract private capital independently. This includes setting up a voluntary carbon market framework for RESCOs, and securing more agreements such as the REA recently obtained with Lotus Bank to provide commercial bank financing.[42] This capacity and its enabling conditions need to be built before the DARES project expires in 2029.
3. **Leverage crowdfunding platforms[43] and commercial paper issuances** to mobilise retail and institutional investors to support aggregated DRE portfolios. Internationally, crowdfunding for energy access has been demonstrated to work, at a small scale. Several Nigerian fintech platforms – including Risevest, Cowrywise, Hisa and Bamboo – have demonstrated that retail investment appetite exists well beyond the traditional banking customer base in Africa too. No one has yet developed a dedicated energy investment product, however, largely because DRE projects are not yet structured in a form that can be packaged into retail-accessible instruments; this is because returns are uncertain relative

[36] Husein, M. et al., The impacts of incentive policies on improving private investment for rural electrification in Nigeria: A geospatial study, Heliyon 10:5, 2024.
[37] Sustainable Energy for All (SEforALL), Integrated Energy Planning Toolkit (IEPT) for Nigeria: Executive Summary (PDF), January 2022, p. 6.
[38] Punch, Nigeria Attracts $425m Investment in Solar Manufacturing, 23 April 2026.
[39] World Bank, Nigeria - Nigeria Electrification Project, November 2025.
[40] World Bank, Nigeria - Distributed Access Through Renewable Energy Scale-Up Project : Additional Financing, July 2026.
[41] Rural Electrification Agency (REA), REA LinkedIn Post on Transforming Developers' Access to Financing, 2025.
[42] Punch, Lotus Bank, REA Collaborate on N100bn Renewable Energy Financing, 24 February 2026.
[43] Examples include: Energise Africa and bettervest.

to the fixed-income products these platforms currently offer and the regulatory pathway for offering energy project-linked securities to retail investors under the Nigeria's Securities and Exchange Commission's framework remains unclear.

4.2 Grid and utility-scale finance

Significant structural and financial constraints limit Nigeria's grid performance. Transmission capacity is estimated at 8.1 GW,[44] and ATC&C losses are high,[45] creating a bottleneck that prevents available power from reaching end users. Nigeria's metering deficit – estimated at over seven million, or 57% of registered, customers[46] – further erodes revenue assurance and investor confidence.

Even if constraints on grid-connected generation are addressed, the limitations of Nigeria's power transmission network persist. This fact strengthens the case for renewable energy integration through embedded generation – connecting renewable energy power plants of up to 20 MW directly to the distribution network to serve customer clusters. Yet uptake by energy project developers has been slow, although now enabled by NERC's 2012 Embedded Generation Regulation, due to concerns about DisCos' ability to pay for electricity supplied.[47]

The roundtable recommended a range of structural and market-oriented reforms:

1. **Privatisation or partial unbundling of transmission infrastructure**, enabling private sector participation through concession or independent transmission project models – drawing on successful experiences in Brazil, Peru, the Philippines and Turkey.[48]
2. **Expansion of renewable embedded generation models[49] and integrated mini-grid and/or community energy systems**, which allow power to be generated and consumed within defined geographic areas, bypassing grid constraints. Demonstration projects for the former are currently under development between Rocky Mountain Institute (RMI) and four DisCos, whose outcomes would set the direction for scaling the model.[50]
3. **Wider support and technical assistance by DFIs to state-level market operators** under the Electricity Act 2023, enabling sub-national governments to procure power, regulate distribution and align supply with local demand, given that many state electricity regulatory commissions currently lack such capacity.[51]
4. **Acceleration of the rollout of metering infrastructure** under the Meter Asset Provider (MAP) scheme to close the revenue assurance gap; note DisCos have the opportunity to

[44] Transmission Company of Nigeria (TCN), TCN's wheeling capacity and transmitting peak generation
[45] Nigerian Electricity Regulatory Commission (NERC), 2025 Fourth Quarter Report.
[46] Nigerian Electricity Regulatory Commission (NERC), 2025 Fourth Quarter Report.
[47] Rocky Mountain Institute (RMI), Unlocking Renewable Embedded Generation in Nigeria, 2022.
[48] World Bank, Private Sector Participation in Electricity Transmission and Distribution: Experiences from Brazil, Peru, the Philippines, and Turkey, Energy Sector Management Assistance Program (ESMAP) knowledge series,no. 023/2015.
[49] Nigerian Electricity Regulatory Commission (NERC), Nigerian Electricity Regulatory Commission (Embedded Generation) 2012 (PDF).
[50] RMI, LinkedIn post by Zihe Meng on Grid Revolution: Transforming Nigeria's Energy System Through Renewable Embedded Generation, 21 November 2025.
[51] Punch Nigeria, Electricity Act: What Are States Waiting For?, 29 April 2026.

utilise ₦28 billion (US$19.3 million) approved by NERC for Tranche B of the Meter Acquisition Fund (MAF) in deploying meters.[52]

5. The roadmap to 2030: priority actions

Building on the roundtable discussions, a set of proposed priority actions starting now is set out below which energy transition finance players ought to consider if they wish to help accelerate private capital mobilisation for Nigeria's energy transition. The priorities with associated actions listed below are interdependent and require coordinated leadership across government, financiers and the private sector. Together, they form a time-bound roadmap for coordinated public-private execution; see Box 4 at the end of this section for milestones in 2026.

Priority 1: Build bankable pipeline – project preparation at scale

Lead: CTH, DFIs, REA | Timeframe: Immediate to Q4 2026

P1.A1: Map and publicly report on the project preparation financing gap, with CTH to quantify how many Nigerian DRE projects are stalled at the preparation stage, what the aggregate financing need is and what it would cost to address this systematically. This kind of evidence base does not currently exist in a credible published form and would strengthen the case for DFI and government investment in preparation facilities, including the CIBF (see next point and Box 1).

P1.A2: Establish a structured project preparation facility to support developers with feasibility studies, financial modelling, and investors and commercial banks to establish clean energy desks and develop sector-appropriate lending products. Use the proposed CIBF developed by CTH as a proof-of-concept (see Box 1): if it can demonstrate a repeatable pathway from early-stage company to bankable investment, it could form the nucleus of a much larger pipeline-building architecture for Nigeria's climate economy.

Box 1: Climate Innovation Bridge Facility (CIBF), developed by CTH

1. The model

The CIBF is proposed to operate in two stages:

1. Technical assistance grants of up to US$50,000 per company, supporting financial modelling, feasibility assessments, regulatory alignment and strengthening governance
2. Debt financing of approximately US$450,000 per entity for pilot or early-scale deployment.

Establishing a formal referral or graduation pathway between the CIBF and the NCIP would ensure that companies supported by the CIBF are systematically surfaced to the investors and development partners engaged through the platform, creating a coherent architecture from early-stage preparation to institutional capital deployment.

A defining feature is the facility's portfolio-based approach: by aggregating 10–15 companies into a single investment vehicle, it creates a combined investment size that meets the minimum-ticket thresholds of DFIs and institutional investors – typically US$10–50 million. This is expected to reduce transaction costs, diversify risk and enable more efficient due diligence.

[52] The Nation, NERC approves N28 billion for DisCos for meters, 16 October 2025.

The CIBF proposes to target ventures across renewable energy, electric mobility, circular economy solutions and climate-smart agriculture.
2. Discussion at the roundtable Participants welcomed the model while raising important questions: • On scaling potential, given the facility's current size, noting that – while the approach is sound – the impact will depend on replication and the mobilisation of follow-on capital. • On financing structure, whether debt is the appropriate instrument for early-stage climate enterprises with uncertain and nascent revenue streams, where grant or equity financing may better match the risk profile of the companies the facility targets. • On aggregation workability, given that within the target number of 10–15 early-stage Nigerian climate enterprises there will be considerable variation in sector focus, revenue model, stage of development, legal structure, management expertise and geographic exposure, creating a highly heterogeneous portfolio, though the alternative of imposing standardisation (with criteria strict enough to ensure comparability) would exclude many companies most in need of support. • On technical assistance, the degree of autonomy that participating enterprises would retain over the choice of experts and the direction of the technical assistance process – noting that developers are more likely to engage meaningfully with technical assistance they have shaped than with externally imposed advice that may not reflect their specific context or strategic priorities. These questions point to a genuine design tension at the heart of facilities of this kind: technical assistance experts must satisfy investor viability requirements but also earn the trust and buy-in of the enterprises they are supporting. Getting this balance right – between the entrepreneur's vision, the technical adviser's assessment and the investor's requirements – will be critical to whether participating companies emerge from the process as genuinely stronger businesses or simply more compliant ones.

P1.A3: Develop aggregation platforms that bundle sub-threshold projects into portfolio vehicles attractive to institutional investors, while also creating common frameworks that reduce transaction costs for investors and developers alike. CTH and ETC will engage the Ministry of Finance, NSIA and NCCC on the status and support required for operationalising the NCIP, as it may be a credible domestic vehicle aggregating demand from across the DRE developer community; it will then be presented to international climate finance partners as part of a coherent country-level financing strategy.

P1.A4: Provide support to the NCCC in further advancing the operationalisation of Nigeria's Carbon Market Activation Policy launched in January 2026, especially as the REA is actively exploring building a voluntary carbon market framework to complement the DARES project (see Box 2).[53] DFIs are best placed to do so.

Box 2: The REA and financing sustainable rural electricity
1. The model

[53] VIISAUS, LinkedIn post on multi-stakeholder engagement on the Carbon Market Activation Framework and MRV tool under the DARES Programme, with the REA, May 2026.

The REA's mandate is to facilitate, coordinate and accelerate access to reliable and sustainable electricity for rural and underserved communities.
2. Update at the roundtable Abba Aliyu, MD/CEO of the REA, noted that the recent National Electrification Strategy and Implementation Plan developed by the REA estimates that US$23 billion is needed to electrify unserved and underserved communities across the country. To mobilise this capital, the REA and the Federal Government of Nigeria have designed various programmes to incentivise the private sector to channel capital into energy infrastructure projects. Mr. Aliyu highlighted the agency's role in structuring blended finance instruments and working with development partners to bring off-grid and distributed energy solutions to underserved communities flagship programmes – including the NEP and the DARES initiative – as platforms that provide capital grants to the private sector. DARES is the biggest publicly funded last-mile renewable energy programme on the African continent, and Mr Aliyu anticipates that in three years the US$750 million DARES funding will enable the mobilisation of nearly US$2 billion in private financing (see section 4.1 above).* * Energy New Network (ENN), Nigeria's Electrification Project is a success – REA Managing Director, 22 January 2026.

Priority 2: Anchor regulatory certainty to strengthen the enabling environment for private investment

Lead: NERC, Federal Ministry of Power, state ministries of energy and electricity regulatory commissions | Timeframe: Ongoing

P2.A1: Capture state-level energy transition capital mobilisation efforts by ETC and CTH engaging with state government institutions and research, in order to disseminate successful models, teachable failures and innovative approaches, and to identify precise capacity-building needs. This work may be undertaken in collaboration with the Forum of Commissioners of Power and Energy in Nigeria (FOCPEN), as well as the Nigeria Governors' Forum.

P2.A2: Develop and communicate a transparent, multi-year tariff reform pathway that provides investors with predictable revenue assumptions, building on NERC's existing MYTO framework and published tariff determinations.[54] As electricity-market regulation continues to shift to the state level, with 15 states having assumed regulatory oversight of their electricity market as of May 2026[55], State Electricity Regulatory Authorities should publish clear, time-bound pathways for

[54] Nigerian Electricity Regulatory Commission (NERC), MYTO Documents, 2026.
[55] Nigerian Electricity Regulatory Commission (NERC), 15 States Have Transitioned to Regulating Their State Electricity Markets, 4 May 2026.

transitioning viable non-cost-reflective end-user tariffs towards cost-reflective levels, while maintaining appropriate consumer protections and reflecting relevant wholesale costs[56].

P2.A3: Develop and publish an annual Nigeria Electricity Regulatory Environment scorecard that scores and ranks states on the quality and consistency of their regulatory frameworks, tariff transparency and investor-friendliness – drawing on publicly available data, developer surveys and engagement with state regulatory commissions. A credible, independently produced index of this kind compiled by research institutions will create greater accountability, recognise regulatory progress (such as made by the REA, see Box 3) and give investors a starting point for market assessment.

Box 3: The REA and creating an enabling environment

1. Update at the roundtable
Abba Aliyu, MD/CEO of the REA, underscored the government's commitment to maintaining a supportive regulatory framework and improving the conditions under which private capital can be deployed effectively at the last mile, such as the Mini-Grid Regulations 2026 which raise the capacity definition of mini-grids and provide additional protections for investors.*

* The Nation, NERC's mini-grid regulation to ensure grid stability, align market, 15 April 2026

Box 4: 2026 Proposed milestones

1. Working group formation The roundtable proposed the establishment of a cross-sector technical working group to: • track progress on the two priority actions • prepare a pipeline of projects ahead of the following milestones.	Q2 2026
2. Nigeria Climate Finance & Investment Summit A flagship convening by CTH to: • translate roundtable insights into deal-making • showcase investment-ready projects • deepen engagement between developers, financiers and policymakers.	August 2026
3. Lagos Energy Summit 2026 Policymakers, innovators and key decision-makers committed to shaping the future of energy in Lagos and beyond are expected to define the next phase of Lagos' energy transformation by unlocking new opportunities for investment and innovation.	September 2026
4. Africa Energy Week, Cape Town A regional platform to showcase Nigerian investment opportunities and advance DRE financing models.	October 2026
5. COP31, Antalya, Türkiye	November 2026

[56] Nigerian Electricity Regulatory Commission (NERC), Application of Multiple Tariff Regimes in the NESI, 24 July 2025

Use the emerging/proposed Nigerian country platform to connect Nigeria's domestic climate-finance mobilisation priorities and investment pipeline with international climate-finance discussions, including the just transition agenda, while building on existing initiatives such as the previously announced Nigerian Climate Investment Platform (NCIP).* * Federal Ministry of Finance, Nigeria, FG Unveils Climate Investment Platform to Unlock $500m in Green Finance, 14 May 2025; GCF, Fourteen new Country Platforms announced in collaboration with GCF to drive country-led climate solutions, 15 November 2025.	

6. Conclusion: a call for coordinated execution

Nigeria's energy sector has the policy ambition, the capital and the market fundamentals to provide clean electricity for all. What it needs now is to translate policy commitments into bankable, investable opportunities at scale.

The defining challenge is to bridge the bankability gap, turning the existing projects into a pipeline that can attract investment. Recommended solutions for this first priority include mapping the project preparation financing gap, establishing a structured project preparation facility and developing aggregation platforms that bundle multiple smaller projects into investable vehicles – directly matching the scale requirements of institutional capital. Another priority is around further improving regulatory certainty to create an enabling environment for private investment.

As Nigeria approaches its 2030 energy access commitments, the opportunity to deploy capital efficiently to achieve this goal is narrowing. The dialogue demonstrated that the will to act is there, the stakeholders are engaged and a shared diagnosis, co-created ideas and pathways for further actions have been agreed.

The challenge now is to convert that shared understanding into a coordinated programme of action – building systems that can efficiently absorb and deploy capital at scale, and ensuring Nigeria unlocks the full economic, social and environmental dividends of its energy transition. Actions to help achieve this are set out in the final section above, together with milestones throughout 2026.

ABOUT ETC

The Energy Transition Council (ETC) is a multilateral platform, co-chaired by the UK and the Philippines, that brings together over 40 governments and institutions offering global political, financial and technical leadership in the power sector.

The United Kingdom is progressing work to integrate the ETC to The Global Clean Power Alliance (GCPA) Finance Mission, to enhance and streamline our offer to partner countries. The GCPA Finance Mission, launched at G20 in 2024, works to close the critical gap between ambition and implementation: mobilising international private finance around credible, investable project pipelines, supported by strengthened local capacity, robust planning, and institutional readiness. This integration will provide the Finance Mission's partners with a more comprehensive, end-to-end offer: supporting the translation of policy and regulatory ambition into a strong, investment-ready pipeline capable of attracting significant international capital.

See the ETC's website for further information.

ABOUT Clean Technology Hub (CTH)

Clean Technology Hub (CTH) is a Nigerian-based policy, research and advisory organisation dedicated to accelerating the deployment of clean energy and climate solutions across Africa. CTH works at the intersection of policy, finance and technology to build ecosystems that enable energy access and a just energy transition. For more information, visit www.cleantechnologyhub.org.

AUTHORS

Ifeoma Malo is the cofounder and CEO of CTH. She has a background in law and professional experience in clean energy governance and policy analysis.

Abel B.S. Gaiya works as Chief Research Officer at CTH. He has a background in development economics and energy planning.

Ghenzini Arigor works as a Senior Investment Analyst at CTH. He has a background in economics, finance and carbon markets.

Ujunwa Ojemeni is a Senior Policy Advisor in the Global Clean Power Diplomacy team at E3G, where she provides strategic advice and insights to governments and other partners on energy transition and climate finance.

Rino Sugioka is a Policy Advisor in the Global Clean Power Diplomacy team at E3G, providing policy analysis and insights on energy transition to governments and other partners.

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- Mercy Adebambo, Program Manager – TechforGood Africa
- Tosin Adenuga, Trade Adviser – UK Department for Business and Trade
- Nina Afani, Chief Growth Officer – Clean Technology Hub

- Kayode Ajiboye, Finance Manager – Auxano Solar
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- Moyo Babalola, Investment Principal – Alitheia Capital
- Seye Bassim, Investment Manager – All On
- Dr. Hemen Buju, Climate Specialist – Africa Finance Corporation
- Ivie Dima Daode, Team Lead – Nigerian Exchange (NGX)
- Nnamdi Dauh, Manager – Alitheia Capital
- Abel Gaiya, Chief Research Officer – Clean Technology Hub
- Arigor Ghenzini, Senior Investment Analyst – Clean Technology Hub
- Tochi Ginigeme, Executive Director – Mesh Venture Partners
- Omofunde Hossam, COO – Starsight Energy
- Mayowa Ikotun, Head, CIF – Coronation Asset Management
- Nasiru Isyaku, ED Finance – The Infrastructure Bank
- Chidi Nnanta, Comms Lead – Pan Ocean & The Newcross Companies
- Nwankwo Francisca, Head of Operations – Clean Technology Hub
- Ganiyat Opeyemi Odeyemi, Intern – Stratagem Energy Management Company
- Ebele Ogbue, Group Head Project & Structured Finance – United Bank for Africa (UBA) Plc
- Kingsley Okoro, Director – Eauxwell Nigeria
- Oreofe Olamoyegun, Assistant Manager – Coronation Infrastructure Fund
- Naomi Olayesun, Relationship Manager – UBA
- Erabor Olor, MD – The Infrastructure Bank PLC
- Ujunwa Ojemeni, Senior Policy Advisor – E3G
- Onyeogi Ruth, Intern – Strategen Energy Management Company
- Chukwuuka Oshiokpu, Head of Sustainability – Sahel Capital
- Arome Sule, Head of Operations – Africa Finance Corporation (AFC)
- Josfim Uba, Editor – Daily Sun Newspaper
- Obinna Ugo-Elulu, Special Advisor – Presidential Initiative on CNG & EVs (Pi-CNG)
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