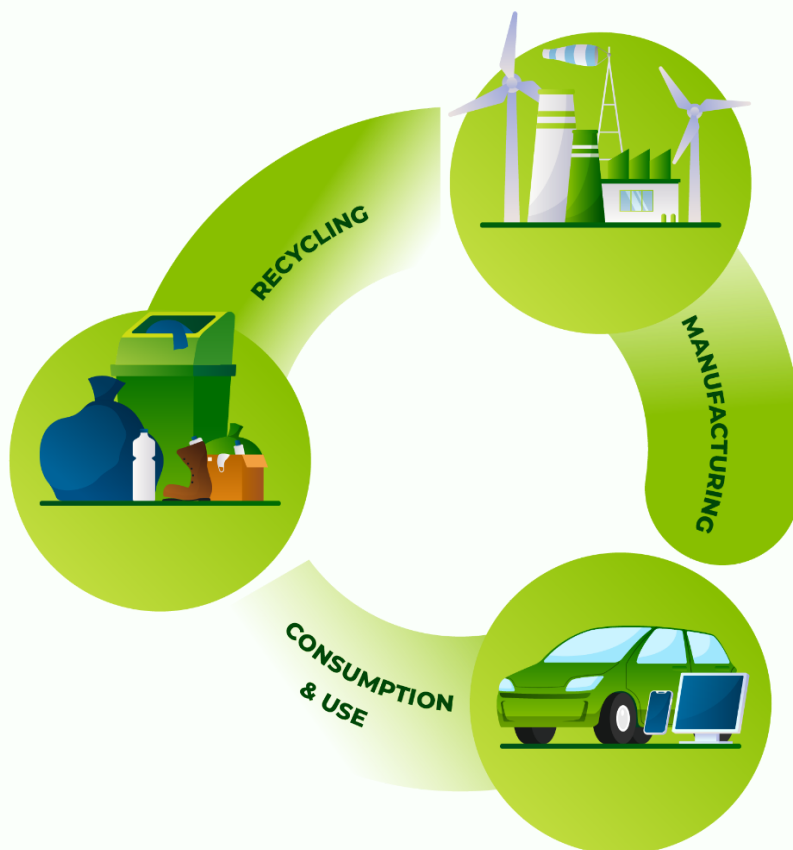




Condensed Synthesis Report

**Catalysing green jobs through the
low-carbon transition in Nigeria, with
the informal economy at the centre**



This report is developed as part of the Africa Policy Dialogue (APD) on *Catalysing Green Jobs through Low Carbon Transition in Nigeria*, being implemented by the Advocacy for Policy and Innovation (API) in partnership with INCLUDE Knowledge Platform.

The APD seeks to institutionalize inclusive green job policies and create a structured workforce pipeline to support Nigeria's low-carbon transition and sustainable development goals in relation to energy diversification. A core focus of the project is enabling access to opportunities in the renewable and sustainable energy sector. This requires an understanding of the landscape, necessitating research development to inform legislative deliberations and guide stakeholder decision-making.



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Abstract

Nigeria is highly vulnerable to climate change while contending with high youth unemployment and a deep dependence on oil. National commitments such as the Nationally Determined Contributions and the pledge of net-zero emissions by 2060 show real ambition, but a wide gap persists between policy and grassroots realities. Informal workers, who account for the overwhelming majority of the workforce, are largely excluded from the opportunities of the green transition by weak coordination, financial barriers and a lack of training. This report proposes a five-pillar framework, spanning policy coherence, capacity development, finance, institutional alignment and inclusion, to catalyse green jobs, diversify the economy and build resilience.

1. Executive summary

Nigeria faces acute climate vulnerabilities while grappling with high youth unemployment and the urgent need to diversify an oil-dependent economy. It ranks poorly on the ND-GAIN Index for both climate vulnerability and readiness, which underlines the case for a just low-carbon transition that creates sustainable livelihoods ([ND-GAIN, 2022](#)). Green jobs, particularly in renewable energy, sustainable agriculture, waste management and climate-resilient infrastructure, offer a way to align environmental sustainability with socio-economic transformation.

This synthesis draws on key informant interviews with stakeholders across government, civil society, the private sector and the informal economy, alongside a review of national policy and the research literature. Respondents recognised Nigeria's policy frameworks, including the Nationally Determined Contributions and the net-zero pledge for 2060, but pointed consistently to a gap between policy intent and grassroots reality.

Several issues emerged. First, informal workers, who make up the large majority of the labour force, remain largely outside green-economy discussions and lack access to resources, training and policy awareness. Second, institutional and regulatory bottlenecks, including weak coordination between agencies and complex compliance requirements, hinder informal-sector participation. Third, economic barriers such as limited access to credit and high upfront costs for green technologies constrain adoption. Set against these constraints are clear opportunities in decentralised renewable energy, sustainable agriculture, waste-to-value initiatives, and the integration of cooperatives and women's associations into green value chains.

The central conclusion is that catalysing green jobs in Nigeria requires a framework that bridges national climate ambition and the realities of informal workers. That means aligning policy implementation with grassroots needs, strengthening institutional coordination, scaling up skills training and financial literacy, improving access to affordable finance, and embedding gender and inclusion throughout. The report proposes five strategic pillars: policy coherence and implementation, capacity development, financial and market access, institutional coordination, and gender-responsive inclusion.

Across all five pillars, the framework prioritises the integration of Nigeria's predominantly informal workforce, and particularly women and youth, into emerging green value chains in energy, agriculture and waste management.

Table 1. Implementation framework for the five strategic pillars

Pillar	Proposed action	Lead institution	Timeline
Policy coherence	Establish a Just Transition Working Group with informal-worker representation	National Council on Climate Change	Short term (1 to 3 years)
Capacity development	Launch green skills and reskilling programmes	Ministry of Labour and Employment; NDE	Short to medium term
Financial and market access	Expand green microcredit schemes for informal enterprises	Bank of Industry; SMEDAN	Medium term
Institutional coordination	Create state-level green-jobs coordination platforms	State Ministries of Environment	Medium term
Awareness and inclusion	Community awareness campaigns on green-transition opportunities	NOA; civil society organisations	Short term

2. Introduction

Nigeria, like many African countries, faces the combined challenge of recovering from recent economic shocks, addressing unemployment and pursuing the Sustainable Development Goals, while navigating high vulnerability to climate change. For a fossil-fuel-dependent economy, the global shift to low-carbon development risks job and revenue losses, yet it also creates opportunities to leapfrog traditional growth models by investing in renewable energy, sustainable agriculture and green industry ([Nano, 2022](#); [Roche et al., 2020](#)).

As Africa's largest economy and most populous country, Nigeria illustrates these tensions sharply. About 40 percent of Nigerians live below the national poverty line, around 45 percent lack access to electricity, and the country ranks poorly on global measures of climate vulnerability and readiness ([World Bank, 2022](#); [ND-GAIN, 2022](#)). With a population projected to approach 400 million by 2050 and an economy in which oil and gas have historically provided the majority of government revenue and around 90 percent of foreign exchange earnings, the low-carbon transition is both urgent and globally significant ([Archibong, 2022](#); [PricewaterhouseCoopers, 2019](#)).

At the same time, the transition offers a pathway to inclusive and sustainable growth. Expanding renewable energy, climate-smart agriculture, waste-to-value initiatives and climate-resilient infrastructure could generate large numbers of green jobs while addressing energy poverty and environmental risk ([Toledano and Archibong, 2016](#);

[Bruederle and Hodler, 2019](#)). Ensuring those opportunities are distributed equitably, across Nigeria's diverse regions and its informal workforce, will be essential to a just transition ([Mohammed, 2021](#)). This report situates that transition within both national policy commitments and the lived realities of the informal workers and vulnerable communities whose livelihoods the shift will most affect.

3. Methodology

The report draws on secondary policy analysis and qualitative field research conducted between July and August 2025. Key informant interviews were held with stakeholders across government institutions, informal-sector associations, civil society organisations, renewable energy actors, private-sector representatives and development partners engaged in climate and green-jobs programming. Respondents were purposely selected for their involvement in the sectors most affected by the transition and their knowledge of labour, climate and green-economy issues. Interviews were conducted online and in person through semi-structured engagements of roughly 40 minutes each. Transcripts and field notes were analysed thematically, using a framework informed by the literature on just transitions and green jobs, with particular attention to policy awareness, employment impacts, fiscal reform, implementation challenges, and the integration of informal workers into emerging green sectors.

4. Greenhouse gas emissions and recent policy

Nigeria is a significant but complex climate actor. As of 2018, its annual greenhouse gas emissions were estimated at about 347 million tonnes of carbon dioxide equivalent, concentrated in a few sectors ([Federal Ministry of Environment, 2021](#)).

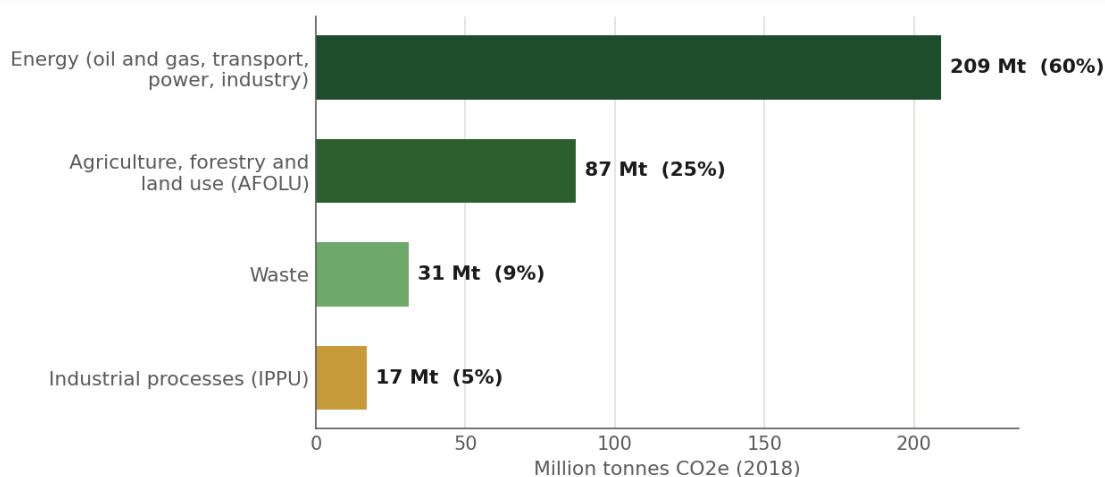


Figure 1. Nigeria's greenhouse gas emissions by sector, 2018 (Federal Ministry of Environment, 2021).

On this profile Nigeria is among the largest emitters in Africa, yet its per capita emissions of about 1.7 tonnes are below the African average of roughly 4.5 tonnes and well below the OECD average of around 10 tonnes ([Ayompe et al., 2021](#)). This duality, high aggregate emissions but a low individual footprint, frames the policy dilemma of balancing energy access and development with global decarbonisation.

In response, Nigeria has adopted ambitious frameworks. Its Nationally Determined Contribution pledges an unconditional 20 percent reduction in emissions by 2030, rising to 47 percent conditional on international support, and the country has set a net-zero target for 2060, anchored in the Energy Transition Plan of 2022 and reinforced by the Climate Change Act of 2021. These frameworks prioritise expanding renewable energy, improving energy efficiency, phasing out gas flaring and scaling climate-smart agriculture.

Despite these commitments, a major implementation gap persists, and it is felt most in the informal economy, which by recent official data accounts for about 92.6 percent of total employment in Nigeria ([NBS, 2024](#)). While national policy envisages large-scale green-job creation, with the Nigeria Green Job Assessment, prepared with the UNDP and ILO, projecting up to 14.1 million green jobs by 2035, many informal workers remain unaware of these opportunities and lack the finance, skills and market linkages to take them up ([Uwagbulam and Gbonegun, 2024](#)). Without integrating informal workers into the agenda, emission targets and just-transition aspirations risk remaining aspirational rather than transformational. These workers, including transport operators, waste pickers and recyclers, market traders, food vendors and small-scale agricultural workers, will face both vulnerabilities and opportunities as energy systems, fuel subsidies and waste systems change, which is why inclusive labour protections, skills development and green finance matter so much.

5. Government policies and commitments

Under a business-as-usual trajectory, Nigeria's emissions are projected to rise toward 453 million tonnes by 2030, with the energy share declining to around 51 percent as agriculture, forestry and land use climb to about 33 percent ([Federal Ministry of Environment, 2021](#)). The Nationally Determined Contribution commits to the unconditional 20 percent and conditional 47 percent reductions noted above, with much of the conditional mitigation expected from the electricity sector as the country moves away from fossil-fuel self-generation toward a more diversified mix.

Central to this effort is the Nigeria Energy Transition Plan, launched in 2022, which sets a pathway to carbon neutrality by 2060. The plan places strong emphasis on a just transition, seeking to balance the global decline in fossil-fuel demand with domestic job security while expanding energy access, and it targets universal energy access by 2030. Renewable energy is central, though natural gas is positioned as a transition fuel for short-term and medium-term stability. The plan is structured around five sectors, power, buildings, transport, oil and gas, and industry, and is complemented by the Climate Change Act of 2021, which establishes the legal and institutional framework for decarbonisation, including the National Council on Climate Change.

Yet a gap remains between ambition and delivery, as one environmental advocate underscored during the engagement:

The policies are beautiful on paper, but the informal sector workers do not even know they exist. Many of the women, farmers and traders I work with have never

heard of net-zero or the incentives for green businesses. If they are not carried along, how can Nigeria realistically achieve these goals?

This points to a disconnect between policy design and on-the-ground reality. Current frameworks tend to focus on large formal industries with access to audits, compliance mechanisms and credit, while neglecting the informal majority. Women in particular face compounded barriers, often lacking awareness of policies, access to finance, or structured pathways into green jobs.

6. Renewables and the energy transition

Nigeria has set ambitious renewable energy targets. Modelling for the transition envisages around 30 GW of installed on-grid capacity by 2030, including roughly 13.8 GW from grid-connected renewables, equivalent to about 45 percent of capacity and 30 percent of generation, against a government target of around 15 percent of the energy mix from renewables by 2030 excluding large hydropower ([Roche et al., 2020](#)). The pathway rests on both on-grid and off-grid solutions, including standalone solar, hybrid mini-grids, expanded hydropower and the integration of non-hydro renewables, with solar the most scalable option.

Meeting these targets depends on sustained investment, a point a renewable-energy operator made directly:

Renewable energy has potential, but financing remains the biggest stumbling block. Without credit facilities or affordable capital, communities and small businesses cannot adopt solar or other clean energy solutions at scale.

Renewables are not only about decarbonising power; they are a major driver of green jobs. Scaling solar and mini-grids creates work in installation, maintenance, distribution and local assembly. Waste-to-energy initiatives generate clean power and jobs in collection, processing and operations; bioenergy from agricultural residues supports rural feedstock supply chains; small hydropower stimulates construction and local operations in riverine communities; and wind, though less developed, could foster specialised technical employment with the right policy and investment. Linking renewable deployment to skills training, enterprise support and access to finance can make the transition a dual engine of climate resilience and inclusive job growth, with youth and women benefiting most where projects are deliberately tied to vocational pathways, business incubation and local manufacturing.

Existing climate instruments can do far more for informal workers if implementation is designed with inclusion in mind. Many informal workers already operate in sectors linked to renewables, waste, clean cooking and agro-processing, yet remain outside formal financing, training and policy processes. The table below sets out practical adjustments.

Table 2. Aligning existing climate instruments with informal-sector green jobs

Climate instrument	Informal workers affected or benefiting	Suggested inclusive adjustment
Clean cooking programme	Fuelwood sellers, charcoal traders, women food vendors	Training and financing support for women-led clean-cooking enterprises
Mini-grid and rural electrification	Informal welders, agro-processors, electricians, artisans	Local hiring and technical apprenticeship requirements
Gas flare commercialisation	Informal workers in oil-producing communities	Reskilling and local employment quotas for affected Niger Delta workers
Waste-to-energy initiatives	Waste pickers and recyclers	Formalise waste-picker cooperatives and integrate them into municipal systems

The Energy Transition Plan, unveiled in 2022, prioritises five sectors, power, transport, oil and gas, cooking and industry, that together account for about 65 percent of national emissions. Within it sit several flagship investment projects, summarised below using the plan's own anticipated impacts. These are gross project-level estimates and are not directly additive to the plan's economy-wide net employment projections.

Table 3. Selected flagship projects under the Energy Transition Plan

Project	Description	Anticipated impacts (per the plan)
Renewable energy generation	Deploy 5 million solar home systems and mini-grids to electrify homes and SMEs	About 250,000 new jobs; power for about 200,000 SMEs; emissions cut of about 25,000 tonnes
Gas flare commercialisation	End routine flaring by 2030 by commercialising flared gas for private off-takers	About 300,000 direct and indirect jobs; about 13 million tonnes CO ₂ e a year avoided; about USD 1 billion in annual revenue
Clean cooking	Switch about 30 million homes from kerosene, charcoal and diesel to LPG, biogas and electric options	About 1 million jobs; about 120 million tonnes CO ₂ e avoided
Healthcare electrification	Provide about 50 MW of solar power to roughly 10,000 health centres	Renewable power for centres serving about 100 million people

7. Fiscal and employment consequences of a just transition

The transition is a fiscal and employment challenge as much as a technical one. Nigeria's dependence on petroleum is structural, and any rapid global shift away from fossil fuels poses real risks to the treasury ([Osinbajo, 2022](#); [Archibong, 2022](#)). In the near term these revenues remain essential for financing green investment, expanding access and sustaining industry. This is the paradox of the transition: the petroleum sector Nigeria must eventually move beyond still provides much of the fiscal backbone needed to fund the move.

On the employment side, the costs are concentrated. The Energy Transition Plan anticipates that a substantial number of oil and gas jobs, on the order of 150,000 to 200,000, could be displaced over the course of the transition, mostly lower-skilled and vulnerable roles concentrated in the Niger Delta ([Federal Ministry of Environment, 2022](#)). Left unmanaged, such losses could deepen grievances in a region already

marked by marginalisation. Yet the same plan projects large-scale job creation, with the potential to generate around 340,000 new jobs by 2030 and about 840,000 by 2060, chiefly through renewable energy and clean cooking, and these opportunities are likely to be more geographically dispersed, with strong potential in the northern states where solar can scale quickly.

This asymmetry, losses clustered in the Delta while new opportunities spread across the country, raises a governance question of regional equity. If policy fails to provide targeted reskilling, reinvestment and safety nets for displaced workers, the just element of the transition will ring hollow. If fiscal policy, green-industrialisation strategy and social protection are aligned, the transition can instead become a driver of inclusive growth and national cohesion.

8. Financing, awareness and implementation: the way forward

Nigeria's transition is a significant opportunity to align economic transformation with global climate goals. As the continent's largest economy, a successful transition would offer a powerful demonstration effect, while failure would have destabilising implications for West Africa. Delivering it requires action on three fronts: implementation capacity, public awareness and international financing.

8.1 Improving implementation

Capacity to implement policy at both federal and subnational levels will determine the credibility of the transition. The National Council on Climate Change is a step toward coordination, but many commitments, including climate-smart agriculture and rural electrification, depend on state and local governments that often have the weakest financing and technical capacity. One way forward is an incentive-based federal framework that fosters competition and accountability among states. The Universal Basic Education Commission offers a precedent: financed through statutory allocations, it required states to set up education boards and rewarded those meeting matching-grant and performance benchmarks. A climate equivalent, anchored in legislation, financed by dedicated allocations and tied to performance-based grants, could generate similar peer competition and embed climate outcomes in the federal structure.

8.2 Increasing public awareness

Reform in Nigeria often gains traction when citizens demand it. Awareness of climate change remains limited, with survey evidence suggesting only about half of Nigerians had heard of climate change in the late 2010s, well below comparators such as Uganda and Zimbabwe ([Selormey et al., 2019](#)), even as people experience worsening rainfall variability, water stress, food insecurity and resource-driven conflict. The transformation of the National Agency for Food and Drug Administration and Control shows how citizen pressure can galvanise state capacity ([Abah, 2012](#)). A similar dynamic could apply to climate governance if civil society helps citizens link daily vulnerabilities, failed

harvests, heatwaves and flooding, to the broader climate agenda, generating the political pressure to move from paper commitments to enforceable reforms.

8.3 Mobilising international financing

Nigeria cannot finance the transition alone; estimates put the incremental need at around USD 10 billion a year. Domestic instruments such as green bonds have targeted rural agriculture, off-grid solar and afforestation, but remain insufficient. Innovative models are therefore critical, including debt-for-climate swaps, sustainability-linked bonds and concessional climate-linked debt. Nigeria's past Paris Club debt relief, which freed about USD 1 billion a year for pro-poor investment under the Obasanjo administration, offers a precedent: similar arrangements today could link debt relief to climate milestones, creating fiscal space while advancing global commitments. As Lankes, Soubeyran and Stern (2022) put it, climate and development goals are inseparable, and if a country fails on one it fails on the other. For Nigeria, progress depends on building institutions that deliver, mobilising citizens to demand accountability, and leveraging international partnerships to finance ambition. Done well, the transition can create green jobs and energy security and renew the legitimacy of Nigeria's governance model.

Table 4. Indicative roadmap of priority actions for an inclusive green transition

Priority area	Key action	Lead institutions	Timeline
Implementation	Establish a Just Transition Working Group with informal-worker representation	NCCC	2026 to 2027
Implementation	Integrate informal-work targets into state climate action plans	State Ministries of Environment	2026 to 2027
Awareness and capacity	Expand green skills and vocational training for youth and women in informal sectors	Ministry of Labour; NDE	2026 to 2028
Financing	Develop green microcredit schemes for informal enterprises and cooperatives	Bank of Industry; CBN	2026 to 2030
Financing	Pilot pay-as-you-go solar and clean-cooking finance in informal settlements	REA; private renewable firms	2026 to 2030

9. Conclusion

Nigeria stands at a critical point in its pursuit of a low-carbon, climate-resilient future. Ambitious frameworks such as the Climate Change Act of 2021 and the Energy Transition Plan of 2022 signal strong intent, but the implementation gap remains wide, and high-level commitments too often fail to reach the informal economy where most Nigerians earn their living. Bridging that gap is central to ensuring the transition is not only green but also just and inclusive.

The way forward requires the deliberate integration of informal workers, women and youth into climate and energy strategies, backed by skills development, access to

finance and supportive market linkages. Scaling renewables, waste-to-value initiatives and sustainable agriculture can cut emissions and create jobs at the same time, but only if grounded in strong institutional coordination and equitable regional planning. Nigeria's green transition is not simply an environmental imperative but a development opportunity. With effective governance, citizen awareness and international financing, the country can turn vulnerability into resilience and its climate commitments into engines of inclusive growth, setting a precedent for Africa and beyond.

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