

Pricing the atmosphere: Carbon financing, market architecture, and the case for a differentiated global carbon price — A Nigerian and African perspective

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Abstract

Carbon financing has migrated, within little more than a decade, from the periphery of climate policy to a central instrument of sovereign fiscal strategy in the developing world. This article argues that the emerging architecture of carbon pricing comprising emissions trading systems, carbon taxes and crediting mechanisms operating under Article 6 of the Paris Agreement, cannot deliver its promised transfer of capital from the Global North to the Global South unless three structural defects are corrected: the absence of a coherent, differentiated global carbon price floor; the persistence of legal ambiguity over the ownership and taxation of carbon credits in producer states such as Nigeria; and the asymmetric extraterritorial reach of instruments such as the European Union's Carbon Border Adjustment Mechanism ("CBAM"), which imports the price discipline of the Global North without importing its fiscal dividend. Using Nigeria's nascent carbon market as a case study, the article contends that the jurisdictions best placed to benefit from carbon financing will be those that legislate (rather than merely regulate) carbon credit ownership, taxation and bankability criteria in advance of market maturity.

Keywords: Carbon financing, carbon pricing, market architecture, global carbon price, differentiated global carbon price, Nigeria

Introduction

Global greenhouse gas ("GHG") emissions have proved remarkably resistant to exogenous shock. Drawing on the European Commission's Joint Research Centre EDGAR dataset, the most authoritative continuous time series available, global GHG emissions have declined in only two years of the twenty-first century: 2009, in the wake of the global financial crisis, and 2020, as a consequence of the COVID-19 pandemic.

This is a narrower record than is commonly supposed. The oil shocks of 1973 and 1979–80 undoubtedly depressed energy demand and emissions growth in the oil-importing economies of the OECD, but they did not produce a global decline in aggregate emissions; growth in non-OECD industrialising economies continued to outpace the contraction in the developed world. The lesson is not that crises fail to reduce emissions — they self-evidently do, at the margin, but that no exogenous shock has yet been severe or sustained enough to reverse the underlying secular trend. Emissions reached a new high of approximately 53.2 gigatonnes of CO₂-equivalent in 2024, a 1.3 per cent increase on the previous year.

This resilience is the analytical premise for the turn, over the past two decades, from purely regulatory climate policy toward market-based instruments capable of internalising the externality directly. It is this architecture — carbon taxation, emissions trading, and the voluntary and compliance credit markets that increasingly intersect with both that forms the subject of this article, with particular reference to the position of Nigeria and the African continent within it.

The Global Emissions Landscape: Concentration, Not Diffusion

The distribution of global emissions remains heavily concentrated. On the most recent EDGAR data (2024),

China, the United States, India, the European Union (as a bloc), Russia and Indonesia are the world's largest GHG emitters, together accounting for well over sixty per cent of global emissions despite representing roughly half of the world's population. Indonesia's inclusion in this group is a recent development, driven by a 5 per cent increase in its emissions in 2024 (the largest relative increase among major emitters) and displaces Brazil, which featured in the top six as recently as 2023. If the European Union is disaggregated into its constituent states rather than treated as a bloc, the ranking by individual sovereign emitter is essentially China, the United States, India, Russia and Indonesia, which is consistent with the ordering commonly cited in policy literature.

China's position at the apex of this ranking is inseparable from its role as the world's dominant producer of cement and steel. Cement manufacture is intrinsically emissions-intensive: the calcination of limestone releases CO₂ as a direct chemical by-product, independent of the fuel used to fire the kiln, so that even a fully decarbonised electricity grid would not eliminate cement's emissions footprint. China alone accounts for more than half of global cement production, and this single industrial input, layered on top of a coal-dependent power sector, substantially explains why its emissions intensity per unit of GDP remains structurally higher than that of comparable economies. This is a materially important qualification for Nigerian and African policymakers: it demonstrates that emissions intensity is often a function of an economy's industrial composition rather than simply the laxity of its regulatory regime, a distinction that matters considerably when African states negotiate equitable treatment under instruments such as CBAM, discussed below.

For Nigeria specifically, the principal sources of emissions are the oil and gas sector, through fugitive emissions, flaring and fuel combustion, together with agriculture, land use and

transport. This sectoral profile is significant for policy design: it means that Nigeria's mitigation strategy cannot be reduced to a power-sector decarbonisation programme of the kind pursued in coal-dependent economies, but must instead address flaring reduction, methane management in the oil and gas value chain, and land-use practices simultaneously.

Africa's Marginal but Consequential Position

Africa's contribution to cumulative global emissions is genuinely marginal. Estimates of the continent's share of annual global CO₂ emissions have fluctuated within a narrow band of approximately 3.4 to 3.9 per cent over the past two decades and this figure is commonly rounded to "around 3.6 per cent" in policy commentary despite the continent housing roughly 18 per cent of the world's population. On a per capita basis, Africa's emissions are the lowest of any inhabited continent.

Within this small share, emissions are themselves highly concentrated. On fossil CO₂ emissions data, the five largest African emitters are South Africa, Egypt, Algeria, Nigeria and Morocco, together accounting for the majority of the continent's fossil emissions. South Africa's position at the summit of this ranking is a direct function of its coal-dependent electricity system as coal accounts for approximately 85 per cent of the country's power-sector CO₂ emissions while Nigeria's fourth-place position reflects gas flaring and a rapidly growing transport sector rather than coal. It should be noted that when emissions are measured instead on a full greenhouse-gas basis inclusive of methane (which is disproportionately significant for Nigeria's oil and gas sector and agricultural base), Nigeria's relative ranking rises, in some datasets displacing Algeria into third place. This is a live methodological point: the choice of metric (CO₂ alone versus full CO₂-equivalent) is not neutral, and Nigerian negotiators should be alert to which convention is being applied when comparative emissions data is used to justify differentiated treatment under international instruments.

The doctrinal significance of Africa's marginal contribution is this: it supplies the strongest available justification, in both moral and legal terms, for a differentiated global carbon-pricing architecture in which capital transfers flow toward, rather than away from, low-emitting developing economies. This is the animating premise of carbon financing as a legal and economic mechanism, considered next.

The Architecture of Carbon Pricing

a. Instruments and Coverage

According to the World Bank's State and Trends of Carbon Pricing 2025 report, 80 carbon pricing instruments were in operation globally as at mid-2025, comprising 43 carbon taxes and 37 emissions trading systems, which is a net increase of five over the preceding year and a substantial expansion from fewer than ten instruments in 2005. These instruments now cover approximately 28 per cent of global GHG emissions and generated in excess of US\$100 billion in public revenue in 2024 alone. The World Bank's most recent update places the number of implemented instruments at 87, covering close to 30 per cent of global emissions, confirming that the trajectory of adoption remains upward.

An emissions trading system operates on a cap-and-trade logic: a regulator sets an aggregate emissions ceiling for covered installations, issues (or auctions) a corresponding number of tradable allowances, and permits the market to discover the price at which marginal abatement becomes cheaper than compliance. A carbon tax, by contrast, fixes the price directly and allows the quantity of emissions to adjust. Both are direct carbon-pricing instruments in the technical sense used by the World Bank, and both are to be distinguished from indirect mechanisms such as fossil-fuel subsidy reform or fuel excise duties, which shape carbon-intensive behaviour without pricing carbon as such.

b. The Price-Adequacy Problem

The existence of a carbon price is not, in itself, evidence of an adequate one. The World Bank's High-Level Commission on Carbon Prices (the Stiglitz–Stern Commission) concluded in 2017 that a carbon price of between US\$40 and US\$80 per tonne of CO₂-equivalent was required by 2020, rising to between US\$50 and US\$100 per tonne by 2030, if global mitigation pathways were to remain consistent with the Paris Agreement's temperature goals. Subsequent estimates calibrated to the 2°C pathway have placed the figure as high as US\$63–127 per tonne. Measured against this benchmark, most operational carbon-pricing instruments remain substantially under-priced.

The European Union's Emissions Trading System, the world's most mature compliance market, has traded in a range of approximately €60–95 per tonne through 2025–2026, settling around €70–81 in mid-2026 — a level that sits within, though at the lower end of, the Stiglitz–Stern range. South Africa's carbon tax, by contrast, illustrates the gulf between a jurisdiction's headline statutory rate and its effective price. The headline rate rose to R236 (approximately US\$14) per tonne in 2025 and to R308 (approximately US\$17–20) per tonne from January 2026, en route to a legislated R462 per tonne by 2030. However, generous transitional tax-free allowances ranging from 60 to 95 per cent of covered emissions, mean that the effective price actually borne by most South African emitters in 2025 fell within a much narrower band of roughly R6 to R48 (US\$0.35–2.80) per tonne. South Africa's carbon tax is consequently better characterised as a price signal in transition than as a fully internalised carbon cost; its Phase Two reforms (2026–2030), which begin to withdraw these allowances and introduce a punitive R640 per tonne rate for emissions exceeding a firm's statutory carbon budget, represent the first serious attempt to close that gap.

The remainder of the continent lags further still. South Africa remains the only African jurisdiction with a fully legislated and operational carbon tax; the rest of the continent's carbon-pricing activity including Nigeria's, sits within emissions trading frameworks or crediting mechanisms still under development, rather than direct taxation. This asymmetry is the source of a genuine equity problem, addressed in Section VI below: a uniform global carbon price, applied without regard to a jurisdiction's stage of industrialisation, risks entrenching rather than correcting global inequality, since a US\$100 per tonne price is a materially different burden on an economy with Nigeria's per capita GDP than on one with Germany's.

Carbon Financing: Legal Structure, Actors and Life Cycle

a. Definition and Mechanism

Carbon financing denotes the funding and investment mechanisms that support projects reducing or removing GHG emissions, structured so that the verified emission reduction itself becomes a fungible, tradable asset (the carbon credit) capable of being sold to an entity seeking to offset its own emissions. It is best conceived, in legal terms, as a form of environmental commodity finance: the credit functions analogously to a negotiable instrument evidencing a verified environmental outcome, transferable by registry entry rather than physical delivery. Its price, unlike a statutory carbon tax, is a function of market supply and demand rather than legislative fiat; the EU ETS price discussed above is itself the clearest illustration of this dynamic operating within a compliance market.

b. Market Structure: Voluntary and Compliance Markets Compared

The voluntary carbon market ("VCM") and the compliance carbon market are frequently, and wrongly, treated as points on a single continuum. They are better understood as distinct legal regimes with different sources of demand, different governing standards, and different geographic reach. The compliance market, exemplified by the EU ETS, California's Cap-and-Trade Program, and South Africa's carbon tax, is created and enforced by domestic legislation; participation is mandatory for regulated installations, and pricing is determined within the regulatory architecture itself. The voluntary market, by contrast, is driven by corporate social responsibility commitments and unilateral net-zero pledges rather than legal compulsion, is not bounded by national or regional borders, and relies for its integrity on private standard-setting bodies rather than a state regulator.

Most African carbon market activity and the overwhelming majority of Nigerian activity to date sits within the voluntary market, governed by private standards such as the Gold Standard and Verra's Verified Carbon Standard, alongside the residual influence of the Kyoto Protocol's Clean Development Mechanism, now transitioning into the Paris Agreement Crediting Mechanism. Kenya's Kasigau Corridor REDD+ project and the clean cookstove programmes proliferating across West Africa are paradigm examples of voluntary-market activity: unrestrained by jurisdictional boundaries, open to participation across every sector of the economy, and priced without regulatory intervention.

c. Key Actors

A functioning carbon market requires the coordinated participation of project developers, who design and implement the underlying emission-reduction activity; investors and lenders, who supply upfront capital against the expectation of future credit revenue; buyers, whether corporate, sovereign or individual, who purchase credits to offset their own emissions; independent verification and validation bodies ("Designated Operational Entities" in UNFCCC parlance), who certify that claimed reductions are real, additional and permanent; and regulators, who oversee compliance, prevent double counting, and increasingly, in jurisdictions such as Nigeria, determine the fiscal and ownership treatment of the resulting credits.

d. Structural Challenges

Carbon financing confronts six recurring legal and commercial obstacles: the additionality requirement, which demands proof that a project would not have proceeded absent carbon revenue and is notoriously difficult to evidence to a counterfactual standard; the material cost of measurement, reporting, verification and third-party validation, which can be prohibitive for smaller developers; persistent integrity and greenwashing risk, dramatised by well-publicised controversies over the overstatement of avoided-deforestation credits; the price volatility inherent in a market without a regulatory floor; pervasive regulatory uncertainty in emerging jurisdictions, Nigeria included, as to the legal ownership and tax treatment of credits; and the risk of double counting, whereby the same tonne of avoided or removed emissions is claimed by more than one party and this is a risk that Article 6 of the Paris Agreement was substantially designed to foreclose through its "corresponding adjustment" mechanism.

e. The Project Life Cycle

The generation of a bankable carbon credit follows a broadly sequential life cycle: project conception, in which the developer scopes the intervention and its expected emissions footprint; selection of methodology, distinguishing at the outset between a voluntary-market pathway (Gold Standard, Verra) and a compliance pathway under Article 6; a baseline study establishing the counterfactual emissions scenario against which reductions will be measured; in Nigeria, a letter of no objection or equivalent endorsement from the National Council on Climate Change; registration with the relevant international registry; preparation of a Project Design Document by qualified technical consultants — typically the most time-intensive stage of the process; a structured stakeholder engagement process, including periodic public notice, to satisfy free, prior and informed consent norms; independent validation by a Designated Operational Entity; national regulatory sign-off; and, finally, issuance of credits following international verification, at which point forward-sale arrangements become available to monetise the anticipated credit stream ahead of issuance.

The Paris Agreement, Article 6, and the International Legal Architecture

The Paris Agreement's central mitigation objective to hold the increase in global average temperature to well below 2°C, and to pursue efforts to limit it to 1.5°C, translates, on the Intergovernmental Panel on Climate Change's assessment, into a requirement that global GHG emissions peak before 2025 and fall by approximately 43 per cent by 2030 relative to 2019 levels. This objective is operationalised through Nationally Determined Contributions ("NDCs") — self-determined national pledges rather than internationally imposed obligations which are reviewed and strengthened on a five-year cycle.

Article 6 of the Agreement is the principal legal gateway for international cooperation on mitigation, and it establishes three distinct cooperative approaches: bilateral or plurilateral carbon trading through Internationally Transferred Mitigation Outcomes ("ITMOs") under Article 6.2; a centralised, UN-supervised crediting mechanism under Article 6.4, the successor to the Kyoto Protocol's Clean Development Mechanism; and non-market

cooperation under Article 6.8, encompassing forms of climate collaboration that do not involve the trade of credits at all. The corresponding-adjustment requirement attached to Articles 6.2 and 6.4 under which a host country must subtract a transferred mitigation outcome from its own NDC accounting once it is claimed by a buyer country is the Agreement's principal legal safeguard against double counting, and its correct application is now the central technical and legal battleground in the design of every national carbon market, Nigeria's included.

Nigeria's Carbon Market: Legal Evolution and Institutional Architecture

a. Legislative and Policy Trajectory

Nigeria's carbon market has developed through a discernible sequence of legal and institutional steps. The Climate Change Act 2021 established the National Council on Climate Change ("NCCC") as the country's principal climate governance body and set a target of net-zero emissions by 2060, empowering the Council, under sections 4(i) and (j) of the Act, to develop mechanisms for emissions reduction, though without at that stage prescribing the operational detail of an emissions trading or crediting system. Voluntary-market activity nonetheless proceeded in parallel: by April 2023 the Nigeria Sovereign Investment Authority ("NSIA"), Nigeria's sovereign wealth fund, had concluded a joint venture with the global energy trader Vitol to establish CarbonVista, an initial US\$50 million platform dedicated to carbon avoidance and removal projects in Nigeria, with an inaugural focus on clean cooking, water purification and reforestation.

The National Council on Climate Change Secretariat released a draft Nigeria Carbon Market Activation Policy in September 2024, and the finalised Nigeria Carbon Market Activation Policy 2025 ("CMAP") was announced by President Bola Tinubu in March 2025, setting out national carbon registry infrastructure, project eligibility criteria aligned with Article 6, and fiscal incentives for private-sector credit generation, with an implementation roadmap running to 2030. Nigeria submitted its third-generation Nationally Determined Contribution ("NDC 3.0") to the UNFCCC in September 2025, formally embedding the carbon market framework within its international climate commitments. In late 2025, ahead of COP30, President Tinubu approved a National Carbon Market Framework, activated Nigeria's Climate Change Fund, and reinstated the NCCC's budget line within the federal appropriations process to give the policy financial and administrative permanence rather than the stop-start funding pattern that had previously characterised Nigerian climate governance.

The CMAP's headline fiscal ambition is to unlock between US\$2.5 billion and US\$3 billion annually by 2030 through the generation and trading of high-integrity carbon credits, supporting an estimated emissions-reduction potential of up to 124.7 million tonnes of CO₂-equivalent. Within this, clean cooking has emerged as the single most consequential sub-sector: Nigeria has targeted the deployment of 80 million clean cookstoves nationally, a programme in which Lagos State has positioned itself as an early anchor, committing to distribute six million free cookstoves beginning with the Makoko waterfront community and separate industry estimates suggest the cookstove programme alone could generate up to US\$5 billion annually in credit revenue at scale, a figure that exceeds the

CMAP's own economy-wide target and should accordingly be treated as an aspirational upper bound rather than a committed baseline. In March 2026, Nigeria authorised its first cross-border export of 5.2 million clean-cooking carbon credits, generated by the developer BURN and cleared through the NCCC for sale under the aviation offset mechanism CORSIA — the first transaction of its kind for Nigeria and a meaningful, if still modest, proof of concept relative to the programme's ultimate scale. Nigeria currently hosts 114 registered clean cookstove carbon projects, more than any other country in the sub-region, and accounts for approximately 5 per cent of global cookstove credit issuance to date.

b. Statutory and Institutional Gaps

Notwithstanding this progress, the prevailing scholarly assessment and, in the author's view, the correct one, is that the Climate Change Act 2021 supplies climate governance architecture without supplying carbon market law in the strict sense. The Act establishes the NCCC and articulates net-zero ambition, but it does not itself create statutory rules on the legal ownership of carbon credits, their tax characterisation, or the enforceability of emissions trading obligations; these matters are presently governed by policy instruments (the CMAP and associated NCCC regulatory guidance) rather than primary or subsidiary legislation with the force of law. The NCCC's own regulatory guidance has, for instance, confirmed that a formal "no-objection" clearance is not compulsory for the issuance and trading of certified credits in the voluntary market, aligning Nigerian practice with Article 6.2 of the Paris Agreement, but this clarification was achieved by administrative guidance rather than statute.

This is not a merely academic distinction. Investors structuring project finance or forward-sale agreements against future Nigerian carbon credit streams require certainty, enforceable as a matter of Nigerian law, as to who owns a credit once issued and as to whether credit revenue is subject to companies income tax, capital gains tax, or a bespoke fiscal treatment. The CMAP anticipates a role for the Nigeria Revenue Service in developing carbon tax and related fiscal rules in collaboration with the NCCC, and a Carbon Market Implementation Unit is envisaged to manage certification and international liaison, but the underlying primary legislation, a Carbon Market Act, properly so called, has not yet been enacted. Until it is, Nigeria's carbon market rests on a policy foundation that can be revised administratively rather than a statutory foundation that binds successive governments, and this remains, in the author's assessment, the single most significant legal risk facing capital deployed into the Nigerian market at present.

c. Institutional Responsibilities and the Private Sector's Role

The government's function within this architecture is threefold: to set policy direction and the overarching regulatory framework; to establish the registry, verification and transparency infrastructure including interoperability with international systems without which credits cannot be traded internationally with confidence; and to define the fiscal incentive structure that will determine whether Nigeria's price competitiveness is sufficient to attract capital relative to comparable jurisdictions such as Kenya or Ghana. The private sector's complementary role is to supply

project finance, to develop and implement the underlying emission-reduction interventions, and to act as the offtaker of last resort for credits pending the maturation of international demand. NSIA's CarbonVista is the clearest illustration of this public-private structure operating in practice, and its recent forward-sale arrangement with a subsidiary of Saudi Arabia's Public Investment Fund itself is a striking illustration of one hydrocarbon-exporting sovereign wealth fund purchasing offsets from another — demonstrates that Nigerian credit demand need not originate exclusively from the traditional buyer markets of Europe and North America.

Bankability, Priority Sectors, and Project Selection

Not every emissions-reduction intervention constitutes a bankable carbon project, and the distinction matters acutely for a jurisdiction seeking to convert policy ambition into realised capital. A bankable project must demonstrate, at minimum: environmental integrity, evidenced through a defensible methodology, a credible baseline and a rigorous additionality case; a coherent revenue model, clarifying whether returns derive solely from credit sales or from a blended stream that includes the underlying project's own commercial output, together with clearly identified, creditworthy offtakers; realistic pricing and issuance-timeline assumptions, given the price volatility inherent in voluntary markets; demonstrable social co-benefits — health, employment and broader ESG impact, which increasingly determine a project's attractiveness to premium buyers; and, not least, the developer's own execution capacity, since Nigerian carbon market practice to date suggests that consortia of collaborating private players are consistently more successful in reaching financial close than individual developers acting alone, given the scale of technical, financial and regulatory coordination the process demands.

The CMAP identifies transport, power generation, oil and gas, forestry and agriculture as priority sectors, and Nigerian practice already illustrates the range of qualifying interventions: the substitution of compressed natural gas or electric propulsion for petrol and diesel in transport, and the displacement of diesel generation by grid, gas or solar power, both of which qualify for credit generation provided the counterfactual emissions reduction can be rigorously measured and verified rather than merely asserted. As of the most recent market survey, more than fifteen Nigerian entities have successfully generated compliant carbon credits, evidencing that the bankability threshold, while demanding, is not unattainable.

The EU Carbon Border Adjustment Mechanism: Extraterritorial Pricing and Its Consequences for Nigerian Exporters

The Carbon Border Adjustment Mechanism entered full enforcement in the European Union from January 2026, applying to imports of cement, iron and steel, aluminium, fertilisers, hydrogen and electricity. Its stated legal rationale is the prevention of carbon leakage — the relocation of emissions-intensive production to jurisdictions with weaker climate regulation, which would otherwise undermine both the environmental integrity and the competitive fairness of the EU ETS. In substance, CBAM requires an EU importer of covered goods to purchase certificates priced at the prevailing EU ETS rate (€75.36 per tonne of embedded CO₂

for the first quarter of 2026) for the carbon content of the imported product, with a corresponding deduction available where the exporting country has already levied an equivalent domestic carbon price.

For Nigerian exporters of CBAM-covered products, the practical consequence is stark: in the absence of accurate, independently verifiable emissions reporting, the European Commission will apply a conservative default emissions value, which is likely to exceed the exporter's actual emissions intensity and thereby impose a higher effective levy than a properly documented actual-emissions submission would produce. Because Nigeria has no equivalent domestic carbon tax of its own (South Africa remains the only African jurisdiction that does), Nigerian exporters will, in practice, obtain no deduction at all, and will bear the full CBAM charge on covered exports to the European market. This is the clearest illustration available of the price-adequacy asymmetry discussed in Section IV: CBAM effectively imports European carbon-price discipline into Nigerian export economics without any corresponding mechanism to recycle that revenue, or an equivalent share of it, back into Nigerian decarbonisation investment. The legally coherent response is for Nigeria to expedite the sectoral carbon-pricing measures already contemplated within the CMAP roadmap, prioritising the specific sectors exposed to CBAM, so that Nigerian exporters can substantiate a domestic carbon price paid, and thereby claim the deduction to which CBAM's own architecture entitles them, rather than absorbing the levy as an uncompensated cost of market access.

Toward Authoritative Solutions

The preceding analysis yields four propositions that go beyond description to prescription.

First, the case for a single, uniform global carbon price is analytically weaker than is often assumed, and the correct policy objective is a differentiated global carbon price floor rather than a flat one. A uniform US\$100 per tonne price, applied without regard to a state's stage of industrialisation, risks discouraging the very industrialisation that developing economies require to escape energy poverty, while conferring no additional environmental benefit over a lower, rising price schedule credibly legislated in advance. The Stiglitz–Stern Commission's own framework contemplates exactly this kind of differentiation, and Nigeria's negotiating position both domestically, in calibrating its own eventual carbon tax, and internationally, in Article 6 and CBAM-adjacent for a, should rest explicitly on this distinction rather than resisting carbon pricing as such.

Second, Nigeria's most urgent legislative priority is the enactment of a Carbon Market Act that places credit ownership, credit taxation, and the enforceability of registry entries on a statutory footing, rather than leaving them to policy guidance issued by the NCCC. The CMAP has done valuable work in establishing the institutional and registry architecture; it cannot, however, substitute for primary legislation capable of surviving a change of administration and of giving international investors the enforceable legal certainty that project finance of this kind requires.

Third, given the demonstrated CBAM exposure of Nigerian cement, aluminium and fertiliser exporters, the sectoral sequencing of Nigeria's own carbon-pricing rollout should be reordered to prioritise CBAM-exposed sectors ahead of the general roadmap timeline, so that Nigerian exporters can

document a domestic carbon price paid and secure the CBAM deduction to which they would otherwise be entitled in principle but denied in practice.

Fourth, the evident success of the clean cookstove sector — 114 registered projects, a first cross-border export of 5.2 million credits, and an 80-million-stove national target, should be treated as a template for institutional design rather than an isolated success story. Its comparative advantage lies in a relatively low additionality evidentiary burden, strong social co-benefits that command premium pricing, and now, in CarbonVista, a credible sovereign co-investment vehicle. Replicating that combination of features rather than merely replicating the cookstove technology itself in gas-flaring reduction and agricultural methane abatement, Nigeria's next most tractable sectors, is the most direct route to converting the CMAP's US\$2.5–3 billion ambition into realised capital before 2030.

Conclusion

Carbon financing is neither a purely technical mechanism nor a purely moral entitlement; it is an emerging field of transnational economic law in which the allocation of gains between the Global North and the Global South will be determined substantially by the quality of the legal architecture that developing states put in place before, rather than after, international capital arrives. Nigeria's progress since 2021, culminating in the 2025 Carbon Market Activation Policy, the September 2025 submission of NDC 3.0, and the approval of a National Carbon Market Framework ahead of COP30 is genuine and should not be understated. But policy architecture is not yet legal architecture, and the distinction will determine whether Nigeria's carbon market matures into a durable source of climate finance or remains a promising but legally contingent experiment. The jurisdictions that legislate credit ownership, taxation and CBAM-responsive sectoral pricing now will be the jurisdictions that capture the coming decade's carbon capital; those that do not will continue to export both their emissions data and their carbon revenue to better-prepared competitors.

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