



Policy brief

Carbon Credits as Fiscal Assets: From Climate Action to Sovereign Value

Summary

- Carbon finance is expanding from small, project-based instruments to scaled-up jurisdictional, sectoral and policy crediting, generating revenues large enough to matter fiscally, not just environmentally.
- Some countries already generate high-integrity, multi-million-ton carbon credit programs. Recognition of their standards by the aviation sector's Carbon Offsetting and Reduction Scheme (CORSIA) has significantly expanded the buyer base for eligible credits, at prices and volumes that increasingly matter for public finances.
- Carbon markets began in the early 2000s financing individual mitigation projects, led by Ministries of Environment because the work was primarily technical. As volumes and revenues grow, Ministries of Finance bring complementary responsibility for fiscal planning, accounting, revenue management, risk oversight, and integration with net zero transition plans and public investment priorities.
- This brief sets out what governments must do to manage material carbon revenues as sovereign fiscal assets. It reviews the evidence, explains when credits have the characteristics of public assets, and sets out implications for Ministries of Finance, national governments and development partners.
- To treat carbon as a fiscal asset, governments should establish clear governance, integrate carbon revenues into medium-term fiscal management, and develop national carbon asset management strategies. These fiscal as well as environmental responsibilities require stronger engagement from Ministries of Finance.
- Multilateral development banks can support this transition through credit origination and institutional support for Article 6 readiness, public financial management, market access, price discovery, treasury and risk management.

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1. Introduction

For most of the past two decades, carbon credits financed discrete projects such as reforestation, renewable energy, or landfill-gas capture. That model is changing. Governments can now generate credits across entire landscapes, sectors, and policy reforms, including through transactions under Article 6 rules. This scaled-up crediting, measures and rewards emission reductions across an administrative area, economic sector, or government intervention, rather than at a single project site. If implemented according to the principles for net zero aligned carbon offsetting,¹ this could reshape the economics of carbon crediting.

Scale also changes the policy question. A single program can now generate tens of millions of verified tons, worth hundreds of millions of dollars in multi-year revenue. Such amounts can affect national budgets. Yet most institutions governing carbon credits were designed for smaller transactions and remain concentrated in environment ministries. These agencies have the technical mandate to generate high-integrity credits, but not always the tools to decide when and for how much to sell them, how to account for them, or how proceeds should be allocated.

This brief asks what governments must do to manage material carbon revenues as sovereign fiscal assets. It reviews the evidence, explains when credits have the characteristics of public assets, and sets out implications for Ministries of Finance, national governments and their development partners.

2. From environmental instrument to fiscal resource

Carbon markets began in the early 2000s, financing individual mitigation projects: a wind farm, a landfill-gas capture system, or a community forestry initiative. Ministries of Environment led because the work was primarily technical: measuring emissions, running monitoring reporting and verification (MRV) systems, negotiating with a small number of specialized buyers. Revenues were modest, project-specific and often only accruing to project developers, so they rarely crossed the desk of a Ministry of Finance.

Three main developments have changed this. First, jurisdictional and sectoral programs, including those pioneered by the World Bank's Forest Carbon Partnership Facility (FCPF) and BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL), aggregate mitigation across entire landscapes rather than single sites, multiplying the volumes involved. Second, policy crediting extends the model from land use to public policy itself, turning climate-smart fiscal and regulatory reforms (for example, reducing fossil fuel subsidies) into a source of carbon finance. Third, Article 6 of the Paris Agreement and the aviation

sector's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) compliance market have opened these credits to buyers previously closed to them, at prices and volumes that increasingly matter for public finances.

Together, these developments are broadening the governance of carbon credits. Ministries of Environment remain central to environmental policy, program design, integrity standards, monitoring, reporting and verification, and alignment with national climate commitments. As credit volumes and revenues grow, Ministries of Finance bring complementary responsibility for fiscal planning, accounting, revenue management, risk oversight, and integration with net zero transition plans and public investment priorities.

3. Scaled-up carbon crediting

The shift to scaled-up crediting is fronted by two main categories of projects: (i) jurisdictional nature-based programs, such as Ethiopia's Oromia Forested Landscape Program, and (ii) sectoral policy crediting models, such as Uzbekistan's Innovative Carbon Resource Application for Energy Transition (iCRAFT) program in the energy sector and Ecuador's forthcoming diesel-subsidy-reform crediting program in the transport sector. The three examples are introduced further below.

Demand-side recognition is accelerating this expansion: in April 2026 the International Civil Aviation Organization (ICAO) Council approved the World Bank's jurisdictional standards FCPF and ISFL as CORSIA-eligible, giving host countries a compliance-grade aviation buyer base for jurisdictional forest credits for the first time.²

Jurisdictional nature-based programs: Ethiopia's Oromia Forested Landscape Program³

The Oromia Forested Landscape Program (OFLP) covers 32 million hectares of Ethiopia's Oromia region (9 million forested), home to more than 30 million people, and has been implemented by Ethiopia's Ministry of Finance since 2017 with financial and technical support from the World Bank's carbon fund ISFL. In December 2025, independent verification confirmed 14.9 million tCO_{2e} of emission reductions for the program's first monitoring period (2022–23), of which 12.4 million tCO_{2e} were issued as tradable ISFL units and recorded in the World Bank's Carbon Asset Tracking System (Table 1). At market prices of US\$10–20 per ton on CORSIA market, the issued credits have been valued at US\$124–248 million, well above the US\$40 million Emission Reductions Purchase Agreement that originally financed the program. The program's benefit sharing plan commits a substantial majority of proceeds, on the order of 75%, to communities and local institutions in the Oromia region.

Table 1: Ethiopia’s OFLP program in numbers

Metric	Figure
Jurisdiction	Oromia Regional State, Ethiopia (32 million ha, 9 million forested)
Program start / implementing agency	2017; Ethiopia's Ministry of Finance
ERPA Phase 1 monitoring period	2022–2023
Verified emission reductions	14.9 million tCO ₂ e
Credits issued for market transaction	12.4 million tCO ₂ e
Original ERPA value	Up to US\$40 million
Estimated value of issued credits (US\$10–20/t)	US\$124–248 million
Local community benefit share	~75% of revenues, per program's benefit sharing plan

Policy crediting 1: Uzbekistan’s iCRAFT program^{4,5}

Policy crediting extends the scaled-up model from land use to public policy. Instead of financing a discrete project, it quantifies and rewards the emission reductions that follow from a government climate-smart reform, such as removing an energy subsidy, by comparing observed outcomes against a modelled counterfactual of what would have happened without the reform.

Uzbekistan's Innovative Carbon Resource Application for Energy Transition (iCRAFT) program is the World Bank's first policy-crediting operation. It rewards Uzbekistan for reforming electricity and natural-gas tariffs. Structured through the World Bank's Transformative Carbon Asset Facility (TCAF), it combines a US\$25 million Mitigation Outcomes Purchase Agreement and a US\$20 million Emission Reductions Payment Agreement (Table 2). Verification confirmed 23.6 million tonnes of carbon dioxide equivalent (tCO₂e) of emission reductions following the first wave of tariff reforms. Uzbekistan received its first payment of US\$7.5 million for 500,000 verified tCO₂e in June 2024, becoming the first country paid under a policy-crediting operation. Uzbekistan could generate up to 60 million tCO₂e of reductions over the life of the program, of which the World Bank would purchase roughly 2–2.5 million, leaving the balance for Uzbekistan to sell on international carbon markets. Part of the proceeds is earmarked to protect vulnerable households from higher tariffs.

The fiscal logic is distinctive: because payments are tied to a reform's verified effects rather than to project construction, iCRAFT functions as multi-year, debt-neutral finance that helps sustain a climate-smart reform.

Table 2: Uzbekistan’s iCRAFT program in numbers

Metric	Figure
Total committed funding	US\$45 million (TCAF)
Structure	US\$25M Mitigation Outcomes Purchase Agreement + US\$20M Emission Reductions Payment Agreement
Verified reductions (first wave of tariff reform)	23.6 million tCO ₂ e
First payment (June 2024)	US\$7.5 million for 500,000 tCO ₂ e
Projected total reductions, program life	Up to 60 million tCO ₂ e
Volume purchased by World Bank	~2–2.5 million tCO ₂ e; balance sellable by Uzbekistan

Policy crediting 2: Ecuador’s diesel-subsidy-reform program⁶

Ecuador shows how the policy-crediting model can be replicated in a new sector and region. A US\$30 million World Bank carbon operation supported by TCAF, the first of its kind in Latin America, will credit the emission reductions from diesel-subsidy reform and transport fuel-pricing policy, building directly on the iCRAFT model developed in Uzbekistan. Structured alongside a US\$900m development-policy financing for job creation and fiscal sustainability development, the operation is designed to measure reduced diesel consumption and associated emissions following subsidy reform, generating a results-based revenue stream while building Article 6 readiness and monitoring capacity.

Together, Uzbekistan and Ecuador show that scaled-up crediting is not confined to forests and land use: it can attach fiscal value to sectoral climate-smart policy reforms with material development, social, and revenue implications.

4. Sovereign carbon credits as strategic national assets

Not every carbon credit is a sovereign asset. A credit generated by a private developer under a voluntary methodology and sold directly to a corporate buyer, with no government role beyond project approval, is closer to a private commercial transaction than a state asset. The credits described in this brief are different in kind, because they typically share three characteristics.

- They arise from sovereign decisions. Whether a jurisdictional program monitors an entire landscape, or a policy-crediting program credits a tariff reform, the underlying action is one only a government can take or authorize.
- They are tradable in international markets, including compliance markets such as CORSIA, at prices that fluctuate and can be material relative to national budgets.

- They require a robust Article 6 authorization framework.⁷ Before a credit can be transferred internationally, the host government must decide whether to authorize it, completing a “corresponding adjustment” so the reduction is not also counted toward its own climate target, or retain it toward its Nationally Determined Contribution: a strategic allocation decision with fiscal and diplomatic consequences.

Where these characteristics are present, treating the resulting credits purely as an environmental record-keeping matter is incomplete. They function economically like other strategic public assets (e.g., natural-resource royalties, foreign-exchange reserves, sovereign wealth funds) that governments hold, value, and actively manage rather than simply report.

They should be treated under the country’s fiscal risk management framework. Prices are volatile, so unsold credits should not be budgeted as certain revenue. Nature-based credits also carry permanence and reversal risks that require buffers, reserves, or insurance. Article 6 authorization and corresponding adjustments can create legal and accounting exposures, while selling credits has implications for the cost of countries’ own transition plans. Managing these risks requires complementary mandates: environment ministries safeguard integrity, technical quality, and benefit sharing; finance ministries oversee valuation, fiscal treatment, revenue, and portfolio risk. Joint governance should embed environmental safeguards into fiscal management.

5. Implications for Ministries of Finance

Ministries of Finance are gradually assuming a more strategic role while the technical leadership of environmental agencies is preserved. This is part of the critical wider role they play in the net zero transition.⁸

In line with the management of other strategic national assets, their responsibilities should extend across five dimensions (see Table below).

First carbon revenues should be brought into medium-term fiscal planning frameworks, rather than leaving them off-budget or confined to environmental agencies. Second, finance ministries should develop a clear view of the carbon assets they hold and a strategy for when to sell, retain, or authorize credits for international transfer under Article 6. Third, they should ensure that proceeds are governed through transparent budget processes and allocated in ways that reinforce mitigation, resilience and national development priorities. Fourth, risk management should extend beyond individual programs to the sovereign carbon portfolio as a whole, with appropriate tools to manage price volatility, delivery and reversal risks, and changes in market demand. Fifth, debt and investment planning should recognize carbon revenues as a potential debt-free financing stream that can improve the bankability of climate and nature-positive investments, and, where sufficiently predictable, inform debt sustainability analysis.

Building these capabilities does not diminish the role of environment ministries. Rather, it establishes the complementary fiscal capacity needed to ensure that high-integrity carbon credits are valued, managed, and deployed strategically in support of national climate and development objectives.

Table 3: Proposed Ministry of Finance responsibilities with respect to carbon credits

Dimension	What success requires	Current state	Priority action
Fiscal planning	Predictable carbon revenue incorporated into medium-term fiscal frameworks	Carbon revenue typically off-budget or tracked only within environment ministries	Require carbon-revenue forecasts in medium-term fiscal frameworks where revenue is sufficiently predictable
Asset management	A strategy for when to sell, hold, or authorize credits under Article 6	Sale and authorization decisions made case-by-case	Build national carbon asset inventories and sale/hold strategies owned jointly with Finance
Revenue allocation	Rules channeling proceeds to investments that reinforce mitigation and resilience	Allocation ad hoc; risk that carbon revenue substitutes for existing climate budgets	Legislate earmarking or allocation rules consistent with existing budget processes
Risk management	Approaches for price volatility, delivery risk, reversal risk, and shifting demand	Buffers exist at program level but not at sovereign portfolio level	Extend sovereign risk-layering approaches (savings, contingent instruments, insurance) to the sovereign carbon portfolio
Debt and investment planning	Expected carbon revenue used to improve bankability of forestry, agriculture, renewable-energy and resilient-infrastructure investments	Rarely factored into project appraisal or debt sustainability analysis	Incorporate expected carbon revenue into public investment planning and debt sustainability analysis

6. Implications for Governments and their partners

Managing scaled-up carbon revenues as fiscal assets that support national development priorities requires reforms at both the institutional and operational level, with adequate support from development partners. Three priorities stand out:

- **Cross-government coordination.** In the short term, convene a standing coordination body bringing together Finance, Environment, Planning, Energy, and, where relevant, Agriculture and the central bank to align Article 6 authorizations, sales strategy, use of carbon revenues, and risk oversight. Over the longer term, institutionalize this coordination through transparent decision rules and joint standards for recording carbon credits, expected revenues, and associated liabilities in national accounts.
- **Operational responsibilities.** In the short term, establish a national inventory covering all scaled-up credits generated, issued, sold, or retained, including their Article 6 authorization status, and clarify the respective responsibilities of environment, finance, and other relevant ministries. Over the longer term, legislate ownership, accounting treatment, and sale or hold authority; establish joint decision-making for material transactions; and integrate sufficiently predictable carbon revenue into medium-term fiscal frameworks and public investment planning, with explicit safeguards for benefit sharing and permanence risk.
- **Support from multilateral development banks.** In the short term, seek support from multilateral development banks that goes beyond credit origination and monetization, and helps Ministries of Environment and Finance to jointly strengthen treasury, public financial management, market access, and risk assessment. Over the longer term, multilateral development banks should support the development of insurance-type instruments for permanence and price-volatility risks, and maintain a shared case library of jurisdictional, sectoral, and policy-crediting operations to standardize deal structures and accelerate replication and scalability.

7. Conclusion

The next generation of carbon markets will not be defined simply by improved environmental integrity or larger transaction volumes. It will be defined by whether countries can transform carbon revenues into long-term development outcomes. Scaled-up crediting programs offer an opportunity to create a new category of fiscal resources, one that rewards measurable climate performance while financing resilience, protecting natural capital, and supporting sustainable growth.

Realizing this opportunity requires shared governance. Environment ministries must continue to lead integrity and credit generation. As revenues grow, finance ministries should co-own decisions on authorization, sale, accounting, allocation, and risk. Carbon finance will deliver lasting value only if high-integrity credits are managed as strategic public assets for people, nature, and economies.

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Endnotes

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