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Building Carbon Markets that Deliver: A Public-Private Agenda

Advance market commitments to
bridge market fragmentation and
scale corporate demand

BRIEFING PAPER

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Contents

Executive summary	3
1 From integrity to demand: Making carbon markets work for buyers	4
2 Advance market commitments: Bridging the demand gap	6
3 From fragmentation to scale: A shared public-private agenda	9
4 The coalition of coalitions: Building the market for climate and nature	12
Contributors	13

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Executive summary

Carbon credit markets remain one of the few mechanisms capable of mobilizing private capital towards climate and nature solutions at speed. They can channel finance into emissions reductions, durable carbon removals, ecosystem protection and clean technology. Yet corporate participation has remained static in recent years. This reflects not only earlier concerns about integrity, but a broader confidence and demand challenge shaped by economic pressure, geopolitical fragmentation, legal and reputational risk, and uncertainty of how companies can credibly use and claim carbon credits.

The next phase of market development requires more than improving individual projects or credits. Meaningful impact at scale will depend on building a robust market infrastructure that provides the core elements of a functioning financial market: clear rules and standards, reliable registries, monitoring, reporting and verification (MRV), transparent claims and pricing, standardized contracts, and effective risk-management tools. The long-term objective should be a market in which high-integrity carbon can be treated as a credible, investable and tradable commodity, giving a broader range of participants, particularly institutional investors, the certainty needed to transact and invest at scale.

Advance market commitments (AMCs) can help bridge today's fragmented market with this longer-term vision. By aggregating buyers, sharing due diligence, standardizing procurement and contracting, increasing access to high-integrity credits, and providing forward demand signals, AMCs can reduce transaction costs, build market know-how and improve the bankability of high-integrity supply. They can also create practical

experience and market data that help shape the standards, processes and infrastructure required for a more mature market.

Earlier World Economic Forum work, established the case for responsible corporate engagement and high-quality credits. Building on that foundation, this paper examines how to rebuild demand in a fragmented market and the conditions needed for carbon markets to complement deep decarbonization and finance high-integrity climate and nature outcomes.

Three priorities will shape the next phase:

- 1. Make credible use and claims clearer.** Consistent accounting, disclosure and recognized criteria, including potential safe-harbour approaches, can give companies greater confidence in how credits are used and communicated.
- 2. Create bankable demand.** Aggregated purchasing and other innovative mechanisms can reduce risk, strengthen investment certainty and give project developers the confidence to finance and scale high-integrity supply.
- 3. Build the market infrastructure for scale.** Clear rules and standards, robust registries, reliable MRV, transparent claims and pricing mechanisms, standardized contracts and risk-mitigation tools, such as insurance and guarantees, backed by governments, are essential to enable transparent, credible and scalable transactions.



From integrity to demand: Making carbon markets work for buyers

Carbon credit markets have made significant progress, but structural barriers still hold back corporate demand. The next challenge is to turn stronger integrity and market infrastructure into the confidence, clarity and business cases that will drive sustainable demand at scale.

Carbon markets have made meaningful progress on integrity, transparency and market infrastructure. However, these improvements have not yet translated into sustained corporate demand at scale. The market is moving from an integrity challenge towards a business case and implementation challenge: buyers increasingly have better tools to identify high-quality credits, but still face uncertainty over how to use, finance and communicate them.

What has improved: Integrity and quality

Higher-quality standards and methodologies:

Standards, methodologies and governance have improved significantly. Integrity initiatives such as the Integrity Council for Voluntary Carbon Markets (ICVCM) with its Core Carbon Principles have established clearer quality thresholds, while improved carbon removal and avoidance methodologies are increasing confidence in project quality.

Better monitoring, reporting, verification and transparency: Digital MRV, satellite monitoring and stronger due diligence processes are improving the credibility, traceability and transparency of credits. These developments make it easier for buyers to assess project quality and manage delivery risk.

Progress on global carbon market architecture: [Article 6 of the Paris Agreement is advancing](#) the broader market infrastructure needed to connect

voluntary and compliance markets. Under Article 6.2, bilateral cooperation is expanding, with 65 countries currently involved in 112 bilateral agreements and close to 28 million ITMO (Internationally Transferred Mitigation Outcome) authorizations. Under Article 6.4, a new carbon crediting mechanism is being operationalized under the United Nations Framework Convention on Climate Change (UNFCCC), promoting rigorous approaches to additionality and baseline setting.

Greater clarity on credible corporate

participation: Frameworks such as the recently published [Science Based Targets Initiative Corporate Sustainability Net-Zero Standard v.2](#) guidance and the proposed ISO Net Zero Standard are providing more clarity on how carbon credits can be used within broader corporate climate strategies. Governments are also beginning to establish principles for responsible claims, while the Shared Principles issued by [the Coalition to Grow Carbon Markets](#) form the basis for a joined-up approach to corporate use of carbon credits across its fourteen members.

What is still missing: Confidence, incentives and ease of participation

Despite advances, corporate demand remains constrained. The central challenge is increasingly not simply whether credits are credible, but whether companies have sufficient confidence, incentives and capacity to use them at scale.

The business case remains difficult: Without clear regulatory or near-term incentives, many companies still struggle to build a compelling strategic and financial case for carbon markets and secure alignment across the C-suite.

Claims and legal uncertainty remain a deterrent:

Although guidance is improving, companies still face uncertainty over how carbon credits can be reflected in claims, disclosures and communications. High-profile legal cases involving corporate use of credits have reinforced concerns about reputational risk. This creates a paradox: greater corporate leadership is needed to build the market, but companies may hesitate to act visibly until the rules for credible participation are clearer.

Procurement remains complex: Corporate procurement is evolving beyond simple spot purchases towards long-term offtakes and portfolio approaches. While these models can strengthen project bankability and impact, they also introduce significant legal, financial and operational complexity. Long-term commitments can extend well beyond normal corporate budget cycles and executive tenures and will require new capabilities around registry accounts, quality assessment, accounting treatment and asset management.

The remaining challenge is turning integrity into demand. Carbon credit markets have made important progress in establishing higher-integrity supply and stronger market infrastructure. The next phase is to convert these improvements into credible, predictable and scalable corporate demand. Doing so will require not only continued work on integrity, but also clearer rules for claims, stronger corporate business cases, more accessible procurement models and mechanisms that reduce the financial and operational barriers to long-term participation.



Advance market commitments: Bridging the demand gap

Advance market commitments can bridge today's fragmented market by aggregating demand, reducing transaction costs and building the confidence needed to invest in high-integrity climate and nature solutions.

Advance market commitments (AMCs) are arrangements through which buyers commit in advance to purchasing carbon credits that meet specified criteria, providing greater visibility on future demand and supporting longer-term planning by market participants.

How AMCs benefit corporate buyers

AMCs address key demand-side barriers by aggregating corporate commitments, reducing procurement and diligence costs, simplifying access to high-quality projects, and providing more predictable demand signals. This strengthens the business case for corporate participation while giving project developers greater confidence to secure upfront financing. Ultimately, AMCs can shift corporate participation from fragmented individual purchases towards more strategic and scalable engagement, while improving the financing conditions needed to bring high-integrity projects to market.

How AMCs help developers unlock finance

The AMC role in facilitating long-term purchase agreements is particularly valuable for emerging carbon removal technologies, preservation and restoration of natural ecosystems such as forest ecosystem restoration and system-level energy

transition solutions, where developers face significant upfront financing needs and buyers remain cautious about committing before delivery is demonstrated. AMCs facilitate and standardize deal structures that commit defined volumes and pricing upfront and provide clear market signals for project developers and host country suppliers for jurisdictional-level programmes. The long-term tenure and scale of these contracts, combined with the creditworthiness of the participating buyers, provide greater certainty over future revenues, improve project bankability and reduce financing risk, enabling the development and deployment of emerging technologies and large-scale activities often before credits are issued.

How AMCs support strengthening quality and integrity

AMCs can strengthen market integrity on both the supply and demand sides. On the supply side, AMCs can apply strong quality criteria, align eligible credits with robust standards such as the ICVCM's Core Carbon Principles and the CORSIA's Eligible Emission Unit, and use independent expert diligence and verification to screen for quality and reputational risks. On the demand side, membership criteria can ensure that carbon credit purchases complement, not substitute for, companies' own emissions-reduction efforts. Together, these safeguards can build trust, reduce reputational risk and reinforce credible use of carbon credits as part of corporate net-zero strategies.

Frontier

Carbon dioxide removal (CDR) is an essential component of credible net-zero pathways and long-term climate strategies. Reaching net zero by 2050 will require around 3-4 billion tonnes of CO₂ removal annually, including through durable approaches such as bioenergy with carbon capture and storage and other biomass-based approaches (BICRS), surficial mineralization, ocean alkalinity enhancement and enhanced rock weathering. Yet current durable removal capacity remains negligible in comparison, at less than 2 million tonnes. Frontier guarantees future demand for durable CDR, giving developers the confidence to build. It sets a high bar for technology eligibility, including storage beyond 1,000 years, a credible path to under \$100 per ton and more than half a gigaton of annual capacity, and no competition for arable land.

A team of 60+ technical and commercial experts runs diligence and structures purchases on behalf of buyers, as pre-purchases for early-stage suppliers and offtakes for those ready to scale. Launched in 2022 with \$925 million from Stripe, Alphabet, Shopify, Meta and McKinsey, Frontier doubled in June 2026 to \$1.8 billion with a further \$915 million from buyers including Stripe, Google, Shopify, Salesforce, H&M Group, Autodesk, McKinsey and Anthropic, the first AI company to join. The field has grown significantly from a dozen companies to hundreds of suppliers across 20+ technological approaches, over 350 corporate buyers have joined, and Frontier has contracted \$694 million, resulting in 1.84 million tCO₂e. Frontier aims to focus on 10-15 technology companies with gigaton-scale potential through 8-10 years of offtakes as far as 2040, favouring jurisdictions whose policy can cover the cost of tons once its contracts expire.

Kinetic Coalition

Coal-fired power is one of the largest sources of global greenhouse gas emissions. Phasing out fossil fuels and replacing them with clean, reliable and affordable energy is critical to deliver cleaner air, greater energy security and long-term economic growth. But long-term fossil fuel contracts, financing constraints, inadequate grid infrastructure, surge in electricity demand, and economic dependence on fossil fuels can make the transition difficult.

Kinetic Coalition is creating a market for high-integrity energy transition credits (ETCs) that can provide catalytic finance for system-level interventions, including early fossil fuel retirement, renewable energy and storage deployment, and grid improvements. Kinetic aggregates demand from companies and governments to purchase ETCs, generating catalytic revenue

that can help address the costs of fossil fuel closure and leverage larger pools of finance for clean energy investment.

Launched in May 2025 by the Centre for Climate and Energy Solutions (C2ES), Kinetic engages more than 20 companies. It is working in the Philippines on an early coal decommissioning project expected to reduce up to 19 million tons of emissions over 10 years, while exploring clean energy approaches in the Dominican Republic and Uzbekistan. Kinetic's near-term goal is to demonstrate the proof of concept for ETCs through first-of-a-kind transactions and catalyse a market capable of supporting the closure of hundreds of fossil fuel plants, reducing gigatons of emissions and leveraging billions of dollars in new finance for clean energy systems.

“Aggregated corporate demand is one of the most powerful tools for unlocking investment. By bringing buyers together around credible, high-integrity projects in clean energy and in nature restoration, Advance market commitments send the long-term demand signals that give project developers and investors the confidence to deliver.”

Mathilde Mignot, Director, Nature & Technology-based Solutions, Schneider Electric Advisory Services

LEAF Coalition

Tropical deforestation drives 10-12% of global carbon emissions. The LEAF Coalition creates economic incentives to halt it, building sustainable forest economies while giving corporations access to high-integrity carbon credits for climate and nature strategies. LEAF operates a jurisdictional model, purchasing forest reduction and removals carbon credits from government-led programmes spanning entire countries or states, and harnessing government authority on policy, enforcement and economic incentives to deliver at scale.

Public funding from the United States, the United Kingdom, Norway and the Republic of Korea de-risks transactions while deploying private sector capital. All credits are issued under the ICVCM-compliant ART TREES standard, with strong social safeguards ensuring Indigenous Peoples and local communities are fully involved and share in the benefits.

Launched with \$1 billion in commitments at COP26, LEAF sent a powerful demand signal, attracting 28 forest governments. Five agreements worth over \$325 million have been signed, and the coalition includes 30+ corporate supporters, including Salesforce, Amazon, McKinsey, H&M and Tencent, the first Asia-based company to

join. In June 2026, Costa Rica became the first country with credits available for LEAF buyers, delivering full proof of concept and enabling funds to flow to forest governments and communities on the ground. LEAF plans to advance progress across Latin America, Africa and Asia, and grow corporate participation to build a high-integrity market for forest protection at scale.

[Symbiosis Coalition](#)

Nature removes more than 7.6 gigatons of carbon dioxide each year and has the potential to remove another 3 gigatons annually by 2030, but the market for nature-based carbon removal has been hampered by several challenges. High-integrity restoration projects are complex and challenging to get right. A lack of upfront financing, a perceived lack of high-quality projects and uncertainty of demand and willingness to pay have kept investors on the sidelines and eroded public trust in nature-based credits.

Founded in 2024, the Symbiosis Coalition is an advance market commitment by Google, McKinsey, Meta, Microsoft, Salesforce, Bain & Company and REI CO-op to contract more than 20 million tonnes of high-integrity nature-based carbon removal by 2030. Symbiosis aims to catalyse the next generation of nature-based carbon removal projects by sending a collective demand signal, followed by facilitating long-term offtake agreements needed to unlock lower-cost financing at scale.

Symbiosis manages joint requests for proposals (RFPs) on behalf of its members, adopts unified quality criteria based on the latest science and standards, and educates project developers, investors and the public to enable more of the projects the world needs to meet its climate goals. Projects to date include forest restoration projects in the Brazilian Amazon and the Appalachian region of the United States and an agroforestry project in Sulawesi, Indonesia. Symbiosis has expanded its focus to include mangroves and is focused on facilitating more offtakes, enabling more buyers to participate, and advancing more consistent, high-quality projects and standards.

[ARC Coalition](#)

Launched in 2026, the Action for a Resilient Climate (ARC) Coalition aims to address carbon market barriers by aggregating corporate demand, adopting standards such as the ICVCM-CCP, and developing financing solutions for high-integrity carbon projects. Supported by leading corporates, financial institutions, public sector organisations and technical partners, ARC seeks to procure at least 10 million tonnes of high-integrity carbon credits by 2030 while helping to channel capital towards projects that deliver climate, nature and community benefits. The industry-led coalition is supported by the Government of Singapore, reflecting the important role of public-private partnerships in catalysing climate action and mobilising demand for quality carbon credits.

What still needs to happen

Three key areas could be strengthened to scale AMCs and increase their effectiveness in driving credible, high-impact climate solutions:

1. Increased corporate participation: Currently, buyer participation is limited to leading Fortune 500 companies with both the commitment and capacity to catalyse markets for high-integrity climate solutions. The expansion of participation to a wider group of companies, including “fast followers”, small and medium-sized enterprises (SMEs) and regionally targeted demand pools, is an important step to full market maturity.

- 2. Proof of concept and pipeline of high-integrity supply:** To date, first credits have been issued and retired by participants in the AMCs; however, private finance is still largely untapped. Not only do buyers and investors want proof of concept for nascent, high-impact solutions, but they also need a clear pipeline of vetted opportunities and demonstrated delivery of credits to strengthen confidence, which will in turn attract more buyers and investors.
- 3. Emergence of new AMCs:** Existing AMCs focus on specific technologies and solutions that address a portion of the systemic problems, from deploying tech and nature-based removals to halting deforestation and decarbonizing energy grids. Expanding the AMC model into other areas could drive broader decarbonization.

From fragmentation to scale: A shared public-private agenda

Governments, corporates, AMCs and financial institutions need to align policy, demand, capital and market infrastructure to turn today's fragmented market into a trusted and investable one.

AMCs are evolving from niche procurement tools into strategic market-shaping mechanisms, but scaling high-integrity carbon markets requires coordinated action across the public and private sectors. Corporate buyer coalitions and financial institutions can create demand, mobilize capital, and scale investment, while governments provide policy certainty and clarify market rules. Together, these efforts can reduce market fragmentation and investment risk, strengthen confidence and accelerate the development of credible carbon markets.

Governments also have a critical role in creating the policy conditions, market infrastructure and financial incentives that give corporate buyers and institutional investors confidence to participate and crowd in capital. Their role spans both demand and supply: creating credible demand signals, providing regulatory clarity, reducing investment risk, and ensuring that markets deliver high-integrity climate and development outcomes.

Governments can act through four key levers:

- 1. Create credible demand signals:** Use carbon pricing, integration of high-integrity credits into compliance frameworks, public procurement and fiscal incentives to create predictable demand while ensuring credits complement, not replace, domestic emissions reductions. Long-term public purchasing commitments can be particularly valuable for carbon removals and other innovative approaches like sectoral crediting, where early demand is limited. By acting as an early buyer, governments can provide investment certainty, help establish new markets and demonstrate how high-integrity climate solutions can support broader climate policy.

Creating demand: Lessons from Singapore, France and Sweden

Singapore's carbon tax was introduced in 2019, increased to S\$25/tCO₂e in 2024, rose to S\$45/tCO₂e in 2026, and is expected to reach S\$50-80/tCO₂e by 2030. Covered facilities may use eligible international carbon credits to offset up to 5% of taxable emissions, subject to Article 6 alignment and integrity criteria. This creates a compliance-linked source of demand while preserving the priority on domestic decarbonization.

In France, Article 147 of the Climate and Resilience Law requires aircraft operators to compensate greenhouse gas emissions from domestic flights. This obligation was phased in at

50% of relevant emissions for 2022, 70% for 2023 and 100% from 2024, with a minimum share of compensation required to come from EU-based emissions reduction or removal projects located in the European Union.

City of Stockholm will purchase 50,000 tonnes of permanent carbon removals annually for 15 years from Stockholm Exergi's BECCS facility, totalling 750,000 tonnes. The agreement supports the city's goals of becoming climate positive by 2030 and fossil fuel-free by 2040, addressing hard-to-abate municipal emissions while demonstrating how cities can create credible demand for carbon removals.

2. Provide regulatory and market clarity:

Establish clear and enabling rules for carbon markets, including claims and accounting guidance, disclosure requirements, Article 6 authorization and interoperability, and transparent registries. This should be complemented by government-sponsored or underwritten AMCs, safe-harbour provisions

for companies acting in line with recognised standards, and targeted demand-side incentives. Together, these measures can reduce legal and reputational uncertainty, provide greater visibility on future demand, and give companies confidence to participate and invest while remaining aligned with evolving policy frameworks.

Shared principles of the Coalition to Grow Carbon Markets

The Coalition to Grow Carbon Markets was created in response to business calls for greater government clarity and consistency on the role of credits in corporate decarbonization plans. Its Shared Principles establish a common

framework around using credits in addition to decarbonization, ensuring quality, upholding fair value and social benefits, reporting transparently, making substantiated claims and supporting market development.

3. De-risk investment and crowd in private capital:

Governments and public finance institutions can use guarantees, first-loss structures, contracts for difference, insurance and blended finance to improve the risk-return profile of emerging technologies and projects, particularly in developing markets. These tools can help bridge the gap between the cost of delivering high-integrity climate outcomes and what markets are currently willing to pay.

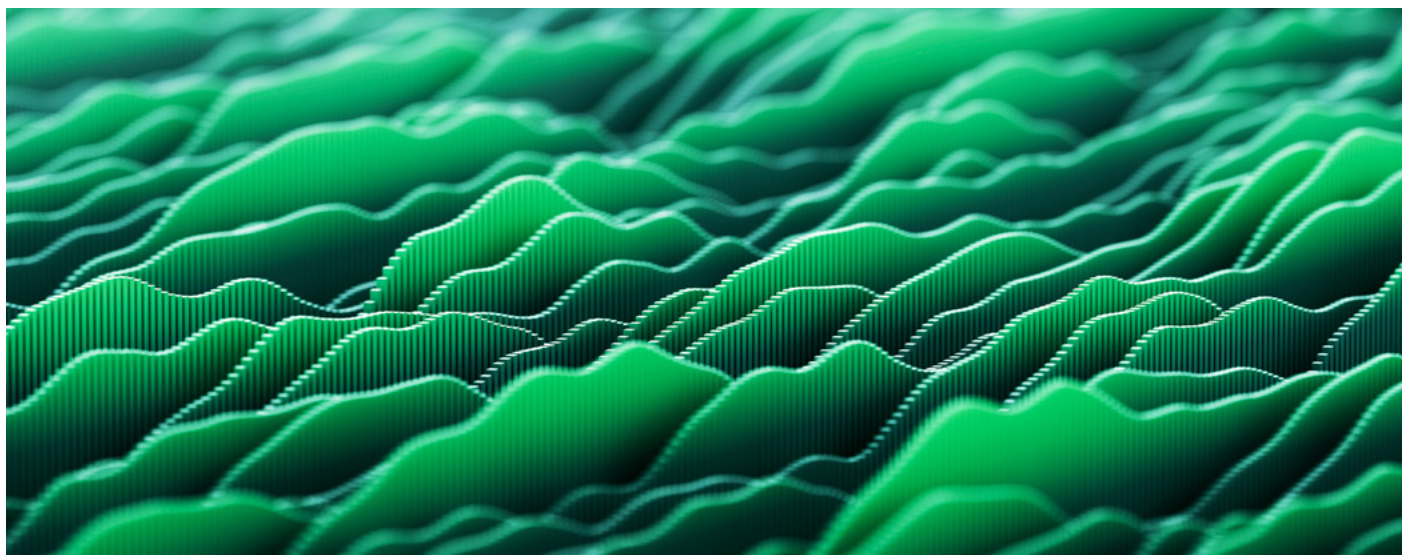
4. Strengthen host-country readiness and climate outcomes:

Host governments can establish transparent approval processes, robust registries, corresponding adjustment rules and benefit-sharing frameworks, while integrating carbon removal, nature and ecosystem services into broader climate, industrial and competitiveness strategies. This can reduce investment risk while ensuring that carbon markets support national priorities and deliver benefits to local communities.

Enabling carbon market investment: Lessons from Ghana

Ghana illustrates how host-country readiness can help reduce transaction risk and create a clearer basis for Article 6-aligned carbon-market investment. Through its [Carbon Markets Office](#), Ghana has published an Article 6.2 international carbon-market framework, progress reporting, an Article 6 initial report, and documentation linked to cooperation with Switzerland and Sweden. These institutional arrangements provide clearer processes for authorisation, accounting and

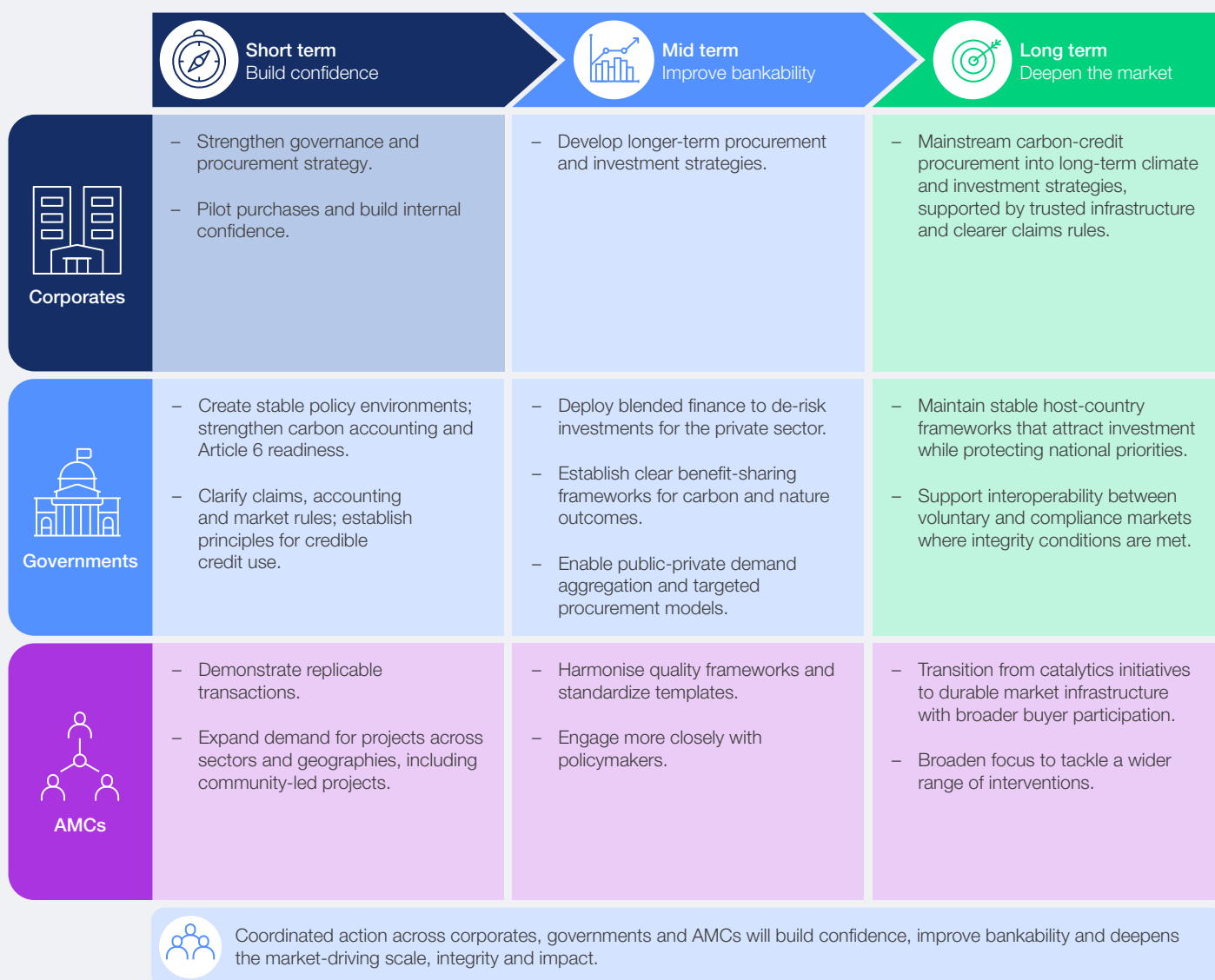
international transfer of mitigation outcomes, helping developers, buyers and investors understand how projects can move from concept to transaction. Ghana's role in the [World Bank Clean Cooking Outcome Bond](#) also shows how host-country readiness can connect with innovative finance: the transaction links investor returns to carbon-credit outcomes under Article 6.2 and mobilizes upfront capital for cleaner cooking projects.



Public-private roadmap: From foundations to scale

The path to a mature carbon market will require coordinated action across market participants,

with priorities evolving over time. In the short term, the focus should be on building confidence and market capability; in the medium term, on improving bankability and reducing risk; and in the long term, on establishing the durable infrastructure, investment and participation needed to deepen the market.



In addition to the above, building a scalable carbon market will require coordinated action from a broader set of stakeholders at every stage. Financial institutions and insurers, in particular, have a critical role to play, from strengthening underwriting and risk assessment in the near term, to scaling guarantees,

insurance and financing structures as the market develops, and ultimately providing infrastructure-scale finance and integrating carbon markets into mainstream investment portfolios. While these actors are essential to market development, their role is beyond the primary focus of this short report.

The coalition of coalitions: Building the market for climate and nature

A shared coalition to build a functioning market

The next phase of market development requires public and private sectors to converge around a shared goal: building a market that participants can trust, understand and transact in with confidence. Governments, corporates, AMCs, financial institutions and market infrastructure providers should move beyond fragmented initiatives and align around a common market-building agenda.

A coalition of coalitions should make participation simpler and more certain for buyers, developers and investors through clearer rules, consistent

standards, transparent information, standardized contracts, credible claims and effective risk-sharing mechanisms. The aim is to reduce uncertainty and transaction costs while creating the confidence needed for more participants to enter the market and commit capital.

Public-private collaboration should not grow carbon markets for their own sake, but deliver real impact at scale by mobilizing capital for innovative technologies, carbon removals, the energy transition and nature protection. As ecosystems decline and the cost of delay rises, climate solutions must scale faster. Fragmented action is no longer sufficient. The priority now is to build a functioning market that can mobilize capital at the speed and scale the climate and nature crises demand.



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