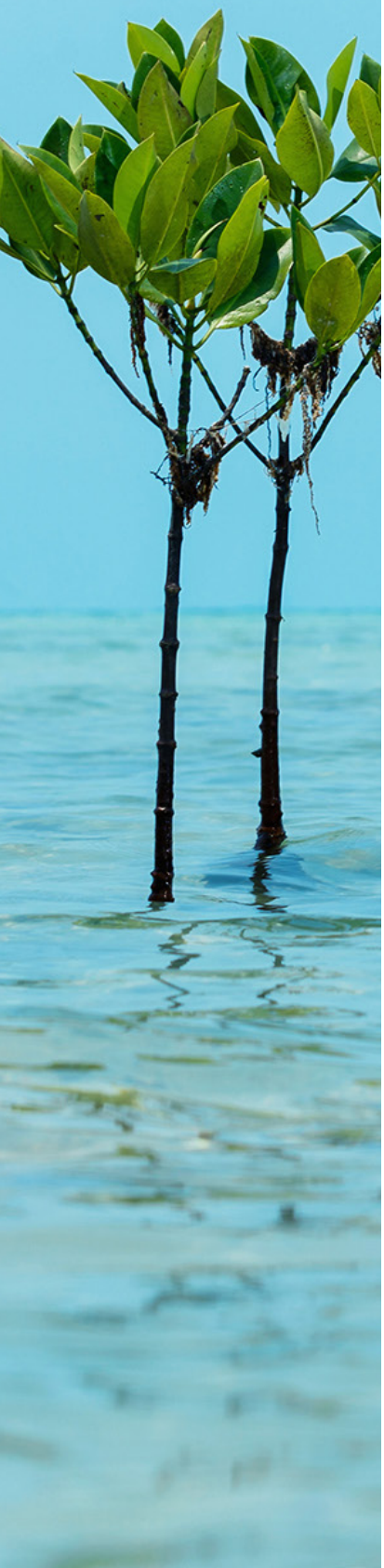
Blue carbon policy readiness:
Lessons from 20 countries

A global policy briefing by Fair Carbon

December 2025



Contents

1. Executive summary

Blue carbon ecosystems – mangroves, seagrasses, and salt marshes – are among the planet's most valuable habitats. They protect coastlines, enhance biodiversity, sustain millions of livelihoods and store up to ten times more carbon per hectare than terrestrial forests. Yet, these ecosystems are disappearing fast. Between 2000 and 2020, the world lost over 43% of its mangroves[1], largely to aquaculture, agriculture, and coastal development.

Reversing this trend requires urgent action. That is where blue carbon comes in. High-quality projects can protect remaining ecosystems, restore degraded areas, and ensure that local communities share in their benefits. But implementation still lags behind ambition – blue carbon accounts for less than 1% of all voluntary carbon market transactions.

Persistent technical, financial and policy barriers continue to hold progress back, and policy readiness is the decisive factor. Laws on authorization, land tenure, carbon rights, benefit-sharing and Free, Prior and Informed Consent (FPIC) determine whether projects advance or stall. Clear frameworks build confidence and attract investment; unclear ones slow progress and erode trust.

Fair Carbon's Blue Carbon Enabling Conditions Index brings new clarity to this picture. It compares 20 countries to show where policy frameworks are already enabling high-integrity blue carbon development and where reforms are still needed to unlock scale and fairness.

Policy readiness status

Across the 20 countries assessed, clear differences emerge.

- Five countries – Brazil, Kenya, Ghana, Indonesia, and the Philippines – are emerging as frontrunners, with near "end-to-end" legal frameworks that define carbon rights, benefit-sharing, and registry systems aligned with both voluntary and compliance markets.
- Most coastal nations fall into an ambiguous middle ground. Reforms are underway, but gaps remain around ownership, coordination, and social safeguards.
- A smaller group still lacks the legal foundations needed to support investment or project authorization, leaving progress uncertain.

These differences have tangible consequences. Countries with predictable, transparent rules are already attracting higher-quality investment, while those without risk losing finance, restoration opportunities, and community trust.

[1] Leal, Maricé and Spalding, Mark D (editors), 2024 The State of the World's Mangroves. Global Mangrove Alliance. DOI: https://doi.org/10.5479/10088/119867

Cross-cutting lessons

Across regions, similar challenges repeat:

- Unclear carbon rights deter investors and delay projects.
- Complex tenure systems and overlapping mandates hinder implementation.
- Weak benefit-sharing mechanisms limit fairness and legitimacy.
- Fragmented monitoring, reporting and verification (MRV) systems prevent reliable carbon accounting.

Yet, these same issues offer entry points for progress. By clarifying ownership, harmonizing procedures, and embedding transparency and community participation, governments can transform blue carbon from isolated pilots into scalable national programs that deliver for people and nature.

The opportunity

Blue carbon is no longer just an environmental issue – it is a governance opportunity. Strong policy foundations can attract investment, strengthen resilience, and deliver equitable climate outcomes.

Policy readiness means different things for different actors:

- For governments, it's about building the institutional systems that turn policy into practice.
- For investors, it means backing countries that align ambition with integrity.
- For communities, it's having a clear, trusted role in shaping and sharing the benefits.

Fair Carbon's global policy briefing highlights where progress is already happening and where decisive action can close the readiness gap. As the world moves beyond COP30, this analysis offers a practical pathway for governments, investors, and communities to scale blue carbon markets that are transparent, inclusive, and fair.

2. Global patterns of blue carbon readiness

Global distribution and market potential

Mangrove ecosystems stretch across more than 100 countries, yet nearly 90% of their total extent – and most of their restoration potential – lies within just 25 nations, led by Indonesia, Mexico, Brazil, and Myanmar[2]. Despite this vast opportunity, blue carbon activity remains marginal: projects account for less than 1% of voluntary carbon credit transactions each year (10.9 $MtCO_2e$ traded between 2020–2023)[3]. This limited share reflects how difficult it is to translate ecological opportunity into investment. **While many countries have strong mangrove resources, few have the policies, institutions, and technical systems needed to develop projects at scale.**

Uneven engagement in the voluntary carbon market

Participation in the voluntary carbon market (VCM) continues to expand, but remains uneven. Many countries now host terrestrial forest carbon projects, yet only a handful have ventured into blue carbon. Indonesia, Mexico, and Myanmar are notable early movers, supported by localized technical capacity and clearer governance.

For most nations, scaling beyond pilots still depends on a consistent enabling environment – clear authorizations, transparent land tenure, defined carbon rights, strong community participation, and fair benefit-sharing. When these align, isolated initiatives evolve into robust national pipelines. When they do not, even those with the best ecological potential remain unrealized.

Nature-based carbon activity remains concentrated in a handful of countries, typically those with established forest carbon portfolios, such as Mexico and Brazil, which each host more than 100 VCM projects. By contrast, many coastal nations with significant mangrove potential – including Jamaica, the Dominican Republic, Thailand, and Sri Lanka – remain underrepresented. Prior experience with land-based carbon programs helps reduce barriers by providing technical know-how and models for securing carbon rights. **Yet, blue carbon projects face unique challenges: overlapping tenure in intertidal zones, informal customary claims, complex multi-agency permitting, and a lack of standardized MRV systems.** Together, these factors explain why blue carbon remains underdeveloped within the broader nature-based landscape.

The regulatory evolution of carbon markets

The voluntary carbon market is rapidly maturing as governments step in to safeguard integrity, transparency, and national interests. Beyond requiring environmental impact assessments or land-use permits, many countries now regulate how projects interact with carbon markets – defining authorization procedures, registry requirements, benefit-sharing mechanisms, FPIC protocols, and MRV systems. Some countries paused project approvals to strengthen these foundations. Papua New Guinea and Honduras, for example, introduced temporary moratoriums while they clarified authorization procedures and social safeguards. Papua New Guinea lifted

[2]Earth Security, 2021 - Financing the Earth's Assets, The Case for Mangroves as Nature-Based Solution.
[3]Forest Trends' Ecosystem Marketplace, 2024. State of the Blue Carbon Market.

its moratorium after putting new governance measures in place, while Honduras' remains active as its regulatory framework is finalized. These actions signal a maturing market in which governments seek to balance opportunity with accountability, ensuring that blue carbon initiatives deliver real climate impact and fair community benefits.

Buyers and investors are also demanding stronger governance. Predictable, transparent policy environments reduce risks of double counting, weak baselines, and unverifiable claims. Regulation aligned with Article 6 of the Paris Agreement and consistent with Nationally Determined Contributions (NDCs) gives investors confidence that credits will retain value across markets. Conversely, subnational fragmentation – where states or provinces apply different rules – raises transaction costs and deters participation.

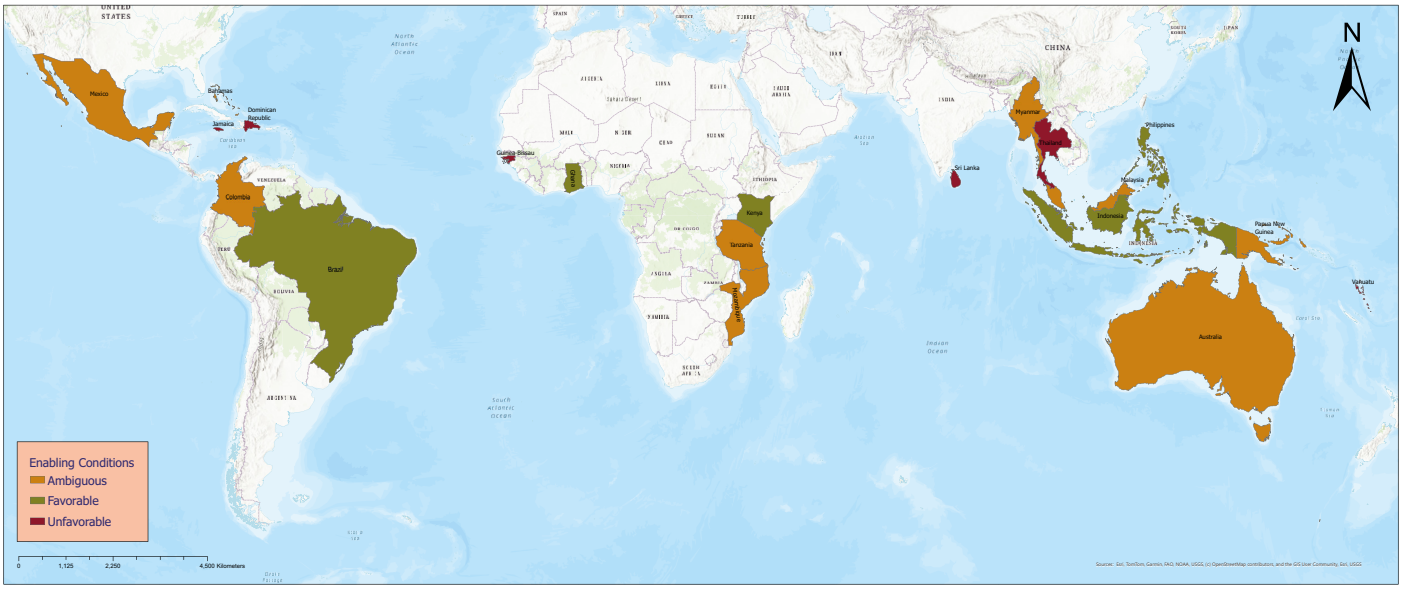
Policy readiness across 20 countries

Across the 20 countries assessed using Fair Carbon's Blue Carbon Enabling Conditions Index *(see Figure 1)*, **a small group of frontrunners – Brazil, Kenya, Ghana, Indonesia, and the Philippines – has established near end-to-end legal frameworks for blue carbon development.** These countries have clear authorization pathways, national registries, benefit-sharing rules, FPIC standards, and MRV requirements. Crucially, their regulations align with both national compliance and international voluntary markets, allowing participation in Article 6 mechanisms without compromising NDC commitments.

Most other countries sit in an ambiguous middle ground where reforms are under way but operational clarity and institutional coordination remain incomplete. Mozambique, Tanzania, Australia, Papua New Guinea, Mexico, Myanmar, Colombia, Malaysia, and The Bahamas are in this category. Some have laws or commitments in progress, but operational clarity, inter-agency coordination, and ownership safeguards remain incomplete and social safeguards – particularly FPIC and benefit-sharing – are usually the weakest elements. Together, they create unpredictable conditions for developers and increase risk for investors.

A smaller group – including Jamaica, Vanuatu, Guinea-Bissau, Sri Lanka, Thailand, and the Dominican Republic – still lack the legal foundations to ensure integrity, equity, and scalability. Fragmented governance, unclear authorization processes, and limited institutional capacity restrict investment and delay projects.

Figure 1. Blue carbon enabling conditions status in 20 countries



Land tenure systems and governance implications

Mangrove tenure systems vary widely across countries, shaping who can access, manage, and benefit from blue carbon projects:

Public domain systems

Mangroves are state-owned and cannot be privately held. Governments instead grant user or management rights through concessions, permits, or co-management arrangements. While this ensures state oversight, it can centralize decision-making and weaken incentives for communities. Transparent and inclusive permitting, paired with equitable benefit-sharing, is essential to attract credible investment and maintain trust.
Found in: Colombia, the Dominican Republic, Mozambique, Tanzania, Kenya, and Sri Lanka.

Mixed tenure mosaics

Mangrove areas are owned or managed by governments, private actors, or communities. Project developers must navigate multiple permissions, overlapping jurisdictions, and differing legal interpretations of resource ownership. These overlapping mandates slow approvals and raise transaction costs. Governments are under increasing pressure to clarify land-tenure systems, strengthen cadastral records, and formally recognize community and private rights. Doing so is critical to provide legal certainty, attract investment, and ensure blue carbon projects are both equitable and durable.
Found in: Brazil, Mexico, Jamaica, the Bahamas, Ghana, Australia, Malaysia, the Philippines, Thailand, and Indonesia.

Customary-dominant tenure frameworks contexts

Community and clan-based systems determine access and ownership of mangrove resources. Yet, these rights are often not formally recognized or recorded in national law, creating gaps between customary practice and statutory frameworks. That disconnect can lead to disputes or exclusion when projects proceed. Aligning customary and statutory tenure is therefore essential to safeguard community rights and ensure equitable benefit-sharing. For developers and investors, early engagement and participatory mapping remain critical to avoid conflict and build legitimacy – the foundation of credible, high-integrity projects.
Found in: Papua New Guinea, Vanuatu, and parts of Indonesia, the Philippines, and Ghana.

Across all models, projects often depend on concessions and leases rather than privatization of coastal commons. Most require parallel permits from multiple agencies – for example Mozambique's TUPEM system, Australian state-level tidal-works approvals, Malaysian state rules, or the Philippines' multi-agency procedures – adding delay and uncertainty to the chain of carbon-rights ownership.

Carbon rights and legal certainty

The legal definition of carbon rights underpins the credibility and scalability of blue carbon projects. In countries where carbon rights are not defined – such as Colombia, Jamaica, Guinea-Bissau, Ghana, the Philippines, Papua New Guinea, Sri Lanka, and Thailand – project ownership and benefit claims remain legally insecure, deterring investment.

Where carbon rights are only partially defined or implied, as in Mexico, Dominican Republic, Myanmar and Malaysia, they are usually inferred from forestry, property, or environmental laws. This creates a foundation for action, but leaves ownership and procedures open to interpretation, exposing projects to legal disputes and policy changes.

By contrast, countries where carbon rights are explicitly defined in law – including Brazil, The Bahamas, Kenya, Tanzania, Mozambique, Australia, Indonesia, and Vanuatu – offer greater clarity over ownership, transfer, and benefit allocation. The form of ownership varies widely, shaping how benefits are shared and projects implemented.

Carbon rights in Brazil, Australia and Kenya

Different countries take very different approaches to defining carbon rights. The examples of Brazil, Australia, and Kenya illustrate the three dominant legal models – rights linked to land ownership, rights treated as independent tradable assets, and rights retained by the state.

Brazil
Carbon rights are tied to land or forest ownership and are transferable through contracts or concessions agreements. The legal framework recognizes multiple rightsholders – from federal and state governments to private owners, Indigenous peoples, extractivist and Quilombola communities, and agrarian reform beneficiaries – creating a strong basis for inclusive benefit-sharing if implemented effectively.

Australia
Carbon rights are fully separable from land and forestry rights, allowing different entities to hold freehold title, forestry rights, and carbon sequestration rights for the same land. This flexibility supports investment and innovation, but also introduces complexity, as states maintain distinct rules and registration systems[4]. In Victoria, carbon rights must be formally registered as legal interests in land, while Queensland requires additional approvals for projects on state-owned land. This decentralized approach provides legal certainty but demands close coordination and oversight to safeguard community interests, and maintain market confidence.

Kenya
Carbon rights are state-controlled and managed through a national registry and government-approved agreements. Centralized oversight enhances accountability but can slow project approval and limit community-driven initiatives if benefit-sharing is not transparent or equitable. The structure of carbon rights systems – whether linked to land, treated as a separate asset, or centralized under state control – ultimately determines who holds power, who benefits, and how effectively blue carbon projects can scale with integrity.

[4]Phạm TT, Falayi M, Sunderland T, Le THG, Tran VH, Nguyen DT, Nguyen TTH, Do TH, Tran TKL, Cascione A, Pearse R, Brandon P, Boyle A, Phạm TCN, Vu QA, Perea AK, Manokara R, von Unger M, Trinh TL, Tang TKH, Tran PM. 2025. Towards an effective, practical, and equitable forest carbon legal framework in Vietnam: Recommendations and proposals for the Draft Decree on Forest Carbon Sequestration and Storage Services, based on a synthesis of global and Vietnamese experiences and practices. Working Paper 52. Bogor, Indonesia: CIFOR; Nairobi, Kenya: ICRAF.

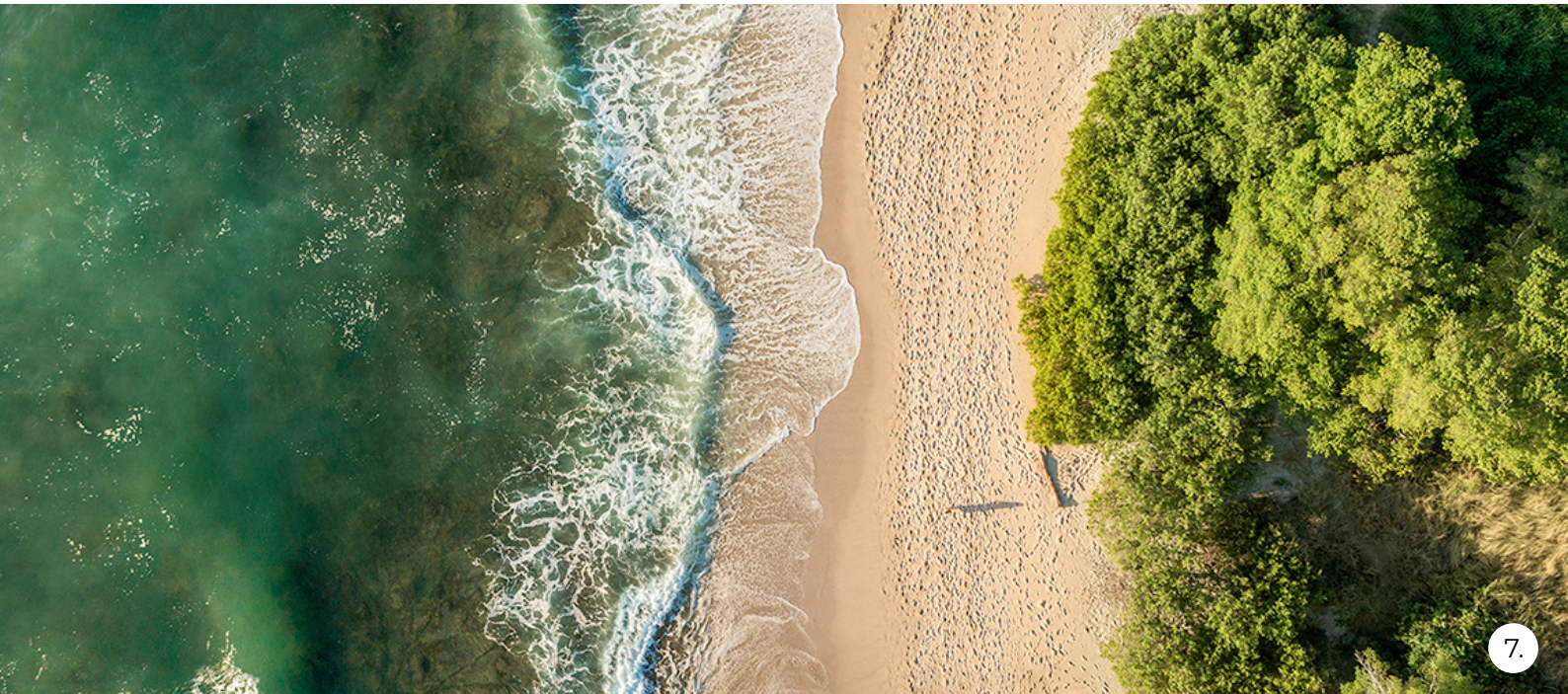


Table 1. Carbon rights in 20 countries

Region	Carbon rights		
	Not defined	**Partially defined**	**Defined**
Africa	Guinea Bissau		Kenya***
	Ghana		Tanzania
			Mozambique
Asia & Pacific	Philippines	Myanmar	Australia**
	Papua New Guinea	Malaysia~	Indonesia***
	Sri Lanka		Vanuatu****
	Thailand		
Latin America & Caribbean	Colombia (under development)	Mexico	Brazil
	Jamaica	Dominican Republic	Bahamas

Notes:
*Law explicitly associates rights with land/roest ownership and defines rights-holders: Federal government, Federal States, Private owners of usufructuraries, Indigenous communities, Extractivist communities, Quilombola communities, settlers beneficiaries of the agrarian reform program, and other usufructuaries.
** Carbon rights are distinct from land and forestry ownership, with regulatory frameworks differing across states.
*** Government controls carbon rights; transfer is managed through a state-run national registry or management agreements
**** All land in Vanuatu belongs to the indigenous custom owners and their descendants.
~ Lack of federal definition; only one state (Sarawak) has a clear (state-owned) law.

Carbon rights definition and implications		
Category	**Definition**	**Implications**
Not defined	No legal definition or framework for carbon rights, or existing regulations are contradictory, in draft form, or repealed.	Creates a high-risk environment that discourages investment and project development.
Partially defined or implied	Rights are inferred from other laws (forestry, property, or environmental) but not explicitly stated.	Creates a foundation for action but carries significant legal risk; ownership is open to interpretation and dispute.
Explicitly defined	Carbon rights are clearly specified in national law, regulation, or formal policy	Creates legal certainty over ownership, transfer, and revocation; supports investment and accountability.

3. Regional policy pathways

The Blue Carbon Enabling Conditions Index reveals significant regional differences in the policy and institutional foundations needed to scale credible blue carbon projects. Across Africa, Asia and the Pacific, and Latin America and the Caribbean, levels of readiness vary sharply – reflecting differences in legal maturity, technical capacity, and political priorities *(see Figure 2)*.

Regions are presented below in order of their policy readiness as assessed by the Index – with Africa leading, Latin America and the Caribbean following closely, and Asia and the Pacific showing the widest variation in enabling conditions.

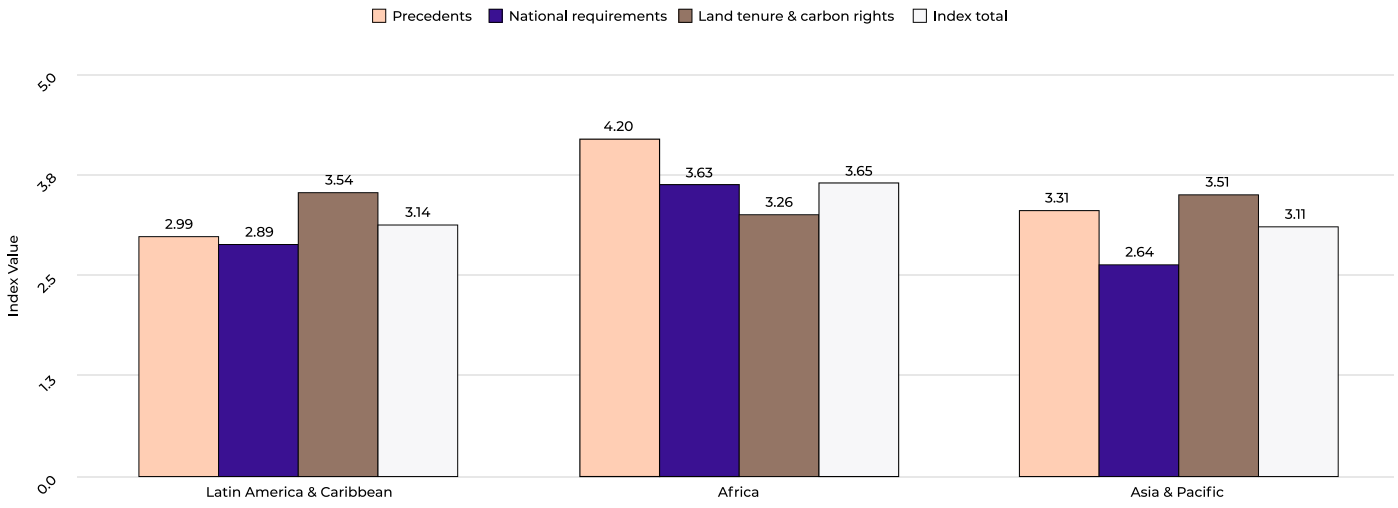
Africa shows the strongest overall progress, driven by its experience with nature-based carbon projects and growing regulatory confidence. Several countries now have dedicated carbon-market laws, benefit-sharing frameworks, and national registries that anchor integrity and build investor trust.

Latin America and the Caribbean follows closely behind Africa, combining strong institutional capacity and long experience with forest carbon markets. Countries such as Brazil, Mexico, and Colombia are well positioned to extend that expertise to coastal ecosystems, though others still face fragmented permitting and uneven social safeguards.

Asia and the Pacific ranks third overall but shows the widest internal variation – from world-leading frameworks in Indonesia and the Philippines to early-stage systems in Sri Lanka and Vanuatu. The region's diversity highlights both innovation and fragmentation, underscoring the need for greater coordination and coherence.

Across all regions, one lesson stands out: policy readiness determines market confidence. Where authorization, tenure, carbon-rights, and benefit-sharing frameworks are clear and trusted, blue carbon investment can scale.

Figure 2. Blue Carbon Enabling Conditions Index: Scores by region



Africa

Context and potential

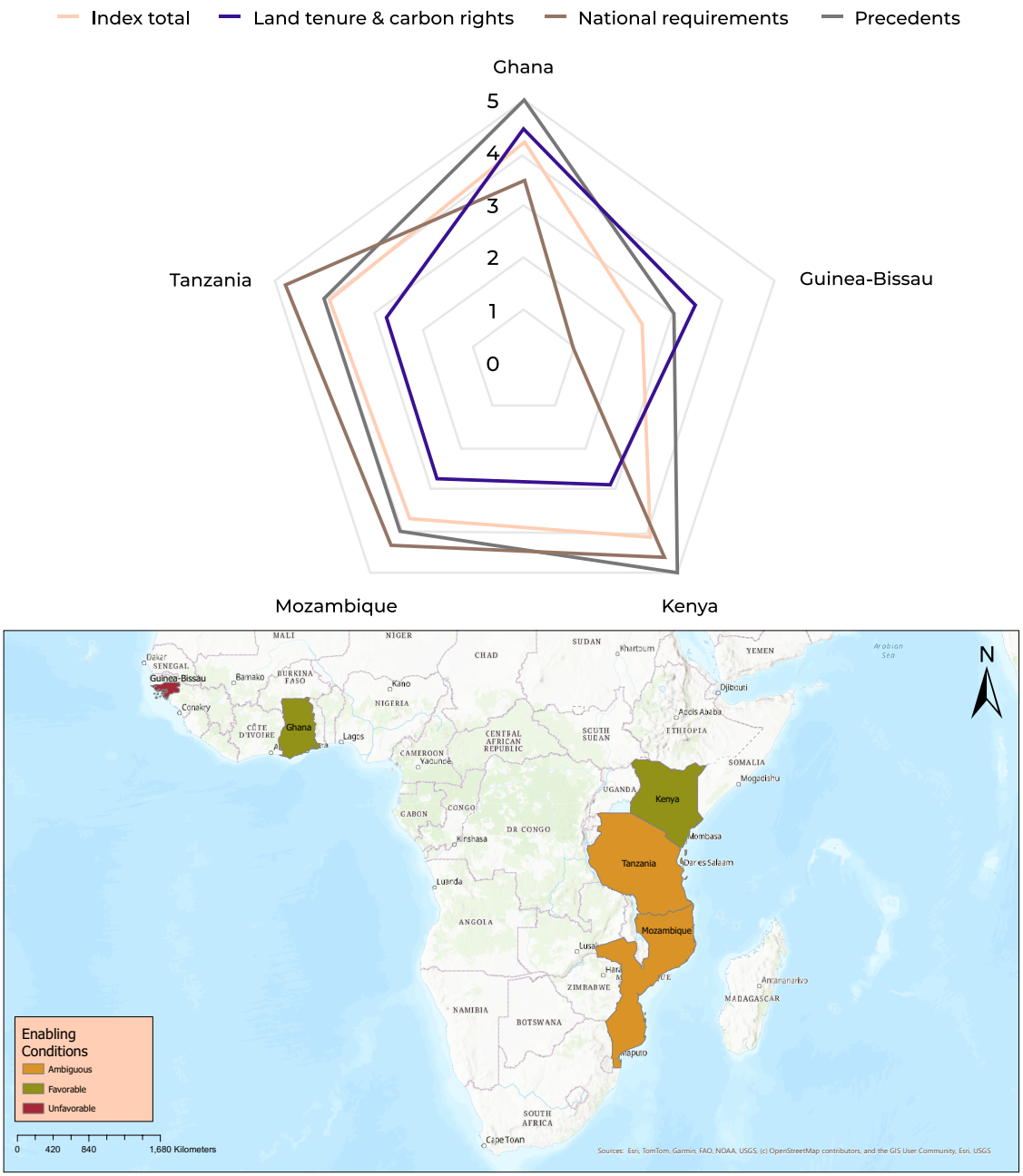
Africa holds around 20% of the world's mangrove area but the continent has already lost about 10% of its mangroves, including 2% between 2000 and 2016, underscoring the urgency of effective protection and restoration[5].

The Blue Carbon Enabling Conditions Index shows Africa leading other regions in overall readiness, supported by growing regulatory maturity and practical experience in nature-based carbon markets.

Kenya and Ghana are regional frontrunners, followed by Mozambique and Tanzania, where policy frameworks are taking shape but still incomplete *(see Figure 3)*.

With roughly 10% of the world's restorable mangrove area, Africa's challenge is to translate ecological potential into scalable and equitable investment.

Figure 3. Blue Carbon Enabling Conditions Index: Scores in Africa



[5]Worthington, T., & Spalding, M. (2018). Mangrove Restoration Potential: A global map highlighting a critical opportunity. Apollo - University of Cambridge Repository.

Market precedents

Africa's participation in the VCM is expanding rapidly, though progress varies widely. Kenya and Ghana have the most advanced portfolios. Kenya hosts four mangrove projects – including Mikoko Pamoja, the world's first community-led mangrove carbon initiative – and 18 other nature-based projects under Verra. Ghana follows with one blue carbon project and 12 nature-based initiatives registered under Verra and Gold Standard.

Mozambique and Tanzania are building momentum, each developing one mangrove project and several other nature-based initiatives. These early efforts demonstrate increasing government and private sector collaboration but both countries continue to have regulatory uncertainty and coordination gaps. Guinea-Bissau remains at an earlier stage, with only one community-based avoided-deforestation project, reflecting limited readiness and institutional capacity.

Overall, every country analyzed has at least one blue carbon or related project underway. **The trend is clear: Africa's foundations for blue carbon are being laid, with East Africa leading and West Africa poised to follow through stronger policy alignment and regional partnerships.**

National frameworks and policy requirements

Across Kenya, Ghana, Tanzania, Mozambique, and Guinea-Bissau, carbon governance is evolving but at uneven speeds. Kenya and Ghana stand out for having clear, structured systems that guide project authorization, monitoring, and registry inclusion. Tanzania is close behind, showing strong intent but inconsistent benefit-sharing rules that still favor central government control. Mozambique and Guinea-Bissau remain in transition, relying heavily on REDD+ frameworks or general environmental law.

Kenya's Carbon Trading Regulations and Ghana's International Carbon Market Framework outline detailed steps for project approval, MRV, and registry requirements. Both create predictable environments for investors and align national rules with international market mechanisms, including Article 6 of the Paris Agreement. Tanzania's model mirrors this trajectory with a five-step approval process and functioning national registry, though public access to project data remains limited. Together, these three countries demonstrate how African governments are moving from ad hoc permissions to coordinated national systems that prioritize integrity and transparency.

Mozambique's REDD+ licensing system provides a foundation, but does not yet cover all carbon project types, creating uncertainty for blue carbon developers. Guinea-Bissau, still lacks any formal VCM rules – no registry, MRV standards, or authorization pathway – making it difficult for projects to operate transparently or for benefits to reach communities fairly.

Community engagement and benefit-sharing rules still vary widely. Kenya and Tanzania both require FPIC and mandate that a share of carbon revenues go to local communities. Kenya's system is the most defined: projects must include a community development agreement that allocates 40% of land-based project revenues and 25% of non-land-based revenues to participating communities. These agreements must be recorded in the National Carbon Registry, and a forthcoming Carbon Credit Trading and Benefit Sharing Bill will formalize the process further establishing a Carbon Trading and Benefit Sharing Authority.

In Tanzania, benefit-sharing rules specify that 61% of the gross carbon revenue goes to the managing authority or property owner – typically the government in the case of mangroves. The remaining 39% is shared between project proponents and national authorities and 8% is directed to the Designated National Authority (DNA). While this structure recognizes community development, the high government share has raised concerns, potentially affecting project sustainability and equitable outcomes.

Mozambique allocates a fixed share of forest and wildlife revenues for community use, while Ghana and Guinea-Bissau rely on general consultation requirements.

Land tenure and carbon rights

Across the five African countries reviewed, governments generally favor concession- and lease-based models to enable blue carbon projects while retaining public ownership of mangroves and coastal lands. Projects typically access sites through long-term use rights – such as DUATs in Mozambique, Participatory Forest Management in Tanzania, or Community Forest Associations in Kenya – rather than freehold ownership.

Ghana stands out with its mixed tenure mosaic, where state, customary, and private ownership coexist; allowing long leases that can extend up to 99 years for nationals and 50 years for foreigners. Guinea-Bissau uses rural concessions that allow private and collective entities to operate, but have limited coastal application. This reliance on delegated use reflects a core principle: coastal ecosystems remain public assets, and stewardship is granted, not sold.

Mozambique and Tanzania lead in using structured co-management and concession systems to enable carbon initiatives. Mozambique's 50-year renewable DUATs, paired with maritime TUPEM permits, provide formal authorization but complexity can be a burden for developers. Tanzania's Joint and Community-Based Forest Management agreements empower villages to co-manage resources – a model offering local legitimacy but requiring strong institutional support. Kenya's system of Forest Management Agreements with Community Forest Associations follow this participatory approach, embedding community consent in law. Ghana and Guinea-Bissau allow long-term leases and concessions, though these mechanisms remain underused for mangrove projects.

Carbon rights remain the region's biggest uncertainty – and the greatest investment risk. Kenya, Mozambique, and Tanzania have advanced the furthest, linking carbon rights to management agreements while retaining state oversight. Kenya allows rights assignment through joint management agreements that include benefit-sharing and FPIC clauses.

Mozambique vests ownership of credits in the state but allows licensed REDD+ projects to generate and transfer credits, leaving non-REDD blue carbon undefined. Tanzania ties carbon rights to forest-use permissions, while Ghana and Guinea-Bissau lack explicit frameworks, leaving project-based crediting open to case-by-case negotiation.

Weak land administration and overlapping coastal mandates continue to create delays and legal ambiguity. Strengthening cadastral systems, simplifying concession templates, and recognizing customary tenure through expedited registration would build the predictability needed for equitable, scalable blue carbon investments.

Outlook

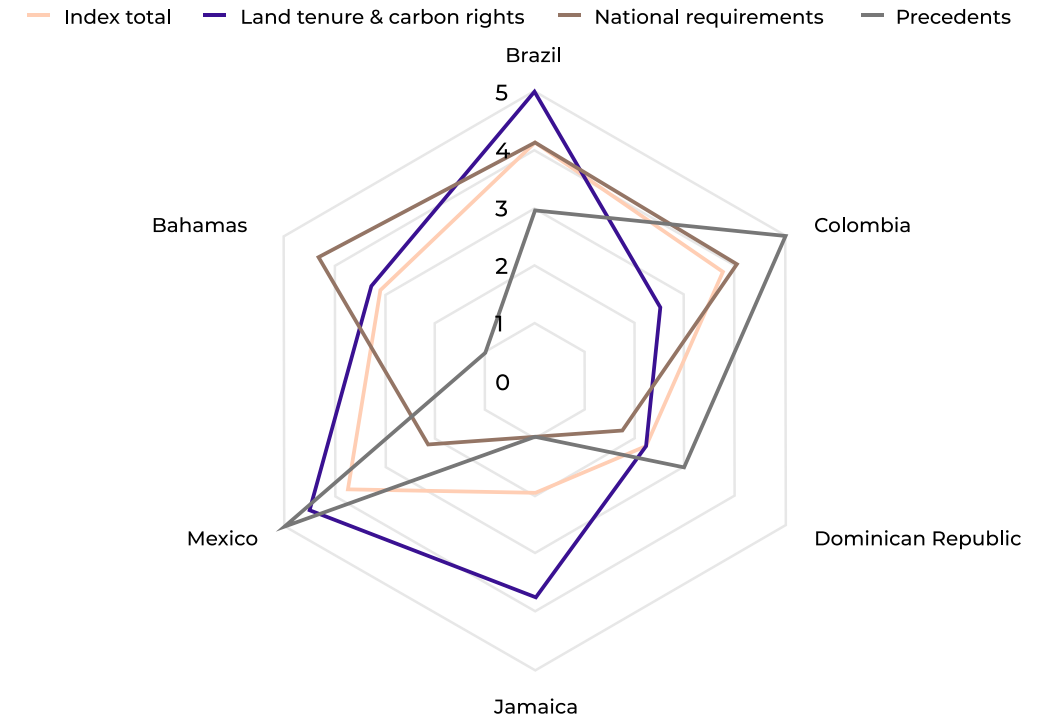
Africa's progress is unmistakable. The region has moved from scattered pilot projects to structured frameworks that protect integrity and attract investment. The next step is to harmonize REDD+ and voluntary carbon market rules, expand transparency through open registries, and make community benefits consistent and equitable. By consolidating these systems, African countries can turn early leadership into a durable competitive advantage – proving that strong governance and local participation are the foundation of credible, high-impact blue carbon markets.

Latin America and the Caribbean

Context and potential

Latin America and the Caribbean holds 29% of the world's mangrove area but it has also experienced the greatest global losses – 39% of all mangroves lost worldwide, equivalent to 8% of its total area, between 2000 and 2016. With 41% of the planet's restorable mangrove area, its ecological and economic potential for blue carbon is unmatched. The Blue Carbon Enabling Conditions Index places Latin America and the Caribbean second among the three regions assessed, reflecting strong institutional capacity and long experience with forest carbon markets but slower progress in adapting these systems to coastal ecosystems *(see Figure 4)*. **Realising the region's potential will depend on coherent and inclusive policy frameworks that can bridge environmental ambition with market and community integrity[6].**

Figure 4. Blue Carbon Enabling Conditions Index: Scores in Latin America and Caribbean



[6]Worthington, T., & Spalding, M. (2018). Mangrove Restoration Potential: A global map highlighting a critical opportunity. Apollo - University of Cambridge Repository.

Market precedents

Experience with nature-based carbon markets is growing but remains concentrated in a few countries. Mexico and Colombia have registered mangrove projects, hosting nine and four mangrove projects respectively, while others – including Brazil, Jamaica, the Dominican Republic, and The Bahamas – have yet to bring coastal carbon initiatives to market.

Mexico is the regional leader, with more than 200 projects registered under Verra, Plan Vivo, and the Climate Action Reserve. Its history with Scolel'te – the world's first voluntary carbon project – has fostered deep institutional experience and familiarity with carbon market mechanisms, though mangrove projects still represent a small share of the country's nature-based project portfolio.

Colombia follows closely, combining strong technical capacity with emerging policy support. The Vida Manglar project in Cispatá Bay, is a global reference for transparent governance, science-based monitoring, and equitable benefit-sharing.

Brazil is a striking contrast. Despite hosting more than 100 nature-based projects, none focus on mangroves. The country's large-scale carbon market demonstrates potential, but also reveals governance risks: recent government reviews of projects in Amazonas underscore the importance of legal safeguards and community consent.

Across the Caribbean, readiness remains limited. Jamaica, the Dominican Republic, and The Bahamas have yet to establish national frameworks or registries, reflecting structural barriers such as limited technical capacity, small project scales, and complex tenure. These Small Island Developing States hold substantial blue carbon potential but will need tailored policy support, financing, and partnerships to build investor confidence.

Overall, the pattern in Latin America and the Caribbean is clear: long-standing experience with terrestrial carbon provides a strong foundation, but regulatory and institutional gaps still constrain the shift from forests to coasts.

National frameworks and policy requirements

Governments across the region are at very different stages in regulating participation in carbon markets. Brazil and The Bahamas are furthest ahead, embedding authorization, registry, MRV, and community safeguards within law. Colombia and Mexico are advancing through draft or partial frameworks, while Jamaica and the Dominican Republic still rely on general environmental licensing rather than carbon-specific rules.

Brazil stands out for its comprehensive 2023 National Carbon Market Law, which sets a high bar for integrity. It mandates project authorization, MRV, national registry inclusion, and equitable benefit-sharing. Projects in traditional territories must allocate at least 50% of credits from removal projects and 70% from REDD+ projects directly to Indigenous Peoples and Traditional Communities. This structure ensures fairness and legitimacy but could challenge commercial viability unless paired with co-financing or streamlined approvals.

The Bahamas follows a state-led model. Its Emissions Reduction Initiatives and Incentives Regulations (2025) establish a permitting process, national registry, and oversight authority. However, because all carbon assets belong to the state and FPIC and fixed benefit-sharing rules are absent, decision-making and revenue distribution remain highly centralized.

Colombia is building a hybrid approach. The RENARE national registry and MRV standards create a clear framework, while constitutional FPIC guarantees safeguard community participation. Yet, definitions of carbon rights and benefit-sharing remain incomplete, slowing project pipelines.

Mexico has strong institutional anchors through SEMARNAT and the National Forest Register and a history of REDD+ projects, but voluntary-market regulations remain in draft. This leaves key rules for authorization, registry, and benefit-sharing undefined. In contrast, the Dominican Republic and Jamaica are at preliminary stages. The Dominican Republic screens projects through environmental licensing and includes MRV and

benefit-sharing provisions in its REDD+ program, but lacks a mandatory registry or VCM oversight body. Jamaica recognizes nature-based solutions in policy but has yet to establish any enabling frameworks or mechanisms.

The regional picture is uneven: a few clear models coexist with widespread ambiguity. Where rules are established, investor confidence and project credibility rise quickly. Where they are missing or inconsistent, uncertainty deters participation and fair benefit-sharing.

Land tenure and carbon rights

Land tenure determines who can participate in blue carbon projects and how benefits are shared. **Across the region, governments rely on concessions, leases, and forest laws to regulate mangrove restoration and conservation, but their approaches to carbon ownership differ markedly.**

Countries span a wide spectrum – from state-owned coastal commons (Colombia and the Dominican Republic) to mixed systems that combine public, private, and communal ownership (Brazil, Mexico, Jamaica, and The Bahamas). Even where mangroves are considered public goods, most governments grant use rights through concessions or permits, but with terms and conditions varying widely.

Brazil provides the most comprehensive model. Carbon rights are tied to land or forest ownership – including Indigenous Peoples, quilombola, and traditional communities – and can be transferred through contract or concession. The National Carbon Market law explicitly defines credit ownership, reducing legal risk for investors while guaranteeing communities a fair share of benefits.

The Bahamas represents the opposite end of the spectrum. All carbon assets, including those from mangroves and other coastal ecosystems, belong to the state. Developers operate through public–private partnerships or government contracts, but the credits remain sovereign assets. The Climate Change and Carbon Market Initiatives Act (2022) centralizes carbon rights under the state and establishes a national registry to manage issuance, transfers, and cancellations.

This model secures transparency and public benefit but may limit private-sector appetite given developers' returns depend on revenue-sharing agreements with the government. In the flagship Carbon Management Ltd. partnership, the government holds 49% equity and receives 85% of upstream revenues, and 49% of downstream trading revenues – leaving the private partner with about 15% plus service fees.

Elsewhere, carbon rights remain implicit or undefined. Mexico links them indirectly to landholders but lacks legal statutes or registries. Jamaica recognizes community management but not customary family lands, limiting participation. Colombia's mangroves are state-owned and managed by environmental authorities; a forthcoming regulation is expected to clarify how carbon use rights are granted, transferred and revoked. In the Dominican Republic, carbon rights for mangroves are also undefined, with project access dependent on environmental licensing.

Across the region, the same weaknesses recur: unclear ownership, slow land regularization, and limited protection for customary tenure. These gaps elevate transaction costs and legal risk, particularly for small-scale community projects. Governments can unlock progress by codifying carbon ownership, streamlining concession processes, and ensuring that benefit-sharing frameworks deliver tangible, predictable returns for local stakeholders.

Outlook

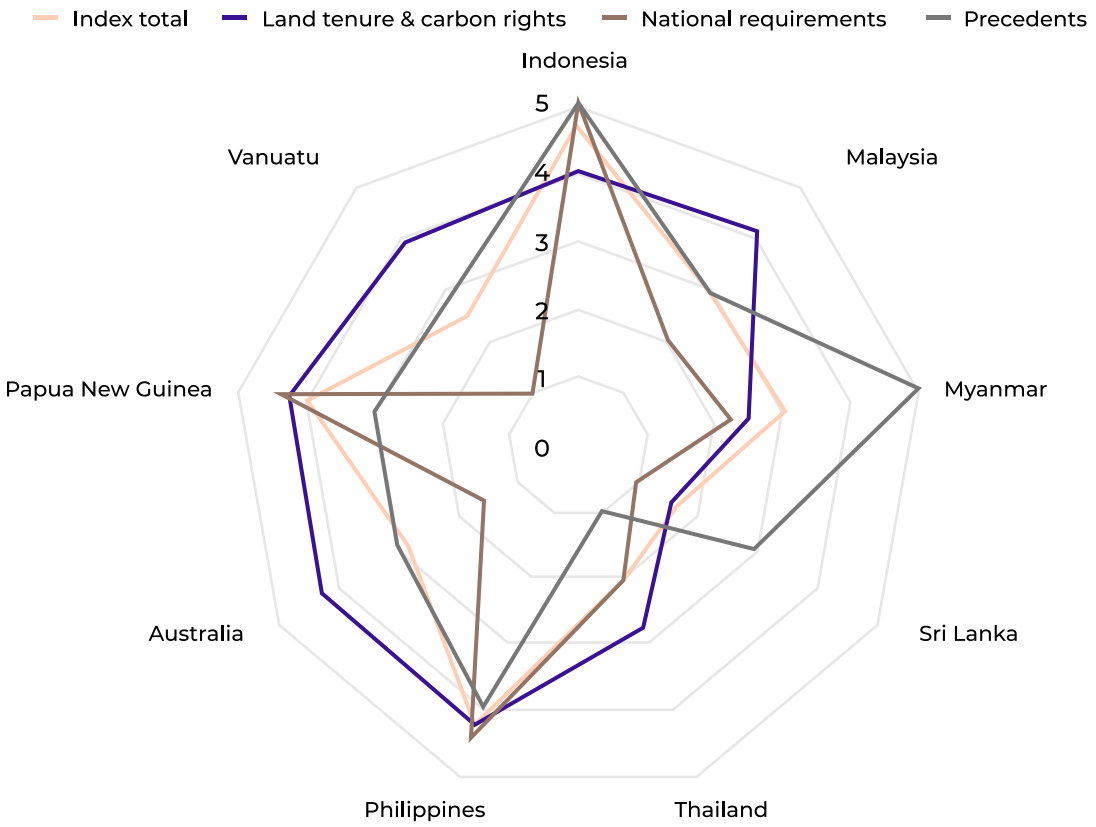
Latin America and the Caribbean combine world-class ecological potential with a deep legacy of carbon-market experience. Yet, turning that experience into a high-integrity blue carbon market requires faster regulatory convergence and clearer ownership rules. Countries such as Brazil, Mexico, and Colombia can anchor regional leadership by extending their forest carbon models to coastal ecosystems, while smaller island states can build readiness through partnerships and targeted technical support. **Strengthening transparency, tenure security, and community benefit-sharing will be key to ensuring that the region's vast natural capital translates into fair and lasting climate impact.**

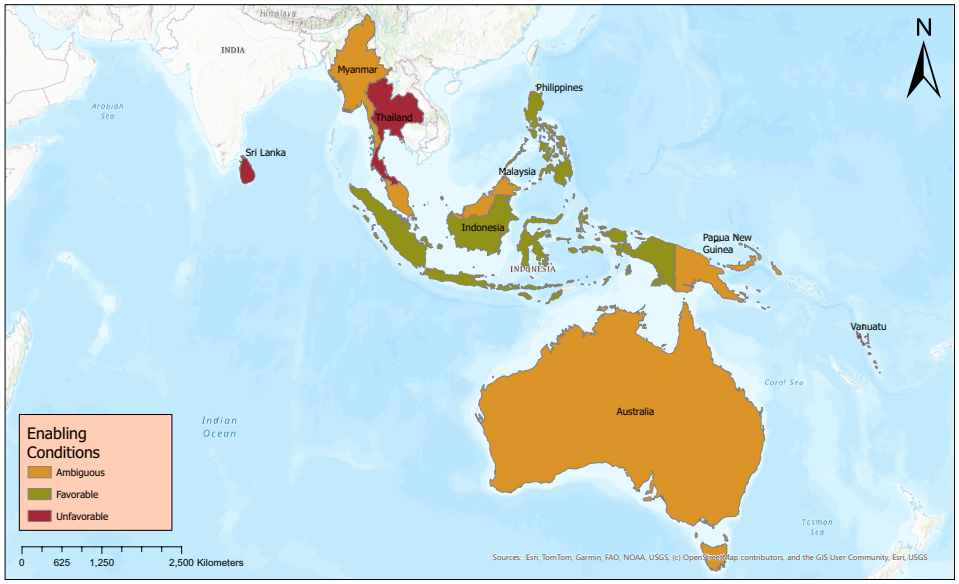
Asia and the Pacific

Context and potential

Asia and the Pacific hold 38% of the world's mangrove area but also account for 44% of global mangrove loss since 2000. With 42% of the planet's restorable mangrove area[7], the region represents the single greatest opportunity for global blue carbon recovery. **The Blue Carbon Enabling Conditions Index places Asia and the Pacific third among regions, reflecting both world-leading frameworks and significant governance gaps.** Indonesia and the Philippines set the pace, while countries such as Sri Lanka, Thailand, and Vanuatu still lack basic regulatory clarity *(see Figure 5)*.

Figure 5. Blue Carbon Enabling Conditions Index: Scores in Asia and the Pacific





[7]Worthington, T., & Spalding, M. (2018). Mangrove Restoration Potential: A global map highlighting a critical opportunity. Apollo - University of Cambridge Repository.

Market precedents

Participation in nature-based carbon markets varies widely across the region. A small group of countries drive most of the progress. Indonesia leads decisively, with more than 25 nature-based projects – six focused on mangroves – registered under Verra and Plan Vivo. The Philippines also shows strong readiness, combining favorable policies with active engagement in blue and forest carbon initiatives. Myanmar's growing mangrove portfolio demonstrates how non-state actors can maintain momentum even where national policy remains uncertain.

At the other end of the spectrum Vanuatu, Sri Lanka, and Thailand show minimal participation despite substantial ecological potential. Australia and Papua New Guinea have extensive terrestrial portfolios but yet to replicate this success in blue carbon, revealing how progress on land does not automatically translate to coastal systems. **The pattern is clear: early project activity depends on domestic regulatory confidence, not just ecological potential.**

National frameworks and policy requirements

Countries across Asia and the Pacific are taking very different paths to regulate carbon market participation. Some, including Indonesia and the Philippines, already operate comprehensive national frameworks that combine project authorization, MRV, benefit-sharing, and community consent. Others, such as Malaysia, Papua New Guinea, Australia, Myanmar, and Thailand, are in transition, testing frameworks or relying on state-level regulations, REDD+ safeguards, or temporary moratoriums. A few, notably Vanuatu and Sri Lanka, still lack any specific rules for carbon trading or blue carbon projects, leaving investors exposed to uncertainty.

Indonesia is the most advanced model for government oversight and market integrity. All nature-based carbon projects must be authorized by the Ministry of Environment and Forestry (MoEF) and registered in the National Registry System for Climate Change Control (SRN-PPI). Regulations No. 21/2022 and No. 7/2023 explicitly cover peatland and mangrove projects, requiring alignment with national climate targets and legal permits. In 2025, Indonesia further strengthened this framework by signing Mutual Recognition Agreements (MRAs) with Verra, Gold Standard, Plan Vivo and the Global Carbon Council. These MRAs make the national registry interoperable with global standards while maintaining government oversight, preventing double counting, and aligning with Article 6. Projects can now be certified under both an international standard and Indonesia's Sistem Perdagangan Emisi Indonesia (SPEI), or Indonesia Emissions Trading System. This dual certification model expands buyer access without compromising national control – a template for other countries seeking to combine sovereignty with market access.

The Philippines follows a similar logic. Its Carbon Accounting, Verification, and Certification System (CAVCS) integrates project authorization, MRV, and benefit-sharing, with FPIC embedded in law. This system ensures that both environmental integrity and community participation are built into project design, providing transparency and investor confidence.

The transitional group – Malaysia, Papua New Guinea, Australia, Myanmar, and Thailand – has partial frameworks in place but lacks coherence. Malaysia illustrates both progress and fragmentation: the federal government provides voluntary guidance, but only Sabah and Sarawak have enacted comprehensive state-level frameworks, creating inconsistent requirements nationwide.

Papua New Guinea recently lifted its three-year moratorium on voluntary carbon projects after introducing regulations to improve transparency and guarantee landowner rights to at least 60% of project benefits. Australia's state-based approach ensures strong consent mechanisms under Native Title law but still lacks national alignment. Thailand's draft Climate Change Bill and Myanmar's REDD+ safeguards could bring predictability once implemented, but both remain pending.

Vanuatu and Sri Lanka remain the least developed. Neither has binding procedures for project authorization, registries, or community participation. While some bilateral arrangements exist under Article 6, the lack of VCM-specific rules limits transparency, deters credible investment, and risks inequitable benefit-sharing.

Taken together, Asia and the Pacific's regulatory landscape is a mosaic of ambition and caution. Countries with clear, enforceable rules are beginning to attract high-integrity investment; those still drafting or debating frameworks risk being left behind as capital and buyers converge on more predictable jurisdictions.

Land tenure and carbon rights

Tenure and carbon-rights systems for mangroves in the region are complex and uneven. Some countries – such as Indonesia, the Philippines, and parts of Australia – provide workable pathways for communities and investors to engage in projects through long-term leases, concessions, or community-based -forestry agreements. Others – Sri Lanka, Myanmar, Thailand, Vanuatu, Papua New Guinea, and parts of Malaysia – retain strong state control or rely on customary ownership without formal legal recognition, leaving carbon rights ambiguous and hard to enforce.

Most countries grant use rights rather than ownership. Project developers commonly access mangrove areas through long-term instruments: Indonesia through Social Forestry permits and Perizinan Berusaha Pemanfaatan Hutan (PBPH) (Business License for Forest Utilization) concessions; the Philippines via Community-Based Forest Management Agreements; Vanuatu through leases; and Papua New Guinea under state or customary leases. Malaysia, Myanmar, and Australia also use concession or lease-based models, while Sri Lanka prioritizes conservation over commercial use. These models facilitate participation but often leave carbon ownership undefined or vested in the state.

The result is widespread tenure mismatch – land and carbon ownership rarely align. In many areas,

land may be private or customary, yet the carbon stored in mangroves is governed separately or not at all. Indonesia captures this complexity best: mangrove governance is split between the Ministry of Environment and Forestry (for state forests) and the Ministry of Marine Affairs and Fisheries (for mangroves outside forest areas), while regional governments hold overlapping authority. This patchwork creates administrative confusion, delays project approval, weakens safeguards for local communities, and undermines investor confidence.

Indonesia's regulations explicitly recognize state control of carbon assets, recorded and transferred through the national registry. Developers can legally trade credits once authorized, creating predictability and transparency. Australia allows carbon rights to be registered as distinct legal interests separable from land title – a useful precedent for balancing integrity and market flexibility. Vanuatu's recent definition of carbon-sequestration rights marks a promising move toward clarity.

In contrast, Malaysia's framework is fragmented – Sarawak claims state ownership of stored carbon, while other states lack clear rules. Thailand recognizes project ownership of domestic T-VER credits but not for international trades. Meanwhile, the Philippines, Papua New Guinea, Myanmar, and Sri Lanka operate in legal gray zones, relying on MOUs or REDD+ practice rather than formal carbon title.

Subnational fragmentation in federations like Australia and Malaysia compounds these challenges, as states apply divergent tenure and licensing requirements that increase transaction costs and delay project development. Overlaps between forestry, fisheries, and coastal agencies add another layer of complexity, often requiring multiple approvals and prolonging timelines. Across Asia and the Pacific, governments can accelerate progress by codifying carbon ownership, establishing public registries, and aligning tenure recognition with social safeguards. Securing these foundations is critical to ensure that blue carbon markets grow not just quickly, but fairly.

Outlook

Asia and the Pacific hold immense ecological and economic potential for blue carbon development, yet the region's policy diversity remains its greatest constraint. Where clear, enforceable frameworks exist – notably in Indonesia and the Philippines – investor confidence and community participation are rising. Elsewhere, frag- mented authority and unclear tenure continue to block progress. **By converting voluntary guidance into binding law, accelerating land regularization, and linking domestic registries with global standards, countries can transform the region's natural wealth into a credible, equitable pillar of climate action.**

4. Cross-cutting barriers and opportunities

Blue carbon markets are emerging from an uneven landscape – legally, institutionally, and technically. Across the 20 countries assessed, governments are experimenting with different governance models, yet all face a similar set of systemic challenges that shape the future of the project pipeline. What unites them is a shared need for clarity, capacity, and collaboration.

Challenge 1: Clarifying policy frameworks and institutional coherence

Many countries have adopted general climate or carbon market laws, but few define how blue carbon fits within the VCM or Article 6 mechanisms. This lack of clarity leaves developers and investors uncertain about authorization procedures, carbon rights, and benefit-sharing. In Asia and the Pacific, overlapping mandates between forestry, marine, and regional authorities often result in conflicting regulations and slow approvals. In Latin America and the Caribbean, environmental laws are well established but not yet adapted to carbon-market realities. By contrast, African countries are moving faster to define VCM participation and benefit-sharing, offering early examples of clarity and fairness.

Implication

Without coherent rules, the blue carbon project pipeline remains limited to small pilots and high transaction-cost projects. Countries with the most predictable and transparent frameworks – such as Kenya and Indonesia – are already attracting more investment. Indonesia's Mangroves for Coastal Resilience program has mobilized about US$419 million, including a $400 million World Bank (IBRD) loan, to support the government's 600,000-hectare mangrove rehabilitation target and strengthen market readiness through clear national standards and registries[8]. In Kenya, the Go Blue Project in Lamu County is expected to deliver more than 50,000 tCO_2e per year through mangrove restoration and to generate circa $600,000 annually for local residents once certified by Plan Vivo[9]. These examples show how regulatory clarity and transparent governance reduce risk and unlock sustained finance.

Opportunity

Governments can build on voluntary market experience to codify transparent authorization, monitoring, and benefit-sharing procedures. Africa's emphasis on equitable benefit-sharing, Latin America's strong environmental institutions, and Asia-Pacific's advances in registry and MRV integration each offer valuable lessons. Aligning these strengths can help countries move from isolated experiments to scalable, high-integrity blue carbon markets.

Challenge 2: Limited institutional and technical capacity for blue carbon

While forest carbon programs such as REDD+ are relatively mature, few national institutions have the expertise or data systems to quantify and verify carbon in mangroves, seagrasses, and tidal wetlands. Most MRV frameworks remain designed for forests, not coasts.

Implication

Limited coastal MRV expertise continues to slow project validation and undermine investor

[8]World Bank, 2022. Indonesia Mangroves for Coastal Resilience Project.
[9]UNEP, 2024. Scaling up mangrove conservation in Kenya.

confidence dence in credit integrity. **Many countries lack integrated MRV systems capable of capturing coastal carbon data, resulting in underreporting of ocean-based mitigation potential in NDCs.** Without credible and interoperable MRV frameworks, blue carbon projects remain confined to small-scale pilots, and investors face high transaction costs and uncertainty around credit quality.

Opportunity

Countries can accelerate readiness by adapting terrestrial MRV systems and collaborating through regional learning networks. Shared data platforms, regional training, and South–South exchanges – such as those among Kenya, Indonesia, and Colombia – can harmonize coastal carbon accounting and reduce costs.

Emerging digital and remote-sensing solutions are rapidly improving accessibility and accuracy:

- Satellite analytics can rapidly assess feasibility and establish baselines aligned with carbon standards.
- Data management platforms can overlay project data, land-tenure agreements, and FPIC documentation, making implementation more transparent and scalable.
- Advanced remote-sensing MRV can shorten verification timelines and reduce costs while generating audit-grade mangrove data for projects up to one million hectares.

Integrating these innovations into national MRV systems will improve credibility, attract larger volumes of climate finance and position blue carbon as a measurable, high-integrity pillar of national mitigation and adaptation strategies.

Challenge 3: Securing tenure and rights in coastal areas

Across all regions, tenure mosaics dominate – and land and carbon ownership rarely align. Mangrove zones are often under customary or communal tenure but carbon rights are undefined or follow separate rules. Indonesia exemplifies this complexity: mangrove management is divided among forestry, marine, and regional authorities, creating overlapping mandates and disputes between communities, farmers, and corporations. Similar challenges exist in Papua New Guinea, Vanuatu, Colombia, and parts of West Africa, where unclear coastal boundaries and slow registration processes create uncertainty over who can legally participate in projects.

Implication

Without tenure clarity, developers struggle to secure long-term rights, investors perceive higher risk, and communities may be excluded from benefits. Tenure insecurity remains one of the biggest threats to both equity and permanence in blue carbon projects.

Opportunity

Governments can strengthen fairness and stability by formalizing customary rights, aligning lease durations with VCM permanence requirements, and institutionalizing FPIC. Africa's community-driven models (e.g., Mikoko Pamoja in Kenya), Latin America's participatory tenure systems (e.g., Vida Manglar in Colombia), and Asia-Pacific's social forestry programs (e.g., Indonesia's 35-year permits) offer complementary pathways for inclusive and investable project pipelines.

Challenge 4: Defining and protecting carbon ownership

Carbon ownership remains the weakest link in most national frameworks. Many countries have yet to define who owns the carbon stored in mangroves or who can trade credits. This legal ambiguity leads to disputes, double claiming risks, and investor hesitation. Several African and Latin American countries still lack explicit definitions of carbon rights, while in the Asia-Pacific region – including the Philippines and Papua New Guinea – frameworks remain incomplete or inconsistently enforced. Even where systems exist, as in Indonesia or Australia, overlapping institutional authority creates further complexity.

Implication

Undefined carbon rights undermine integrity and limit access to finance. Investors increasingly prioritize countries where ownership, transfer, and registry systems are clearly defined and publicly traceable

Opportunity

Countries can boost transparency and trust by codifying carbon rights, establishing public registries, and linking these systems to MRV and benefit-sharing frameworks. Standardized benefit-sharing templates – ensuring minimum revenue shares for local communities — would further embed fairness and predictability.

Challenge 5: Integrating blue carbon into national climate strategies

In many countries, blue carbon projects still operate as stand-alone voluntary market ventures rather than integral parts of national climate and adaptation policy.

Implication

The disconnect reduces coordination across agencies, increases the risk of double counting, and prevents governments from fully valuing blue carbon's adaptation co-benefits, such as flood protection and fisheries recovery.

Opportunity

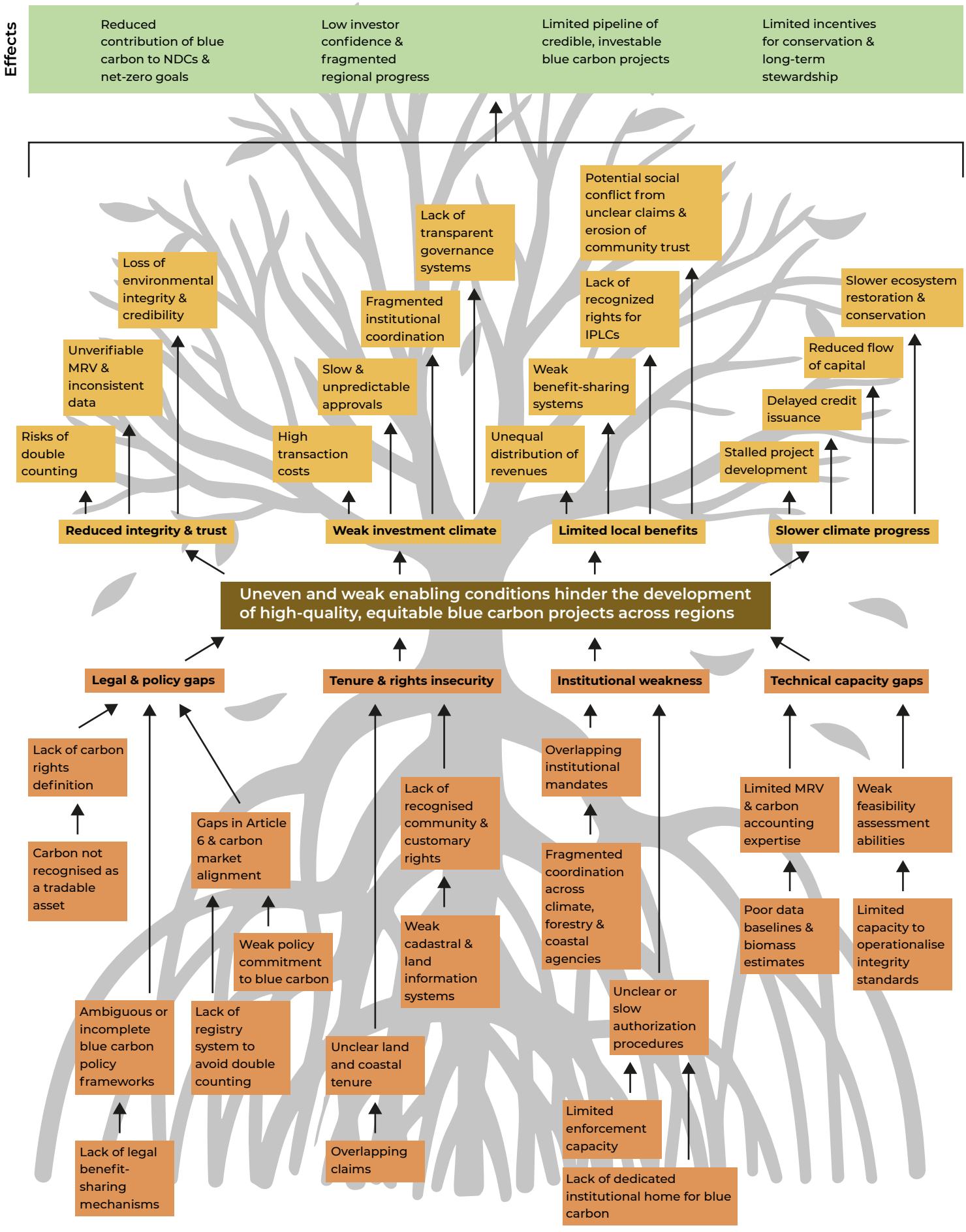
Embedding blue carbon into national climate frameworks creates multiple benefits: it enhances transparency, attracts blended finance, and aligns market activity with NDC implementation. Countries such as Indonesia, Kenya, and The Bahamas demonstrate how linking voluntary market participation with national accounting strengthens both credibility and investment readiness.

Transition to solutions

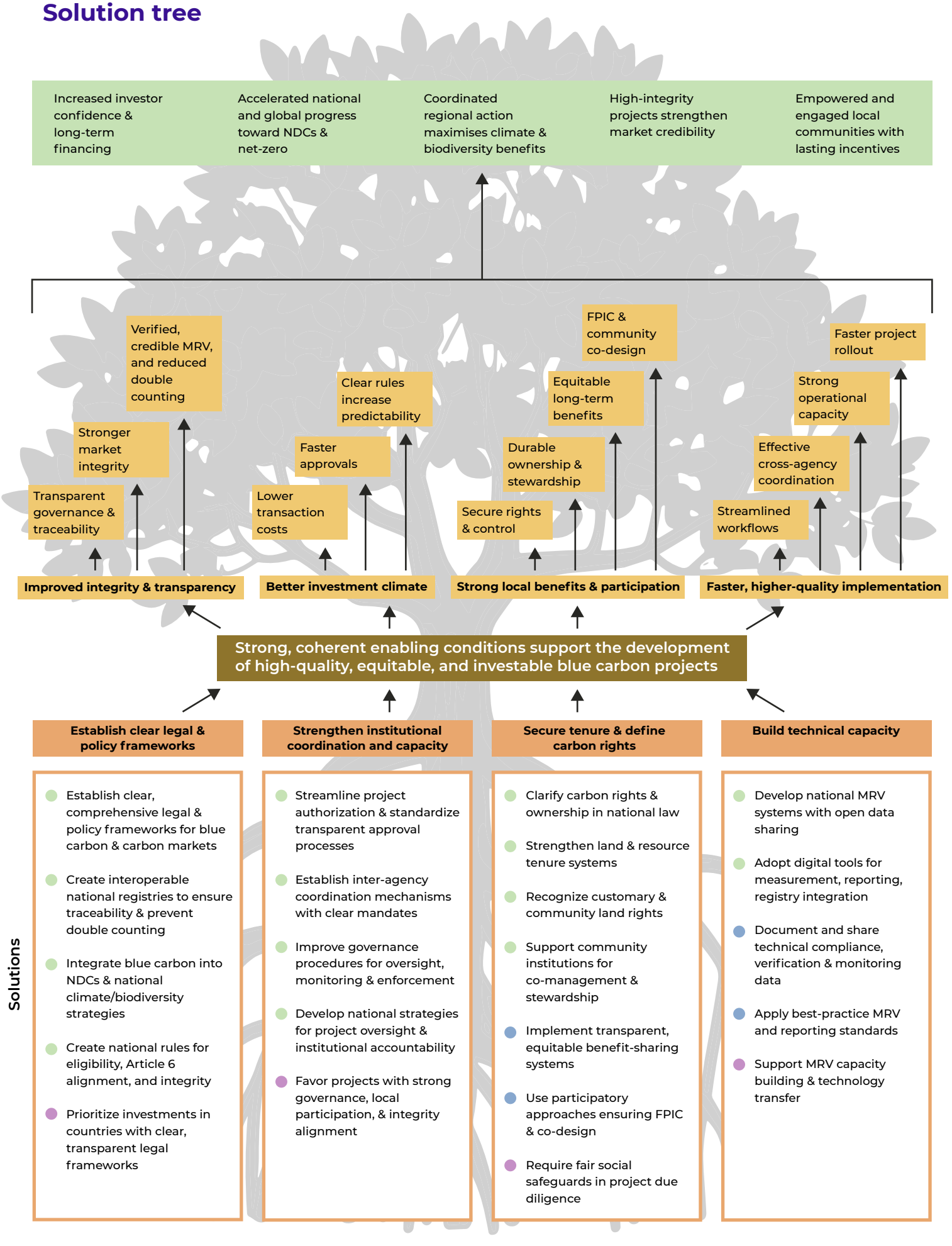
These cross-cutting barriers reveal where the roots of readiness must deepen – in policy clarity, institutional strength, community rights, and data credibility. Each challenge carries a corresponding opportunity: the actions governments, investors, and developers can take to transform constraints into progress.

The following visual synthesis – our *problem–solution trees* – maps these connections, showing how practical reforms can turn weak foundations into stronger systems for high-integrity blue carbon.

Problem tree



Solution tree



5. Calls to action: Building readiness for scale

The *problem–solution trees* highlight where decisive action can close the blue carbon readiness gap. Delivering high-integrity, investable markets will require governments, developers, and investors to act together – aligning policies, finance, and community participation around shared standards of fairness and transparency.

For policymakers: Create clarity, consistency, and confidence

- **Define blue carbon within national frameworks.**
  Embed coastal ecosystems in climate and carbon-market legislation, specifying authorization procedures, MRV systems, and carbon-rights ownership.
- **Integrate blue carbon into NDCs and adaptation strategies.**
  Link voluntary market participation with national accounting to reduce double counting and attract blended finance.
- **Establish transparent registries and benefit-sharing rules.**
  Make project information, ownership, and revenue distribution publicly traceable to build trust and accountability.
- **Recognize community and customary rights.**
  Formalize local stewardship through FPIC and long-term tenure agreements that align with crediting timelines.
- **Develop national safeguard and risk-management tools.**
  Strengthen oversight, grievance mechanisms, and risk-mitigation systems to ensure environmental and social integrity as markets expand.
  .
- **Invest in institutional capacity.**
  Fund national MRV systems, training, and data infrastructure to enable efficient oversight and credible reporting.

For project developers: Build integrity through participation and alignment

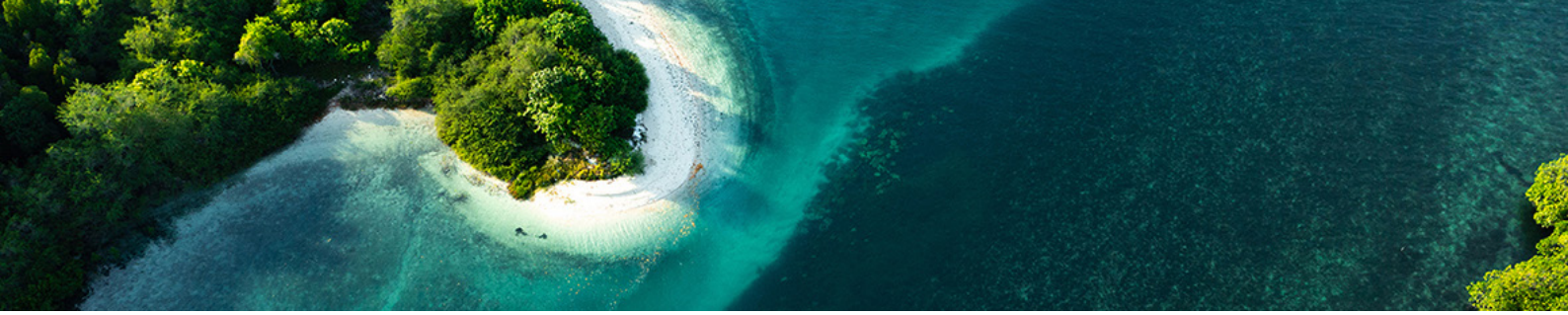
- **Work within national systems.**
  Align project design with government authorization, MRV, and registry requirements rather than operating in isolation.
- **Strengthen local partnerships.**
  Engage communities from feasibility stage to benefit-sharing design, ensuring consent and shared ownership.
- **Adopt robust social and environmental safeguards.**
  Apply recognized standards to document social impact and equitable revenue flows.
- **Leverage technology for transparency.**
  Use open data platforms and remote-sensing tools to track baselines, tenure, and outcomes in real time.
- **Design for permanence.**
  Match project duration to legal tenure and build long-term capacity for local monitoring and management.

For investors and buyers: Finance fairness and long-term value

- **Prioritize countries with policy clarity and social safeguards.**
  Channel finance to jurisdictions where authorization, carbon rights, and benefit-sharing are well defined.
- **Support early-stage readiness**
  Provide concessional or blended finance to help emerging markets establish registries, MRV systems, and legal frameworks.
- **Require transparency.**
  Invest only in projects with verifiable data, public documentation, and clear community-benefit mechanisms.
- **Reward durability over volume.**
  Value projects that deliver measurable ecosystem resilience and livelihoods alongside emissions reductions.
- **Collaborate on standards**
  Engage with governments and standard setters to align private-sector requirements with national policy and Article 6 guidance.

The path ahead

Strengthening policy readiness is both a climate imperative and an economic opportunity. By clarifying rules, aligning incentives, and embedding fairness at every stage, countries can unlock the full potential of blue carbon – transforming coastal ecosystems into reliable climate assets that sustain biodiversity, resilience, and local prosperity.



6. References

Earth Security, 2021. Financing the Earth's Assets, The Case for Mangroves as Nature-Based Solution.
https://www.blueclimateinitiative.org/sites/default/files/2021-01/Earth%20Security%20Group-mangrove-12.2020.pdf

Fair Carbon, 2025. Enabling Conditions Country Profiles,
https://www.faircarbon.org/country-profiles

Fair Carbon, 2025. Enabling Conditions Index methodology.
https://drive.google.com/file/d/1SrNmCoM5GpArRh8dshweFdfDVegC0mj8/view

Forest Trends' Ecosystem Marketplace, 2024. State of the Blue Carbon Market 2024.
https://www.ecosystemmarketplace.com/wp-content/uploads/2024/10/State_of_the_Blue_Carbon_Market_FINAL-with-box.pdf

Leal, Maricé and Spalding, Mark D (editors), 2024. The State of the World's Mangroves Global Mangrove Alliance. DOI: https://doi.org/10.5479/10088/119867

Phạm TT, Falayi M, Sunderland T, Le THG, Tran VH, Nguyen DT, Nguyen TTH, Do TH, Tran TKL, Cascione A, Pearse R, Brandon P, Boyle A, Phạm TCN, Vu QA, Perea AK, Manokara R, von Unger M, Trinh TL, Tang TKH, Tran PM, 2025. Towards an effective, practical, and equitable forest carbon legal framework in Vietnam: Recommendations and proposals for the Draft Decree on Forest Carbon Sequestration and Storage Services, based on a synthesis of global and Vietnamese experiences and practices. Working Paper 52. Bogor, Indonesia: CIFOR; Nairobi, Kenya: ICRAF.

UNEP, 2024. Scaling up mangrove conservation in Kenya.
https://www.unep.org/technical-highlight/scaling-mangrove-conservation-kenya

World Bank, 2022. Indonesia Mangroves for Coastal Resilience Project.
https://documents1.worldbank.org/curated/en/099240003022226118/pdf/Project0Inform0e0Project000P178009.pdf?

Worthington, T., & Spalding, M. (2018). Mangrove Restoration Potential: A global map highlighting a critical opportunity. Apollo - University of Cambridge Repository.
https://doi.org/10.17863/CAM.39153

Abbreviation list

CAVCS – Carbon Accounting, Verification, and Certification System (Philippines)

DNA – Designated National Authority

DUATs – Direito de Uso e Aproveitamento da Terra (Right to Use and Benefit from Land) – Mozambique

FPIC – Free, Prior and Informed Consent

IBRD – International Bank for Reconstruction and Development

MoEF – Ministry of Environment and Forestry (Indonesia)

MOU – Memorandum of Understanding

MRA – Mutual Recognition Agreement

MRV – Monitoring, Reporting, and Verification

NDC – Nationally Determined Contribution

PBPH – Perizinan Berusaha Pemanfaatan Hutan (Business License for Forest Utilization) – Indonesia

REDD+ – Reducing Emissions from Deforestation and Forest Degradation (plus conservation, sustainable management of forests, and enhancement of forest carbon stocks)

RENARE – Registro Nacional de Reducción de Emisiones (National Emissions Reduction Registry) – Colombia

SEMARNAT – Secretaría de Medio Ambiente y Recursos Naturales (Ministry of Environment and Natural Resources) – Mexico

SPEI – Sistem Perdagangan Emisi Indonesia (Indonesia Emissions Trading System)

SRN-PPI – Sistem Registri Nasional Pengendalian Perubahan Iklim (National Registry System for Climate Change Control) – Indonesia

TUPEM – Título de Uso Privado de Espacio Marítimo (Private Use Title for Maritime Space) – Mozambique

VCM – Voluntary Carbon Market