REPORT

Host Country Article 6 Readiness

Key Aspects to Drive Demand

Sylvera CACE

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Executive summary

The Paris Agreement has undeniably transformed the global carbon market, introducing new demands for all signatory nations, especially those hosting carbon projects.

This includes a universal mandate for tracking national greenhouse gas (GHG) emissions and committing to reduction targets. Consequently, host governments are now more strategic in selling mitigation outcomes, prioritizing their Nationally Determined Contributions (NDCs) and aiming to prevent overselling. The introduction of corresponding adjustments (CAs), while crucial for preventing double-counting, adds a layer of complexity to international market engagement.

Furthermore, new and more stringent reporting requirements pose significant challenges for many host countries that often lack necessary experience and infrastructure. This contributes to supply-side constraints in international carbon markets.

Despite these complexities, many host countries still actively want to engage in carbon markets because of their potential to unlock significant finance.

From a buyer's perspective, the primary obstacle to securing carbon credits is the lack of host country readiness, which introduces considerable uncertainty and limitations. Despite recent clarifications from the 29th Conference of the Parties (COP29) regarding Letters of Authorization (LOAs), some nations remain hesitant to authorize or apply CAs.

Moreover, recent years have seen increasing attention to the quality of carbon credits, putting their genuine impact on emissions reductions to the test. Government buyers, in particular, face increased pressure to demonstrate the integrity of their procurements, leading to a cautious approach that extends to maintaining public trust and ensuring good use of public funds.

To foster greater participation in Article 6, it is essential to improve the connection between host countries and carbon credit demand. Developing countries sometimes lack clarity on how to attract Article 6 demand, a challenge exacerbated by the diverse requirements of buyers. A certain level of alignment on demand-side expectations would enhance efficiency, provide clear pathways, and mitigate reputational risk for both suppliers and buyers.

This report aims to establish a common Article 6 readiness blueprint (Figure 1) to guide host countries in fostering an ideal environment for attracting demand and investment, while also highlighting aspects useful for buyers when considering potential host countries.

This framework can also help align existing capacity-building initiatives that support host countries on their readiness journeys. Ultimately, the primary challenges for scaling Article 6 rest with host countries. To ensure the successful expansion of Article 6 mechanisms, it's crucial for all carbon market players, including initiatives like CACE and private sector entities such as Sylvera, to actively support host nations in their readiness efforts.

Readiness indicators are categorized into three broad groups: primary arrangements, experience, and integrity guardrails.

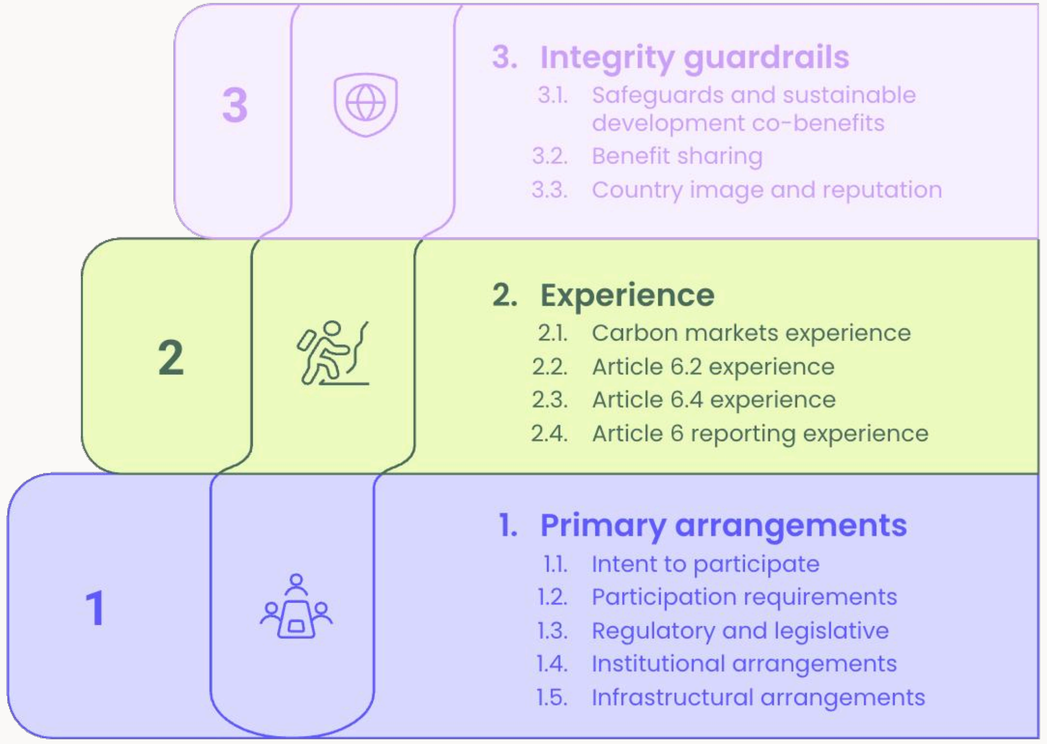

Figure 1: A blueprint for Article 6 readiness: indicators for host countries
Source: Sylvera and CACE (2025)

1 . Primary arrangements

Primary arrangements are the foundational domestic systems that enable countries to operationalize Article 6 of the Paris Agreement. They encompass the legal, institutional, and technical components necessary to authorize, track, and report mitigation outcomes (MOs) in line with United Nations Framework Convention on Climate Change (UNFCCC) guidance—whether or not they are authorized for international transfer.

These arrangements serve to integrate Article 6 into institutional mandates. They are essential not only for compliance and environmental integrity but also to build confidence among international partners, avoid double-counting, and ensure contributions to national climate goals. The five key elements that form the primary arrangements of a country's Article 6 readiness are:

- **1.1 Intention to participate.** The political and strategic signal of a country's interest in engaging with Article 6 mechanisms.
- **1.2 Participation requirements.** The minimum legal and procedural conditions defined by the UNFCCC for participation in cooperative approaches.
- **1.3 Regulatory and legislative.** The legal frameworks and guidelines that govern Article 6 engagement at the national level.
- **1.4 Institutional arrangements.** The assignment of mandates, roles, and coordination structures for Article 6 implementation.
- **1.5 Infrastructural arrangements.** The systems and platforms for tracking.

Together, these components form the enabling environment for credible and effective Article 6 implementation for host countries. In the sections that follow, we elaborate on each of these pillars, drawing on UNFCCC decisions, host country examples, and emerging best practices.

2 . Experience

The foundational policy, institutional, and infrastructural ecosystem is crucial for establishing a theoretical structure, but it only represents the initial stage of national development and preparedness. A nation's true understanding of the intricacies of the Article 6 rulebook and its capacity is genuinely revealed through practical implementation.

Prior experience in broader carbon markets significantly indicates a country’s potential for successful Article 6 engagement. And, naturally, any preliminary involvement in Article 6 itself is exceptionally valuable.

The following four key experiential areas have been identified:

- **2.1 Carbon markets experience:** This refers to a host country's prior engagement with carbon pricing mechanisms, participation in carbon markets, and history of developing carbon projects.
- **2.2 Article 6.2 experience:** Refers to a host country's demonstrated experience with the full spectrum of Article 6.2 implementation, from establishing cooperative frameworks to applying CAs.
- **2.3 Article 6.4 experience:** This considers their past involvement with the Clean Development Mechanism (CDM), the Paris Agreement Crediting Mechanism’s (PACM) predecessor, as well as their direct engagement with the PACM itself, including any work to transition activities from the CDM to the new PACM system.
- **2.4 Article 6 reporting experience:** Examines a host country's history of adhering to and submitting all mandated reporting requirements under Article 6.

3 . Integrity guardrails

Environmental and social integrity has become an indispensable requirement in carbon markets, forming a central pillar of Article 6 of the Paris Agreement. The absence of proper guardrails in this regard will cast doubt on a country's readiness to participate. While host countries can take numerous steps to promote integrity, particular emphasis has been placed on environmental and social safeguards and equitable benefit sharing. Also, the host country's general image and reputation is often used as an indication of a country's capacity to uphold integrity. These factors are foundational for upholding the integrity and ensuring the success of Article 6 implementation.

- **3.1 Environmental and social safeguards:** host governments must demonstrate robust systems for identifying and managing potential environmental and social risks. Strong safeguards not only ensure ethical project development but also mitigate significant reputational and legal risks for all parties involved in Article 6 transactions.

- **3.2 Benefit sharing:** Well-structured benefit-sharing mechanisms are key to maintaining host country ambition and fostering local support for Article 6 activities. Countries are increasingly adopting monetary approaches—such as allocating a share of carbon revenues to national climate funds or communities—as well as non-monetary models, like reserving a portion of mitigation outcomes in national buffer accounts to support NDC achievement. These mechanisms help ensure that carbon market participation benefits both national priorities and communities, while reducing the risk of overselling and enhancing the credibility of international transfers.

- **3.3 Country image and reputation:** this encompasses its international standing, the level of media scrutiny it receives, its human rights record, political stability, perceptions of governance, and its overall ambition in addressing climate change. A positive perception in these areas indicates the country has the capacity of upholding a certain level of integrity, making it a more attractive host for Article 6 activities.

Introduction

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Introduction

After nearly a decade of negotiations since the Paris Agreement's adoption in 2015, the 29th Conference of the Parties (COP29) in Baku marked a turning point for international carbon markets. Final consensus was reached on all remaining components of Article 6, paving the way to implementation.

Article 6 provides countries with the tools to collaborate across borders to achieve their climate targets more cost-effectively—either through market-based approaches (Articles 6.2 and 6.4) or non-market cooperation (Article 6.8).

While Article 6.8 supports broader sustainable development, this report focuses on the two mechanisms directly linked to the transfer of mitigation outcomes (MOs) and international carbon markets. Article 6.2 enables bilateral transfers of Internationally Transferred Mitigation Outcomes (ITMOs) between countries, while Article 6.4 establishes the centralized Paris Agreement Crediting Mechanism (PACM).

Since the initial rules for both mechanisms were first adopted at COP26 in 2021, countries began setting up national systems, including registries, tracking tools, and authorization procedures even before the full rulebook was agreed. With 30 bilateral agreements under Article 6.2 signed as of May 2025 and the PACM set to begin issuing credits this year, the Article 6 landscape is entering a critical phase of implementation.

Implementing the Paris Agreement

New realities, ongoing considerations

The Paris Agreement marks a significant departure from the Kyoto Protocol, fundamentally altering the landscape for carbon project development. A key change is the mandate for all signatory nations, including developing countries, which typically would host the majority of such projects, to track their national greenhouse gas (GHG) emissions and commit to emission reduction targets.

This universal commitment has resulted in increased strategic awareness among host governments regarding the MOs they generate. They are now more cautious about what they sell, prioritizing the achievement of their own Nationally Determined Contributions (NDCs) and seeking to avoid overselling.

The establishment of national targets for all Parties also necessitated the introduction of "corresponding adjustments" (CAs)—a critical mechanism to prevent the double-counting of the same mitigation effort. The complex interplay of CAs with other international markets, such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and, in some instances, the voluntary carbon market, has further complicated the definition of host countries' approaches to international carbon markets.

Moreover, the introduction of new reporting requirements, often more stringent than prior frameworks, presents a considerable challenge for many host countries as they may lack the necessary experience, capabilities, or infrastructure to ensure full compliance. Collectively, these macro factors have contributed to constraints on the Article 6 supply side.

While in comparison the implementation of the Paris Agreement has not led to a dramatic overhaul of the carbon market landscape for buyers in broad terms, they are increasingly grappling with significant challenges stemming from the supply side. A primary impediment to demand for carbon credits is the pervasive issue of host country readiness. This lack of preparedness in potential host nations introduces considerable uncertainty and limitations for buyers seeking to secure a reliable supply of carbon credits.

While Baku offered some advancements by clarifying that countries can generally only alter or revoke Letters of Authorization (LOAs) before ITMOs are first transferred (unless agreed otherwise), some nations are still undecided on what to authorize, or simply are not yet prepared to apply CAs.

Implementing the Paris Agreement

In recent years, carbon markets have faced escalating criticism, primarily centered on skepticism regarding the quality of carbon credits. Concerns have been repeatedly raised about whether these credits genuinely represent one tonne of CO2 equivalent (tCO2e) reduced or removed from the atmosphere. Government buyers are by no means immune to these criticisms.

In fact, they face an even greater imperative to demonstrate the integrity and efficacy of their carbon credit procurements. Consequently, government entities have so far adopted a cautious approach to purchasing carbon credits. Their diligence extends beyond simply ensuring the environmental integrity of the credits; they must also prioritize securing the buy-in and acceptance of their citizens and society at large regarding the use and legitimacy of carbon markets.

This increased scrutiny necessitates thorough due diligence and transparent communication to maintain public trust and avoid accusations of misusing taxpayer funds or undermining climate action efforts.

Boosting Article 6

Bridging host countries and carbon demand

Improving the connection between host countries and carbon credit demand could lead to more Article 6 participation. Developing countries are uncertain about what key elements are required to attract Article 6 demand. This is further exacerbated by the diverse requirements of the demand side, making it challenging for host countries to respond effectively. Aligning demand-side expectations would benefit both suppliers and buyers in the Article 6 market as it would contribute to increased efficiency, a clear path forward, and reduced reputational risk.

This report intends to create a common Article 6 readiness blueprint to guide host countries on how to foster an ideal environment to attract demand and investment, and to highlight aspects that buyers may find useful when considering host countries. Additionally, this framework can help align existing capacity-building initiatives, which are crucial in supporting host countries on their readiness journeys.

While Article 6 capacity-building initiatives aren't explicitly listed in the blueprint, their immense role in achieving country readiness is undeniable. These initiatives are crucial means by which countries develop readiness, rather than being indicators of readiness themselves.

Initiatives such as the UNFCCC Article 6 Capacity-Building Programme, the UNEP Integrated Assessment for Article Six (IAA6), or the Article 6 Implementation Partnership (A6IP) are some of these initiatives.

The Article 6 Readiness Blueprint

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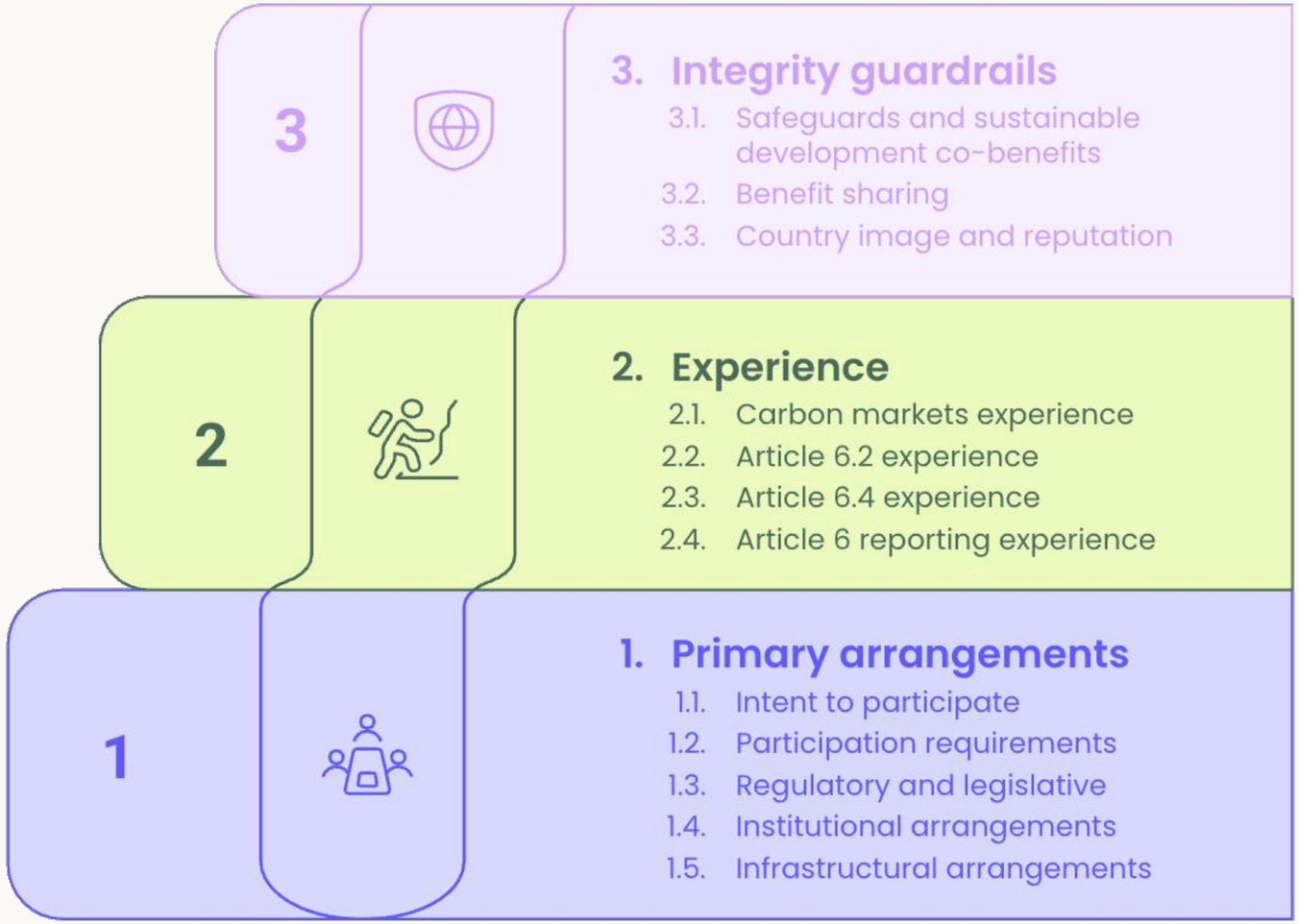
The Article 6 Readiness Blueprint

The blueprint readiness indicators are categorized into three broad groups (Figure 1): **primary arrangements**, **experience**, and **integrity guardrails**.



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1. Primary arrangements

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Primary arrangements

Primary arrangements are the foundational domestic systems that enable countries to operationalize Article 6 of the Paris Agreement. They encompass the legal, institutional, and technical components necessary to authorize, track, and report mitigation outcomes (MOs) in line with UNFCCC guidance—whether or not they are authorized for international transfer.

These arrangements serve to integrate Article 6 into institutional mandates. They are essential not only for compliance and environmental integrity but also to build confidence among international partners, avoid double-counting, and ensure contributions to national climate goals.

1.1 Intention to participate in Article 6

A country's decision to engage in Article 6 mechanisms is typically shaped by its national climate strategy, political context, and broader development goals. While participation is voluntary, for those interested in participating in Article 6 as a buyer or seller, clear and timely communication of intent is essential for attracting international partners and laying the groundwork for cooperation.

The primary channel for expressing this intention is the NDC.[1] As NDCs are updated every five years, they offer a recurring opportunity for countries to clarify their engagement with cooperative approaches, including whether they intend to authorize ITMO transfers or host projects under the Article 6.4 mechanism. However, the absence of such an indication in the NDC does not preclude a country from participating. Beyond the NDC, countries may also articulate their interest through dedicated carbon market regulations.

The current NDC 3.0 update cycle is particularly important. Following the outcomes of COP29 in Baku—where consensus was reached on the future operationalization of Article 6.4 and key additional guidance for Article 6.2—countries now have both the political and technical clarity needed to define their Article 6 positioning.

This includes identifying priority sectors and establishing policy conditions for cooperation. It also involves aligning domestic arrangements with the international Article 6 guidelines.

Proactive and transparent communication of intent signals a country's readiness and builds trust among prospective partners.

[1] With a dedicated section for this enabled by paragraph 5 (g), Annex I to Decision 4/CMA.1

1.2 Article 6 participation requirements

Meeting the formal participation requirements under Article 6 is the first essential step for countries to engage credibly in international carbon markets. These requirements provide the legal, institutional, and procedural foundation that ensures Article 6 engagement is transparent and aligned with the Paris Agreement's goals.

For host countries, fulfilling these conditions signals readiness to host Article 6 activities, issue ITMOs, and meet reporting obligations. For buyers, they offer clarity on whether a country has the systems in place to manage Article 6 transactions in a way that safeguards against double-counting and upholds the integrity of both parties' climate commitments.

Participation in Article 6 mechanisms is governed by the modalities and procedures adopted at COP26.[2] These decisions define the minimum conditions that Parties must meet to engage in cooperative approaches under the Paris Agreement.

At a foundational level, countries must:

- Be a Party to the Paris Agreement; and
- Have prepared, communicated, and maintained an NDC.

Each mechanism under Article 6 sets out additional participation requirements to ensure transparency, environmental integrity, and alignment with national climate objectives.

[2] Specifically Decision 2/CMA.3 for Article 6.2 and Decision 3/CMA.3 for Article 6.4.

1.2.1 Article 6.2 requirements

To participate in cooperative approaches under Article 6.2, countries must satisfy four additional conditions:[3]

- **Authorization arrangements.** The country must have in place formal procedures to authorize the use of ITMOs toward the achievement of NDCs, including the issuance of LOAs and the designation of competent authorities.

- **Tracking arrangements.** The country must establish or access systems that enable the tracking of ITMOs in accordance with UNFCCC guidance. These systems must be capable of tracking:
  - Authorization of MOs
  - First transfer and subsequent transfers
  - Acquisition and use toward NDCs
  - Use for other international mitigation purposes
  - Voluntary cancellation (including for Overall Mitigation in Global Emissions, if applicable).

- **National Inventory Report (NIR).** The country must have submitted its most recent national GHG inventory report, to demonstrate consistency with broader transparency obligations. The NIR can come as part of the Biennial Transparency Report (BTR) or a standalone report.

- **Contribution to national and long-term goals.** Participation must contribute to the implementation of the country's NDC, and, where applicable, its long-term low-emissions development strategy (LT-LEDS), as well as contribute to the long-term goals of the Paris Agreement.

In short, effective participation in Article 6.2 requires a country to have robust systems for authorization, tracking, and reporting, firmly embedded within its broader climate policy framework.

As of May 2025, out of the 195 Parties to the Paris Agreement, at least 100 have expressed interest in participating in Article 6 through their NDCs, and nine countries have submitted initial reports to the Article 6 Centralized Accounting and Reporting Platform (CARP). To participate in Article 6.2 cooperative approaches, a country must demonstrate that it meets the requirements listed above through its initial report.

[3] Outlined in Section II of the Annex to Decisions 2/CMA.3
[4] As required under Decision 18/CMA.1

1.2.1 Article 6.2 requirements

For example, Table 1 presents an overview of how Cambodia, the most recent Party to submit an Initial Report (on April 30, 2025) to the CARP, has addressed these participation requirements. Among other arrangements, the Government of Cambodia has designated the Ministry of Environment as its competent authority and developed an operational manual detailing its Article 6 processes.

Table 1. Cambodia's Article 6.2 Participation requirements overview as stated in its Initial Report

Participation Requirement	Assessment
Party to the Paris Agreement	The Kingdom of Cambodia signed the Paris Agreement on April 22, 2016, and ratified it on February 06, 2017.
Updated NDC	Updated NDC submitted on December 31, 2020
Authorization arrangements	The Ministry of Environment is designated as the competent authority for authorizing the use of ITMOs through the Operations Manual for the Implementation of Article 6 of the Paris Agreement on Climate Change in Cambodia, which also includes authorization eligibility requirements.
Tracking arrangements	Arrangements are detailed in the Article 6 Operations Manual. The Government of Cambodia will develop a national registry for ITMO tracking. In the meantime, the country will utilize the UNFCCC international registry or independent standards' registries that are compliant with Article 6 reporting requirements.
National Inventory Report	Most recently NIR submitted to the UNFCCC in September 2022 in their Third National Communication, as of the time when the Initial Report was prepared. Cambodia's first BTR was published in February 2025.
Contribution to national and long-term goals	Cambodia's first NDC (2021–2030) focuses on domestic implementation but incorporates Article 6 activities to accelerate emissions reductions, contributing to the overall goal of a 41.7% decrease from the business-as-usual scenario by 2030. The Government of Cambodia will authorize only activities on its positive list, ensuring alignment with its Updated NDC. The Government of Cambodia can claim ownership of up to a maximum of 10% of authorized MOs, and proceeds from their sale must be allocated to Cambodia's Environmental and Social Fund.

1.2.1 Article 6.2 requirements

By submitting its Initial Report and publicly sharing its authorization rules and benefit-sharing mechanisms, Cambodia demonstrates how countries can enter the market with credible systems, even as they continue to scale up capacity. However, it is important to note that the information summarized above has not yet undergone the Article 6 technical expert review process, which will ultimately determine its consistency.

As more countries follow suit, consistent and transparent Initial Reports will play a key role in building trust, enabling early transactions, and ensuring that cooperative approaches contribute meaningfully to both national and global climate goals.

1.2.2 Article 6.4 requirements (form submission)

To participate in the Article 6.4 mechanism, countries must fulfill three additional criteria:[5]

- **Designated National Authority (DNA).** The country must designate a national authority responsible for Article 6.4 participation and formally communicate this designation to the UNFCCC Secretariat. As of May 2025, 105 countries have submitted their DNAs to the UNFCCC.

- **Sustainable development contribution.** The country must publicly indicate to the Supervisory Body how its participation in the mechanism contributes to sustainable development while acknowledging that the consideration of sustainable development is a national prerogative.

- **Activity eligibility and NDC alignment.** The country must specify which types of mitigation activities it intends to approve under Article 6.4 and explain how those activities, and their associated emission reductions, contribute to the achievement of its NDC, its LT-LEDS (if applicable), and the long-term goals of the Paris Agreement.

To facilitate this process, the UNFCCC has developed a standardized voluntary Host Country Participation Form, through which Parties can publicly communicate these elements to the Article 6.4 Supervisory Body. There is additional optional participation information that Parties may submit, as applicable, as shown in the participation requirement form. As of May 2025, 17 countries have submitted their Article 6.4 host Party requirements form to the UNFCCC, revealing a wide range of approaches to activity eligibility and sustainable development articulation.

[5] As set out in Section IV of the Annex to Decision 3/CMA.3

1.2.2 Article 6.4 requirements (form submission)

Table 2 below provides a brief comparison of four early movers under Article 6.4, illustrating the diversity of national approaches to defining eligible activities.

These examples highlight the flexibility granted to host countries under Article 6.4 to determine their preferred activity types and sustainable development contributions. Some countries, like Ghana, have developed detailed positive lists aligned with conditional NDC components, while others, like Uganda, retain broader discretion by leaving the list open. This diversity reflects different national contexts and underscores the need for transparent criteria and alignment with long-term climate strategies as more countries join the mechanism.

Table 2. Examples of host Party participation requirements for Article 6.4

Country	DNA	Activity Eligibility	Sustainable Development Contribution
Ghana	Environmental Protection Agency	Explicit positive list includes: electric mobility, low-carbon hydrogen, waste innovations, carbon removals, improved cookstoves, renewables, and cooling efficiency.	Focus on job creation, tech transfer, and alignment with domestic sustainable development regulations and stakeholder consultation.
India	Ministry of Environment, Forest and Climate Change	Uses the same positive list for Article 6.4 as for Article 6.2; includes renewable energy with storage (only the stored component), specific types of renewables (e.g., solar thermal, offshore wind, ocean energy), energy efficiency, and waste-to-energy.	Projects must align with India's Sustainable Development Evaluation Framework (SDEF), ensuring ESG benefits and SDG alignment.
Uganda	Ministry of Water and Environment	Activities across energy, agriculture, forestry, waste, and transport sectors may be approved; no exhaustive list defined.	Guided by the national Vision 2040 and Sustainable Development criteria assessing environmental, social, economic, and technological benefits.

1.3 Article 6 Regulatory and legislative arrangements

A well-defined regulatory and legislative foundation is key for credible participation in Article 6. It provides the legal authority and operational procedures needed to authorize activities, issue ITMOs, and apply CAs.

While the Paris Agreement and subsequent CMA decisions do not prescribe a single format, countries must meet several legal and procedural conditions to engage in cooperative approaches. Developing a national Article 6 framework—whether through laws, guidelines, or operational manuals—is therefore not only a best practice but a practical necessity.

1.3.1 Article 6 framework

An Article 6 Framework is an instrument that defines a country's approach to international markets and its authorization and oversight of mitigation activities under Article 6. It translates UNFCCC requirements into nationally applicable rules and processes, offering clarity to domestic and international actors. Countries have adopted different approaches—these frameworks may take the form of laws, guidelines, or operational manuals, which will be discussed later.

All Parties participating in Article 6 must meet specific legal, procedural, and institutional conditions as outlined in Section 1.2. A national Article 6 framework, therefore, serves as the vehicle to fulfill these participation requirements and to ensure that such conditions are met in a coherent and transparent manner. It is particularly critical to:

- Provide legal certainty and procedural clarity to project developers and cooperating Parties;
- Operationalize LOAs and CAs;
- Avoid inconsistencies across ministries and institutions;
- Ensure full alignment with national climate objectives and international reporting obligations.

A well-structured Article 6 framework ensures coherence across climate and environmental regulations, helps prevent delays in implementation, and builds confidence among buyers and partners. Some of the primary components typically included in these frameworks are summarized in Table 3 (on the next page).

1.3.1 Article 6 framework

Table 3. Primary components of an Article 6 Framework

Component	Description
Legal basis for Article 6 engagement	Identifies or establishes the domestic legal or regulatory instruments that enable participation in Article 6 and authorizes relevant entities to engage in international carbon markets.
Institutional Roles and Responsibilities	Defines mandates, responsibilities, and coordination mechanisms among government entities involved in Article 6 implementation, including who has the authority to issue LOAs.
Eligible sectors, activities, and targets	Defines the scope of participation—e.g., through positive and/or negative lists of eligible mitigation activities aligned with the NDC and national priorities.
Operational procedures for Article 6 and independent crediting programs	Describes the process and criteria for issuing LOAs and applying CAs to ensure transparency and consistency. Outlines technical and procedural steps to approve activities for participation in Article 6 and may include procedures for interfacing with independent standards.
Fee structure and benefit-sharing	Defines how financial flows related to Article 6 activities are managed to ensure cost recovery, equity, and alignment with national priorities. Article 6 frameworks may include: • Administrative fees charged to cover the costs of reviewing, authorizing, and monitoring projects or ITMOs (e.g., LoA issuance or CAs application) • Buffer levies set aside as risk reserves to account for uncertainties or non-permanence in emissions reductions, particularly relevant for removals or nature-based solutions (NbS) • Sustainable development or adaptation contributions. For Article 6.4 activities, it is mandatory to contribute at least 5% of issued A6.4ERs to the Adaptation Fund. Activities in LDCs and SIDs are exempt. [6] • Revenue-sharing arrangements with local communities • Overall Mitigation in Global Emissions (OMGE) provisions for setting aside or canceling a portion of credits to contribute beyond NDC compliance. For Article 6.4 activities, it is mandatory to cancel at least 2% of issued A6.4ERs for OMGE. Countries should clearly define each mechanism to avoid confusion, and adhere to PACM fees and contributions where applicable. The fee schedule of the PACM activity cycle outlines all relevant fees at registration, post-registration, issuance and renewal.
Ambition in mitigation, adaptation, and NDC alignment	Clarifies how Article 6 activities must contribute to national climate goals and reflect ambition across mitigation, adaptation, and sustainable development.
Control mechanisms	Describes enforcement tools, including penalties for non-compliance, fraud prevention protocols, grievance mechanisms, and LOA revocation procedures.
Revisions and updates process	Specifies the procedures and frequency for reviewing and updating the framework in response to evolving UNFCCC guidance, domestic policy changes, or lessons learned.
Templates and forms	Provides standardized documents for activity proponents—e.g., LOA request templates, project idea notes, issuance request forms, monitoring reports.

[6] Paragraph 20, Section V of Decision 6/CMA.6

1.3.1 Article 6 framework

As of May 2025, at least six host countries—Ghana, Cambodia, Kenya, Zambia, Tanzania, and Rwanda—have published formal Article 6 frameworks, according to UNEP's Article 6 Pipeline. The A6 Implementation Partnership (A6IP) identifies at least 12 countries with frameworks in place.

While these documents vary in scope and legal form, they share common features that support operational readiness. In some cases, Article 6 provisions are embedded within broader carbon market legislation or regulatory guidelines, reflecting the natural overlap between international cooperation mechanisms and domestic carbon pricing instruments.

For example, in Tanzania, Article 6 was embedded in their domestic regulation by amending Tanzania's Environmental Management Act, while Ghana's framework is an operational guideline legally enabled by Ghana's Environmental Protection Agency (EPA) Act 490; the guideline is not a standalone legal document.

1.3.2 Alignment with the NDC

Operationalizing Article 6 must be fully aligned with the design and scope of the host country's NDC. Without this alignment, there is a risk of double-counting, overselling, or generating MOs that are incompatible with the country's own climate targets.

Alignment between Article 6 implementation and the host country's NDC is essential to ensure the environmental integrity and credibility of cooperative approaches. First, it helps prevent ITMO transfers from undermining national mitigation goals by ensuring that emissions reductions sold abroad do not detract from what is needed to meet domestic targets. Second, it enables consistent and accurate reporting through BTRs, ensuring that the country's climate progress is transparently and credibly accounted for. Finally, proper alignment protects against reputational and environmental risks by embedding Article 6 transactions within a sound, nationally defined mitigation pathway.

In practice, however, achieving this alignment is technically and politically complex. Many countries exploring Article 6 participation still lack a clear understanding of how ITMO transfers may affect their 2030 targets, especially when conditional and unconditional measures are not fully costed or quantified.

Key elements to align include:

- **Target type(s).** Whether the NDC target is economy-wide or sector-specific, and whether it is framed as an absolute emissions reduction, an emissions intensity reduction, or based on conditional/unconditional commitments. As mentioned in Section 1.2, participation in Article 6 must contribute to the implementation of the host country's NDC. Since ITMOs are deducted from National Inventories, having just an emission target for a sector does not provide enough clarity on how an Article 6 activity could contribute to the NDC. Projects typically deliver non-GHG benefits—such as improved energy access or clean transport—that align with broader sectoral strategies. Clearly reflecting these co-benefits in the NDC helps establish a credible link to national objectives. To further strengthen this link, countries may need to apply benefit-sharing mechanisms. These could be non-monetary (e.g., reserving a portion of ITMOs in a buffer account) or monetary (e.g., investing a share of proceeds in domestic mitigation actions). These mechanisms help ensure that national targets are not compromised by the international transfer of ITMOs and are further discussed in Section 3.2.

1.3.2 Alignment with the NDC

- **Quantification of targets.** The extent to which mitigation targets are expressed in CO_2-equivalent, with clear baselines and methodologies.
- **Scope and coverage.** Including which GHGs, sectors, and geographies are covered by the NDC. Given that NDCs are updated every five years but often span a 10-year implementation period, it is important that subsequent NDC updates account for ongoing Article 6 activities to avoid misalignment.
- **Institutional arrangements.** Ensuring consistency between entities tracking NDC progress and those managing Article 6 activities.
- **Monitoring, Reporting, and Verification (MRV) alignment.** Ensuring that ITMOs transferred under Article 6 are reflected in the same monitoring and reporting systems used for NDC implementation and national inventory reporting.

It is important to distinguish between activities that fall inside or outside the scope of the NDC, and those that fall inside or outside the national GHG inventory. According to Article 6 guidance, MOs do not necessarily need to be included in the NDC target to be authorized—but all ITMOs require a corresponding adjustment (CA), even if they fall outside the NDC's scope. However, activities must be covered by the national GHG inventory in order to allow proper adjustments and reporting. The inventory must include all significant sources of emissions, regardless of whether a sector is included in the NDC.

For instance, consider a host country whose NDC covers only energy-related CO_2 emissions and does not include the land-use sector. If that country begins generating ITMOs from forestry or NbS (e.g., afforestation or improved forest management), it must ensure that these activities are adequately reflected in its National Inventory. Otherwise, there is a risk of transferring emission reductions that fall outside the scope of inventory reporting, which not only threatens environmental integrity but would also make it harder for the host country to meet its own NDC, as they would need to pursue additional emission reductions to compensate for the uncounted ITMOs.

1.3.2 Alignment with the NDC

A strong Article 6 framework helps address these challenges by clarifying how MOs from outside the NDC scope are treated, either by covering through National Inventory Reporting or through clearly documented exclusions and safeguards.

Ghana offers a leading example of how a host country can align its Article 6 implementation with its NDC framework. Ghana's updated NDC (2020–2030) includes 34 mitigation measures, divided into nine unconditional and 25 conditional actions. Under its Article 6 Framework, Ghana explicitly limits authorization of ITMOs to mitigation activities drawn from the conditional portion of its NDC—those requiring international finance.

Notably, if such international finance is delivered outside carbon markets, the resulting emission reductions must be counted toward Ghana's national targets and would therefore not be available for transfer, in order to avoid double counting. This approach ensures that emission reductions from unconditional measures, which are fully accounted for in its NDC, are not transferred abroad.

Moreover, Ghana's framework extends eligibility to activities outside the NDC's scope only if they are covered by the national GHG inventory and agreed upon by the cooperating Party, ensuring robust integration with MRV systems and transparency requirements.

This alignment is further operationalized through Ghana's structured use of positive and negative lists. The framework includes a "whitelist" of pre-approved activities drawn from conditional NDC measures—such as waste-to-energy, solar mini-grids, improved cookstoves, and composting—that are considered automatically additional if they meet defined technical, regulatory, and development criteria. In contrast, a "red list" identifies ineligible activities drawn from Ghana's unconditional mitigation actions, which will not be authorized for ITMO transfers and are instead reserved for achieving the country's NDC domestically.

This dual-list system reduces the risk of overselling, ensures clear attribution of MOs, and increases investor confidence by transparently linking each authorized activity to national climate objectives and reporting systems.

1.3.3 Alignment with national policies

In addition to aligning with the NDC, Article 6 operationalization must be embedded within the broader climate and environmental policies and regulatory landscape of the host country. This ensures that international carbon market engagement complements domestic mitigation strategies and contributes to long-term low-carbon development objectives.

Such alignment enables countries to integrate Article 6 activities with national climate legislation, carbon pricing instruments, sectoral mitigation programs, and long-term low-carbon sustainable development plans. This coherence helps avoid policy fragmentation, enhances cross-ministerial coordination, and supports more efficient implementation.

Key areas of policy alignment include:

- **National climate laws and regulatory frameworks.** Where relevant, Article 6 provisions should be harmonized with existing climate change acts, national adaptation plans (NAPs), and legal definitions of MOs.
- **Carbon pricing and domestic markets.** Countries with compliance carbon pricing instruments—such as emissions trading systems (ETS) or carbon taxes—should clarify how Article 6 transfers interact with domestic allowances, offsets, and compliance obligations. Coordination between international and subnational, national, or regional carbon pricing instruments is particularly important to avoid overlap or unintended competition.
- **Sectoral strategies.** Article 6 engagement should be guided by sectoral mitigation priorities and investment plans (e.g., in energy, transport, forestry, or agriculture). This ensures that cooperative approaches contribute to decarbonization where it is most needed and feasible.
- **Sustainable low-carbon development and investment policies.** Aligning Article 6 activities with national development strategies (e.g., green growth plans, just transition frameworks, investment incentives) can amplify co-benefits and support a whole-of-economy approach to climate action.

1.3.3 Alignment with national policies

Ultimately, integrating Article 6 within the broader policy ecosystem strengthens the legitimacy and effectiveness of international cooperation. It enables countries to use Article 6 not only as a compliance tool but also as a catalyst for transformative climate and development outcomes.

For example, Thailand has embedded Article 6 into its domestic policy architecture by linking its voluntary carbon market standard, Thailand Voluntary Emission Reduction Program (T-VER), and registry with Article 6 operations, ensuring that activities authorized for ITMO transfers align with domestic mitigation policies. Thailand's case is further discussed in Section 1.5, which covers infrastructural arrangements.

On the demand side, countries like Switzerland and Singapore have incorporated Article 6 into national climate legislation to drive ITMO demand: Switzerland's CO_2 Act enables the use of authorized ITMOs toward compliance targets, while Singapore allows entities to offset up to 5% of their carbon tax obligations using ITMOs. These examples illustrate how aligning Article 6 participation with national policy tools—such as climate laws, carbon pricing systems, and investment strategies—can create synergies between

1.4 Article 6 institutional arrangements

Institutional arrangements are the operational backbone of Article 6 implementation. Even with the right policies in place, countries cannot engage effectively in international carbon markets without clearly defined institutional roles, legal mandates, and coordination mechanisms.

Governments do not only have to establish the rules for participation but also carry them out—reviewing projects, issuing authorizations, coordinating across ministries, managing data and registries, and engaging with buyers and international platforms. Given the breadth of these tasks, they often require distribution across multiple government entities.

A key benchmark of institutional readiness is whether roles and responsibilities are clearly defined across relevant agencies. This includes identifying who holds the legal authority to issue LOAs—a critical function for both Article 6.2 cooperative approaches and Article 6.4 mechanism activities. Clarity on mandates, coordination structures, and internal procedures not only increases operational efficiency but also reduces risks related to delays, miscommunication, and legal challenges.

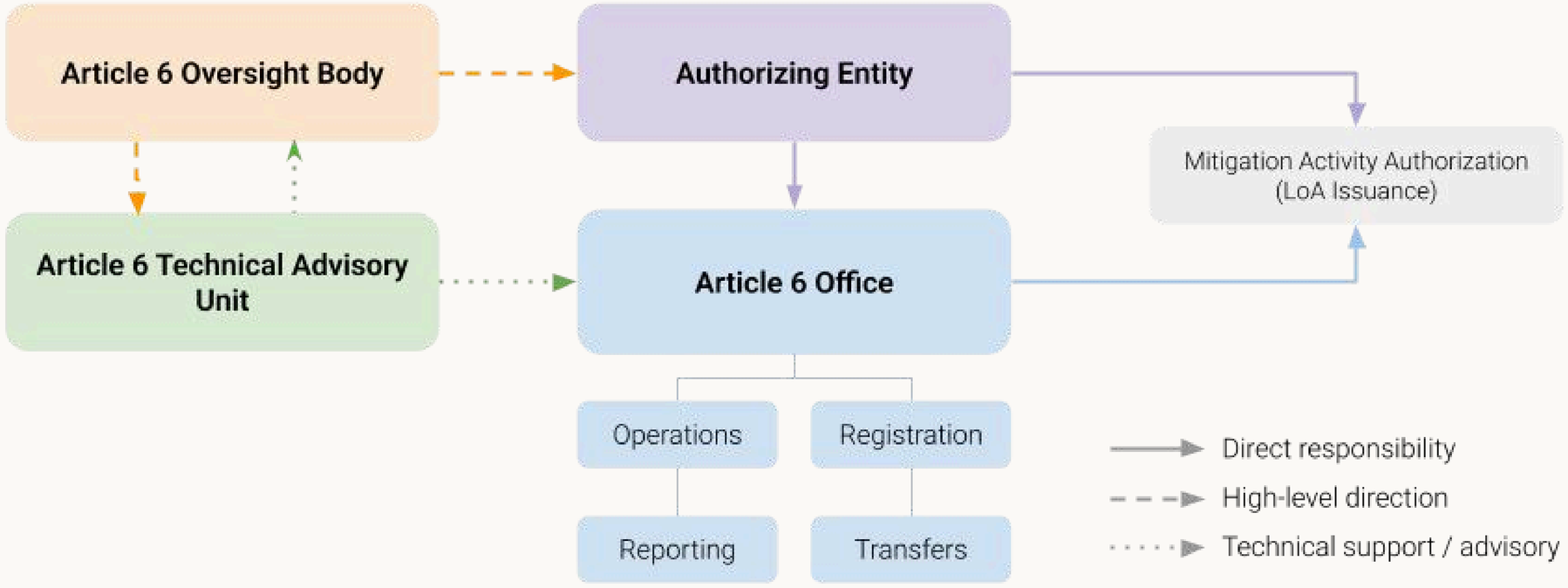
Countries are adopting different models for implementing Article 6 based on their administrative structures and capacities. While structures vary, emerging best practices point to the importance of defining at least four core institutional functions, each potentially managed by separate or integrated bodies, depending on the country context:

- **Oversight.** High-level strategic direction, policy alignment, and inter-ministerial coordination—often involving representatives from finance, energy, environment, and foreign affairs ministries.
- **Advisory.** Provide technical guidance on activity evaluation, reviews methodologies and safeguards, and advises on eligibility and risk.
- **Authorization.** Hold legal authority to issue LOAs and make decisions on whether MOs may be transferred internationally. This function must be transparent, accountable, and guided by clear criteria.
- **Day-to-day operations.** Manage documentation, stakeholder communication, data collection, Article 6 reporting, and registry updates. Establishing a centralized coordination unit —or “one-stop shop”— can enhance accessibility and prevent stakeholders from being passed between agencies, especially when addressing technical queries, document submission, or buyer engagement.

1.4 Article 6 Institutional arrangements

These functions are illustrated in Figure 2, which outlines a model Article 6 institutional arrangement aligned with international best practice and adaptable to national contexts.

Figure 2. Core Institutional Functions in Article 6 Governance
Source: CACE (2025)



1.4 Article 6 Institutional arrangements

Defining institutional roles early—and embedding them in legal or regulatory instruments—helps ensure that Article 6 implementation proceeds in a coordinated, credible, and timely manner. It also facilitates institutional learning and adaptive governance as the carbon market evolves.

Clear institutional mandates are essential not only for domestic coordination but also to instill trust among international partners and buyers, who need clarity on which authority they must engage with and who has the legal mandate to issue LOAs. This clarity reduces transaction risk, accelerates project development, and signals a country's readiness to participate effectively in international cooperation under Article 6.

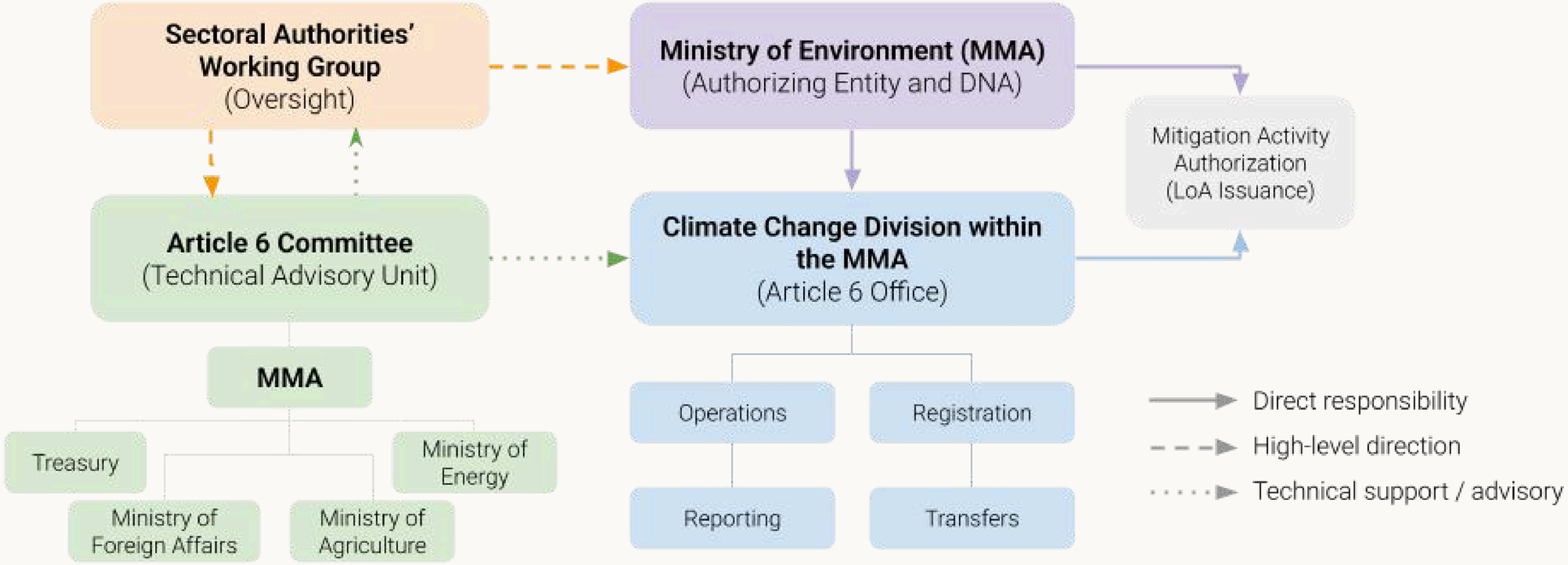
Ghana, for instance, has centralized its approach by establishing a dedicated Carbon Market Office within the national Environmental Protection Agency, responsible for day-to-day Article 6 functions, including review, authorization, registry management, and international coordination. Chile has opted for a different model, where the Climate Change Division of the Ministry of Environment oversees daily operations, while an Interministerial Article 6 Committee provides technical guidance and ensures alignment with sectoral policies and national climate goals.

The Ministry of Environment itself is the authorizing entity, and Article 6.4 DNA, and a Sectoral Authorities Working Group provides oversight. These institutional arrangements are outlined in Figure 3 on the next page.

1.4 Article 6 Institutional arrangements

These approaches reflect the diverse strategies nations are employing to navigate carbon market mechanisms effectively.

Figure 3. Core Institutional Functions in Article 6 Governance: Chile's Approach
Source: Government of Chile (2024)



1.5 Article 6 infrastructural arrangements

Technical infrastructure enables the transparent and credible operation of Article 6 mechanisms. Without functional systems for monitoring, tracking, and reporting, even the best-designed policies and institutions cannot deliver the level of environmental integrity and international accountability required under the Paris Agreement.

Article 6 introduces rigorous transparency and accounting requirements, including CAs, registry interoperability, and integration with national GHG inventory systems. To meet these expectations, host countries must have reliable infrastructure in place to measure and verify MOs and to track their transfer and use across borders.

This section highlights two core infrastructural components: (1) MRV systems aligned with the NDC; and (2) tracking systems that enable the tracking of MOs in line with Article 6 guidance.

1.5.1 MRV system to track the implementation of NDCs

A robust MRV system is critical for ensuring environmental integrity and tracking the contribution of approved projects to national and international climate goals.

This infrastructure must allow countries to accurately quantify emissions reductions or removals, verify the performance of mitigation projects, ensure consistency with national GHG inventories and transparency reports, and carry out CAs.

An essential consideration for Article 6 participation is whether the country has a functioning MRV system—or access to one—that enables it to track MOs in a way that prevents double counting. This is one of the participation requirements,[7] already discussed in Section 1.2.1. Tracking NDC implementation is particularly important when multiple actors are involved, including subnational governments and private project developers. Without proper MRV infrastructure, there is a heightened risk that emission reductions could be counted toward both the host country's NDC and a buyer country's targets, undermining the environmental integrity of cooperative approaches.

An effective Article 6-compatible MRV system should therefore:

- Track emissions reductions at the activity level and aggregate them reliably at the national level; and
- Support verification and reporting in accordance with Article 6 guidance and the Enhanced Transparency Framework (ETF).

Countries currently updating their MRV systems to meet ETF obligations are well-positioned to incorporate Article 6 functions, ensuring coherence across climate reporting frameworks.

[7] Paragraph 4(d), Section II of the Annex to Decision 2/CMA.3

1.5.2 Carbon tracking systems

A second critical component is the establishment of a carbon tracking system that records the authorizations and use of MOs in line with Article 6 modalities. The system ensures transparency, traceability, and accountability throughout the carbon credit lifecycle.

The central question for countries is whether their Article 6 framework provides clarity on which tracking infrastructure will be used and how it will interact with international systems. This clarity is vital not only for operational readiness but also for building confidence among market participants and international partners.

Under Article 6.2, each participating Party must establish, or have access to, a registry that is capable of recording a wide range of transactions. Such a registry must track: [8]

- Authorization of MOs;
- First transfer and subsequent transfers;
- Acquisition and use toward NDCs;
- Use for other international mitigation purposes;
- Voluntary cancellation (including for Overall Mitigation in Global Emissions, if applicable).

The UNFCCC Secretariat is developing a centralized international Article 6.2 registry as part of the broader CARP to support countries that do not have their own registry systems. While its use is optional, the international registry serves as a critical default option for countries seeking to engage in cooperative approaches. At COP29, further guidance clarified that this registry must be interoperable with the 6.4 mechanism registry, enabling the transfer of authorized A6.4ERs as ITMOs. The international registry has yet to be operationalized, but its architecture and expected operational scope have already been defined.

Each transaction must be recorded with unique identifiers and must be linked to the host country's CAs and BTR submissions. Some countries are developing bespoke national registries, while others are planning to approve independent programs. Regardless of the approach, registries must meet minimum standards for security, transparency, and functionality.

Examples include access to the Joint Crediting Mechanism (JCM) registry provided by Japan for Mongolia or the World Bank's Carbon Assets Tracking System. While such arrangements can offer early functionality, the expectation is that the UNFCCC's international registry and the PACM registry will become the central infrastructure supporting Article 6 transactions.

[8] Paragraph 29, Section VI of the Annex to Decision 2/CMA.3
[9] Decision 4/CMA.6

1.5.2 Carbon tracking systems

Under Article 6.4, the registry will be managed centrally by the UNFCCC Secretariat, which will act as the registry administrator, under the supervision of the Article 6.4 Supervisory Body. This mechanism registry will track issuance, transfers, and cancellations of units generated under Article 6.4, including those from projects transitioned from the Clean Development Mechanism (CDM). An interim offline registry has been established by the Secretariat to facilitate the prompt issuance of units from CDM transitioned projects. The final mechanism registry is still in the procurement and implementation phase and will follow the already agreed Article 6.4 mechanism registry procedure adopted at the 15th Meeting of the Article 6.4 Supervisory Body in February 2025.

Even though the Article 6.4 registry is centralized, host countries will still require domestic systems to coordinate data inputs, verify MOs, and ensure alignment with national accounting systems and NDC targets.

Thailand offers a strong example of early registry and carbon market infrastructure development. The Thailand Greenhouse Gas Management Organization (TGO) operates the Thailand Carbon Credit Registry (TCCR), the official and mandatory platform for the country's domestic T-VER, which also functions as Thailand's registry for ITMOs. As of May 2025, the registry hosts over 190 certified projects and has issued more than 22 million carbon credits, reflecting a mature and growing ecosystem.

Moreover, Thailand was the first country to issue and transfer Article 6.2 ITMOs for NDC use, under its Implementation Agreement (IA) with Switzerland. In December 2023, 1,916 ITMOs were transferred from the TCCR to the KliK Foundation's account in the Swiss Emissions Trading Registry—a milestone in the operationalization of Article 6.2. Furthermore, Thailand's T-VER Program holds conditionally eligible status under CORSIA for the first phase of its compliance period (2024–2026).

This multi-level engagement —across domestic, bilateral, and international market mechanisms—illustrates how coordinated infrastructure and governance can unlock early participation and position countries to attract demand from both compliance and voluntary carbon markets.

Thailand's experience highlights the value of building a carbon tracking system that is robust, interoperable, and closely tied to national and international policy objectives. It demonstrates how countries can leverage their domestic standards and institutions to engage confidently and effectively in global carbon markets under Article 6.

[10] As per Section VI of the Annex to Decision 3/CMA.3

2. Experience

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Experience

The foundational policy, institutional, and infrastructural ecosystem is crucial for establishing a theoretical structure, but it only represents the initial stage of national development and preparedness. A nation's true understanding of the intricacies of the Article 6 rulebook and its capacity are genuinely revealed through practical implementation.

Prior experience in broader carbon markets significantly indicates a country’s potential for successful Article 6 engagement. Naturally, any preliminary involvement in Article 6 itself is exceptionally valuable.

2.1 Carbon market experience

A country's existing familiarity with carbon pricing and carbon markets—whether through implementing compliance or voluntary carbon pricing systems, or by hosting carbon projects—significantly enhances its preparedness for Article 6 engagement. Any form of exposure to carbon markets typically confers a strong advantage in facilitating Article 6 activities.

2.1.1 Carbon pricing systems experience

Compliance carbon pricing systems, both Emission Trading Systems (ETS) and carbon taxes, have been implemented globally for decades. Cap-and-trade is a common ETS structure where a cap on emissions is set, emission allowances are distributed among compliance actors, who can then trade these allowances.

In contrast, carbon taxes directly impose a price that compliance actors must pay for their emissions. While historically favored by developed nations, developing countries are increasingly adopting compliance carbon pricing systems to meet Paris Agreement targets and due to Carbon Border Adjustment Mechanisms (CBAMs) pressures.

2.1.1 Carbon pricing systems experience

The acceptance of carbon credits has been particularly prevalent in emerging carbon pricing systems within developing countries (Table 4), which frequently serve as hosts for carbon projects. Integrating carbon credits into these schemes offers compliance actors greater flexibility while simultaneously fostering the growth of the domestic carbon project development sector. Experience gained from establishing and managing such systems can provide valuable insights for countries preparing to engage in Article 6, especially those systems that permit the use of carbon credits for compliance purposes. It's important to note, however, that quantitative and qualitative limitations often apply to the use of these carbon credits. Additionally, some countries have established voluntary carbon pricing systems, often as a preparatory step towards a compliance scheme, which also contributes to their carbon experience.

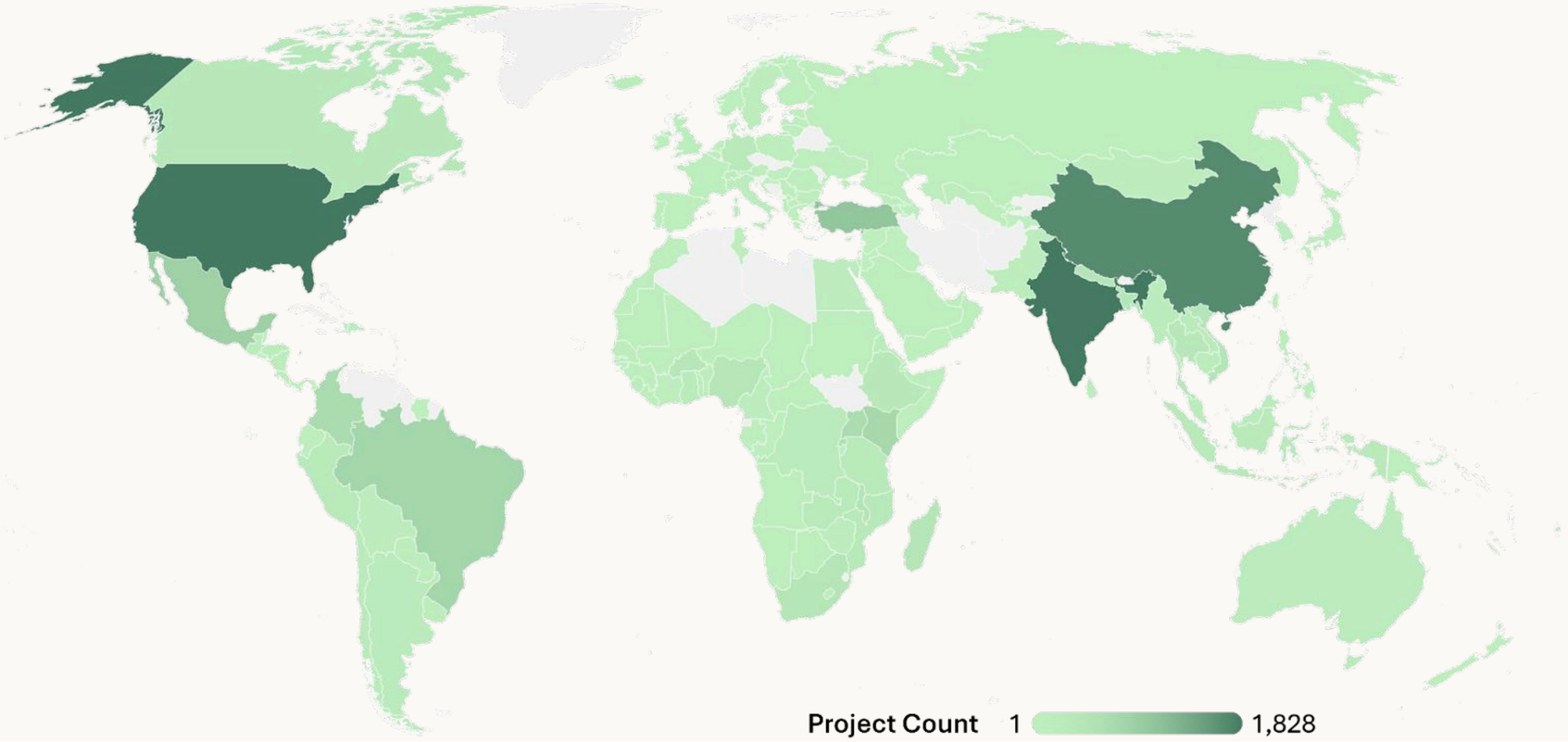
Table 4. Examples of Article 6 host countries that have experience with compliance carbon pricing systems
Source: World Bank State and Trends of Carbon Pricing Dashboard (2025)

Jurisdiction	Nature	Carbon pricing system type	Status	Acceptance of carbon credits
Indonesia	Compliance	ETS	Operational	Yes
Colombia	Compliance	Carbon tax	Operational	Yes
Chile	Compliance	Carbon tax	Operational	Yes

2.1.2 Carbon project development experience

Countries with previous experience hosting carbon projects under mechanisms like the CDM or independent carbon standards (Figure 4), such as Gold Standard or Verra, are often better positioned to facilitate Article 6 activities. This advantage stems from a more developed ecosystem of carbon market participants, government officials already familiar with carbon market concepts, and a higher likelihood of existing carbon regulations, institutional frameworks, and infrastructure.

Figure 4. Countries by number of projects certified by independent carbon standards
Source: Sylvera's Project Catalog (2025)[11]



[11] The map considers project data from International Carbon Registry, Verra, Gold Standard, BioCarbon Standard, Climate Action Reserve, EcoRegistry, Puro, CDR.fyi, American Carbon Registry, Plan Vivo, Isometric, and the BC Carbon Registry. Last updated 27 May, 2025.

2.1.2 Carbon project development experience

Hosting carbon projects, whether under the CDM or certified by independent standards typically within the voluntary carbon market, fostered distinct yet complementary forms of market readiness. CDM projects demanded greater government-level engagement through Letters of Approval and reporting capacity. This operational difference crucially shaped capacity development: the CDM was instrumental in embedding carbon market infrastructure directly at the governmental level, leading to the establishment of national authorities.

Conversely, the voluntary carbon market offered a flexible platform, enabling project developers and other non-governmental stakeholders to remain active and innovative in the carbon space even after the CDM's decline. Both markets presented unique advantages and challenges, collectively building a more diverse and resilient foundation for global carbon market participation.

Given the significant diversity of carbon project types across sectors, expertise gained from one activity isn't directly transferable to others when considering Article 6 activities. For instance, a country with experience in hosting cookstove projects wouldn't necessarily possess the expertise to evaluate and approve forestry sector projects. Nevertheless, some foundational principles and processes are common across all project types. Therefore, while direct translation of experience is limited, having some prior experience in carbon project development is generally more beneficial than none.

2.2 Article 6.2 experience

Even prior to the finalization of the Article 6 text, nations initiated implementation of Article 6.2, leading to significant advancements. This progress includes the signing of numerous IAs, the issuance of LOAs by various countries, and the application of CAs. Notably, 2024 marked the first transaction under this framework, occurring between Thailand and Switzerland. These first events of translating the theory into practice are invaluable to build a host country's readiness.

2.2.1 Agreements (MOUs, IAs)

Given the decentralized nature of Article 6.2 of the Paris Agreement, establishing IAs is a crucial step for participating countries. These agreements delineate the framework for cooperation, including the types of activities to be undertaken and their timelines. The progress a country has made in finalizing such agreements signifies a significant stride in their journey toward Article 6.2 implementation and demonstrates the preparedness of their institutional arrangements.

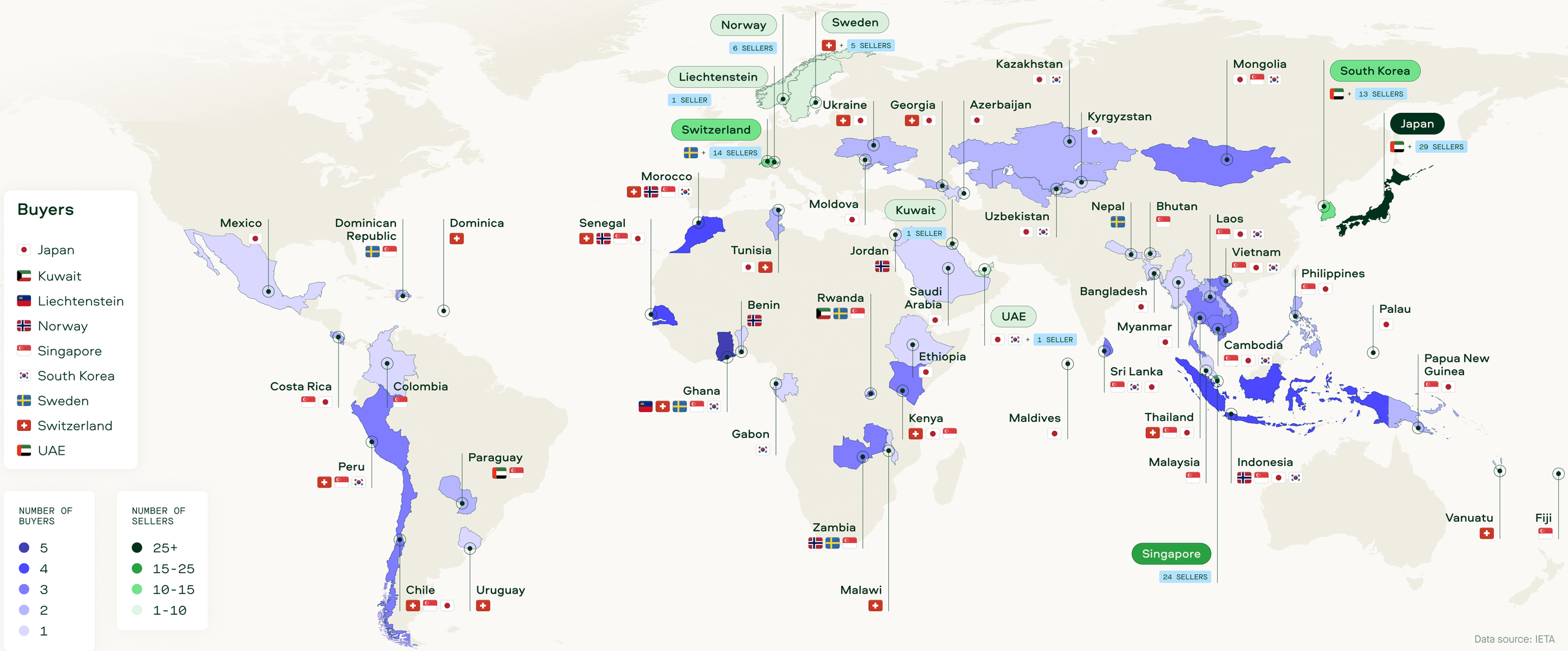
Article 6.2 IAs are progressing globally (Figure 5, on the next page), with some already finalized and others still under negotiation. On the supply side, a significant number of "selling countries" are located in Southeast Asia, though there's a noticeable surge in activity from nations across the African continent, such as Morocco, Senegal, Ghana, Rwanda or Zambia.

When it comes to the "buy side" of these agreements, a few countries are particularly active. Switzerland and Singapore are at the forefront of purchasing MOs, with Switzerland already having made the first acquisition and Singapore nearing the completion of its first tender process. Sweden has also been active, specially piloting several Article 6 activities. In terms of the number of established agreements, Japan's JCM provides a robust foundation for future Article 6.2 activities, boasting agreements with 30 countries.

However, it is important to know that some countries, like Guyana, are adopting unilateral cooperative approaches. This means they are independently developing systems to create and authorize credits, even without a specific buyer lined up yet. CORSIA buyers, who require correspondingly adjusted credits as mandated by the Paris Agreement, are an example of potential buyers.

Figure 5: Article 6.2 government-to-government IAs and MOUs around the world

Source: Sylvera (2025)



Data source: IETA

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2.2.2 Pilots

The term "Article 6 Pilot" lacks a precise definition, leading to a wide variety of existing examples. Article 6 pilot activities are real or virtual initiatives undertaken by countries to test, explore, and learn about the practical implementation of the Article 6 mechanisms.

The importance of these pilots for Article 6 readiness cannot be overstated. By engaging in "learning by doing," participating countries are actively building the necessary technical, institutional, and policy capacity to effectively utilize Article 6. This includes developing robust MRV systems, establishing national authorization processes for ITMOs, designing methodologies, and understanding how Article 6 activities integrate with their NDCs.

The insights gained from these practical experiences directly inform the ongoing negotiations and the eventual full implementation of Article 6, accelerating preparedness and fostering greater confidence in these novel carbon market instruments.

Article 6 pilot activities encompass a range of initiatives, from tangible projects designed to generate ITMOs to virtual simulations. An example of the former is the Thailand Bangkok E-Bus Programme, which has successfully sold ITMOs to Switzerland. In contrast, Sweden has spearheaded the development of virtual pilots in various countries, including Chile, Colombia, Indonesia, Kenya, Mongolia, Nigeria, and the Philippines.

These virtual pilots aim to test and analyze how different mitigation activities can be structured under Article 6 within diverse country-specific contexts.

2.2.3 Activities

Direct experience in developing Article 6.2 cooperative approaches is a strong indicator of a country's readiness. While only a limited number of these activities have been implemented to date, many more are in the pipeline. With the finalization of the Article 6 text, a significant increase in their proliferation is anticipated in the coming years.

Article 6.2 activities show significant diversity across sectors, types, and scales. While mandating quality assurance (e.g., ensuring no net emission increase and environmental integrity through conservative baselines), Article 6.2 does not prescribe specific methodologies. This flexibility has resulted in the emergence of two primary methodological approaches. On the one hand, some countries choose to shape their own methodologies.

These are often based on existing frameworks, such as the CDM or those from independent carbon standards, while some are entirely original. For example, Japan is expected to use the methodologies the country developed under its JCM. On the other hand, some opt to propose programs directly certified by these independent standards.

For instance, on the selling side, Guyana's cooperative approach is exclusively focused on its nationwide jurisdictional REDD+ (Reducing Emissions from Deforestation and Forest Degradation) program under the Architecture for REDD+ - The REDD+ Environmental Excellence Standard (ART TREES), and Singapore's eligibility criteria for purchasing ITMOs rely on credits certified by independent carbon standards.

It is crucial to differentiate between the experience of hosting carbon projects certified under independent carbon standards and the unique experience of formally submitting such a project as an Article 6.2 cooperative approach. The latter necessitates navigating the specific requirements and processes inherent to the Article 6 framework, thereby offering host countries a distinct set of operational and regulatory learnings.

2.2.4 Transactions

Though Article 6 agreements are in place and many activities are being developed, the true exchange of ITMOs is, in many cases, still progressing through the necessary phases of project development, verification, and authorization.

For a host country, establishing clear frameworks and operational procedures for Article 6 transactions is fundamental to securing vital funding for national climate initiatives. This includes pinpointing effective methods for meticulously tracking and accounting for these transactions to proactively mitigate the risk of double-counting in both NDC calculations and subsequent reporting.

Governments can begin the process by establishing fundamental tracking systems managed by the appropriate national authorities. These mechanisms can efficiently monitor Article 6 transactions while guaranteeing complete adherence to the Paris Agreement's reporting requirements. Progressively, nations can advance to more advanced tracking and accounting systems, such as creating a specific carbon registry.

This type of registry would considerably improve the transparency of tracking Article 6 transactions and effectively avoid the risks of double crediting and double-counting.

A concrete illustration of an early Article 6 transaction unfolded in December 2023, when Switzerland acquired the first batch of 1,916 ITMOs from Thailand. These ITMOs originated from a project aimed at converting Bangkok's public bus system to electric vehicles. A subsequent transaction involving 29,222 ITMOs was recorded a year later. The TGO manages the TCCR, which serves as the official and obligatory platform for Thailand’s domestic T-VER and also acts as the national ITMO registry.

2.2.5 Letter of Authorization (LOAs) and Corresponding Adjustments (CAs)

LOAs formally convey the host country's consent for the transfer of specific MOs, directly linking to the vital accounting requirement of CAs. LOAs must contain specific information, but their format is not rigidly defined by a mandatory template. Instead, the UNFCCC offers a voluntary template for authorizing cooperative approaches, ITMOs, and entities.

This mechanism, mandated by the Paris Agreement ensures that when an ITMO is transferred and used towards another country's NDC or for other international mitigation purposes (e.g., CORSIA), the host country applies an adjustment to its own national GHG inventory to prevent "double counting" of the emission reduction or removal. For example, Ghana has issued 4 LOAs under its IA with Switzerland.

LOAs can be issued unilaterally by a country. In such instances, a country might authorize a specific project even without a formal Article 6.2 IA in place between two nations for the transfer of ITMOs. This could facilitate international climate finance flows and enable companies to purchase correspondingly adjusted carbon credits. Rwanda and Madagascar have issued several unilateral authorization letters for carbon projects certified under an independent carbon standard (such as Verra or Gold Standard).

While not a definitive indicator, the presence of LOAs can suggest a host country has already conceptualized the specific mitigation activities, technologies, or programs that they deem eligible for the generation of ITMOs. It can also suggest the country has likely agreed upon the terms and conditions for these LOAs, indicating its preparedness to issue further authorizations.

Regardless of whether issued within the scope of an Article 6.2 agreement or unilaterally, LOAs specify key details pertaining to the authorized activity, the period of validity, the estimated or verified emission reductions or removals that are subject to the authorization, and the use of the ITMOs.

However, the broad adoption of Article 6.2 and the push for ITMO generation present a significant risk of overselling. This occurs when a host country authorizes the transfer of MOs beyond its capacity to meet its own NDC (both conditional and unconditional). This risk is currently deterring many countries from issuing LOA, due to concerns about potentially undermining their domestic climate targets. Countries need to clearly define the next generation NDCs (NDC 3.0), ensuring that carbon markets are explicitly designated for projects that struggle to secure adequate climate finance through other means.

2.2.4 Letter of Authorization (LOAs) and Corresponding Adjustments (CAs)

The practical implementation of CAs remains notably underexplored. To date, only two countries have officially reported the application of CAs through their Annual Reports. Thailand was the first nation to report a CA to the UNFCCC, adjusting for emission reductions from its e-bus cooperative approach with Switzerland. Subsequently, Guyana reported a unilateral CA for its national jurisdictional REDD+ program, which underwent verification under ART TREES.

This specific adjustment involved 7.14 million 2021 vintage TREES Credits (HFLD labeled), which were generated from Guyana's ongoing efforts to protect its extensive tropical forests, thereby demonstrating its commitment to a low-carbon development strategy. The implementation of CAs is primarily a reporting task, and while host countries are not expected to face major challenges, prior experience in this duty will streamline the process.

2.3 Article 6.4 experience

The PACM is often considered the successor to the Kyoto Protocol's CDM. Countries that previously participated in the CDM are expected to be well-prepared for the PACM. Furthermore, nations that approved carbon projects for transition will likely be among the first participants in the PACM, giving them a potential advantage in readiness. Because no PACM activities using new methodologies have emerged yet, this specific experience can't be assessed yet.

2.3.1 CDM participation

The CDM, launched in 2006, represented a groundbreaking initiative under the Kyoto Protocol. For many host countries, it served as their initial foray into international carbon markets, providing invaluable practical experience in developing, implementing, and monitoring emissions reduction projects.

Over its operational lifespan, the CDM registered more than 7,800 projects and issued over 2 billion certified emission reductions (CERs), mobilizing substantial private sector investment in climate action.

While the CDM laid the groundwork, the PACM represents a significant evolution, introducing stronger provisions for environmental integrity and reporting requirements. This includes fundamental shifts such as the ability to authorize PACM carbon projects and the mandatory contribution to Overall Mitigation in Global Emissions (OMGE). Despite these differences, the core dynamics and practicalities of carbon market participation remain remarkably similar.

Host countries that engaged with the CDM possess a wealth of transferable experience directly applicable to the PACM, including project development, stakeholder engagement, or reporting. In essence, the CDM acted as a vital learning ground, equipping host countries with the institutional capacity, technical know-how, and practical understanding necessary to effectively participate in the next generation of international carbon markets under the Paris Agreement.

The distribution of CDM projects exhibited significant geographical disparities. A predominant share of all CDM projects was concentrated in just five nations: China, India, Brazil, Mexico, and Malaysia. Conversely, engagement from Least Developed Countries (LDCs) was notably low. Many LDCs, particularly those in Africa and various island nations, registered the fewest CDM projects, often having none or only a handful, and are now keen to engage with Article 6 to attract carbon finance, aiming to avoid past missed opportunities.

2.3.2 CDM transition

Several active CDM projects have been listed as eligible by the UNFCCC to transition and continue operating under the PACM. These projects can apply for transition, but host country approval is a prerequisite for the transition to be finalized.

Eventually, these projects will need to switch to PACM methodologies, which are expected to be more stringent. While the PACM methodological guidelines are still under development and have no approved methodologies yet, the first approvals are expected by the end of the year.

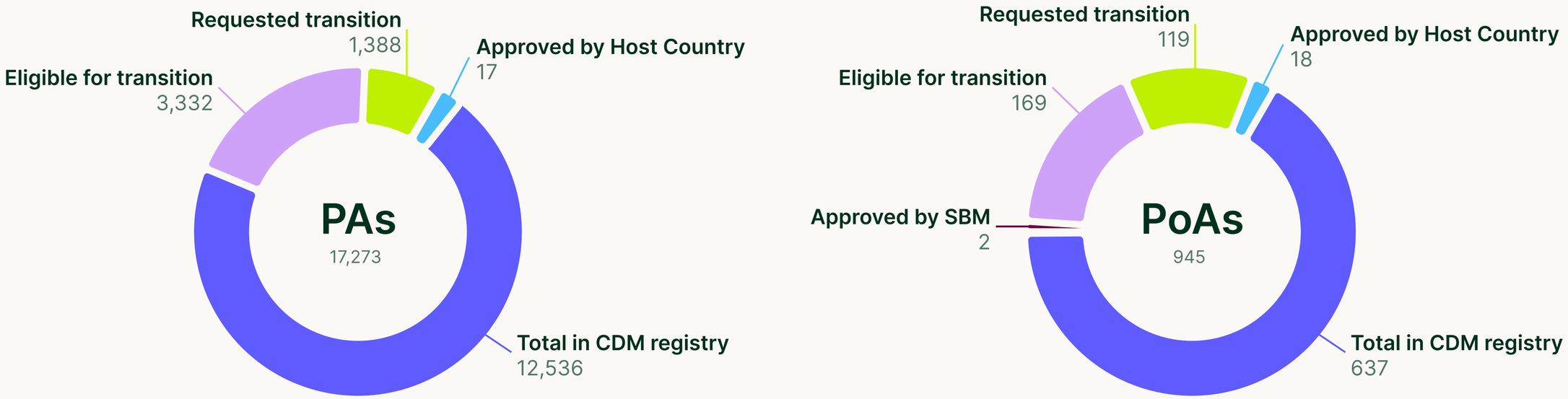
The Article 6 Methodological Expert Panel (MEP) recently finalized guidelines for establishing baselines and managing leakage. These guidelines have since been approved by the Article 6.4 Supervisory Body (SBM) at their 16th meeting in Bonn, joining the previously approved additionality guidelines.

Countries actively engaged in the transition of CDM projects are demonstrating a higher readiness for the Article 6.4 mechanism. This is primarily because they have already gained an understanding of and adapted to the operational intricacies of carbon credit systems. Furthermore, carbon credits generated from transitioned CDM projects are anticipated to constitute the initial Article 6.4 Emission Reductions (A6.4ERs).

2.3.2 CDM transition

As of 15 April 2025, over a quarter of the registered Project Activities (PAs) (26.6%, or 3.3K) and registered Programs of Activities (PoAs) (26.53%, or 169) are listed by the UNFCCC as eligible to transition to the PACM. Transition requests have been submitted by 41% (1.4K) of eligible projects, representing 67% (or 717M) of all eligible CDM project issuances to date. Similarly, transition requests have been submitted by 70% of eligible PoAs representing 87% (or 55M) of all eligible CDM PoA issuances to date (Figure 6). These transition requests are subject to the host country's approval for full implementation.

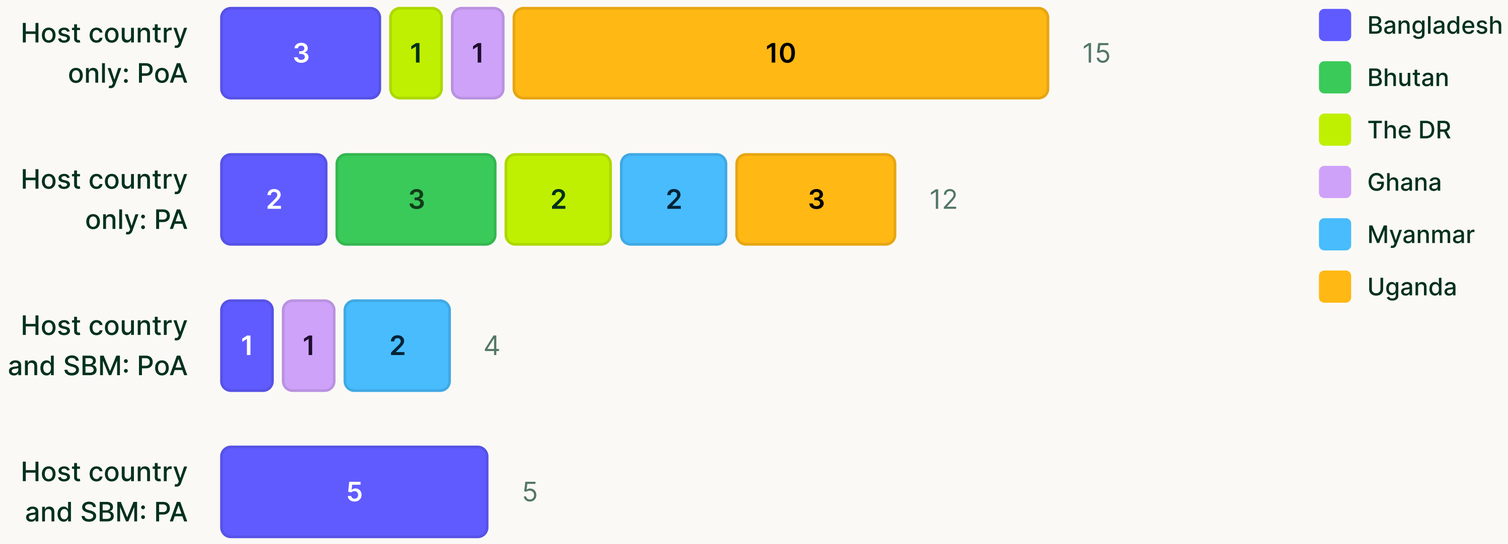
Figure 6: CDM PAs and POAs transition status
Source: UNEP Article 6 Pipeline, accessed 15 April 2025



2.3.2 CDM transition

China and India collectively host the majority of projects and Programs of Activities (PoAs) that have sought to transition, accounting for approximately 36% and 33% of requests, respectively. Despite this significant share, neither country has yet approved any transition requests. Conversely, several other nations, including Bangladesh, Bhutan, the Dominican Republic (DR), Ghana, Myanmar, and Uganda, have each approved multiple CDM activities to transition to the PACM (Figure 7), even though they represent a smaller proportion of overall transition requests. To date, only nine PoAs or PAs have been fully transitioned and registered under the PACM, with numerous other activities still awaiting final approval from the SBM.

Figure 7: CDM transition approvals
Source: UNFCCC CARP (accessed on 19 June 2025)



2.4 Article 6 reporting experience

The Paris Agreement unifies reporting requirements for all Parties under its ETF. This is the first time Annex I and Non-Annex I Parties share a common reporting framework, regardless of their development status. Host countries' initial experience with these new requirements may pose challenges due to limited technical capabilities, insufficient financial resources, or time constraints. Such factors could hinder timely and accurate reporting, potentially delaying the broader Article 6 process and impacting market confidence. Therefore, prior reporting experience is a sign of Article 6 readiness.

Article 13 of the Paris Agreement establishes the ETF, which forms the foundation for Parties' reporting obligations. Beginning in 2025, all Parties to the Paris Agreement were required to adhere to this framework. A significant shift introduced by the ETF is the unification of reporting requirements, regardless of a Party's developmental status. For the first time, both Annex I and Non-Annex I Parties share a common reporting structure.

At COP24 in Katowice (2018), an agreement was reached that established the ETF, requiring countries to submit a BTR every two years. Building on this, subsequent agreements at the COP26 in Glasgow (2021) and COP27 in Sharm el-Sheikh (2022) conferences specifically addressed how international carbon markets would operate under the Paris Agreement.

These agreements introduced new requirements for countries engaging in cooperative approaches, often referred to as Article 6.2. They mandate an Initial Report detailing each cooperative approach, along with Annual and Regular information on their implementation and templates for reporting are available in the CARP. Together with the BTR, these reports form the existing reporting obligations for countries participating in cooperative carbon market approaches.

These same reporting duties also apply when carbon projects are authorized under the Article 6.4 mechanism, ensuring a consistent and transparent approach across the board.

2.4 Article 6 reporting experience

While reporting is new for many countries, some have already successfully met these demands, positioning them favorably for future reporting requirements and cycles (Table 5).

CACE's A6 Tracker, which evaluates the readiness of 141 ODA-eligible countries to engage with Article 6 mechanisms—based on primary arrangements and experience criteria—identifies Ghana, Kenya, Cambodia, Rwanda and Zambia as the most advanced.

Table 5: Reporting requirements and host countries' submissions

Reporting requirement	Reporter	Frequency	Host countries submissions
BTR	All Parties except LDCs and Small Island Developing States (SIDS), which may submit the information at their discretion	Every two years, no later than 31 December of the relevant year (the first ones, reporting on 2021-2022, were due by 31 December 2024)	A number of countries have submitted their first BTRs. Some met the deadline (e.g., Ghana), while others submitted after (e.g., Peru, Indonesia), and some have yet to submit (e.g., Senegal).
Initial report	Article 6.2 Participating Parties	For every cooperative approach • no later than the authorization of ITMOs, or • where practical (in the view of the participating Party), in conjunction with the next BTR	The following host countries submitted Initial Reports through the CARP: Ghana, Vanuatu, Thailand, Guyana, Suriname, Mongolia, and Cambodia.
Annual information	Article 6.2 Participating Parties	Annually, by no later than 15 April of the following year	The following host countries submitted Annual information through the CARP: Guyana, Ghana, Thailand, and Vanuatu.
Regular information	Article 6.2 Participating Parties	As an annex to BTRs, no later than 31 December of the relevant year	Although no reports have been included in the CARP, some countries have included elements of the regular information in their BTRs (e.g., Thailand)

3. Integrity guardrails

Integrity guardrails

Environmental and social integrity has become an indispensable requirement in carbon markets, forming a central pillar of Article 6 of the Paris Agreement. The absence of proper guardrails in this regard will cast doubt on a country's readiness to participate. While host countries can take numerous steps to promote integrity, particular emphasis has been placed on environmental and social safeguards and equitable benefit sharing.

Also, the host country's general image and reputation is often used as an indication of a country’s capacity to uphold integrity. These factors are foundational for upholding the integrity and ensuring the success of Article 6 implementation.

3.1 Safeguards and sustainable development co-benefits

In a rapidly evolving carbon market, safeguards and sustainable development co-benefits are key to securing international credibility and public acceptance. As host countries operationalize Article 6, they must not only prevent environmental and social harm but also demonstrate that carbon activities contribute meaningfully to local and national development goals. Embedding them into Article 6 governance frameworks reduces reputational risk, enhances investment appeal, and aligns mitigation efforts with broader sustainability priorities.

Environmental and social safeguards are a core element of high-integrity carbon market participation. As countries operationalize Article 6, host governments must be equipped to identify and manage potential environmental and social risks associated with mitigation activities.

Incorporating safeguards into the domestic Article 6 framework serves multiple functions: it protects against unintended harm, enhances the credibility of MOs, and aligns Article 6 activities with national and international sustainable development priorities.

Furthermore, robust safeguards create a more attractive investment environment by reducing reputational and legal risks for all actors involved.

Beyond avoiding harm, Article 6 activities should deliver measurable contributions to sustainable development. While each country retains sovereignty in defining its sustainable development priorities, buyers and partners increasingly seek robust and transparent claims. This is especially true under Article 6.4, where host countries must explain how authorized activities contribute to development priorities as part of the host Party's participation requirements.

At the activity level, high-integrity implementation also requires strong environmental integrity provisions, such as robust baseline setting, conservative emissions quantification, downward adjustments, and transparent benefit-sharing. Several relevant standards and procedures for the PACM have already been adopted by the SBM, such as the standards for baseline setting and demonstration of additionality.

3.1.1 Article 6.4 Sustainable Development Tool

The Sustainable Development Tool adopted by the Article 6.4 Supervisory Body in October 2024 establishes a formal process for host countries and project participants to assess and manage environmental and social risks. The tool requires the implementation of a structured assessment process that includes:

- Identification of environmental and social risks associated with the activity;
- Development of mitigation measures to address identified risks;
- Definition of monitoring procedures to ensure compliance throughout the project lifecycle.

This tool supports host countries in upholding the Paris Agreement's integrity principles while respecting national sovereignty in defining sustainable development priorities. Countries integrating the Sustainable Development Tool into their national Article 6 frameworks can demonstrate alignment with international expectations, particularly to buyers and international financial institutions that prioritize environmental and social governance (ESG) criteria.

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3.1.2 Fraud prevention & non-compliance

Credible participation in carbon markets also depends on robust systems to address fraud and non-compliance. Host country frameworks should include clear provisions on:

- What constitutes fraudulent or non-compliant activity;
- Procedures for corrective action, including review, enforcement, and public disclosure mechanisms.

This is especially relevant in the context of Article 6.2 cooperative approaches, where tracking and authorization are managed at the national level. Parties must resolve any inconsistencies flagged during the UNFCCC's consistency checks.[12]

The Article 6 technical expert review team evaluates these issues, and if inconsistencies materially affect emissions balances or double-counting risk, corrective actions may include:

- Reporting the issue in the technical expert review documentation;
- Public disclosure on the CARP;
- Formal notification to the Conference of the Parties.

Countries are expected to address and correct inconsistencies based on these findings in their next relevant submission. Including such processes at the national level ensures accountability, protects environmental integrity, and supports the credibility of the host country in international cooperation.

[12] According to Section VII.C of Decision 4/CMA.6 (Guidance on cooperative approaches)

3.1.3 Dispute resolution & grievance mechanisms

Effective grievance and dispute resolution mechanisms are essential to protect stakeholder rights and ensure transparency and fairness in Article 6 implementation. National Article 6 frameworks should clearly define how disputes between stakeholders, project developers, and authorities will be handled, and provide accessible channels for raising concerns.

At the international level, stakeholders, activity participants, and participating Parties may appeal decisions of the Article 6.4 Supervisory Body and submit grievances to an independent process for resolution.[13] The SBM has already adopted a Grievance and Appeal procedure.

While these provisions exist at the UNFCCC level, they must be mirrored or complemented at the national level. Host countries should consider establishing independent, transparent grievance mechanisms that are accessible to affected communities, Indigenous Peoples, civil society organizations, and other stakeholders. Embedding these processes within national Article 6 governance frameworks helps mitigate conflict risk, ensures accountability, and strengthens public support for international carbon market engagement.

While UNFCCC guidance underpins Article 6 governance, countries may also look to complementary standards and initiatives for further alignment—particularly when designing project-level requirements. Examples include CORSIA's eligibility criteria and Singapore's International Carbon Credit (ICC) framework.

While these efforts vary in scope and approach, they offer useful reference points as countries develop safeguards and sustainable development contributions within their Article 6 frameworks. Importantly, alignment is expected to become clearer as eligible crediting programs align with Article 6 post-COP29, especially between CORSIA and Article 6.

[13] As established by paragraph 62, Section V of the Annex to Decision 3/CMA.3

3.2 Benefit sharing

Equitable benefit-sharing is increasingly recognized as a core pillar of high integrity in carbon markets. How countries structure and allocate the proceeds of carbon transactions shapes community trust, national ownership, and long-term project viability.

Countries have adopted diverse approaches to benefit-sharing in their regulations and Article 6 frameworks, reflecting different legal traditions, land tenure systems, and policy objectives. For example, Kenya has codified a mandatory benefit-sharing structure within its legal framework.

Under its regulations, land-based carbon projects on public or community land must allocate at least 40% of net earnings from the previous year (after deducting business costs) to community beneficiaries as an “annual social contribution", while non-land-based projects must allocate at least 25%. Private carbon projects on private land are not required to disburse an annual social contribution.

These contributions are formalized through Community Development Agreements and overseen by community project development committees. Moreover, 50% of CA fees should be remitted to the national Climate Change Fund.

In contrast, Tanzania takes a more flexible approach: benefit-sharing arrangements are optional and defined at the project level, with developers asked to disclose any such arrangements as part of their application for carbon trading authorization. While both models seek to promote equitable outcomes and local co-benefits, Kenya’s prescriptive model offers stronger safeguards and predictability for affected communities, whereas Tanzania’s approach provides greater discretion to project developers and less predictability on benefit sharing within a national framework.

While these examples focus on financial redistribution, benefit sharing can also be non-monetary—such as technology transfer, capacity building, improved infrastructure, or the allocation of MOs to a national buffer. These alternatives may be particularly valuable in cases where direct financial flows are limited, or where host countries seek to demonstrate additionality or contribution to their NDC through retained mitigation benefits.

Ultimately, well-designed benefit-sharing mechanisms can serve multiple goals: protecting host country ambition, strengthening the NDC linkage of Article 6 activities, and ensuring that local communities meaningfully benefit from carbon market engagement. As Article 6 implementation progresses, countries may consider combining financial and non-financial approaches to tailor benefit-sharing models to their national priorities and institutional capacities.

3.3 Country image and reputation

A country's reputation, both globally and within carbon markets, is crucial. A negative perception signals a lack of capacity to uphold integrity, and can significantly hinder its Article 6 participation. This not only slows down a country's readiness and deters international buyers but also erodes broader confidence in carbon markets.

A country's international standing is shaped by several factors that directly impact its attractiveness as an Article 6 host nation, including:

- **Media scrutiny:** Host countries and carbon projects are under constant media observation. Negative media coverage or criticism can severely affect the acceptance of carbon credits from that country and damage the reputation of credit buyers.

- **Human rights record:** Carbon projects often involve or affect local populations. A country's poor track record on human rights protection, particularly concerning Indigenous Peoples and Local Communities (IPLCs), can lead to substantial reputational risk.

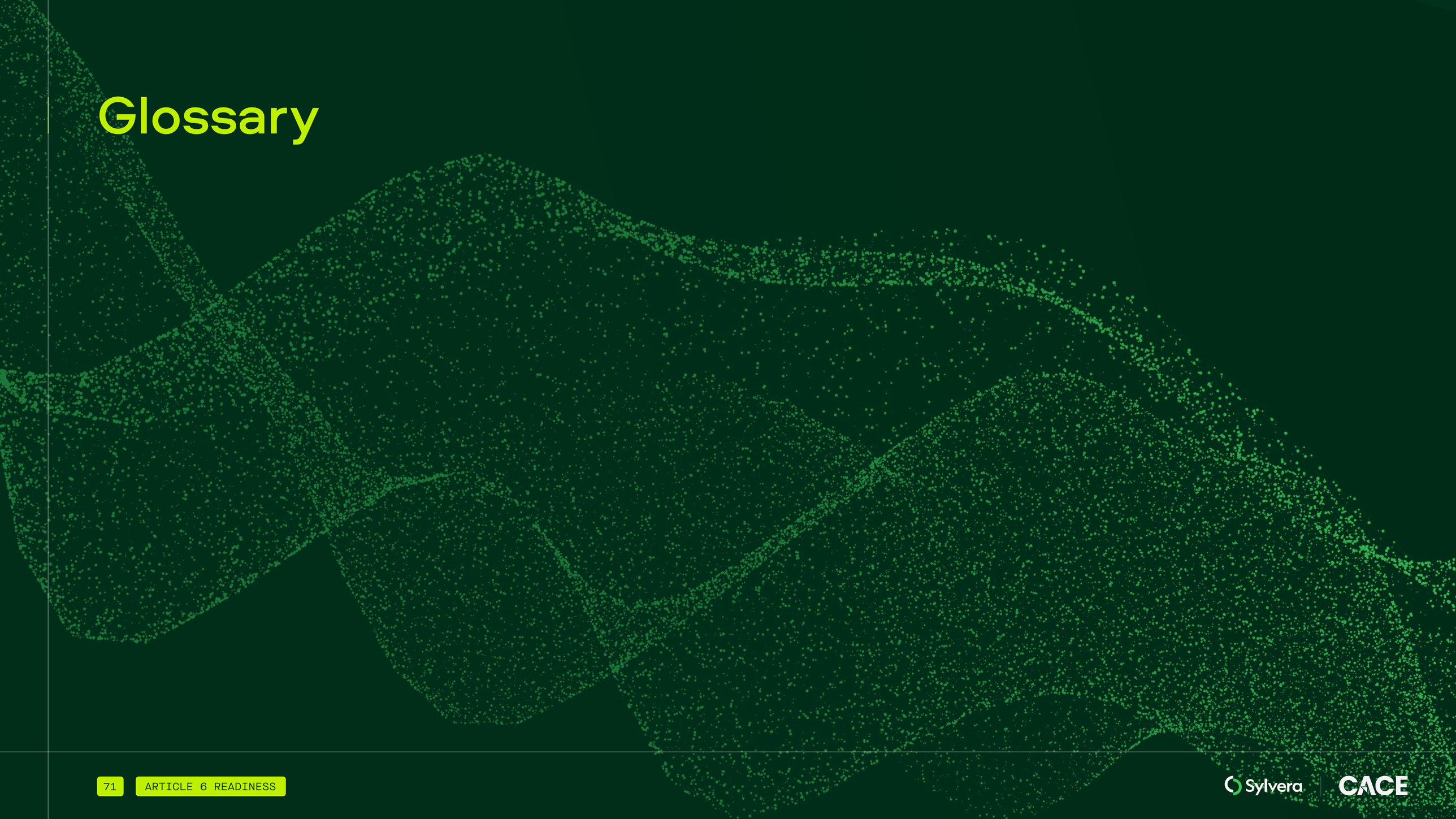
- **Political stability and governance perception:** Political stability and robust governance are foundational to a country's international reputation, serving as crucial indicators of its reliability and trustworthiness. Perceived instability, whether from frequent policy reversals, a weak rule of law, or high levels of corruption, can significantly undermine confidence, deterring international buyers and slowing down a nation's readiness to participate in complex global frameworks such as Article 6 of the Paris Agreement.

- **Climate ambition:** A country's commitment to its climate goals serves as a fundamental indicator of its dedication to environmental integrity and sustainable development. Strong climate ambition enhances a country's image and fosters trust.

Sylvera's Country Profiles, which assess reputational risk for carbon buyers and investors across 36 Global South nations,[14] identify Ghana, Nepal, and Senegal as having the most favorable images.

[14] Argentina, Bangladesh, Bolivia, Brazil, Cambodia, Chile, Colombia, Côte d'Ivoire, Ethiopia, Ghana, India, Indonesia, Kenya, Malawi, Malaysia, Mexico, Mozambique, Namibia, Nepal, Nicaragua, Nigeria, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Rwanda, Senegal, Sierra Leone, South Africa, Tanzania, Thailand, Uganda, Vietnam, Zambia, and Zimbabwe.

Glossary



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Glossary of key terms

Annex I Countries

Annex I countries under the Kyoto Protocol are industrialized nations and economies in transition that are committed to specific greenhouse gas reduction targets. This group includes OECD members as of 1992 and countries with transitioning economies, such as Russia and several Eastern European states. Their obligations were based on the principle of common but differentiated responsibilities, recognizing their historical contributions to global emissions.

Article 6.4 activity

An “Article 6, paragraph 4, activity” is an activity that meets the requirements of Article 6, paragraphs 4–6, these rules, modalities and procedures, and any further relevant decisions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA);

A6.4ERs

Article 6.4 Emission Reductions (A6.4ERs) are carbon credits generated under the PACM. They represent verified emission reductions or removals from registered activities and can be used for various climate mitigation purposes. Depending on their authorization status, A6.4ERs may be Authorized A6.4ERs (AERs) or Mitigation Contribution Units (MCUs), defined below.

BTR

Under the Enhanced Transparency Framework of the Paris Agreement, Parties are required to submit Biennial Transparency Reports (BTRs) every two years. These reports provide information on national greenhouse gas inventories, progress toward NDCs, climate policies, adaptation measures, and financial and technical support. The first BTR submissions were due by December 31, 2024.

Carbon tax

Price-based policy instrument that imposes a fee on greenhouse gas emissions, typically based on the carbon content of fossil fuels. By increasing the cost of emitting carbon dioxide, it incentivizes emitters to reduce emissions and shift toward cleaner production processes.

CMA

The Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA) is the governing body responsible for overseeing the implementation of the Paris Agreement. It consists of all Parties to the Agreement and meets annually to review progress, adopt decisions, and promote effective implementation.

Corresponding Adjustments (CAs)

Paris Agreement Article 6 addresses double counting through corresponding adjustments (CAs), an accounting measure that prevents two countries or entities from counting the same emissions reductions or removals twice. CAs consist of adjusting the emission balances of the seller (increases) and the buyer (decreases) when an ITMO gets transferred between the two, ensuring the ITMO is only counted once. CAs are mandated by the Article 6 rulebook when the buyer utilizes the ITMO towards meeting its NDC or other OIMPs; however, the text leaves governments and carbon standards in the driver's seat when it comes to the requirement of applying CAs for voluntary transactions.

CORSIA

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is a global market-based scheme for offsetting emissions from international aviation. The Paris Agreement does not cover international aviation since it is limited to domestic action. CORSIA was therefore developed by the International Civil Aviation Organization (ICAO) to complement the Paris Agreement.

ITMOs

Internationally Transferred Mitigation Outcomes (ITMOs) are envisioned under Article 6.2 of the Paris Agreement, and they refer to carbon credits (or 'mitigation outcomes') that have been authorized by a host country to be transferred internationally for use towards another country's NDC, other compliance purposes such as CORSIA, or voluntary purposes. ITMOs must be tracked and reported in Biennial Transparency Reports (BTRs).

Glossary of key terms

ETS

An Emissions Trading System (ETS), also known as a cap-and-trade system, is a market-based mechanism that sets a cap on total greenhouse gas emissions and allows entities to buy and sell emission allowances. Entities that reduce emissions below their allowance can sell excess permits, while those exceeding their cap must purchase additional ones. ETSs aim to achieve emissions reductions at the lowest overall cost by leveraging market efficiency.

MCUs

Mitigation Contribution Units (MCUs) are not authorized for international transfer but can be used for voluntary carbon markets or result-based finance, contributing to global mitigation efforts without corresponding adjustments.

MOs

Mitigation Outcomes (MOs) under Article 6.2 that have not been internationally transferred.

NDC

Countries that are parties to the Paris Agreement submit Nationally Determined Contributions (NDCs) to the UNFCCC with the goals and targets that they intend to achieve to support the long-term goal of limiting global warming to 1.5 °C. NDCs contain goals related to mitigation, adaptation, finance, and other policy measures. A country that is party to the Paris Agreement is expected to submit an updated NDC every 5 years, with each subsequent submission increasing in climate ambition.

OMGE

Overall Mitigation in Global Emissions (OMGE) refers to a principle under Article 6 of the Paris Agreement aimed at ensuring that international cooperation leads to a net decrease in GHG emissions, rather than simply shifting emissions between countries. It is operationalized through measures such as the voluntary cancellation of units or mandatory cancellation shares under Article 6.4, so that some emission reductions are not counted toward any country's NDC but instead contribute to global climate ambition.

PACM

The Paris Agreement Crediting Mechanism (PACM) is the centralized carbon crediting mechanism established under Article 6.4 of the Paris Agreement. It enables countries and authorized entities to generate and trade emission reduction or removal credits (A6.4ERs) while ensuring environmental integrity and transparency. The mechanism is overseen by the Article 6.4 Supervisory Body and aims to facilitate international cooperation, enhance climate ambition, and support sustainable development.

(Article 6.4) Supervisory Body

The Supervisory Body under Article 6.4 of the Paris Agreement is responsible for overseeing the implementation of the Article 6.4 mechanism, which establishes an international carbon crediting system governed by the UNFCCC. The body develops methodologies, registers activities, accredits verification entities, and manages the Article 6.4 Registry to ensure transparency and integrity in emissions trading.

Acronyms

A6.4ER
Article 6.4 Emission Reduction

ART TREES
Architecture for REDD+ - The REDD+ Environmental Excellence Standard

BTR
Biennial Transparency Report

CA
Corresponding Adjustment

CARP
(UNFCCC) Centralized Accounting and Reporting Platform

CBAM
Carbon Border Adjustment Mechanism

CDM
Clean Development Mechanism

CER
(CDM) Certified Emission Reduction

COP
Conference of Parties

CORSIA
Carbon Offsetting and Reduction Scheme for International Aviation

DNA
Designated National Authority

ETF
(Paris Agreement) Enhanced Transparency Framework

ETS
Emissions Trading System

GHG
Greenhouse gas

IA
(Article 6.2) Implementation Agreement

IPLC
Indigenous Peoples and Local Communities

ITMOs
Internationally Transferred Mitigation Outcomes

JCM
(Japan's) Joint Crediting Mechanism

LDC
Least Developed Country

LOA
Letter of Authorization

LT-LEDS
Long-Term Low Emission Development Strategy

MEP
(Article 6) Methodological Expert Panel

MOU
Memorandum of Understanding

MPG
(Article 6) modalities, procedures, and guidelines

MRV
Monitoring, Reporting, and Verification

NbS
Nature-based solution

NDC
Nationally Determined Contributions

ODA
Official Development Assistance

PA
(CDM) Project Activity

PACM
Paris Agreement Crediting Mechanism

PoA
(CDM) Program of Activities

REDD
Reducing Emissions from Deforestation and Forest Degradation, including Sustainable Management of Forests, Conservation Enhancement

SBM
(Article 6.4) Supervisory Body

SIDS
Small Island Developing States

T-VER
Thailand Voluntary Emission Reduction Program

TCCR
Thailand Carbon Credit Registry

tCO2e
tonnes (t) of carbon dioxide (CO2) equivalent (e)

TGO
Thailand Greenhouse Gas Management Organization

UNFCCC
United Nations Framework Convention on Climate Change

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About CACE

The Climate Action Center of Excellence (CACE), established by the Gulf Organisation for Research & Development (GORD) and based in Doha, supports the implementation of Article 6 of the Paris Agreement. CACE provides technical assistance, policy guidance, and strategic support to help countries access carbon markets, mobilize climate finance, and implement high-integrity mitigation activities.

To strengthen transparency and readiness, CACE launched the A6 Tracker, a first-of-its-kind platform assessing Article 6 readiness across 141 countries, covering over 40 legal, institutional, and technical indicators linked to official national and United Nations Framework Convention on Climate Change (UNFCCC) sources. CACE has also introduced A6 Assist, a real-time support service and community of practice offering simplified, contextualized guidance to governments working to operationalize Article 6.

Find out more about CACE.

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Center of Excellence

About Sylvera

Founded in January 2020, Sylvera is the global leader in bringing trust, transparency, and rigor to carbon market data. Our platform empowers governments, investors, and corporates to make high-integrity climate decisions at scale.

Sylvera plays a pivotal role in Article 6 engagement, supporting both buyers and sellers. On the demand-side, Sylvera assists entities like the government of Singapore in sourcing high-quality carbon credits for their climate targets, has developed the first Article 6.2 rating, and its Country Risk Profiles assess host countries Article 6 readiness to inform procurement strategies. On the supply side, Sylvera's Carbon Data Access Partnership (CaDAP) with the UNDP provides African governments with free world-leading carbon credit data, fostering their readiness for Article 6.

Find out more about Sylvera.