

ARTICLE 6.2 CAPACITY NOTE

Building the potential for
transactions with TCAF

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For The World Bank Transformative
Carbon Asset Facility

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*The conclusions of this note are
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LIST OF ACRONYMS

| | |
|---------------|---|
| BTR | Biennial Transparency Report |
| CDM | Clean Development Mechanism |
| ETF | Enhanced Transparency Framework |
| ERPA | Emission Reductions Payment Agreement |
| ITMO | Internationally Transferred Mitigation Outcome |
| MACC | Marginal Abatement Cost Curve |
| MOPA | Mitigation Outcome Purchase Agreement |
| MRV | Monitoring, Reporting, and Verification |
| NDC | Nationally Determined Contribution |
| NDC-P | NDP Partnership |
| RCC | Regional Collaboration Centre |
| RBCF | Results-based climate finance |
| SOP | Share of Proceeds |
| TCAF | Transformative Carbon Asset Facility |
| UNDP | United Nations Development Program |
| UNFCCC | United Nations Framework Convention on Climate Change |
| VER | Verified Emission Reduction |
| VCM | Voluntary Carbon Market |

Introduction

01

Under the Paris Agreement, all countries are required to set mitigation targets as part of their Nationally Determined Contributions (NDCs). Article 6 of the Paris Agreement allows for the cooperative implementation of countries' NDC via carbon market mechanisms, such as the Article 6.2 cooperative approaches, which represents a novelty compared to the Kyoto Protocol.

The rules governing Article 6 – the Article 6 Rulebook – were finalized at the end of 2021 at COP26 in Glasgow. While several gaps remain in the operational guidance from the UNFCCC (which are expected to be resolved in the next couple of years, according to the mandates from COP27 in 2022), current guidance provides the basis to enable pilot transactions under the Article 6.2 mechanism.

In this context, the World Bank Transformative Carbon Asset Facility (TCAF), established as a World Bank trust fund, supports countries' efforts to implement transformative mitigation programs through a hybrid mechanism. TCAF will channel results-based climate finance (RBCF) to developing countries to pay for Verified Emission Reductions (VERs) that can be used by these host countries to meet their NDC targets (TCAF Phase I). Additionally, TCAF will also purchase Internationally Transferred Mitigation Outcomes (ITMOs), which cannot be used by host countries to meet their domestic climate targets given that ITMOs will be transferred and correspondingly adjusted (TCAF Phase II).

To pilot transactions of mitigation outcomes within Article 6 of the Paris Agreement, TCAF has engaged with several potential host countries since 2018. A TCAF core parameter is "readiness for implementation" by the host country.¹ This means that as a part of the program preparation, host countries need to map out existing technical work, understand the gap for Article 6 readiness and prepare a comprehensive time-bound action plan – Capacity Building Plan (CBP) for Article 6 readiness. After the signature of the Emission Reductions Payment Agreement (ERPA) during TCAF Phase I, host countries need to start implementing the CBP and getting ready to potentially transact ITMOs under Phase II. Therefore, this country engagement has aimed, among other things, at understanding host countries' readiness to strategically engage in Article 6 transactions, identifying capacity needs and

supporting capacity-building efforts to successfully transact ITMOs.

Building on this work, the objective of this note is to inform interested stakeholders about the readiness steps necessary to prepare for an Article 6.2 transaction within TCAF's framework, laying the groundwork for full Article 6 implementation.

The note provides a concise overview of the Article 6.2 readiness pathway and key readiness elements, by including definitions and considerations for host countries, as well as providing checklists with specific actions that host countries need to undertake to engage in an Article 6.2 transaction with TCAF. Where relevant, the note clarifies the latest developments from COP27² and refers to the most recent advancements in readiness support from international initiatives and progress from host countries, providing a compilation of the available knowledge resources.

This note is targeted at host governments preparing their readiness plan to engage in Article 6 transactions. It is intended to inform host governments' development of the comprehensive time-bound action plan to be implemented in TCAF Phase I. At the end of the implementation of this plan, the host country should be able to make an informed decision on whether to authorize Article 6 transactions and be ready to meet the reporting requirements under Article 6.

¹ See the rest of TCAF core parameters in Table 3.

² For a more complete overview of COP27 outcomes in relation to Article 6, see [TCAF's Article 6 Regulation Note: key take-aways from COP27](#).

Article 6.2 readiness

02

The term Article 6 readiness refers to the ability of a country to take full advantage of international market-based cooperation in the context of Article 6. While the term generally encompasses Article 6.2 (cooperative approaches) and Article 6.4 (centralized mechanism), the focus of the present note is Article 6.2 readiness in the context of TCAF transactions.

Readiness requires Article 6-related knowledge of all relevant stakeholders, including public and private entities as well as civil society, and a governance structure for the development of Article 6 policies and the day-to-day functioning of Article 6 operations.³ For the latter, countries should have the required technical, institutional, and legal frameworks in place to understand in what ways they can fully benefit from Article 6 cooperation, facilitate the approval of activities and authorization of mitigation outcomes, apply corresponding adjustments, and to manage and balance mitigation needs to avoid overselling, among others. This requires both a solid technical understanding of the Article 6 guidance, which is still being further operationalized at the level of the UNFCCC, and implementation capacity to make Article 6.2 activities happen on the ground.

The readiness activities related to Article 6.2 cooperation can be broadly categorized into two dimensions: (i) strategizing for Article 6.2 engagement and (ii) governing Article 6.2 collaboration (also at a technical level). The first dimension involves the development of a strategy to identify and actualize Article 6 potential for the country. The second dimension, governing Article 6.2 collaboration, involves setting up institutional arrangements and infrastructure to allow the implementation, monitoring and reporting of Article 6.2 activities.

TCAF provides a platform to test Article 6.2 cooperative approaches, thus helping countries prepare to strategically engage in Article 6.2 transactions with buyer countries and informing countries' Article 6 decision-making framework and processes.

2.1 Article 6 readiness status at a global level

As of early 2023, Article 6 readiness across the world is still at very early stages. However, since the adoption of the Article 6 Rulebook in Glasgow, many countries have embarked on developing their Article 6 strategies and regulatory frameworks.

One of the frontrunners in preparing for Article 6 is Ghana, which in late 2022 established a [Carbon Markets Office](#) and adopted its [regulatory framework](#). Ghana also is the first country to authorize the transfer of ITMOs in an Article 6.2 pilot transaction with Switzerland.⁴

On the side of the support, several bilateral or multilateral technical assistance programs have started to provide Article 6 readiness support for host countries. This includes a formally mandated capacity-building program operated through the UNFCCC secretariat and its regional collaboration centres (RCCs). A survey carried out by the Japanese initiative 'Article 6 Implementation Partnership' has mapped the existing programs, identifying thirty-nine ongoing initiatives.⁵ The survey results highlight regional gaps in Article 6 capacity building, notably with regard to reporting and project development and implementation.

2.2 Article 6 readiness under TCAF

Many of the countries TCAF engages with have not yet developed specific governance structures for Article 6 collaboration but through the transaction are taking the first steps to understand how these frameworks can leverage and build on existing capacities. Through the pilot Article 6.2 engagement under TCAF, countries will be able to increase their readiness capabilities, which will be enhanced by incorporating lessons learned into their Article 6 strategy and governance structure, in view of the full-fledged implementation of the Article 6 mechanisms in the coming years. Thus, TCAF engagement with selected countries is laying the

³ Espelage et al. (2022) [Blueprint for Article 6 readiness in member countries of the West African Alliance](#).

⁴ See further information about Ghana's progress in Chapter 3.

⁵ Kuroda K. (2023) [Status of Article 6 capacity building](#).

groundwork for Article 6.2 readiness and future transactions.

It is important to point out that countries do not need to develop full Article 6 capacity to commence engagement with TCAF and complete transactions since the main objective is to create a testing ground for countries that want to start engaging in Article 6 via pilot activities. This means that the overall Article 6 framework does not need to be comprehensive and all-encompassing, but solid enough to allow the host country to make an informed decision on the TCAF Phase II transaction and comply with the Article 6.2 minimum requirements under UNFCCC regulatory framework, if the host government authorizes the transaction.

Throughout this note, the different readiness elements are explained, accompanied by host country examples, further reading material and indicative checklists to provide an overview of the necessary steps to build Article 6.2 capacity.

2.3 Getting started

Countries interested in engaging in Article 6.2 should take some first basic steps to prepare for the Article 6 capacity building process.

These initial activities include mapping relevant stakeholders at subnational, national, and international levels that will play a role across the Article 6 pipeline, from identification of activities to management, implementation and funding. Among key stakeholders, there are, for example, ministries and other government agencies responsible for NDC planning and implementation, (international) financial institutions, project developers and NGOs. Through stakeholder mapping, countries can ensure that they have a clear understanding of the interests, perspectives, and capacities of relevant actors and can develop strategies for engagement that are inclusive, effective and complementary to NDC implementation. This mapping should also aim to identify the potential barriers to engagement and develop strategies to overcome them.

Connected to the stakeholder mapping, it is critical to have an overview of carbon market experience in the country and already existing capacities, namely whether activities under existing crediting standards such as the Clean Development Mechanism (CDM) or even Article 6 pilot activities have taken place.

For example, an assessment of the CDM activities in the country could help identify the strengths and weaknesses of past approaches and inform the design of new cooperative approaches under Article 6.2. Experience in the Voluntary Carbon Market (VCM) by private stakeholders may also offer the basis for building further capacity under Article 6.

Finally, it is beneficial to map ongoing support initiatives in relation to Article 6 in the country and other existing programs in collaboration with international institutions (World Bank institutions, NDC-P, UNDP, etcetera), which could overlap or generate synergies in terms of readiness efforts. See Table 1 for an indicative checklist of these first steps.

In this preliminary phase, it is also important for interested countries to start getting familiarized with Article 6.2 guidance, especially the participation requirements therein (see Table 2), setting the basis for an Article 6 strategy.

Table 1. Indicative checklist: Getting started with Article 6 engagement (Source: Authors).

GETTING STARTED WITH ARTICLE 6 ENGAGEMENT

Mapping and consulting relevant stakeholders

Mapping carbon market experience (CDM and VCM)

Mapping Article 6 pilots and support initiatives

Table 2. Indicative checklist: Article 6.2 participation requirements (Source: adapted from *WAA Blueprint*, p. 39).

ARTICLE 6.2 PARTICIPATION REQUIREMENTS

Party to the Paris Agreement

Preparation and maintenance of NDC*

Communication of NDC*

Participation contributes to the implementation of its NDC*

Participation contributes to the implementation of Long-term Low-Emissions Development Strategy (if applicable)*

Participation contributes to the long-term goals of the Paris Agreement

Provision of the latest National Inventory Report

Necessary national arrangements and infrastructure in place for authorizing the use of ITMOs

ARTICLE 6.2 PARTICIPATION REQUIREMENTS

Necessary national arrangements and infrastructure in place for tracking ITMO use

** Exceptions apply to Least Developed Countries and Small Island Developing States*

RESOURCES

Action recommendations for capacity building for participation in carbon markets (2021), COP26 Catalyst

Article 6 readiness in West Africa (2021), Hunzai et al.

Article 6 readiness in updated and second NDCs (2021), Michaelowa et al.

How governments can implement NDCs cooperatively and encourage private sector investment (2022), IETA

Pocket guide to Article 6 (2022), Michaelowa et al.

Global survey on Article 6 readiness, in *Developing carbon markets based on Article 6 of the Paris Agreement: challenges and opportunities* (2023), GGGI

Status of Article 6 capacity building (2023), Kuroda

Course

Operationalizing Article 6.2 of the Paris Agreement: Achieving ambitious climate action through cooperative approaches, UNFCCC & UNDP (It includes an Article 6.2 Training Support Guide)

Strategizing
for Article 6.2
collaboration under
TCAF

03

Generally speaking, the government can decide on a more reactive or proactive approach towards Article 6 engagement. A reactive approach involves the government waiting for potential partners to present opportunities for cooperation. This approach may require less effort but can also result in missed opportunities and limited control over the cooperative approach taken. On the other hand, a proactive approach involves the government taking the initiative to engage with potential partners and develop cooperative approaches to achieve their climate goals. A proactive approach implies the development of an Article 6 strategy, which enables host countries to engage with Article 6 in a coordinated and inclusive manner. This approach demands more capacities and resources but allows the country to have more control over the process and ensures that their strategic preferences are more likely to be reflected in the final cooperative approach.

The development of the Article 6 strategy must happen within the context of the overall NDC implementation plan, by collecting relevant information and data on climate-related activities. This includes information on existing or planned domestic policies and measures for NDC implementation, or other policies and measures that will contribute to the achievement of the NDC target.

Developing such a strategy requires the government to make several strategic decisions, related to i) the overall objective of engaging in Article 6, ii) the role the government wants to play in Article 6 collaboration, and iii) which stakeholders will need to be involved.

As explained in this chapter, to take full advantage of Article 6 collaboration, countries need to assess their own mitigation potential and identify areas where they can benefit from collaboration with other countries, through a careful analysis of their NDC target and NDC implementation plans. Furthermore, in the context of bilateral cooperation under Article 6.2, countries need to decide on their pricing strategy.

Finally, countries need to assess the financial, technical, and institutional requirements for cooperation and develop mechanisms to ensure that these requirements are met. This involves the development of a clear and transparent set of policies and processes that enable the country to approve and authorize mitigation outcomes for

international transfer under Article 6.2. This is further discussed in the next chapter, as well as infrastructure requirements for accounting, tracking and reporting of transactions.

3.1 Defining eligibility criteria for activities and ITMOs

A. Minimum eligibility criteria

For activities to be eligible under Article 6.2, they must meet the requirements established by the Glasgow decision on Article 6.2 guidance. Among other things, activities under cooperative approaches must generate credible, real and additional emissions reductions, ensure that they do not lead to a net increase in emissions of the participating parties, and minimize negative environmental, economic and social impacts.⁶

B. Additional strategic eligibility criteria by host countries

On top of the minimum criteria, host countries have the prerogative to set additional requirements depending on national circumstances and priorities. This is fundamental since countries will transfer realized emission reductions that could make the achievement of their own NDC targets more challenging. In the context of domestic NDC targets under the Paris Agreement, host countries should therefore strategically decide which mitigation outcomes are eligible for international transfers to avoid overselling and jeopardizing the achievement of their NDCs. Thus, defining eligibility criteria for activities and/or sectors and ITMOs is a critical step in preparing for Article 6.2 collaboration.

No-regret crediting transactions take into account host countries' NDC implementation plans and long-term decarbonization strategies and ensure that the benefits of cooperation under Article 6.2 are in turn integrated into these plans. Developing robust and informed eligibility criteria and the connected pricing strategy are of particular importance under TCAF, as host countries need to carefully elaborate their negotiating position when discussing the terms of the Mitigation Outcome Purchase Agreement (MOPA) (TCAF Phase II).

⁶ For a full list of requirements, see [Decision 2/CMA.3](#), Annex, "I. Internationally transferred mitigation outcomes", para 1 (a); "III. Corresponding adjustments", para 17; "IV. Reporting", para 18 (h-i).

To establish eligibility criteria for activities under Article 6.2, countries should start by identifying priority sectors for cooperation based on their national circumstances, including emissions profiles, economic sectors, and technological capabilities. This can be informed by technical knowledge about domestic marginal abatement cost curves (MACCs), and the quantification of the marginal costs of overall NDC compliance.

MACCs provide a graphical representation of the cost-effectiveness of different mitigation options, showing the emission reduction potential of each option relative to its cost. This can help countries to identify the most cost-effective mitigation options and priority sectors, as well as the marginal cost of meeting their NDC target, which can then be used to define eligibility criteria for Article 6.2 collaboration.

Host countries can opt for different crediting strategies to meet their needs, which are closely linked to the pricing strategy (see below). Previous TCAF work classifies the possible crediting strategies as follows.⁷

- Only credit mitigation activities that go beyond the country's NDC commitments;
- Establish a domestic crediting framework that opens crediting to activities with marginal cost below the NDC marginal compliance cost to benefit from market opportunities in specific sectors or activities. Here, it is important to account for the opportunity cost of NDC compliance associated with crediting these activities (see below);
- Use policy, sectoral or jurisdictional crediting where only specific policies or overachievement in specific sectors or jurisdictions are eligible for carbon crediting.

Based on the above, countries should develop clear and transparent criteria for the selection of eligible activities or exclusion of activities. Other factors to take into account are the emission reduction potential of activities, their additionality, and the permanence of the mitigation outcomes, always in the context of their NDC implementation. For policy, sectoral or jurisdictional crediting, it is important to consider technical factors, such as the availability

of methodologies and the complexity of related MRV systems, since they also have an impact on the cost-effectiveness of credit generation.

Once established, these criteria can be translated into positive or negative lists of activities. Positive lists are a tool to ensure that national goals are reflected in the activities under Article 6.2 cooperative approaches.⁸ In this case, the listed types of activities are considered eligible under Article 6.2. Negative lists can be a means of excluding activities from Article 6 when they do not meet the eligibility criteria or may undermine the environmental integrity of cooperative approaches. This could include, e.g., activities that have negative environmental or social impacts.⁹

C. TCAF's specific eligibility criteria

TCAF has set several portfolio selection criteria that partially overlap with the formal Article 6.2 requirements mentioned above. Host countries planning to engage with TCAF should take into account the following requirements (see Table 3) in the development of national regulations related to Article 6.2.

TCAF will use crediting thresholds informed by (i) the host country's unconditional NDC target (when applicable) and/or (ii) mitigation efforts funded by international climate finance.¹⁰

When the host country has an unconditional target, this target informs the baseline setting for TCAF ITMO purchasing operations. The unconditional target forms the *target emission trajectory*, which is compared to the *Business As Usual emission trajectory (BAU)* (see Figure 1). The lower of the two trajectories sets the baseline. However, this does not mean that TCAF will credit all emission reductions relative to the *baseline*. TCAF will credit emission reductions against the so-called *crediting threshold* (crediting line – see Figure 1), i.e. the baseline adjusted (reduced) based on TCAF's crediting parameters, host country circumstances and interests (including conditional targets if existing).

⁷ TCAF discussion note: Corresponding Adjustments.

⁸ UNDP (2023) *Support Guide for UNDP Article 6.2 Training Course*, p.64.

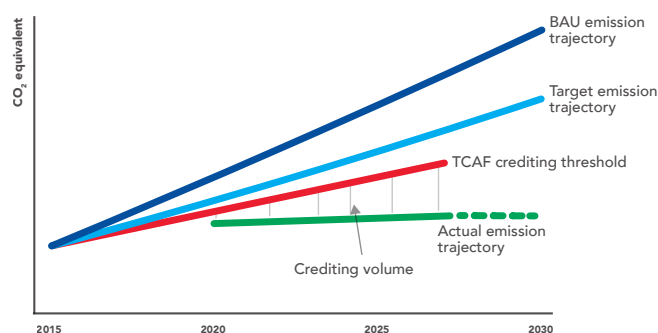
⁹ Kohli et al. (2020) *Practical strategies to avoid over-selling*.

¹⁰ To ensure that TCAF only acquires ITMOs that have not been financed by other climate finance funds, TCAF applied a proportional attribution approach via grant equivalents. See *TCAF Guidebook*.

Table 3. TCAF's specific eligibility criteria (Source: adapted from TCAF core parameters).

| TCAF SELECTION CRITERIA | METHODOLOGICAL CRITERIA | OPERATIONAL CRITERIA |
|--|---|--|
| 1. Coherence with national mitigation aims | Conservative baseline setting | - |
| 2. Support increased domestic ambitions | Conservative baseline setting | Crediting parameters |
| 3. Programs that achieve a lasting impact | Transformational change | Crediting parameters Safeguarding against regrets |
| 4. Programs that have demonstrable SDG co-benefits and maintain environmental and social safeguard standards | Sustainable development | - |
| 5. High level of environmental integrity of emission reductions | Conservative baseline setting Additionality MRV Avoidance of double counting | - |
| 6. The Program should avoid any direct distortionary effects on the sector's international competitiveness and adverse incentives on the sector's GHG emission | - | Safeguarding against regrets |
| 7. It should be possible to establish a robust baseline for the program | Conservative baseline setting | - |

Figure 1. TCAF baseline setting (Source: adapted from TCAF core parameters).



When the host country exclusively has a conditional target, the *BAU emission trajectory* will be the *baseline* by default for TCAF ITMO transactions. This baseline might be adjusted by the full or partial conditional target (if the latter is lower than *BAU*) depending on international climate finance received (see (ii) above) and/or on agreement between the host country and TCAF.

For the sake of conservativeness, in any case – both if the host country has an unconditional target or exclusively a conditional one – the *TCAF crediting*

threshold for ITMO purchasing will be placed below *BAU*.¹¹

Once all eligibility criteria have been set, they should be reflected in the activity cycle regulations and in the selection of methodologies, which could be newly developed or adapted from existing standards where applicable. A Monitoring, Reporting and Verification (MRV) system is then necessary to ensure that ITMOs have been generated respecting all requirements set in the national framework.

3.2 Defining a pricing strategy

A part of the Article 6 strategy, and closely connected to the definition of eligibility criteria and underlying assessments, an ITMO pricing strategy has to be defined. Specifically, this strategy refers to the set of policies, mechanisms, and practices that a country puts in place to establish ITMO prices. Importantly, an ITMO pricing strategy also aims at managing the risk of overselling mitigation outcomes that are needed to meet NDC targets.

¹¹ For further details on how TCAF sets the baseline and crediting threshold, please see [TCAF Core Parameters](#), p. 3-5.

In determining the ITMO price, host countries need to consider that transferring ITMOs implies that the generated emission reductions can no longer be used in-country for NDC compliance due to the mandatory application of corresponding adjustments in line with the Article 6 Rulebook.¹²

Pricing emission reductions solely according to their abatement cost does not consider this impact of the transaction on NDC achievement. This approach would lead to selling at a too low price, i.e., a price below the marginal cost of achieving the NDC. This might even result in overselling and jeopardizing the achievement of the country's targets. Therefore, pricing strategies need to take into consideration the opportunity costs as a starting point.

Opportunity costs are the marginal abatement costs of still meeting the NDC target after transferring the ITMOs. When following this approach, the minimum ITMO price should be the sum of the abatement cost for the crediting intervention and the opportunity cost.¹³

To apply opportunity cost pricing, countries need information on sectoral or economy-wide abatement costs. To manage overselling risks, countries need a good understanding of their emission trajectories and the effectiveness of policies and measures put in place to achieve their NDC.

An ITMO opportunity cost price constitutes a minimum price that is set for ITMOs, below which they should not be sold on the international market. This applies to all cases where the host country decides to sell ITMOs from intramarginal activities (i.e., those mitigation activities with implementation costs below the marginal cost of achieving the NDC). Setting a floor price based on the opportunity cost of NDC compliance and independent of the implementation cost of the activities will generate windfall profits which could be taxed and/or earmarked for financing mitigation measures with higher implementation costs. In such cases, the host country will need to develop a strategy defining how the additional revenues will be used.¹⁴

Table 4. Indicative checklist: Key aspects of Article 6 policy (Source: Authors).

KEY ASPECTS OF ARTICLE 6 STRATEGY

Define overall strategic objectives of Article 6 collaboration

Assess marginal abatement costs per sector, activity, policy and for achieving the NDC

Identify which sectors, policies, activities could benefit from Article 6 collaboration

Determine eligibility criteria

Assess ITMO pricing and develop a pricing approach

HOST COUNTRY EXAMPLES

Strategies to avoid overselling Chile's mitigation outcomes under Article 6 of the Paris Agreement (2021), WSP Ambiental

Financial additionality tests for cooperation under Article 6 of the Paris Agreement: case study Peru (2021), Michaelowa et al.

Eligible activities under Article 6.2 in India

¹² See [Decision 2/CMA.3](#), p. 16.

¹³ The World Bank (2023). [Corresponding Adjustment and Pricing of Mitigation Outcomes](#), World Bank Working Paper, Washington, DC.

¹⁴ TCAF discussion note: [Corresponding Adjustments](#).

RESOURCES

Practical strategies to avoid overselling (2020), Carbon Limits

Promoting Article 6 readiness in NDCs and NDC implementation plans (2021), Michaelowa et al.

NDC conditionality and Article 6 – an analysis of African countries' updated NDCs (2021), Greiner et al.

Identifying potential policy approaches under Article 6 of the Paris Agreement – initial lessons learned (2021), GGGI

Different approaches to mitigate overselling risks of mitigation outcomes under Article 6 of the Paris Agreement (2022), TCAF, World Bank

Blueprint for Article 6 readiness in member countries of the West African Alliance (2022), Espelage et al.

Developing an Article 6 strategy for host countries (2022), World Bank

TCAF Crediting Blueprint Synthesis Report (2021), World Bank (see for pricing strategy)

Methodologies

Ensuring environmental integrity under Article 6 mechanism (2020), World Bank

Additionality under Article 6.2 of the Paris Agreement (2022), Gold Standard

Developing an Article 6 tool to assess the additionality of mitigation activities (2022), Michaelowa et al.

Guidance for evaluating activities' links to host country NDC and long-term low emission development strategies (2022), Perspectives Climate Research

Tool for monitoring, reporting and verification of emissions and emission reductions (2022), Perspectives Climate Research

Developing an Article 6 tool to set a robust crediting baseline (2022), Michaelowa et al.

Tool for robust baseline setting (2022), Perspectives Climate Research

Tool for the demonstration and assessment of additionality (2022), Perspectives Climate Research

Governing Article 6.2 collaboration under TCAF

04

The second dimension of Article 6 readiness relates to the governance infrastructure required to implement Article 6 collaboration and meet the reporting and accounting requirements under Article 6 and the Enhanced Transparency Framework¹⁵ (ETF). The purpose of such a governance framework is to manage and coordinate the implementation of the Article 6 strategy; ensure the rights to carbon credits through legislation; apply corresponding adjustments; and track, account for and report on how Article 6 collaboration is contributing to the overall climate strategy of the host country.

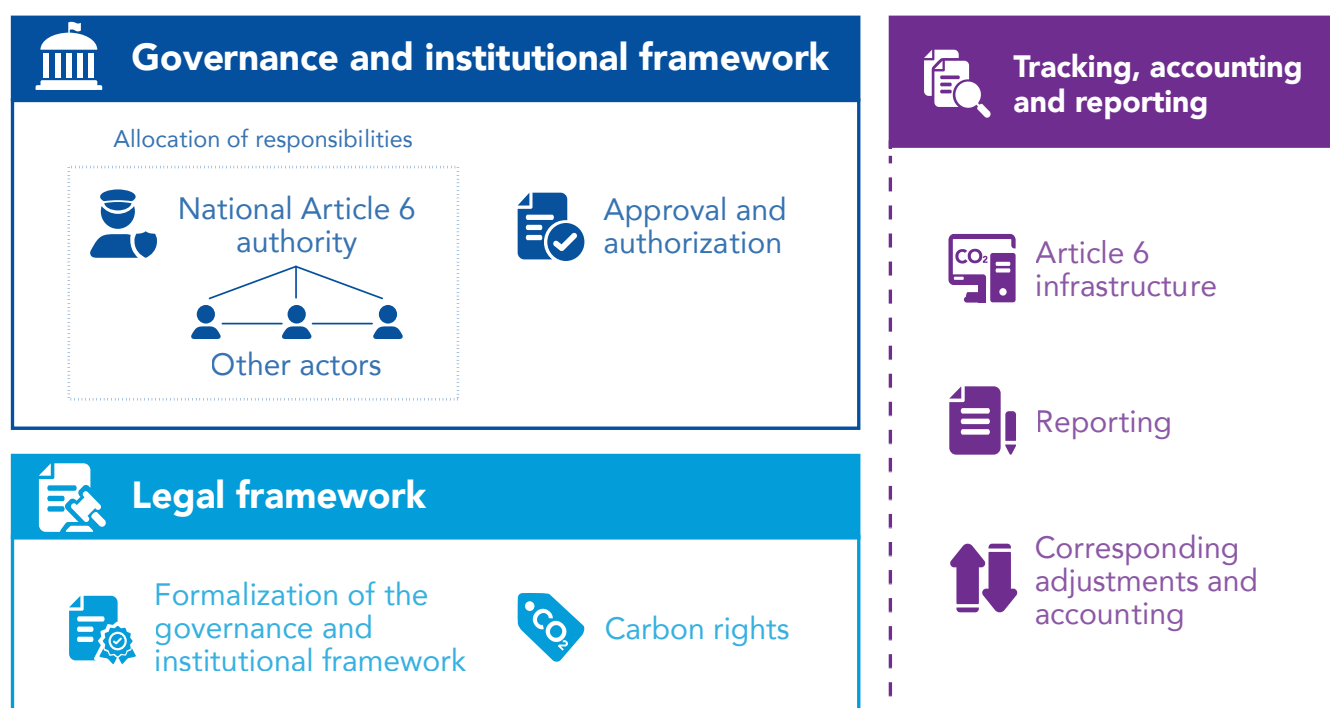
The governance function for Article 6 includes coordinating Article 6 engagement and overall scope, creating the legal framework, approving methodologies and other technical aspects, approving activities, setting crediting periods

and pricing, authorizing and transferring ITMOs, maintaining the Article 6 registry, being in charge of the reporting towards the UNFCCC, among others (see Figure 2).

It is important that countries establish transparent and accountable governance structures, including institutional and legal frameworks, and in parallel develop infrastructure that permits consistent and reliable accounting, tracking and reporting of carbon transactions. This should be done by building on existing mandates and infrastructures, when available, to avoid replication and overlap of mandates.

The fulfillment of Article 6 reporting requirements and the establishment of the institutional structures for meeting UNFCCC obligations are the sole responsibility of countries.

Figure 2. Overview of the readiness elements related to governing Article 6.2 (Source: Authors).



¹⁵ The purpose of the [Enhanced Transparency Framework](#) (ETF) is to ensure that countries are accountable for their climate action and progress towards meeting their commitments under the Paris Agreement. The ETF establishes a common reporting system for countries to provide information on their greenhouse gas emissions, mitigation efforts, adaptation actions, and support provided or received.

4.1 Governance and institutional framework

National Article 6 authority and allocation of responsibilities

Host countries need to establish a national Article 6 authority that is responsible for the coordination and implementation of the Article 6 strategy. An Article 6.2 unit under the national Article 6 authority could be responsible for the day-to-day operations and coordination related to Article 6.2.¹⁶

Specific tasks will depend on the country's Article 6 strategy but may include assigning responsibilities for Article 6-related processes (including decision-making to authorize Article 6 transactions), coordinating with partners, ensuring that Article 6 collaboration respects terms of engagement, tracking issuance of mitigation outcomes, and authorizing their international transfer.

The exact institutional arrangement will differ from country to country, based on existing frameworks and previous carbon market-related policy experience.

Ghana's governance approach, for example, is grounded in a Carbon Market Office within the Environmental Protection Agency's (EPA) Climate Change Unit. The Carbon Market Office functions as the secretariat responsible to implement Ghana's international carbon market and non-market approaches framework, by providing administrative and technical services to the public. A Carbon Market Inter-Ministerial Committee serves as an oversight body, making high-level strategic decisions on Article 6.2 engagements. The Ministry of Environment, Science, Technology and Innovation acts as the authorization entity. Two other committees provide technical support and develop rules for Article 6.2 activities and transactions.¹⁷

Approval and authorization processes

Host countries grant approval to activities when they fulfill the eligibility criteria and other requirements outlined above. Approval does not automatically entail authorization for the transfer of ITMOs – they are conceptually distinct steps.¹⁸ This does not, prevent countries to merge both processes into one single step – it is important to note that the rules concerning the timing of authorization are still under negotiation, with some countries arguing for full merging of the two steps and others arguing for more flexibility.¹⁹ The national Article 6 authority would be responsible for establishing the rules and procedures for these processes, as well as for verifying that the mitigation outcomes are consistent with the country's NDC.

According to the Article 6 guidance, host countries may authorize ITMOs for all purposes or for a specific purpose. ITMOs may be used for the following purposes: achievement of NDCs, international mitigation purposes (i.e., under initiatives such as ICAO's CORSIA) and other purposes (generally understood as use in the Voluntary Carbon Market). Corresponding adjustment is triggered by first transfer and not by the approval of activities. For an ITMO authorized for use towards the achievement of the NDC of another Party, the first transfer is the first international transfer of the ITMO; for an ITMO authorized for other international mitigation purposes²⁰, the first transfer is (i) the authorization, (ii) the issuance, or (iii) the use or cancellation of the ITMO, as specified by the participating Party.

There is no detailed guidance under Article 6.2 on the exact process for authorization. While issues related to authorization were negotiated during COP27, Parties did not find agreements and still need to define minimum elements, as well as clarify if, and under which circumstances, changes to authorization of ITMOs are possible. These decisions have been deferred to COP28 (November 2023).

It is the host countries' responsibility to come up with their own arrangements and procedures, and related

¹⁶ UNDP (2023) Support Guide for UNDP Article 6.2 Training Course, p.24.

¹⁷ Carbon Market Office "About Carbon Market Office".

¹⁸ UNDP (2023) Support Guide for UNDP Article 6.2 Training Course, p.55.

¹⁹ See CMA mandate to SBSTA in [Decision -/CMA.4 on Article 6.4](#): "[CMA] requests the Subsidiary Body for Scientific and Technological Advice to continue its consideration of, and to develop, [...] recommendations for consideration and adoption [at COP28] on: [...] Provision of a statement by the host Party to the Supervisory Body specifying whether it authorizes Article 6, paragraph 4, emission reductions issued for an Article 6, paragraph 4, activity for use towards achievement of nationally determined contributions and/or for other international mitigation purposes, [...] including its timing, relevant information on the authorization and any revisions." See also Greiner et al. (2023) [COP27 Digest: Moving towards the operationalization of Article 6-backed carbon markets in Africa](#).

²⁰ International mitigation purposes and other purposes are referred altogether as Other International Mitigation Purposes (OIMP).

forms and documentation that activity participants need to submit and the national authority needs to produce.²¹ A key principle in the development of these processes is clarity and transparency, allowing all stakeholders to have a good understanding of the steps to take.

Some countries have already developed templates to operationalize the processes for authorization. For example, Ghana's Article 6 framework contains, among several other sample documents, a template for a Letter of Authorization Request (LOAR), to be submitted by the activity developer. Furthermore, the Gold Standard has also developed its own Letter of Authorization template.²²

4.2 Legal framework

Establishing a domestic legal framework governing Article 6 collaboration implies formalizing processes and responsibilities, as well as defining the right to carbon. Thus, the legal framework should define the conditions and processes under which ITMOs are issued, transferred, and retired, as well as the rights and obligations of the parties involved in the transactions.

The legal framework will reduce uncertainty for buyer countries and contribute to the continuity of the implementation of the Article 6 strategy – which may span across many years and different governments.

The legal framework formalizes the Article 6 strategy and sets out the allocated responsibilities through a legal text, such as a national law, regulation or policy, to ensure that the national interest is protected and to provide legal certainty for all parties involved.

The legal framework should define the roles and responsibilities of the host country in the ITMO approval and authorization process. This includes setting up the relevant processes and procedures for the issuance of ITMOs, such as the criteria for assessing the environmental integrity of the mitigation outcomes, the procedures for ensuring transparency, and the requirements for monitoring, reporting, and verification of the activities that generate ITMOs, as well as applicable fees for project developers.

The legal framework should also clarify the institutional arrangements and the competencies of the authorities responsible for the administration and oversight of Article 6.2 transactions. Such a legal text could also encompass the overall carbon market strategy of the host country (including Article 6.4 mechanism and voluntary carbon market).

Depending on the overall national legal framework, it may also be necessary to include provisions on carbon rights, which refer to the ownership or entitlement to the carbon mitigation outcomes that are generated from activities that reduce greenhouse gas emissions. If not explicitly granted on the letter of approval or authorization, the host country may need to establish clear legislation on this topic.

4.3 Tracking, accounting and reporting

The government needs to design and develop a framework through which it can meet the mandatory Article 6 monitoring and reporting requirements according to the Article 6 Rulebook and the Enhanced Transparency Framework.

While international initiatives and buyer countries might support the development of the necessary frameworks by different means, host countries are fully responsible for meeting UNFCCC requirements.

Parties to the Paris Agreement adopted several key decisions related to reporting at COP27, including draft reporting templates. There are, however, still many open questions regarding infrastructure, especially on the interoperability of registries.

Article 6 infrastructure

Host countries will need to have appropriate infrastructures in place to issue and track ITMOs.

According to the Article 6 Rulebook, countries must have access to a registry in order to uniquely identify ITMOs. Article 6 also requires countries to provide annual information to the UNFCCC on ITMOs transferred, acquired, or used for various purposes. It is not necessary for countries to build a national

²¹ UNDP (2023) [Support Guide for UNDP Article 6.2 Training Course](#), p.68.

²² See [here](#) for Ghana; see [here](#) for the Gold Standard.

registry infrastructure as the UNFCCC secretariat is tasked with the creation of an international registry to track and record information including, for example, the transfer, use, cancellation and holding of ITMOs. Countries that do not have the capacity to establish a domestic registry will be able to use the international one; alternatively, countries may build simplified tools, such as Excel-based datasheets. Other possibilities include the use of a regional registry or a third-party registry or leverage of the services and support provided by initiatives such as World Bank's Climate Warehouse.

Progress at COP27 in the context of Article 6 infrastructure includes an agreement on the functionality of registries and basic requirements for interoperability (i.e. connectivity) of different registries. However, there are still some guidance gaps in relation to the international registry, as well as the possible connections between i) different national registries and ii) between national registries and the international registry, which will be addressed at COP28.

Accounting and corresponding adjustments

Corresponding adjustments refer to the process of ensuring that the transfer of mitigation outcomes between two countries is not counted twice towards meeting their respective NDCs. There are different types of double counting. The most consequential ones are double issuance and double use. Double issuance occurs when more than one unit is issued for the same emission reduction or removal. Double use or double selling happens when one unit is used twice.²³

Applying corresponding adjustments is a key requirement under Article 6 since transferring and receiving countries must ensure that they do not claim the same emission reduction towards their NDC targets. To achieve this, host countries need to develop robust ITMO accounting systems that enable them to accurately track and record the issuance, transfer, and retirement of ITMOs, in line with Article 6 guidance.

Basic Article 6 guidance on corresponding adjustments was agreed upon in Glasgow and differs on the basis of whether the country has a single-year NDC or a multi-year NDC.²⁴ However, further details are required for the application of corresponding adjustments and the discussion has been postponed to COP29 (2024). Additionally, COP27 could not deliver an agreement concerning the timing of the application of corresponding adjustment.

ITMO accounting is a crucial aspect of Article 6.2 readiness. Countries will need to choose a method of accounting to apply corresponding adjustments (i.e. averaging or multi-year trajectory methods) and use it consistently throughout their NDC implementation period.

Finally, a relevant indicator of the country's Article 6 capacity is how complete and up-to-date the country reports on its inventory emissions are.²⁵

Reporting

The transparency and accountability component of the implementation of the Paris Agreement is covered by Article 13, which sets up an Enhanced Transparency Framework (ETF). In the context of Article 6 cooperative approaches, Article 13 is complemented by and aligned with the Article 6.2 guidance on reporting and review procedures. Those two elements are critical to ensuring the integrity and credibility of ITMOs generated through Article 6 cooperation.

Under Article 6, Parties are required to report on their implementation of cooperative approaches, including the transfer of ITMOs. This reporting should include information on the implementation of the Article 6.2 ITMO accounting and corresponding adjustment procedures, as well as any other relevant information related to cooperative approaches under Article 6.

In practice, countries engaging in Article 6.2 must submit:

- An initial report, to be submitted prior to the ITMO transaction;
- Regular information as part of the Biennial Transparency Reports (BTRs);

²³ UNDP (2023) *Support Guide for UNDP Article 6.2 Training Course*, p.29.

²⁴ See *Decision 2/CMA.3*, p. 16.

²⁵ For each Party the latest reporting year shall be no more than two years (three years for developing countries) prior to the submission of its national inventory report. See para 58, *Annex of Decision 18/CMA.1*.

- Annual information to the Article 6 database. This information is related to ITMO transactions and corresponding adjustments.²⁶

Important decisions on reporting have been taken at COP27 (November 2022), including the outlines for the initial report and regular information.²⁷ Additionally, a draft version of tables for reporting annual information (so-called Agreed Electronic Format) was agreed upon. However, Parties are still expected to adopt the final version of the Agreed Electronic Format and agree on the sequencing and timing of the initial report (in relation to the Technical Expert Review and the submission of the Agreed Electronic format) at COP28.

Table 5. Indicative checklist: Key aspects of Article 6.2 governance (Source: Authors).

KEY ASPECTS OF ARTICLE 6.2 GOVERNANCE

Establish the governance and institutional framework

- Establish a national Article 6 authority
- Define approval and authorization procedures
- Define roles and responsibilities

Establish the legal framework

- Formalize the Article 6 strategy
- Formalize the allocation of roles, responsibilities and governance procedures
- Develop domestic legislation that clarifies primary right to carbon (if applicable)

Establish the framework to meet the mandatory Article 6 monitoring and reporting requirements

- Ensure access to a registry for tracking ITMOs
- Develop procedures and accounting systems to apply corresponding adjustments
- Ensure compliance with reporting requirements of the Paris Agreement

HOST COUNTRY EXAMPLES

Ghana's framework on international carbon markets and non-market approaches (2022), Ghana

Carbon Markets Office, Ghana

Platform for voluntary cooperation, UNDP

Sample letter of authorization (2022), Gold Standard

Ghana-Switzerland Article 6.2 cooperative approach

Authorization statement (Ghana)

Authorization statement (Switzerland)

RESOURCES

Governance and institutional frameworks

Country processes and institutional arrangements for Article 6 transactions (2020), World Bank

Carbon asset development process (2021), World Bank

Country policy framework for cooperative approaches under Article 6.2 (2021), World Bank

Summary report: Designing governance structure and transactional documentation for mitigation outcome transactions under Article 6 of the Paris Agreement (2021), GGGI

The birth of an ITMO: authorization under Article 6 of the Paris Agreement (2022), Lo Re et al.

Article 6 transaction structures (2022), 't Gilde et al.

Tracking, accounting, and reporting

TCAF discussion note: Corresponding adjustments (2020)

Promoting transparency in Article 6 (2020), Michaelowa et al.

Country processes and institutional arrangements for Article 6 transactions (2020), World Bank

Understanding reporting and review under Article 6 and 13 of the Paris Agreement (2021), Falduto et al.

Infrastructure to meet reporting requirements under Article 6 (2022), World Bank

²⁶ UNDP (2023) *Support Guide for UNDP Article 6.2 Training Course*, pp. 102-104.

²⁷ See Annex V and Annex VI of *Decision -/CMA.4 on Article 6.2*.

