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Defined Article 6 Transaction Frameworks

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On this page: *Find inspiration on some potential models of Article 6 transactions. Read more below, or visit Strategic Guidance for Country System Assessments, Guidance for Countries in Assessing ERC Projects, or Mobilizing ERC Finance.*

D1: Defined Article 6 transaction frameworks. Establishing mechanisms and processes for Article 6 transactions as a host country is an essential component of funding national climate action. As stated in the Article 6 Transaction Structure Report[1] released as part of the World Bank's Transformative Carbon Asset Facility (TCAF) efforts, establishing a national law can help host countries seeking to engage in Article 6-aligned activities to provide predictability for project developers, as well as reduce the effort needed from having to develop framework agreements with separate buyers. This comprehensive framework should lay out how such transaction should be authorized as well as provide guidance regarding which type and scale of projects will be authorized to manage over-selling risks. This component will be relevant to countries whether they choose to roll out a national crediting framework or not.

Guideposts for best practice
Sequencing for roadmap

- Clear framework and criteria for identifying over-selling risks and referencing the NDCs for any ERC project that may request for Corresponding Adjustments, potentially resulting to both positive and negative lists that project developers may refer to as general guidance before deploying investments
- Established process and mechanism for facilitating and approving transactions involving ITMOs and CAs including roles of government ministries and sector leadership.
- Identified mechanisms for the proper tracking and accounting of Article 6 transactions to ensure double-counting risks are managed for the purpose of NDC calculations and reporting.
- Robust basis established for the setting, calculation, approval, and subsequent disbursement of both transaction and opportunity costs to be paid to the government for planned Article 6 transactions

Impact	Medium-High- Increasing in importance as more developed countries seek to engage in Article 6 transactions	
Resources needed	Low to High-Regulations and guidelines will need to be drafted to ensure alignment with the Paris Agreement, many procedural details in Article 6 yet to be finalized; With option to implement basic functionalities to meet policy objectives before full system roll-out	Phase1-2: Establishing the foundations of an ERC supply market

Though Article 6 transactions are in their infancy across the globe as of this writing, some potential models are emerging that may provide inspiration to countries looking to participate in the international transfers as contemplated by the Paris Agreement. These models are summarized as follows:

Mechanisms	Earlier stage models	Longer-term models
Process for approving transaction	Countries can establish processes for Article 6 transaction approval leveraging bilateral agreement-driven pilots	Longer term, the government can establish the guidelines covering all relevant Article 6 activities based on learnings from pilots to define the processes, templates, and timelines for approval.

Mechanisms	Earlier stage models	Longer-term models
Example: **Thailand and Switzerland.** Thailand entered into a bilateral agreement with Switzerland for the e-bus ITMO scheme, where cooperation agreement stipulates foundational components (e.g., authorization process, avoidance of double counting, registry, and infrastructure, etc.,) for operationalizing ITMO transactions in the partnership.	Example: **Ghana.** Ghana has developed its Framework on International Carbon Markets and Non-Market Approaches to provide comprehensive operational guidelines for all Article 6.2 transactions, including detailed steps, target templates, and reference information for potential Article 6 transactions.	
Identification of eligible activities	Countries can first identify the low-hanging fruits in terms of eligible activities that are not likely to create over-selling risks in relation to their NDCs, if such activities are clear	Countries can then look into a more robust approach to determining eligible activities for Article 6 transactions by conducting analyses regarding which activities and extent of implementation are less likely to pose overselling risks

Mechanisms	Earlier stage models	Longer-term models
Example: **India.** India's initial list of eligible activities for Article 6.2 transactions focuses on projects that require capital-intensive emerging technologies not contemplated by its NDC submissions, primarily on energy, transport, and industrial processes.	Example: **Ghana.** Under Ghana's Framework on International Carbon Markets and Non-Market Approaches, eligibility criteria and eligible activities for ITMO transactions have been clearly laid out based on an analyses of the country's NDCs. Mitigation activities tagged in the whitelist confer automatic additionality and may receive pre-authorization from the Carbon Market Office as they fall outside unconditional NDC targets and meet listed criteria; Mitigation activities in the red list are not eligible to generate ITMOs for authorization and transfer as they are included in the unconditional NDC mitigation measures; Mitigation activities that are not listed as either red or whitelist may still be eligible to generate ITMO with demonstration of additionality to NDC target.	
Tracking and accounting of transactions	Countries can start by deploying basic tracking tools that are centrally managed by relevant government bodies for tracking Article 6 transactions, while still aligning with the reporting requirements from the Paris Agreement.	Countries can then look into more advanced tracking and accounting mechanisms, such as developing a carbon registry, to track Article 6 transactions transparently and in a manner that will prevent double crediting and double counting risks.

Mechanisms	Earlier stage models	Longer-term models
Example: Utilizing basic tools to centrally manage tracking of ITMO transactions (e.g., Excel sheet).	Example: **Ghana.** Ghana's Carbon Market Office has developed the Ghana Carbon Registry to keep all records on the development of mitigation activities that will create authorized mitigation outcomes for international transfer, host the ITMO account, hold authorization, transfer, and cancellation information relating to ITMOs, and document ITMO transactions with unique identifiers.	
Pricing	Countries can establish simple pricing mechanisms, such as flat fees per ITMO transfer or a percentage of ITMO transaction value, to cover estimated administrative costs. Example: Establishing flat rates or specific percentage of ITMO transaction as fees to cover administrative costs.	Countries can progress to more robust analyses that will enable appropriate pricing to take into account the transaction costs incurred by the country in facilitating such transactions, as well as the opportunity costs of transferring the mitigation outcome to another country as opposed to counting said outcome against the country's emission targets Example: **Ghana.** Ghana's Carbon Market Office imposes application, administrative, corresponding adjustment, and listing fees on Article 6.2 transactions; fees are tiered based on scale and activity category (e.g., small vs. large scale; forestry vs. non-forestry projects).

Outside of establishing the overall framework, countries are already engaging in cooperative mechanisms for Article 6 transactions leveraging bilateral agreement-driven pilots. These pilots are a practical option for countries aiming to learn by doing, providing for an environment where the mechanisms can be established with the potential buyers involved and able to provide inputs. Based on the current agreements in place as of this writing, there are several elements emerging to be critical in drafting cooperation agreements between governments. In this context, we summarize in the following table the typical components of such

agreements. For a more detailed view, the Article 6 Transaction Structure Report released as part of the World Bank's Transformative Carbon Asset Facility (TCAF) efforts is recommended as a reference for such agreements.

Typical components of cooperation agreements	Required information
Cooperation set up	• Scope and duration of partnership and authorized uses of credits
Environmental integrity	• Minimum principles and criteria for ensuring environmental integrity of mitigation outcomes for transfer
Sustainable development	• Minimum criteria for sustainable development to consider before authorization
Monitoring, reporting, and verification	• Requirement for submission of MRV reports to be examined and approved by transferor
Authorization process	• Procedures for authorization of international transfer and use of mitigation outcomes
Recognition of transfer	• Guidelines on how each party shall recognize authorized transfers of mitigation outcomes
Registry and infrastructure	• Properties of registry to be used for recognition of transfer
Corresponding adjustments	• Application of corresponding adjustments to emission levels covered by NDC; avoidance of double counting

Typical components of cooperation agreements	Required information
Reporting	• Reporting frequency to the Secretariat of the Paris Agreement and information to be reported
Penalties	• Instances when parties may suspend a recognition of transfer
Competent authorities	• Authorized government agencies to act on behalf of sovereign in implementing agreement

In addition to the best practices and approaches identified above, the following table outlines the recommended knowledge products and assessment tools to provide detailed guidance regarding the design, set-up, and implementation of the legal and institutional frameworks to enable Article 6 transactions from the perspective of the host country.

Tools/Papers/Notes/Sites	Recommended reference materials by topic
Mitigation Action Assessment Protocol	Assessment tool to evaluate the risks and performance of current or planned jurisdictional set-up of a country's International Transfer Readiness, to which the assessment of D1. Defined Article 6 transaction mechanisms will be complementary
Climate Warehouse's Article 6 Approach Paper Series	
Paper One: Ensuring Environmental Integrity under Article 6 Mechanisms	Examination of factors that affect environmental integrity – transferring Mitigation Outcomes (MOs) without affecting the country's ability to meet its NDC and ensuring that such transfers do not lead to an increase in global GHG emissions – and practical approaches to implementing the concept for governments
Paper Two: Country Processes and Institutional Arrangements for Article 6 Transactions	Definition of the institutional requirements to establish the policy and regulatory process that defines and supports the implementation of the activity cycle for Article 6.2 activities and transactions, including the functions required at the national level from the host country's perspective and how to allocate these to existing or new institutions

Tools/Papers/Notes/Sites	Recommended reference materials by topic
Paper Three: Carbon Asset Development Process	Identify processes for the generation and transfer of carbon assets in post-2020 international climate markets and to suggest standard terminology in the carbon asset development cycle across key independent standards, building upon existing practices among different independent standards
Infrastructure to Meet Reporting Requirements under Article 6	Identification of what market infrastructure may be needed at the national and international level to meet transparency and integrity requirements of Article 6, as well as to store, track, and transact units at different stages of a carbon asset's life cycle.
Developing an Article 6 Strategy for Host Countries	Discuss guidance for host countries on assessing and choosing their approach to participation in Cooperative Approaches of Article 6 of the Paris Agreement across the key questions of whether to participate and how to participate.
Corresponding Adjustment and Pricing of Mitigation Outcomes	Provide guidance to countries in developing the pricing for Corresponding Adjustments to address risks of overselling and potentially having to implement more expensive mitigation activities to meet their NDCs.

Deep-dive into the MAAP's ITR module: As a next step, the Mitigation Action Assessment Protocol's (MAAP) International Transfer Readiness (ITR) Module is recommended as a tool to support the host country conduct an in-depth assessment of its end-to-end readiness to participate in Article 6 transactions, specifically on ensuring environmental integrity of the units to be transferred, alignment with the NDCs and national goals, readiness of the infrastructure to trade the units, and ability to comply with the reporting requirements of the Paris Agreement

Footnote 1: Article 6 Transaction Structures Report

Related Content

- **Strategic Guidance for Country System Assessments (Download PDF version)**
- **Guidance for Countries in Assessing ERC Projects (Download PDF version)**
- **World Bank Emissions Reduction Program: Mobilizing ERC Finance (Download PDF version)**

Additional Resources

- Climate-Smart PPPs: Further Reading and Resources
- ?Sector-Specific Content on Climate-Smart
- Managing PPP risks with a new guide on guarantees

This section is intended to be a living document and will be reviewed at regular intervals. The Guidelines have not been prepared with any specific transaction in mind and are meant to serve only as general guidance. It is therefore critical that the Guidelines be reviewed and adapted for specific transactions. Unless expressly stated otherwise, the findings, interpretations, and conclusions expressed in the Materials in this Site are those of the various authors of the Materials and are not necessarily those of The World Bank Group, its member institutions, or their respective Boards of Executive Directors or member countries. For feedback on the content of this section of the website or suggestions for links or materials that could be included, please contact the Public-Private Partnership Resource Center at ppp@worldbank.org.