ARTICLE 6 APPROACH PAPER SERIES

PAPER TWO

Country processes and institutional arrangements for Article 6 transactions





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Acronyms

BTR Biennial Transparency Report

CDM Clean Development Mechanism
Ci-Dev Carbon Initiative for Development

CPIs Carbon pricing instruments

GHG Greenhouse gas

ITMOs Internationally transferred mitigation outcomes

JI Joint Implementation

JISC Joint Implementation Supervisory Committee

LOA Letter of approval

LT-LEDS Long-term low emission development strategy

MOs Mitigation outcomes

MRV Measurement, reporting, and verification NAMAs Nationally Appropriate Mitigation Actions

NDC Nationally Determined Contribution

REMA Rwandan Environmental Management Agency

SCF Standardized crediting framework

Article 6 Approach Paper: Country processes and institutional arrangements for Article 6 transactions

Abstract

Unlike the Kyoto Protocol's Clean Development Mechanism (CDM), Article 6.2 of the Paris Agreement is designed to allow for international cooperation in carbon markets through decentralized governance. Under this article, bilateral or plurilateral cooperation between participating parties can be established through a mutually agreed policy and governance framework, and reflected in the agreement between the parties involved. This decentralized architecture requires considerably higher levels of engagement and oversight from participating parties.

Specifically, the decisions on how to quantify, monitor, verify, authorize, and report emission reductions under Article 6.2 are largely up to the participating parties, with broad guidance from the CMA. Even under Article 6.4, which will be governed by the Supervisory Body with strong centralized governance, it is expected that host countries would play a much bigger role compared to the CDM. More importantly, any transfers of internationally transferred mitigation outcomes (ITMOs) under Article 6 that trigger corresponding adjustments of the host country's Nationally Determined Contribution (NDC) need to be closely monitored by the host country to ensure that the trading does not compromise the environmental integrity and achievement of their NDC goals.

This means that, in addition to any international institutions that may oversee Article 6 cooperation, countries intending to engage in cooperative activities will need their own robust institutional and governance framework at domestic level in order to systematically make informed decisions. Putting such a framework in place also provides policy clarity to market players (both domestic and international) who are interested in engaging with the country.

While the functions in the institutional and governance framework would be broadly similar between participating parties, the focus of this paper is on the necessary institutional arrangements for countries hosting the mitigation activities.

The context for setting institutions and approval procedures at the domestic level is fundamentally rooted in the country's national climate strategy and their NDC. A host country will need to establish a detailed Article 6 strategy that guides, but is not limited to, how its participation in Article 6 will help the country achieve its target. These considerations will include the activities, sectors, and technologies the country intends to use to generate ITMOs for transfer; the price at which the country wishes to sell the ITMOs; measures to enable private entities to participate in crediting operations (marginal cost pricing versus opportunity cost pricing); and how to choose different crediting approaches (such as project-by-project,

sectoral, or policy crediting). An Article 6 strategy and a policy framework to address these issues will help the country identify the mix of mitigation interventions, policies, and measures that could meet its NDC pledge, forming an integral component of the country's overall climate strategy. A clear strategy is essential for countries to understand the broader requirements that support their participation in Article 6.2 mechanisms.

This paper forms the starting point, focusing on the institutional requirements to establish the policy and regulatory process that defines and supports the implementation of the potential activity cycle for Article 6.2 activities and transactions; identifies functions required at the national level from the host country's perspective; and discusses different options to allocate these functions to existing or new institutions. The Article 6.2 activity cycle could build on project cycles under the Kyoto Protocol, with an added requirement for the authorization and transfer of mitigation outcomes (MOs). While the entire process can be developed domestically, host countries can

also choose to use international crediting programs to register projects and issue units. However, the host country would still be responsible for the Article 6.2 process of authorizing and transferring ITMOs, as well as applying corresponding adjustments.

The type of arrangement that a country chooses to adopt affects the type of institutional arrangement and functions of the different bodies involved. As summarized in Table 1, the governance arrangements could include a high-level decision body with overall authority to design and oversee the program and international cooperation; an executive body that would develop and approve rules based on the overall regulatory environment and mandate; an administrator to execute the rules and guidance on a day-to-day basis; and a technical committee to provide technical advice and inputs to all of the other bodies. Each cell is colored in green, yellow, or red, which respectively represents that the function should be undertaken by that particular institution, could be handled by the institution, or should not be performed by the institution.

Table 1. Governance functions for Article 6 in host countries and options for mapping functions to key institutions

Functions	Decision body	Executive body	Admini- strator	Technical Committee
 Policy coordination and oversight Agree on overall scope of Article 6 engagement: sectors, technologies, project types, methodologies, etc. Agree on the use of elements of international crediting programs or recognition of any existing crediting programs/independent standards Agree on allocation of all other functions to relevant institutions 	•			•

Functions	Decision body	Executive body	Admini- strator	Technical Committee
 Rulemaking Approve methodologies, technical standards, and guidelines Approve accreditation rules for third-party auditors Approve NDC-related parameters to be used in emission reduction calculations Guide and oversee Article 6 program implementation Review implementation decisions, if appropriate Address grievances and appeals (e.g., by project proponents, civil society, etc.) 				
 Technical advisory Review international methodologies, technical guidelines, default factors, etc. for use within country Oversee development of new methodologies, technical guidelines, default factors, etc., where this work was undertaken by third parties Develop new (top-down) methodologies, technical guidelines, default factors, etc. Provide analysis of impact of potential projects/transfers on NDC compliance 				
 Implementation Accredit auditors to carry out validation and verification Approve projects and project entities to generate MOs for Article 6 Review and register eligible projects and their crediting period Certify and issue emission reduction units Authorize units to transfer for Article 6 Execute transfer of Article 6 units Approve and implement converting Article 6 units to domestic units and vice versa Maintain a registry of projects and emission reductions, including links with international registries where required Implement corresponding adjustments Report on projects, MOs and transfers in the Biennial Transparency Report (BTR) for Article 6 Technical Expert Review 				

Note: Functions in italics could be covered by either domestic institutions or the authorities under an international crediting program, or a combination of the two, depending on the transferring country's approach to Article 6.2

1. Introduction

This note introduces the country processes and institutional arrangements that will be needed for Article 6 transactions, and that countries could begin to pilot now. This includes what new legal, institutional, and regulatory arrangements may be required, particularly by countries that host mitigation activities. While the note covers both Article 6.2 and Article 6.4 cooperation, the focus is on Article 6.2 because of the stronger role that participating countries will likely play. By outlining the key functions or decisions and the various options for meeting these requirements, this note is intended to serve as a basis for further country-level consideration—as an aid to piloting rather than a comprehensive treatment of the subject.

Section 2 provides background on the evolving role of transferring countries in the transition from the Kyoto Protocol to the Paris Agreement. Section 3 presents an overview of what the activity cycle for Article 6 cooperation could be, and the institutional options for host country¹ institutions and their role in the cycle. This is followed by a summary of the negotiations involving these topics in Section 4. Links to the other approach papers in this series are explained in Section 5, while Section 6 highlights considerations for both private and public sector participants when considering the options presented. Section 7 elaborates on the importance of coordination between different ministries/agencies. Finally, Section 8 highlights the infrastructure that may be required to operationalize the approaches presented, Section 9 emphasizes the need to explore options to ensure the sustainability of the framework, and Section 10 provides examples of ongoing piloting activities.

2. Background: New institutional requirements for Article 6

Under the Kyoto Protocol's Clean Development Mechanism (CDM), the host country's formal role in a mitigation activity was largely limited to providing a "letter of approval" (LoA) before the request for registration.² This LoA provided the host country's confirmation that the activity would contribute to their sustainable development. In addition, the LoA authorized the project participants to engage in the activity and sell Certified Emission Reductions in the future without any additional approval from the government. Under the Paris Agreement's Article 6, on the other hand, the role of governments in trading transactions is potentially much greater. This is because Article 6.2 leaves the decisions on how to quantify, monitor, verify, and report emission reductions largely up to the participating countries, provided they follow the CMA's general guidance (expected to be approved in 2021). For Article 6.4, the Supervisory Board created by the Paris Agreement will have more centralized functions, but even here the host country will have new authority and decisions to make. Under Article 6.2, any transfers of ITMOs will trigger corresponding adjustments, affecting the host country's ability to achieve their NDC pledges. This means that, in addition to any international institutions that may oversee Article 6 cooperation, countries intending to host cooperative activities will need their own robust institutional arrangements and procedures.

Because of the stronger bottom-up architecture of the Paris Agreement, Article 6 will require considerably higher levels of engagement and oversight from the host country institutions in developing countries than under the CDM. This means stronger institutional and governance arrangements should be considered and put in place at domestic level.

¹ This paper uses the terms "host country" and "transferring country" interchangeably. Although the Article 6 rules only refer to "Participating Parties" and transfers of mitigation outcomes, most readers are familiar with the term "host country".

² Though in specific cases, host countries also set up frameworks and legal institutions to approve projects, set floor prices (such as China), and funds to administer share of proceeds (again, such as China).

This paper discusses some arrangements for the mandate, authority, and composition of national institutions, and what their role in the international and domestic processes could be. Given the impact of Article 6 trading on NDC compliance, the institutions that are responsible for a country's NDC achievement may also need to play a role in Article 6 cooperation. In addition, although Article 6.4 will have a more centralized governance structure, COP26—the 26th United Nations Climate Change Conference—may provide additional guidance on the specific authority that transferring countries would exercise under this mechanism (for example, when and how transfers are authorized). Setting up a robust institutional framework could also support effective domestic carbon pricing instruments (CPIs). Many countries already have or are considering domestic CPIs (such as domestic crediting schemes to provide offsets against a carbon tax or emissions trading scheme obligation), which means that the national institutions described in this note could potentially serve both domestic and international arrangements.

The decisions on institutional arrangements should form part of a broader Article 6 strategy, which will be an important part of building capacity in transferring countries. For example, to avoid double counting, transferring countries cannot use any transferred MOs to meet their own NDC goals. There is a risk, therefore, of transferring MOs from low abatement cost activities ("low-hanging fruit"), which could compromise NDC achievement if the remaining mitigation opportunities turn out to be too expensive. Ideally, the transferring country needs to first identify which mix of mitigation interventions, policies, and measures would be used to meet its NDC pledges, based not only on abatement costs but also on other criteria such as policy alignment, other socioeconomic benefits, or technology development priorities. The transferring country might also consider additional factors such as:

- Whether the sector is covered by NDC pledges (see more discussion on these issues in the approach paper on crediting outside the scope of the NDC)
- The need of the transferring country for technology transfer and international resources
- The strategic importance of the sector to the country in current and future NDC pledges.

This is why a detailed Article 6 strategy is a critical prerequisite to decide on whether and how to authorize the transfer of MOs internationally. This strategy development process should involve the authorities in charge of NDC implementation as well.

The context for setting institutions and approval procedures at domestic level is fundamentally rooted in the country's national climate strategy and their NDC. Given a country's pledges under the Paris Agreement, the most important goal of implementing and promoting mitigation projects is to achieve—or even to surpass its NDC goals. Mobilizing and facilitating access to financing for mitigation activities is one of the key roles of government and the private sector, even before considering Article 6 engagement. At the same time, deciding whether to authorize the transfer of ITMOs requires close attention by the authorities in charge of the transferring country's mitigation pledges to ensure that the trading does not compromise the achievement of their NDC goals. Given that all countries are assumed to increase their ambition level over time (Article 4.3), transferring countries may want to align their engagement with Article 6 with their ability to increase their NDC target ambitions in future. The transferring country will need to understand and quantify its NDC target, including potentially analyzing what the overall target means for (sub)sectoral targets and action plans. This will help the country assess how using Article 6 to trade in MOs may be used as a stepping stone for increasing their ambitions in future and to decide if a mitigation action proposed for Article 6 trading goes beyond the actions necessary to reach the NDC target (Broekhoff et al. 2017).

Authorizing transfers without understanding this short- to medium-term plan for how to export ITMOs without compromising the NDC goals would be risky. In the longer term, countries will also need a national mitigation planning process for example, a long-term low emission development strategy (LT-LEDS) that highlights the role of Article 6 cooperation in long-term decarbonization and increases NDC ambitions over time. This planning and analytical process could then support the development of baseline trajectories that reflect the country's NDC targets over multiple cycles.

The strategy should also consider what institutional and governance arrangements need to be put in place so that respective bodies are empowered to make informed decisions related to Article 6 transactions.

3. Options and approaches

This section presents an overview of the different national institutional structures that could support a country's participation in Article 6 mechanisms (as well as potentially supporting domestic CPIs in future). Previous reviews of international, regional, and national crediting schemes—as well as guidance for developing domestic CPIs—have characterized key institutions in terms of different levels of governmental authority, including a) a high-level decision-making authority on the overall scope of the scheme, b) an administrator to handle day-to-day requirements, c) advisory bodies that provide technical support, and d) third-party auditors that validate and verify emission reductions. Before considering the functions that different institutions could have, however, it is important to understand the overall role of the host country in the Article 6.2 activity cycle, and how this relates to the use of international crediting programs in Article 6 transfers. The discussion of institutions and project cycles in this note is not meant to prejudge exactly when and how the authorization for international transfers will occur, since this is still under discussion in the negotiations.

3.1 Building existing domestic and international experience

A key driver of setting the national institutional requirements for Article 6 will be to what extent the participating countries want to participate in Article 6 mechanisms and to what extent they want to use elements of international crediting programs. At one end of the spectrum, the countries could simply recognize carbon credits issued by an international crediting program or any independent standards as the basis for an ITMO transfer.3 At the other end of the spectrum, decisions on project registration; measurement, reporting, and verification (MRV) approaches; accrediting of third-party verifiers; and issuance of units-everything up to the actual authorization and transfer of MOs-might be done entirely by the transferring country government at domestic level. The benefits of building on international crediting programs or using any independent standards include faster implementation, reduced costs (for example, for developing methodologies or setting up accreditation schemes), and potentially greater credibility. This could be particularly important for countries with limited capacity (such as least developed countries and small island developing states), because relying on existing international crediting programs would reduce the administrative burden on the government. On the other hand, this could offer less flexibility and restrict the institutional options (for example, the number of qualified auditors within the host country) to support Article 6 programs.

Similarly, building on existing domestic experience with carbon markets and other mitigation activities will have major advantages. Many countries have experienced CDM designated national authorities and other related agencies that have worked with carbon markets, United Nations Framework Convention on Climate Change (UNFCCC) processes, Nationally Appropriate Mitigation Actions (NAMAs), and results-based climate finance. In addition, many countries have already set up institutional structures for NDC development and implementation. Building on these experiences, arrangements, and institutions—bearing in mind the lessons learned from earlier carbon markets—will strengthen Article 6 governance at the national level.

While countries can utilize international crediting programs or independent standards to generate and issue carbon credits, it may still require additional due diligence process to ensure no double issuance that includes the country authorization process.

3.2 Potential Article 6 "activity cycle"

This section discusses a possible generic activity cycle for Article 6.2 from the host country's perspective. The Article 6.2 rules do not require this project cycle, because they only address the process and requirements for transfer and accounting of MOs. In practice, however, Article 6 pilot activities are likely to follow a project cycle that, in many ways, is similar to earlier carbon markets, but with added steps related to the authorization and transfer of MOs. As discussed above, the host country's responsibility could vary depending on the extent to which the cooperating Parties rely on elements of international crediting programs for the activity cycle. Figure 1 illustrates this process for an activity where an international crediting program would handle project registration and issuance of units,4 while the host country would still be responsible for the Article 6.2 process of authorizing and transferring ITMOs, as well as applying corresponding adjustments. The figure shows that the project proponent could request and receive formal authorization at three different stages of the activity cycle:

- At the project concept stage (the host country "pre-authorizes" the project based on certain eligibility criteria and basic project documentation provided in a project concept note)
- Following validation of the project design (when more information about the project is known, including how the project contributes to different national policy objectives)
- Following verification of emission reductions (when the transfer and use of MOs has been requested).⁵

This is important because, under the different potential reporting requirements of Article 6.2 of the Paris Agreement, countries may require reporting authorizations and transfers separately, so authorization might need to occur prior to the time of transfer.

3.3 Institutional and governance functions for Article 6

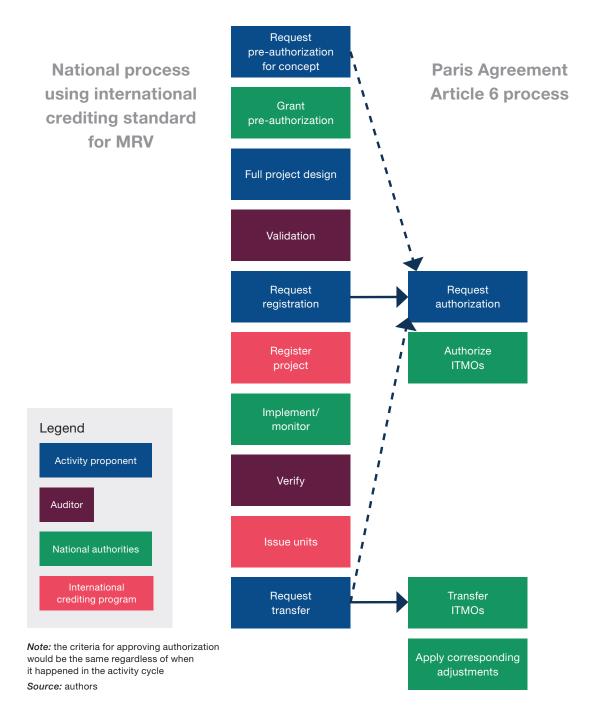
To support the development of the host country's strategy and the processes and procedures that should be put in place at domestic level, developing an institutional framework for Article 6.2 cooperation should consider what functions are required for the transferring country, and how these functions could be allocated to new or existing bodies. Building on existing institutions and reporting structures has important benefits in terms of leveraging capacity, minimizing costs, and drawing on existing relationships. In this context, the need for fostering collaboration and coordination between related ministries/agencies cannot be underestimated. Countries will need to consider how to develop suitable overarching coordinating and decision-making bodies on domestic climate policy (including NDC updates, reporting under the enhanced transparency framework, and so on) and participation in Article 6 activities. Article 6 governance should consider building on existing national infrastructure established to regulate the country's engagement with CDM or Joint Implementation (JI). For existing institutions to execute these functions, however, their mandate, authority, composition, and skills may need to be revised.

This section outlines the main functional areas for transferring country institutions: policy coordination and oversight, rulemaking, technical advisory, implementation, and auditing (see Table 2). Those functions shown in italics could be covered by either domestic institutions or the authorities under an international crediting program, or a combination of the two, depending on the transferring country's approach to Article 6.2 (as discussed in section 3.1).

⁴ Article 6.2 does not require that mitigation outcomes be authorized as "units" or that they be in metrics of tCO₂. For purposes of this paper, however, the term "units" is used interchangeably with MOs to include greenhouse gas and non-greenhouse gas metrics. In practice, Article 6 piloting activities are using tCO₂ as units in their MRV.

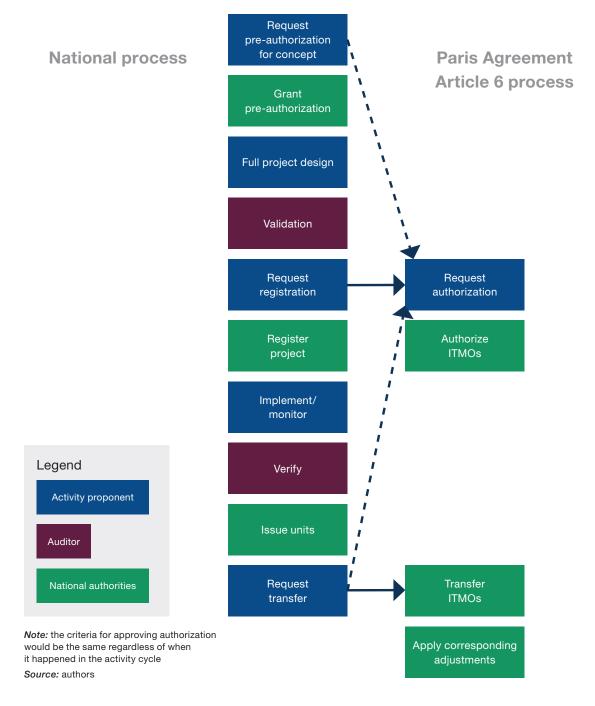
Other metrics could be possible, but the current Article 6 piloting activities almost all focus on emission reductions. Emission reductions in this paper refers to both removals and reductions in emissions.

Figure 1. Potential Article 6.2 activity cycle from transferring country perspective, using international crediting programs for MRV



The host country may also choose to develop the domestic process for the project registration, verification, and unit issuance functions, as shown in Figure 2. This approach could still draw on internationally approved MRV methodologies and auditors, but the decisions on project registration, verification and unit issuance would be made by the host country government, not by the authorities of an international crediting program or independent standard programs. As with the previous example, the request for authorization could still come at different stages of the activity cycle.

Figure 2. Potential Article 6.2 activity cycle from transferring country perspective, using domestically developed/adopted MRV approaches



Depending on which of the two approaches a host country chooses, the institutional and governance arrangements that should be put in place and capacity-building needs at domestic level will vary. Accordingly, how the host country functions would be allocated to different institutions is discussed in the following sections. In addition, countries may choose to modify or bring innovation to the activity cycle to fit the particular scope of their mitigation activities. For

example, some existing crediting schemes combine the validation and verification steps, so that both project eligibility and performance are assessed after implementation.⁶ Typically, this is for project types that lend themselves to highly standardized approaches for baseline and additionality assessment.

⁶ Including Ci-Dev's Standardized Crediting Framework.

Table 2. Governance functions for Article 6 in transferring countries

Policy coordination and oversight functions

- Agree on overall scope of Article 6 engagement: sectors, technologies, project types, methodologies, etc.
- Agree on the use of elements of international crediting programs or recognition of any existing crediting programs/ independent standards
- Agree on allocation of all other functions to relevant institutions

Technical advisory functions

- Review international methodologies, technical guidelines, default factors, etc. for use within country
- Oversee development of new methodologies, technical guidelines, default factors, etc., where this work was undertaken by third parties
- Develop new (top-down) methodologies, technical guidelines, default factors, etc.
- Provide analysis of impact of potential projects/transfers on NDC compliance

Rulemaking functions

- Approve methodologies, technical standards, and guidelines
- Approve accreditation rules for third-party auditors⁷
- Approve NDC-related parameters to be used in emission-reduction calculations
- Guide and oversee Article 6 program implementation
- Review implementation decisions, if appropriate
- Address grievances and appeals (by project proponents, civil society, etc.)

Auditing

- Validate project applications
- · Verify emission reductions

Implementation functions

- Accredit auditors to carry out validation and verification
- Approve projects and project entities to generate MOs for Article 6
- Review and register eligible projects and their crediting period
- Certify and issue emission reduction units
- Authorize units to transfer for Article 6
- Execute transfer of Article 6 units
- Approve and implement converting Article 6 units to domestic units and vice versa
- Maintain a registry⁸ of projects and emission reductions, including links with international registries where required⁹
- Implement corresponding adjustments¹⁰
- Report on projects, MOs and transfers in the BTR for Article 6 Technical Expert Review

⁷ For 6.4, the Supervisory Board will have authority for accreditation, but for 6.2, national authorities would likely have jurisdiction.

⁸ A separate approach paper will discuss in more detail the domestic infrastructure needs for Article 6 (i.e. a project database management system and a registry for unit tracking and transactions).

In the case in which a country decides to use international crediting programs' registries for registration and issuance of MOs, it is still the country's responsibility to fulfil potential reporting requirements of Article 6.2 of the Paris Agreement. Therefore, a separate database or a registry at the national level is needed for the purpose; countries that do not have such domestic infrastructure are expected to use the international registry that the secretariat of the UNFCCC shall implement.

¹⁰ This assumes that transferring country authorities will need to undertake tasks on corresponding adjustments as per the agreed international rules. This note does not address the unresolved issues of how and when corresponding adjustments are made.

3.4 Options for institutional roles, composition and mandates

International and domestic crediting schemes can provide important lessons for Article 6 governance at the national level, including what types of institutions are needed and how the functions above are allocated to these different institutions. The governance arrangements for these functions will vary across countries, but would often include:

- A high-level decision body with overall authority to design and oversee the program and international cooperation (the "policy coordination and oversight" functions). This would generally require ministerial authority and would only occur at the start of Article 6 engagement and periodically (every few years) as the country's overall performance was reviewed. This might be implemented by a single ministry or a high-level inter ministerial body.
- An executive body that would develop and approve rules based on the overall regulatory environment and mandate (most of the rulemaking functions above). This body would include middle- to seniorlevel members, often with relevant specialist knowledge, and would meet more regularly to address some rulemaking functions. It might also include members from outside of government.
- An administrator to execute the rules and guidance on a day-to-day basis. This could be a department, government agency, or even an outsourced third-party with appropriate oversight.
- A technical committee to provide technical advice and inputs to all of the other bodies.

- Third-party auditors to carry out auditing functions, although some programs allow the administrator to audit small projects.
- This section outlines some options and choices in setting up the governance structures for Article 6 engagement. These options are not all mutually exclusive, because they address different interrelated approaches to allocating roles and responsibilities.
- Allocate some rulemaking functions to an administrator: In some international crediting programs, the decision body and executive body are essentially the same (for example, the boards of the Gold Standards and Verra, which runs the Verified Carbon Standard) and only cover policy coordination and oversight. In these programs, the administrator covers most of the rulemaking functions as well as the implementation functions (for example, the administrator accredits auditors and approves methodologies). Under the CDM and JI, on the other hand, the parties to the Kyoto Protocol served as the decision body, the CDM Executive Board and Joint Implementation Supervisory Committee (JISC) served as the executive body, and the UNFCCC Secretariat was the administrator, with the latter covering only implementation functions. Domestic crediting programs also vary in their approaches. Table 3 illustrates different options in such an approach. Each cell is colored in green, yellow, or red, which respectively represents that the function should be undertaken by that particular institution, could be handled by the institution, or should not be performed by the institution.

Table 3. Different approaches to mapping functions to key institutions

Functions	Decision body	Executive body	Administrator	Technical Committee
Policy coordination and oversight				
Rulemaking				
Technical advisory				
Implementation				

Source: authors

- Include nongovernment stakeholders in rulemaking functions: While nongovernmental stakeholders and experts are often part of the technical advisory functions in crediting programs, their role in rulemaking varies greatly. In some of the emerging domestic crediting programs (such as in Colombia and South Africa) the rulemaking functions are all covered by government, although they could be in agencies instead of departments. For Rwanda's domestic governance for future Article 6 engagement, however, a civil society representative was included in the executive body that covers rulemaking functions (and potentially some policy oversight functions as well) (see section 8). Including civil society at this level could potentially increase credibility, although there would need to be provision for managing potential conflicts of interest-for example, if the civil society organization was involved in the crediting program as a project proponent or auditor.
- Include private sector stakeholders in technical advisory and rulemaking functions: Similarly, bringing the private sector into the technology advisory and rulemaking functions—for example, via industry associations rather than individual companies—might help develop robust greenhouse gas (GHG) methodologies and streamline the program to make it more accessible to activity proponents, including pushing for lower transaction cost options. Here the potential for conflict of interest could be greater, however, which could negatively affect the credibility of the system.
- Outsource implementation functions versus keeping them in-house: Government could choose to contract an independent entity to implement Article 6 functions rather than assigning them to a government authority. Outsourcing could reduce the burden on government and potentially improve efficiency with lower transaction costs. Depending on the strength of the government's policy oversight, however, this choice could raise concerns about credibility and environmental integrity if the outsourced organization did not have sufficient capacity or perverse incentives to prioritize project flow over environmental integrity.

A robust institutional framework can support effective domestic CPIs and be built on existing institutions and international crediting programs. Specifically:

- Combining governance with existing climate policies and instruments: Where a country has multiple domestic CPIs that could have international linkages via Article 6, there could be synergies from combining Article 6 governance with the authorities that supervise other CPIs. On the other hand, the authorities governing the existing CPI (such as a carbon tax system) might not have the capacity and skills to cover many of the more technical functions for Article 6 engagement. In addition, having separate institutions could allow more flexibility in the way domestic crediting would interact with Article 6 cooperation.
- **Building on existing institutions versus creating** new institutions: Many of the functions could be covered by existing institutions, assuming their mandate could provide the authority to do so. For example, the rulemaking and/or implementation functions might be assigned to existing environmental regulators, or the policy coordination and oversight functions might be addressed under existing ministerial (or statutory body) constitutional powers. This could be particularly useful to ensure coordination among NDC revisions, preparation of reporting under the Paris Agreement and UNFCCC, and even tracking of climate finance. Technical advice could also be sourced from committees set up to serve other climate policy functions (such as national communications or biennial update reports) or sectoral functions (such as energy policy development). This might include building on or modifying in-country institutions that evaluated and approved CDM or JI projects on behalf of the host country. On the other hand, there may be a need to establish new institutions if the mandates of the existing bodies, or their competencies, does not fit with the functional requirements. Building on existing institutions would reduce the burden on government and might also reduce transaction costs (because other actors in the sector already know the relevant government authorities). These existing authorities might not be as flexible, however, in terms of exercising their functions and evolving as the needs of the crediting program change.

Building on elements of existing international crediting programs: Whether domestic institutions are needed for all functions depends on the approach to incorporating elements of international crediting programs. Countries might choose to use internationally accredited auditors in their Article 6 engagement, or use methodologies approved under other international crediting standards. If a domestic crediting program uses only internationally accredited auditors, then there is no need to develop a national accreditation standard or supervise auditors. In terms of technical advisory functions, if methodologies are all from international standards, then less technical input is needed, although there may still be a need to assess international standards for their applicability. If these methodologies and parameters are developed locally, the technical committee must have the depth of sectoral knowledge and mitigation analysis expertise to evaluate a new methodology proposal or develop a "top-down" approach.

4. Progress in the negotiations

As with many other issues, consensus on key issues at COP26 will most likely provide more detailed guidance on the roles of national institutions in the Article 6 activity cycle. The most recent text for Article 6.2 discussed at COP25 focused on participation requirements, accounting, and tracking issues, because under Article 6.2 the Parties will largely be able to decide how to approve, monitor, and verify ITMOs. The international rules, in turn, are likely to mainly cover how transfers are tracked, how corresponding adjustments are implemented, and how the impacts of Article 6.2 activities are reported. This means that countries will need to set up institutional arrangements to authorize ITMO transfers, track ITMOs, and implement corresponding adjustments.

For Article 6.4, on the other hand, the role and responsibilities of the participating countries and particularly the country hosting the mitigation activity and transferring those MOs-could be quite different and may differ significantly by country. This is because, based on the current text, the country can choose whether to develop their own baseline and methodology approaches (including standardized baselines), which institutional functions they will exercise (such as auditor accreditation), and how they will evaluate the sustainable development contribution of project activities. They will be required to approve each project and authorize its activity proponents, as well as transferring the verified and issued emission reductions. Of course, they will also implement and report on corresponding adjustments. Finally, they should communicate to the Article 6.4 Supervisory Board what types of activities they will allow, in line with the earlier discussion in this report about the specific strategies for Article 6 cooperation (for example, the country could communicate that they would not permit certain activities).

5. Relationship with other design elements

In terms of the relationship between this note and other Article 6 approach papers in the series, one key link is that transferring country institutions, legal frameworks, and infrastructure will influence environmental integrity. Reflecting NDC goals in baselines for Article 6.2 activities, for example, would rely on rulemaking decisions supported by the technical committee. Similarly, where transferring countries have their own national accreditation process for auditors, the robustness of that process (including spot checks on auditor performance) could influence the credibility of the resulting emission reduction units. Where national governments are able to choose the methodologies and approaches they will use for single-year versus multi year accounting, the institutions outlined in this note would likely be centrally involved in that process. These institutions could even play a role in ITMO metrics and approving conversion factors for ITMOs in non-GHG metrics.

6. Considerations for market participants

One of the most fundamental changes for international trading under the Paris Agreement is that private sector developers in transferring countries now face new risks. These risks are created by the requirement that all transfers of MOs—and not just projects—must be authorized by the government. Under the original CDM rules, once a project was approved, the government had no further role in the issuance and transfer process, in part because the transfer did not have any consequences for the transferring country. In 2013, the CDM Executive Board adopted a procedure that would allow host countries to withdraw their letter of

approval—after which no further issuance would be allowed-but, short of this, they still did not have any say in the quantity of issued units or to whom they were transferred. For Article 6.2, on the other hand, the host country must authorize the activity and execute the transfer of MOs. This raises the question of what legal, institutional, or technical arrangements can help to reduce these risks. As discussed in section 3.2, could the host country authorize the activity after validation, so that transfers would happen automatically after verification as long as certain conditions were met? Or could there be domestic legal arrangements that would grant "pre-authorization" for projects even at the concept stage and guarantee the approval of transfers under certain conditions and up to a certain volume? One possible approach is for host countries to establish a policy framework that clearly outlines the roles and responsibilities of different entities and processes, and the requirements that the private sector needs to follow.

The range of functions that will now be under national authority also means that many countries will need to significantly build their capacity. The level of capacity needed will depend on, among other things, the degree of national oversight of methodologies, accreditation of auditors, and other components of the activity cycle, as opposed to using only international institutions and tools. In addition, capacity building will be needed for the Article 6 strategy and national mitigation analysis (see section 3.1) in terms of NDC quantification and setting crediting baselines. Continuously developing national expertise (for the technical committee, for example) and closely coordinating analysis and decision-making across ministries/agencies will also be important.

7. Coordination between different ministries/agencies

Because all ITMO transactions affect a country's ability to meet its NDC target and manage sectoral targets (if the country's NDC has sectoral targets), coordination between various ministries, government institutions, and agencies that manage the NDC

process and Article 6-related functions is important. As such, government at its highest level needs to make coordination a requirement by law, decree, or regulation. The coordination structure should reflect the way the NDC is set up to ensure that sectors and ministries/agencies responsible for meeting targets are directly involved. The coordination meetings should be chaired by the coordinating ministry/agency with experience in climate-related processes.

8. Infrastructure for operationalization

Workflow management systems are key pieces of technical infrastructure needed to support these new country institutions and processes. The systems could track the decision-making process and documentation for project authorization and approval, unit issuance, and transfer execution. Most crediting schemes have some form of workflow management, particularly when multiple organizations need to provide documentation and contribute to decisions. Digitalizing the workflow system (such as using online templates for all data input, analysis, and calculations) and using digital infrastructure (such as MRV and registry systems) could increase the efficiency and reliability of processes and systems in the project cycle.11 In addition, the ongoing work in many countries to develop national registries will be important for managing Article 6 transactions and tracking units for domestic CPIs.

9. Sustainability of the institutional framework

In setting up an institutional and governance framework, one important aspect for consideration is the cost of implementing the framework and options to adequately finance it. While outsourcing methodology development and the independent assessment process¹² could minimize the government's burden, the resources needed for key institutions' policy coordination, oversight, and administrative support should be identified at the beginning to ensure their sustainability. These resources could include budgetary support from the government or levying a fee on Article 6 transactions. Also, in the case of setting up essential yet costly infrastructure such as national registries for UNFCCC reporting, countries could explore the possibility of aggregating and sharing services at the regional level or using services from third-party providers or the UNFCCC to minimize costs for seller countries.

10. Practical examples and considerations for pilots

The Standardized Crediting Framework (SCF), currently piloted in Senegal and Rwanda (see references in section 9), is a good example of an emerging Article 6 activity. The SCF pilots a simplified crediting approach, initially focused on energy access, for the Paris Agreement that builds on the lessons learned from the CDM. The Senegal and Rwanda schemes are funded by the World Bank's Carbon Initiative for Development (Ci-Dev) and target rural electrification and improved cookstoves, respectively. Importantly,

See proposals by the Climate Ledger Initiative https://climateledger.org/, as well as Classen et al. (2012).

By using independent international standards like Gold Standard, Verra, and CDM, for example.

the SCF program cycle only verifies emission reductions and does not yet include a process for issuing units or authorizing transfers. Both transferring countries have established a governing board (covering both decision body and executive body in the terminology of this paper), administrator, and technical committee. Both pilots use internationally accredited auditors from the CDM, Gold Standard, and Verra, but are starting to train local auditors for a possible national accreditation scheme in future.

In terms of functions, the governing board covers almost all of the policy coordination, oversight, and rulemaking functions. It also covers some implementation functions, such as certifying and issuing emission reduction units (see Figure 3).

One difference in the SCF process, however, is that validation and verification are combined, so that the administrator covers the "listing" of the project (approval and registration based on simple, objective criteria). In terms of composition, both countries have decided that the administrator would be the same institution that serves as the CDM designated national authority and the focal point for the Green Climate Fund. The technical committees are based largely on similar reference groups used for evaluating CDM proposals, but with the addition of specific expertise related to the pilot program content (such as electrification or cookstoves). For the governing board, both countries include key ministries, but Rwanda also chose to include a state-owned corporation that oversees energy development and a nongovernmental organization (Figure 4).

Figure 3. Standardized Crediting Framework generic governance structure

Executive body (SCF governing board)

- Approves recommendations from technical committee (e.g. list of other suitable technologies)
- Certifies emission reductions
- Decides on international transfers of mitigation outcomes
- Decides on future development of SCF

Technical committee

- Evaluates role of SCF for NDC implementation
- Recommends approval of SCF program documents and templates (methodologies, monitoring, verification, eligible auditors, etc.)
- · Recommends rules/guidelines for application of SCF

Administrator

- Lists (i.e. approved and registers) projects and undertakes completeness checks (i.e. during listing and certification)
- Approves and lists eligible auditors
- Maintains a registry of emission reduction certificates
- Convenes meetings of the governing board

Source: Spalding-Fecher et al. (2017)

Figure 4. Governance structure for Rwanda SCF pilot

Executive body (SCF governing board)

 Ministry of Environment (chair); Rwanda Environmental Management Agency (co-chair); Ministry of Infrastructure; Rwanda Green Fund; Rwanda Energy Group; IUCN

Technical committee

- 15 members, including government, private sector, academia, and civil society
- Drawn from the CDM technical committee (Rwanda's existing multi stakeholder committee to review CDM projects) plus additional members

Administrator

Rwanda Environmental Management Agency Climate Change
 & International Operations Department, which serves as the
 CDM and Green Climate Fund national designated authority

Source: Rwandan Environmental Management Agency (REMA) (2018)

While in the SCF example the rulemaking functions are vested in the executive body, in Bangladesh the administrator carries out both rulemaking and implementation functions.

The Bangladeshi government is developing an Article 6 engagement strategy that includes domestic governance arrangements. It is considering allocating more of the rulemaking functions to an administrator, in addition to implementation functions. In this model, the combined decision body and executive body (called the governing board in Bangladesh) would be chaired by the Secretary of the Ministry of Environment, Forests, and Climate Change and would provide only policy coordination and oversight functions (such as strategic direction and coordination with other ministries). The Ministry would also sign agreements with other countries on Article 6 cooperation, where required. The governing board would approve a general policy on Article 6 engagement, which may include a "positive list" of activities that are automatically eligible activities, in order to reduce the transaction costs for project proponents. Most of the rulemaking and implementation functions, however, would

be undertaken by an administrator (known as the secretariat in Bangladesh) based in the Department of Energy within the Ministry of Environment, Forests, and Climate Change. This administrator would carry out all day-to-day functions, such as approving and registering project proposals, issuing units, and eventually authorizing and recording ITMO transfers. The administrator would be responsible for all liaison with the project proponents and technical committee, as well as managing the overall process of generating and authorizing the use of MOs for identified purposes. Finally, the technical committee would be an ad-hoc body, which would be convened to provide guidance on an as-needed basis (for new types of projects and applicable methodologies, for example). In summary, the Bangladesh example is one where the administrator carries out both rulemaking and implementation functions, while in the SCF example the rulemaking functions will be vested in the executive body.

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