Carbon Asset Development Process
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Acronyms

CA  Corresponding adjustment
MO  Mitigation outcome
NDC  Nationally Determined Contribution
ICAO  International Civil Aviation Organization
CORSIA  Carbon Offsetting and Reduction Scheme for International Aviation
MRV  Monitoring, reporting, and verification
CDM  Clean Development Mechanism
ITMO  Internationally transferred mitigation outcomes
Article 6 Approach Paper: Carbon Asset Development Process

1. Background

The Paris Agreement provides a framework for all countries – both developed and developing – to voluntarily adopt individual targets, elaborated in their Nationally Determined Contributions (NDCs). This effectively introduces commitments on the country in the sectors covered by their NDCs. Consequently, there is a need for countries to ensure that mitigation outcomes (MOs) and their international transfer are accompanied by robust accounting. Beyond international climate markets under Article 6, the International Civil Aviation Organization (ICAO) decided to establish a global market-based mechanism, in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), to help achieve ICAO’s global goal of carbon-neutral growth. Corporate commitment to managing carbon footprint and net-zero goals is driving voluntary demand for carbon offsets and is likely to be the dominant force shaping climate markets in the next few years. Other market mechanisms may also emerge, providing additional avenues for countries to leverage carbon markets.

Carbon markets could be used for voluntary and compliance purposes, and there will be a need to distinguish between different types of action. Entities, taking account of their policy obligations in the jurisdictions in which they operate, can publicize how far they voluntarily exceed the required climate action. Conversely, reducing emissions to compliance levels indicates the impact of policy instruments that governments implement and that they can unquestioningly count toward their NDC achievement. The “use” of carbon credits may be referred to as “voluntary” when they are used to achieve commitments beyond compliance requirements, such as private entities’ net-zero goals and carbon footprint commitments. However, the credits themselves, and the standards under which monitoring, reporting, and verification (MRV) occur, are not inherently voluntary. Independent standards were once associated exclusively with voluntary markets; however, independent standards now often provide quality assurance and the credits they generate are being accepted for use in compliance markets. This is the case in Colombia, Mexico, and South Africa. Similarly, credits from independent standards may be generated under a government-regulated standard in the context of Article 6.2 or the Article 6.4 crediting mechanism and still be used for voluntary purposes.
The presence and increasing scope of NDC targets in host countries increase the risk that carbon markets will count emission reductions toward more than one target. By default, lower emissions recorded in host country emission inventories will contribute to achieving their economy-wide NDCs. The accounting provisions for Article 6 address this at the national level by requiring double-entry bookkeeping among all countries – MOs sent to another country to count as emission reductions against its NDC must be added back to emissions in the originating country. In the accounting for Article 6, this double-entry bookkeeping is referred to as “corresponding adjustments” (CAs). The prospect that this accounting requirement means host countries might not benefit from emission reductions occurring on their own territories results in many being cautious about what is transferred. Host countries also need to implement climate action and demonstrate mitigation results. They will most likely wish to ensure that any transferred emission reductions are the result of mitigation efforts that are truly additional to their NDCs and are not attributable to their own policies and measures.

Given the new requirements of the Paris Agreement and the envisaged role of countries in meeting NDC commitments with accounting rigor and transparency, a harmonized approach between different types of market activities may be needed for credibility and transparency of transactions in post-2020 markets. Further analytical work and consultations are required to come to a common understanding on the processes that reduces transaction costs and increases private sector participation. International mechanisms like the Clean Development Mechanism (CDM) and independent standards like the American Carbon Registry, Architecture for REDD+ Transactions, Climate Action Reserve, Gold Standard, and Verified Carbon Standard have their own process cycles that each mitigation activity is required to follow. The existing international standards and their processes could form the building blocks for post-2020 markets. For this to happen, it is important to assess how existing processes of the independent standards can be harmonized, and explore relevance and consistency with the emerging regulatory regime created by the Paris Agreement while transparently serving the needs of the non-compliance market. Key issues such as the role of host countries in approving or authorizing mitigation activities, the role of independent standards in Article 6, and the interaction or integration of the processes, infrastructure, and institutions need to be addressed to simplify, streamline, and harmonize processes.

2. Objectives

This note seeks to 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. The note builds on existing practices among different independent standards to streamline and harmonize process flows and ensure that country governments have greater clarity on the process for engaging in climate markets. This note reflects inputs from the Informal Working Group on Carbon Assets, pilot transactions under different initiatives, as well as knowledge produced in relevant platforms.
3. Process Definition

This section defines key stages of the asset development process, based on existing practices under independent standards and experience with carbon markets. Following the requirement under the Paris Agreement and based on the Informal Working Group’s current understanding of discussions related to the Paris Agreement and CORSIA, an additional definition and process step for “authorization” is included:

a. **Validation and/or broader independent assessments:** An independent evaluation of the project activity by an independent entity against the applicable rules and requirements of the standard/mechanism and the applicable methodology. This process can conclude with registration of the activity by the standard or some similar step by the country hosting the mitigation activity.

b. **Verification:** The periodic independent evaluation by an accredited entity and ex-post determination of monitored emission reductions or removals that have occurred as a result of the registered project activity. The verification process is intended to confirm:

   - Emission reductions or removals per the validated project documents
   - Correct utilization of the applicable methodologies and tools
   - That the project activity continues to meet the applicable rules and requirements of the standard/mechanism.

c. **Issuance:** The issuance of a specified quantity of serialized units of emission reductions to project participants’ accounts in accordance with the rules and requirements of the mechanism/standard.

d. **Labelling:** Standards/Mechanisms may choose to label units to indicate their compliance with the Paris Agreement, CORSIA, or other uses, and to highlight key attributes, such as the application of a CA and a Letter of Endorsement/Authorization. These labels are intended to make a distinction among different use cases by transparently listing the characteristics of units.

e. **Authorization:** The written authorization (through a Letter of Authorization) of units or activities that are subject to the regulatory requirements of the Paris Agreement, CORSIA, or other specified uses. The mitigation activities or units would receive a Letter of Authorization from the host country and provide a commitment by the host country to carry out CAs as needed.

f. **Endorsement:** If applicable, a host country may issue an optional Letter of Endorsement to indicate the recognition of a mitigation activity and its link to the host country’s NDC. The optional Letter of Endorsement is expected to endorse the claim that the mitigation activity, or units, contributes to the financing or implementation of the host country’s NDC. For avoidance of doubt, an endorsement does not commit the host country to CA.
4. Process Flow of the Asset Development Process

The independent standards in the Working Group confirm the harmonized process flow for asset development, as presented in Figure 1. Details of possible steps and accountabilities of different stakeholders are depicted in Annex 1.

As shown in Figure 1, information about carbon assets may be reflected in different information systems (described in Annex 2) at different stages of the development process. Furthermore, there could be two parallel processes for country-level authorization and for project development, as further described in the sections below.

Key stages of project development to be clarified in the Article 6.2 Policy Framework

The precise process for project development would depend on the host country’s decision to use independent standard(s) along with the processes and institutions identified by the relevant standard. Using eligible independent standards would allow the host country to build on the infrastructure, experience, processes, and capacity associated with the eligible independent standard. In capacity-constrained host countries, this could reduce time and costs to start mitigation activities and increase transparency of mitigation activities.

A. Project design

During the project design stage, the project owner prepares the project documentation as required by the standard or the relevant host country’s Article 6.2 Policy Framework. The Policy Framework may allow the use of defined independent standards, their documentation, and processes and procedures. As a best practice, the project document template should

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1 The “Policy Framework” refers to the general Policy Framework for Article 6.2 that the host country establishes through regulation or legislation and is included in Annex 4.
be made available by the host country and should describe the linkage between the mitigation activity with the country’s NDC, and provide links to relevant information such as methodology, MRV, and other details that may be needed by the host country to endorse and/or authorize the mitigation activity.

**B. Validation/Broader independent assessment and registration**

Independent assessment is a standard feature of carbon crediting standards. Certain standards require project owners to contract an independent entity to validate the project design and the application of the relevant methodology and MRV, while other schemes combine this step with the verification step described below. Frameworks like the World Bank’s Standardized Crediting Framework² consider direct registration (or listing) of certain types of projects (for example, positive lists and with no environmental impacts) with no requirement for independent validation. Beyond validation, there may be assessments of broader project risks and performance through frameworks such as the Mitigation Action Assessment Protocol ³ that seek to provide a more nuanced assessment to increase the comparability of projects/programs and drive demand toward high-quality carbon assets.

**C. Verification**

Verification is the periodic independent review and ex-post determination of the monitored emission reductions or removals by a qualified, accredited entity. The project owner must follow a monitoring plan that details how to track and report on carbon assets and other data relevant to the project as specified in the applied methodology and independent standard, as applicable. Project owners should document the emission reductions or removals in a monitoring report based on the MRV protocol defined in the project document as per the requirements of the relevant standard, and an independent entity should then be contracted to verify the reductions or removals claimed in the monitoring report.

**D. Issuance**

Carbon assets can be issued into the project participant’s account in the standard’s registry or a registry specified by the host country. Issuance is the responsibility of the standard, and the associated processes and institutions can also be specified by the host country. Issued carbon assets can then be “authorized” as MOs for NDC use, internationally transferred mitigation outcomes (ITMOs), or for other uses. As indicated, “authorization” can be for mitigation activities or units and can be provided by the host country at any time before the transfer of the MOs. This is described in more detail below.

**E. Use cases and labelling**

Carbon assets could have different “use cases.” Use cases that are subject to the regulatory requirements of the Paris Agreement or CORSIA, for instance, require authorization and a CA. Other use cases may not require such authorization or CA, and may depend on the host country’s policy framework for carbon market and evolving negotiations. To inform these discussions, for some use cases, “labels” may be required to describe the eligibility of units (for example, “Article 6-compliant,” “ITMO Authorized,” or “CORSIA-compliant”). Since CAs may not be carried out at the time of transfer, something like a “Pending-Article 6” label could be created when there is evidence of a host country’s intent to make a CA. How labels are defined depends on the independent standards’ requirements, use cases, and claims that are made of the mitigation activity or MOs. Further research on these aspects is warranted and will be covered in a separate Approach Paper.

Moving forward, it will be important to update registry systems to transparently list the characteristics of each unit, such as the status and labelling of a given unit (for example, with respect to whether it has a CA or not) and specific retirement reasons (some of which may require a CA and others may not). Furthermore, meta-registries and information systems like the Climate Warehouse at the international level could be important for identifying double counting risks, by tracking the development and transfer of assets across different institutions and countries. Standards and mechanisms should provide the needed infrastructure and transparency for such oversight at the meta-registry level to occur. Annex 3 provides further information on infrastructure systems for tracking and accounting.

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² [www.ci-dev.org/SCF](http://www.ci-dev.org/SCF)
³ [https://maap.worldbank.org/#/homepage](https://maap.worldbank.org/#/homepage)
Key stages of endorsement or authorization of mitigation activity or MOs

Unless a country has a policy that clearly defines the type and scope of mitigation activities that are eligible for specific use such as Article 6 or CORSIA, project developers may have to individually request host country authorization to ensure the eligibility of their carbon assets for compliance purposes.

Based on the current understanding of modalities of Article 6, authorization, including a commitment to carry out a CA if needed, may only be required for units that are subject to the regulatory requirements of the Paris Agreement and use for NDC purposes, CORSIA, or as specified for other use. Some claims, for example, whereby the buyer has contributed to financing emission reductions or removals, or to the implementation of a country’s NDC, may not require a CA. In such instances, the project developer can benefit from the comfort of an “endorsement” from the host country that the mitigation activity contributes to the NDC. When no CA is carried out, the host country can use the mitigation activity or MO for meeting its own NDC. For units to be authorized, explicit additional steps are suggested in the project development process, as described below.

A. Identify the need for CA

Firstly, based on the regulatory requirements under the Paris Agreement or other compliance regimes, the country’s regulatory requirements, and requirements of independent standards, the project owner will identify whether a project’s associated units need CA. The requirement may also be specified in a host country’s policy framework, which can also define the process for confirming that mitigation activities are eligible for NDC or international transfer. Project developers may also have an early signal of eligibility based on a positive list and host countries may specify eligible activities for generating MOs under the Paris Agreement, CORSIA or other specific uses. A project owner may decide to obtain a CA in advance of knowing what the use of the credits will be so that they can be used for CORSIA, Article 6.2, or by voluntary buyers who want a CA.

B. Country issues Letter of Authorization or Endorsement

A Letter of Authorization must be obtained before the carbon asset is qualified for use under Article 6, CORSIA, or other use cases that require CA. The timing for obtaining the letter may vary depending on circumstances and host country policies. Based on the independent standard’s requirements, the carbon asset may be qualified for use at the time of issuance or after issuance, but qualification must be obtained before use. Ideally, the letter would be obtained at an early stage to provide greater transparency and certainty to the project owner. The project owner should ideally aim to obtain country-level authorization after the validation stage, so that the host country can refer to information provided in the project document to inform its decision to authorize the assets. By committing to undertake a CA, the host country is committing not to use the authorized mitigation activity or MOs for its own NDC. Labelling of use cases could provide transparency on which units require authorization and which do not. A template of the Letter of Authorization is included in Annex 1.

If a CA is not required, the host country could provide an optional Letter of Endorsement to give greater credibility to claims made by voluntary markets. Through this letter, the host country acknowledges that an activity is consistent with/inside the scope of its NDC but does not commit to a CA. This Letter of Endorsement could provide some level of assurance to buyers and project developers. However, the letter would be optional, depending on the country’s regulatory requirements and requirements of independent standards. The letter could be used as a long-term solution, or alternatively, as a temporary solution until there is clarity from the host country’s policy framework on whether voluntary carbon credits require a CA or not.

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4 In the discussions at the Climate Market Club, Peru indicated that it envisions providing a “no-objection” letter for the purpose of Article 6 even prior to the validation process to provide assurance to project owners.
C. Country records the need for CA annually and applies CA according to Paris Agreement rules

The country’s registry should publish information, as needed and transparently, on how carbon assets are used for different purposes, once carbon assets are issued, authorized for specific use (if needed), and transferred to another participant party. Based on this information, the host country should record the need to carry out a CA on an annual basis in the country’s accounting system. The draft guidance for Article 6.2 foresees the need for an initial report, among other things, indicating the method chosen for CAs, annual reporting of (indicative) CAs to a United Nations Framework Convention on Climate Change Secretariat-maintained Article 6 database, and biennial reporting of (indicative) CAs within the Biennial Transparency Reports.⁵

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⁵ The term “indicative corresponding adjustment” (ICA) is not explicitly defined in the draft guidance, but it is helpful to distinguish ICAs occurring before the NDC target year from CAs occurring with the NDC target year/period, because the first is a statement of intent whereas the latter is the real adjustment.
5. Conclusion

Harmonized definitions of the processes and the project cycle by independent standards will greatly facilitate the development of the market and choices by countries for their own requirements and processes. The carbon asset process from design to issuance is understood, but additional considerations on the role of host countries need to be adapted for Article 6. Countries may consider the use of international independent standards to manage capacity constraints, costs, transparency, and credibility wherever these meet the countries’ interests. National standards or methodologies should be considered when no suitable independent standard or methodology is available or if warranted by national circumstances. While the project development cycle for generating carbon assets is well understood, the process of country-level authorization requires further understanding and stakeholder consultations. Pilots are needed to better understand its potential implications and the risks of the authorization process to different participants, including:

- A risk that the host country could revoke the letter of authorization or fail to carry out CAs. To lower the perception of this risk, the host country may (i) develop a policy upfront defining requirements clearly, including the processes, procedures, and public reporting obligations to be followed; and/or (ii) specific protocols to allow the transfer of carbon assets for intended use, as long as the conditions specified in the Letter of Authorization are met.

- CA and the associated country-level authorization being likely to remain challenging and complex in the short to medium term as it will require regulations and processes on the part of host countries, project developers, and carbon standards to interpret the requirements of the NDCs.

- A lack of clarity on requirements and processes for authorization that create governance risks; exclusion (for example, where a country cannot take advantage of post-2020 international carbon markets since it does not have the capacity to assess whether authorizing CAs is needed or not and may conflict with the country’s best interest); and exploitation (for example, where a host country feels pressured to approve investments and transfer MOs against its interest).

Early engagement with key stakeholders by the government will be essential. Host country authorization of transfers has important implications for the country’s NDC mitigation goals. Uncertainty over the scope, approaches, and rules for climate markets under the Paris Agreement means that many developing country governments may be hesitant to transfer carbon assets that are generated by low-carbon investments. Unlike Kyoto markets, the success of future international climate markets depends critically on strong government support and engagement.

Corporate commitment to managing carbon footprint and net-zero goals is driving demand for carbon offsets through the voluntary markets and is likely to be the dominant force shaping climate markets in the next few years. It is important to catalyze climate action through encouragement of the voluntary markets while the regulatory requirements under the Paris Agreement are defined. Upfront engagement and regular, ongoing discussions are needed to help host countries better understand the benefits and implications of participating in international climate markets. Costs and benefits of Article 6 should be used to understand the significance of defining a pricing strategy and policy. These measures are necessary to develop streamlined institutional and governance processes for authorizing carbon assets. Coordination is needed to streamline the authorization process when other market instruments (such as renewable certificate trading) are operational or under development.
6. Recommended next steps

Building on this paper’s findings and ongoing stakeholder consultations, the Informal Working Group on Carbon Assets could continue to explore the concept of carbon asset “use cases” and their linkages with host country endorsement or authorization. A non-exhaustive list of how use cases can be identified, defined, and categorized is further described below. These concepts may be further explored and refined during the next phase of work.

- **Use cases**: These may include voluntary corporate commitment (Scope 1, 2, and 3), carbon neutral product, country commitment, domestic and international compliance obligation, etc.

- **Claims associated with use cases**: Claims may include increase in the host country’s NDC ambition, NDC achievement, carbon neutrality, fulfillment of domestic and international compliance obligation, contribution to the Paris Agreement goals, contribution to a host country’s NDC, no claims about host country, etc.

- **Implications of use cases and claims**: Certain use cases may require authorization (and CA commitment) or require an acknowledgement of the activity, while others may not.

- **Process**: Certain use cases may require host country authorization or endorsement, while certain use cases may not. Further analytical work and consultations are needed to better understand the requirements for authorization or endorsement, and the potential information to be included in a Letter of Authorization or Endorsement (draft in Annex 1).
Annex 1: Draft Letter Templates

Draft Letter of Authorization

Ref. [Date]

Sub: Letter of Authorization of Program titled “[Name of Program]”

Dear [___],

On behalf of the Government of [Name of Country], I have the pleasure to inform you that “[Name of Program]” (“Program/Project”), with ID number [ID or serial number of Project], was authorized as a mitigation activity under Article 6.2 of the Paris Agreement on [Date].

The Government of [Name of Country] confirms that: 

(a) [Name of Country] has ratified the Paris Agreement on [Date] and submitted its Nationally Determined Contribution (NDC); 

(b) The Program/Project is inside the scope of [Name of Country]’s NDC; 

(c) The transferred mitigation outcomes (MO) under the Program/Project shall not be used by the Government of [Name of Country] to demonstrate achievement of its own NDC; 

(d) The participation of [Name of Country] in the proposed Program/Project and the associated mitigation activity is voluntary; 

(e) The Program/Project contributes to sustainable development in [Name of Country]; and 

(f) The Government of [Name of Country] shall follow all requirements of the Paris Agreement, including reporting, preventing double counting, and undertaking Corresponding Adjustments, as needed.

The Government of [Name of Country] authorizes the [Project/Program Implementing Entity] to coordinate, manage, and implement the Program/Project as coordinating/managing entity, and to enter into agreements for the transfer of [up to Maximum Volume of Mos of] MOs generated by the Program/Project [during Time Period for generation of MOs]. This authorization shall remain valid until [last date or period of validity].

[The Government of [Name of Country] recognizes that the Internationally Transferred Mitigation Outcomes (ITMOs) from the Program/Project [may/will be used for meeting [NDC target/for other uses] in [Name of Country using the MO].] These ITMOs will be issued into [Name of Registry].] Detailed project information is available at [weblink].

Through this letter, the Government of [Name of Country] commits that it shall support transfer and accounting of mitigation outcomes from the Program/Project, in line with the requirements of the Paris Agreement.

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6 Some countries may simply provide authorization for the same duration as the NDC period. This sentence is included to accommodate cases where the authorization period varies depending on the type of Program/Project.

7 Depending on the Policy Framework, the letter may specify the issuance registry.

8 Project information may be maintained on a database or website specified by the government or in the registry of the relevant carbon market standard.
Draft Letter of Endorsement

[Date]

To Whom It May Concern

Letter of Endorsement of Program titled “[Name of Program]”

The [Government of Country] endorses the program titled “[Name of Program]” (“Program/Project”), with ID number [ID or serial number of Program/Project].

The Government of [Name of Country] confirms that:

(a) [Name of Country] has ratified the Paris Agreement on [Date] and submitted its Nationally Determined Contribution (NDC);

(b) The Program/Project is inside the scope of [Name of Country]’s NDC;

(c) The mitigation outcomes (MOs) under the Program/Project may be used by the Government of [Name of Country] to demonstrate achievement of its own NDC;

(d) The participation of [Name of Country] in the proposed Program/Project and the associated mitigation activity is voluntary; and

(e) The Program/Project contributes to sustainable development in [Name of Country].

The Government of [Name of Country] endorses the [Program/Project Implementing Entity] to coordinate, manage, and implement the Program/Project as coordinating/managing entity. Endorsement does not imply any commitment to undertake Corresponding Adjustment.

The [Program/Project Implementing Entity] is expected to generate [Maximum Volume of MOs] of MOs during [Time Period for generation of MOs]. Detailed Program/Project information is available at [weblink].
Annex 2: Carbon Asset Development Process and Accountabilities

Figure 3. Proposed workflow for carbon asset development

<table>
<thead>
<tr>
<th>BUYER</th>
<th>PROJECT OWNER</th>
<th>GOVERNMENT</th>
<th>INDEPENDENT ENTITY</th>
<th>DMS ADMIN</th>
<th>REGISTRY ADMIN</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Request for project registration</td>
<td>2. Validation/Independent assessment</td>
<td>3. Periodic verification and request of issuance</td>
<td>4. Upload project data</td>
<td></td>
</tr>
<tr>
<td>3. Navigate projects/MOs: search, filter, sort projects, view project details</td>
<td>Project qualifies for use under Article 6, CORSIA or other specific use</td>
<td>Country issues a Letter of Assurance and Authorization</td>
<td>Country receives information on how MOs are used to fulfill offsetting requirements</td>
<td>Country applies CA according to Paris Rules</td>
<td></td>
</tr>
<tr>
<td>10. Negotiate purchase of MO</td>
<td>Request for transfer</td>
<td>Country receives information on how MOs are used to fulfill offsetting requirements</td>
<td>Country applies CA according to Paris Rules</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 4. Linkage between endorsement and authorization, and the project cycle

- **Project Preparation**
  - Project commences preparation

- **Project Commissioning**
  - Project begins operation and leads to emission reductions

- **Verification**
  - Monitoring and verification of Units/MOs completed

- **Transfer of Units/MOs**
  - Units transferred for voluntary market with optional Endorsement
  - MOs transferred for compliance buyer after Authorization

- **Policy Framework for Article 6**
  - May specify eligible activities

- **Letter of No-Objection/Endorsement/Approval**
  - If applicable, government grants approval for the project to continue preparation for generating MOs

- **Letter of Authorization**
  - Government authorizes the international transfer of MOs and commits to CA

- **Corresponding Adjustment**
  - For specified volume in relevant NDC period
Annex 3: Information and Registry Systems for Tracking and Accounting

The discussions at COP25 suggest that each participating Party shall have, or have access to, a registry for tracking purposes. While negotiations are still ongoing, it is envisioned that the registry (or a designated registry account) is needed at the national level to accommodate the reporting and tracking requirements of the Paris Agreement. The design of national registries is likely to be influenced by existing registries managed by CDMs and independent standards. In addition, there may be a need for national level data management systems for countries to track NDC progress (for example, project tagging to NDCs) and maintain a full repository of their mitigation activities.

Having the right infrastructure is critical for ensuring accountability and environmental integrity of climate markets. Given the decentralized nature of climate markets that are likely to emerge, countries and institutions should build the needed institutional, legal, and operational infrastructure to ensure efficient and transparent recording of carbon assets, thereby building trust and transparency across decentralized climate markets. The following summarizes the information systems that may be needed at the national and the international level to store, track, and transact units at different stages of a carbon asset’s life cycle.

**National level**

- **Data management system (DMS):** A database that records and archives project-level information that does not need to be stored or listed in the register/transaction registry but will be necessary for transparency and accountability. The DMS may include documents related to project design, emission reductions, or removals calculation methodologies and tools; permissions required for project operation; host country issued documents, stakeholder engagement documentation, monitoring reports, validation and verification reports, etc.

- **Register/Transaction registry:** A register is a database that records unit-level information as required by the market mechanism. This could include the vintage of the carbon unit, the serial number and location of the project for which the carbon unit was issued, the project funder, or verification details. Depending on the host country’s choice, ability and the need, a separate DMS may not be needed. A transaction registry is a database that has all the features of a register, plus the capability to transact carbon units between multiple account holders on the transaction registry (internal transfer), and/or the capability to transfer carbon units to another transaction registry (external transfer). The more complex the market mechanism, the more features the transaction registry will require. “Registry” is used in this note as a more general term for register/transaction registry. While the DMS can be implemented offline, it is mandatory to display information related to projects and units online in a registry.

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9 The United Nations Framework Convention on Climate Change Secretariat is expected to implement an international registry for participating Parties that do not have a registry or have access to a registry.

10 The Madrid draft text also identifies the functionalities of the registry as its ability to record MOs with unique identifiers and record actions such as authorization, first transfer, transfer, acquisition, cancellation, use toward NDCs, authorizations for use toward other international mitigation purposes, voluntary cancellation, and to maintain relevant accounts, as necessary.
International level

- Trading platform (for example, Exchange): Registries may have the ability to integrate with trading platforms, such as exchanges, which enable account holders to buy and sell carbon assets in environmental markets. Key benefits of an Exchange include providing a centralized pool of liquidity, electronic clearing and settlement; same-day settlement of products and funds; real-time price transparency; anonymous trading; and a transparent web-based marketplace.

- Connecting registries and other information systems: The draft text and guidance related to the Paris Agreement do not elaborate on how registry systems will be connected so that carbon assets may be tracked across different decentralized market mechanisms. Going forward, international climate markets, such as under CORSIA or Article 6, will likely require different registry systems to communicate with one another for compliance purposes including robust tracking and the avoidance of double counting. Linking these systems to reduce fragmentation and systems integration – through initiatives like the World Bank’s Climate Warehouse – can facilitate an inclusive platform to track carbon assets and avoid double counting.

Annex 4: Policy Framework for Article 6.2

Article 6.2 of the Paris Agreement is expected to support a bottom-up approach to markets that requires considerably higher levels of engagement and oversight from host countries. Specifically, the decisions on how to quantify, monitor, verify, authorize, and report emission reductions under Article 6.2 are largely up to the participating countries, provided they are consistent with the guidance adopted by the Conference of the Parties at the meeting of the Parties to the Paris Agreement. Countries that host cooperative activities will need robust policy and regulations along with strong institutional arrangements and procedures.

The Policy Framework has been drafted for a Party to declare its preferred approach toward implementing a Cooperative Approach under Article 6.2. The Policy Framework is intended to provide the minimum legal foundation required to give Parties (including private sector entities) the necessary certainty regarding their rights and obligations as participants to the Cooperative Approach, including the ability to enforce cross-border contractual arrangements. The Policy Framework is intended to facilitate negotiations and subsequent agreement between two or more Parties, and the Policy Framework does not in itself create an effective and binding Cooperative Approach between Parties.

The main body of the Policy Framework is accompanied by several Schedules to the Policy Framework, which play an integral role in setting out the specific requirements. These Schedules are intended to contain the detailed and technical information related to, among others, environmental integrity, sustainability requirements, approved sectors and activities, and approved standards and methodologies, for the purposes of implementing a Cooperative Approach. These may be as specific (for example, the methodology that MO activities must use) or as broad (for example, eligible methodologies of international standards including the CDM, Gold Standard, or Verra) as a country deems fit. Recognizing the potential multiplicity in requirements and options, the Climate Market Club will consultatively develop
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Approach Papers to provide a starting point for countries to define requirements through Schedules that meet their national circumstances and climate strategies. The development of Schedules will also benefit from inputs from various technical experts and consultations in platforms such as the Climate Market Club, alongside the final Article 6.2 Guidance.

A summary of the contents of each of the schedules defined in the Policy Framework is provided below.

**Schedule 1 – Definitions:** This schedule outlines definitions for terms used in the Policy Framework to ensure a consistent understanding.

**Schedule 2 – Environmental integrity requirements:** Ensuring environmental integrity is recognized as an important goal under Article 6 of the Paris Agreement. The principle of environmental integrity is intended to ensure that transfers of emission reductions or MOs do not lead to an increase in global GHG emissions. The Approach Paper on Environmental Integrity being developed through the Climate Market Club suggests that ensuring environmental integrity requires assessment of two aspects: 1) stringency of NDC compared to “business as usual” conditions; and 2) unit quality, i.e. whether the volume of transferred MOs generated from a mitigation activity is accurately calculated by setting a stringent or conservative baseline. Through this schedule, the country will describe how it will ensure that the MOs it generates and transfers have environmental integrity.

**Schedule 3 – Sustainable development criteria:** This schedule is intended to demonstrate the linkage between activities generating MOs and sustainable development. The 17 Sustainable Development Goals of the United Nations could form a starting point for this schedule.

**Schedule 4 – Eligible MO activities:** Through this schedule, the country may define conditions, technologies, or sectors that would be eligible for generating MOs. Clarity on eligibility could incentivize investment in activities that could generate additional revenues through the sale of MOs. Countries may choose to define eligibility in various ways, for example, through a “positive list” of eligible sectors or technologies; a list of criteria that would be used to establish eligibility; and/or a process for review and assessment of eligibility of an activity.

**Schedule 5 – Eligible methodologies:** Through this schedule, the country will outline the eligible methodologies that Activity Participants may use for estimating MOs of an eligible activity. For example, countries may pre-approve relevant, internationally peer-reviewed standards and their methodologies, such as the CDM, Verra, and Gold Standard. Countries may also establish a mechanism for developing new methodologies.

**Schedule 6 – MO development process:** This schedule is intended to outline the steps in the development of an MO. This would provide clarity to an Activity Participant on the processes to be followed, and the stage at which approval and/or authorization could be sought from the relevant government ministry or agency. The Approach Paper on the Carbon Asset Development Cycle prepared through the Climate Market Club could serve as a starting point for this schedule.

**Schedule 7 – Validation and MRV:** The country would outline the validation or independent assessment process, whereby an accredited/eligible third party entity ensures that the Activity Participant has correctly applied and followed the methodology to estimate MOs. The country would also outline the MRV process to be followed by eligible activities to generate MOs. For example, the country could adopt the MRV process prescribed under the approved methodologies. Alternatively, the government may require a different MRV process or outline required/permissible modifications to the process to ensure robustness and conservatism.

**Schedule 8 – Requirements for Activity Participant:** Activity Participants may include, governmental agencies, relevant ministries, public sector undertakings, legally and validly established corporate entities, unincorporated associations, bodies corporate, trust bodies, [multilateral organizations and international financial institutions] etc., but will not include individuals. This schedule is intended to define which entities can be Activity Participants and how they could potentially engage in the generation, transfer, and/or use of MOs (whether as a buyer or a seller) within the jurisdiction of the country.

**Schedule 9 – Issuance:** In this schedule, the country would outline the process for issuance of an MO, i.e. reviewing and confirming that a MO activity
has complied with the requirements of the Policy Framework and authorizing it for international transfer.

**Schedule 10 – Eligibility criteria and/or approval/accreditation process for independent entities**: This schedule would formulate criteria for entities to be eligible to carry out independent assessment or validation. The country may pre-approve accredited bodies under an existing standard, or define a process for the selection and accreditation of independent entities.

**Schedule 11 – Authorization requirements**: The documents or submissions to be made by an eligible Activity Participant to seek authorization from the country for international transfer of MOs would be outlined. This may include the Letter of Authorization or Endorsement templates developed through the Climate Market Club, which outlines the commitments to be made by the country as part of authorization and/or endorsement of an activity.

**Schedule 12 – Prerequisites for MOs**: The country may outline criteria to be met by MOs to be transferable; e.g. eligible metrics, conversion factors if applicable, the years in which MOs may be generated or eligible vintages for transfer, etc.

**Schedule 13 – Registry procedures**: A country would need to operate or have access to registry infrastructure in order to facilitate tracking and recording of MOs to avoid double counting. This schedule would outline the registry that would be used and the process for registration, authorization, transfer, and reconciliation through this system.

**Schedule 14 – Reporting procedures**: Based on the guidance related to Article 6.2 that emerges from the international negotiations, the country will outline how it will follow and meet these reporting requirements.

**Schedule 15 – Functions of the DNA and relevant ministry**: This schedule would outline the institutional processes, and the roles and responsibilities of relevant ministries, designated agencies, committees or relevant bodies that would be responsible for facilitating and regulating participation in markets. The Approach Paper on Country Processes and Institutional Frameworks developed through the Climate Market Club outlines the full set of functions that need to be performed at the country level.