



GGGI Insight Brief 07

# Implementing Article 6 of the Paris Agreement: Options for governance frameworks for host countries

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# EXECUTIVE SUMMARY

Article 6 of the Paris Agreement is crucial in the global fight against climate change. It recognizes that some countries may choose to pursue voluntary cooperation in the implementation of their nationally determined contributions (NDCs) to allow for higher ambition and to promote sustainable development. Critically, Article 6 provides a framework for international cooperation in addressing climate change that encourages private sector investment in climate actions.

However, as highlighted in 2022 by then Executive Secretary of the United Nations Framework Convention on Climate Change, Ms Patricia Spinoso, while Article 6 is poised to support the operationalization of the Paris Agreement, its technical rules are complex.<sup>1</sup> This Insight Brief explains some of the challenges related to the implementation of Article 6 cooperative approaches. Cooperative approaches involve countries collaborating by trading internationally transferred mitigation outcomes (ITMOs) to support achievement of their NDCs. The Article 6 rulebook provides only a broad outline of appropriate cooperative approaches, and countries have considerable flexibility when developing the governance frameworks required to implement Article 6. The brief explores five areas that require host countries to make decisions, using examples from countries that have moved early in articulating their Article 6 approaches. In line with GGGI's mission of accelerating a global transition toward a model of green growth, this Insight Brief provides guidance and recommendations for these five areas outlined below:

## i. Eligible activities for ITMO authorization

Establishing eligibility criteria for identifying suitable activities for ITMO authorization is critical. So far, countries have used a strategic list of activities, an activity's place in the NDC, or a combination of both. Utilizing both is likely to maximize the benefits of Article 6 participation and mitigate the risk of overselling. Countries could consider integrating eligibility considerations into their next NDC update for coherence in their approach to NDC implementation and financing.

## ii. Share of mitigation outcomes reserved for domestic use

Host country governments can minimize the risk of overselling ITMOs by reserving a proportion of mitigation outcomes (MOs) for use towards their own NDCs. As yet, no benchmark exists for determining this proportion. Host countries may wish to consider if reserving a higher amount for domestic usage will impact the commercial viability of their mitigation activities and deter investment. Until a clear benchmark emerges, countries can determine the amount case-by-case.

## iii. Accounting approach for applying corresponding adjustments

Most early moving host countries prefer averaging over multi-year accounting for applying corresponding adjustments. But averaging may jeopardize overall NDC achievement if unexpected events cause emissions to spike or drop in the target year. Multi-year accounting requires greater capacity and resource commitment but enables a country to assess the risk of overselling across the entire NDC period and respond promptly to unexpected changes in emissions. Governments could consider developing multi-year targets in their next NDC updates to allow for more robust accounting.

## iv. Carbon crediting mechanism for issuing MOs that can be authorized as ITMOs

The choice of a carbon crediting mechanism for issuing credits authorizable as ITMOs depends on a host country's resources, capabilities and needs. Developing a national mechanism provides more control in some respects, such as methodology design, but demands significant capacity and stakeholder buy-in. Resource-constrained host countries could outsource the issuing process to independent crediting mechanisms.

## v. Developing a fee structure

Each country's unique context determines its decisions regarding fees for Article 6 transactions. Using a fee structure that appropriately reflects a country's opportunity and administrative costs from participating in Article 6 is prudent. Equally prudent is considering how different fee levels might affect the commercial viability of mitigation activities. Ensuring fees are transparently defined, clearly communicated and consistently applied is also important.

In addition to addressing the five areas where host countries have options and providing a recommended approach, the Insight Brief summarizes Article 6 in section 2 and provides an overview of the state of Article 6 readiness among existing and potential host countries in section 3. As this paper demonstrates, GGGI stands ready to help countries in effectively participating in Article 6, meeting their NDC targets and aiming for more ambitious mitigation and adaptation outcomes.

<sup>1</sup> <https://unfccc.int/news/article-6-is-a-key-tool-to-boost-climate-ambition-patricia-espinosa>



# 1. Introduction

The Paris Agreement, adopted in December 2015, aims to strengthen the global response to climate change by holding the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels, and pursuing efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels. To help achieve these goals, all parties to the Paris Agreement must submit nationally determined contributions (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC). NDCs outline the mitigation and adaptation actions countries will take to support the Paris Agreement goals and are updated every five years.

However, not all countries have the resources to fulfill their NDCs and may make implementing them conditional on international support, such as financial or technological assistance. These are known as conditional NDC targets and are unlikely to be achieved without the support requested. In contrast, unconditional NDC targets are likely to be achieved by a country using its own resources.

Article 6 of the Paris Agreement recognizes that some countries may choose to pursue voluntary cooperation in implementing their NDCs to allow for higher ambition in their mitigation and adaptation actions, and to promote sustainable development. Voluntary cooperation refers to the international trading of emission reductions (known as mitigation outcomes, or MOs) between countries, with the MOs achieved in one country counted towards the NDC targets of another in exchange for payment.<sup>2</sup> The Article 6 framework also enables non-state entities to purchase MOs for use towards voluntary or compliance commitments. As such, Article 6 provides a mechanism which allows international finance to be channeled to mitigation activities facing implementation barriers, such as conditional NDC measures.

The Article 6 rulebook was agreed at COP26<sup>3</sup> and further developed at COP27<sup>4</sup>. It provides a framework for implementing cooperative approaches, including guidance on a common set of accounting and reporting rules. Significantly, it specifies that a country transferring MOs internationally must apply corresponding adjustments to its emissions balance equal to the MOs transferred. Corresponding adjustments ensure that the MOs generated from an activity and transferred internationally do not count towards both countries' NDCs—that is, MOs are not double counted. While applying corresponding adjustments helps avoid double counting, it presents host countries<sup>5</sup> with a potential “overselling risk.” Overselling risk refers to a country transferring too many MOs internationally, leaving it with insufficient emission reductions to reach its own NDC targets. To mitigate this risk and meet the Article 6 requirements, host countries need to design robust strategies and governance frameworks that guide their Article 6 decisions and processes. These include the authorization, issuance, and transfer of internationally transferred MOs (ITMOs) and other related reporting requirements (Figure 1).<sup>6</sup>

<sup>2</sup> Article 6.8 refers to “non-market” approaches, which do not involve the trading of emissions reductions. Article 6.8 is beyond the scope of this paper.

<sup>3</sup> Decision 2/CMA.3 ‘Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement’ (Decision 2/CMA.3).

<sup>4</sup> Decision 6/CMA.4 ‘Matters relating to cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement’ (Decision 6/CMA.4).

<sup>5</sup> A ‘host country’ is the country hosting the mitigation activity that generates MOs for international transfer under Article 6; also known as the ‘seller country’ or ‘transferring country’.

<sup>6</sup> All figures in this document have been designed by GGGI.

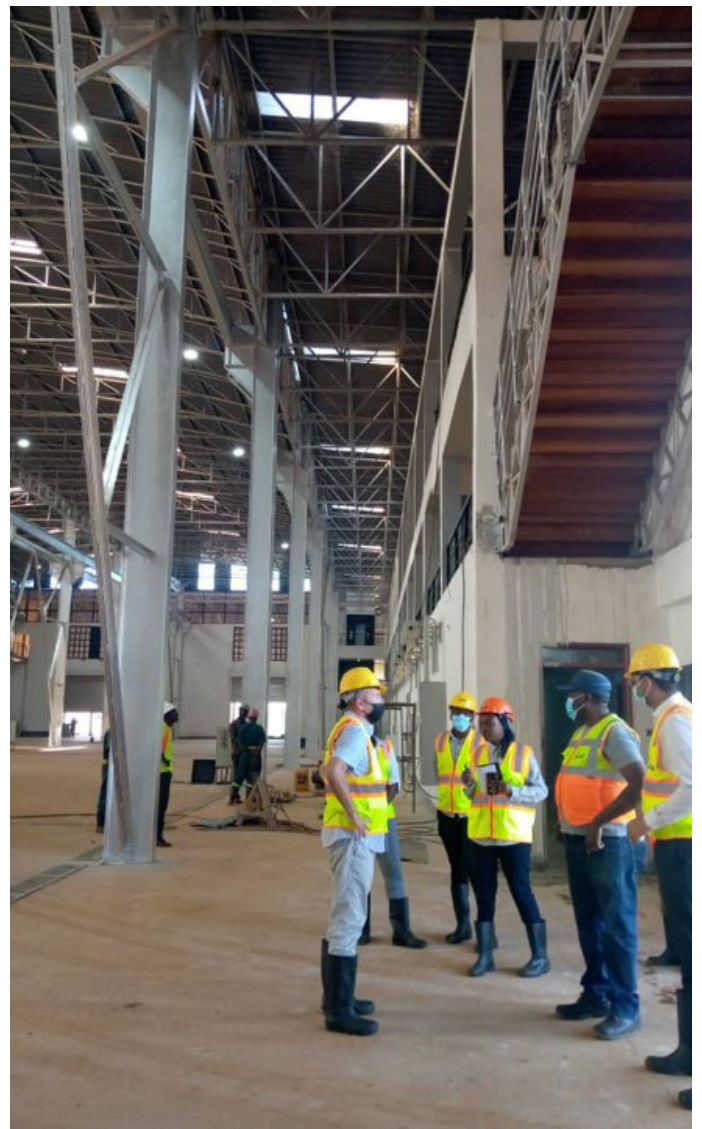
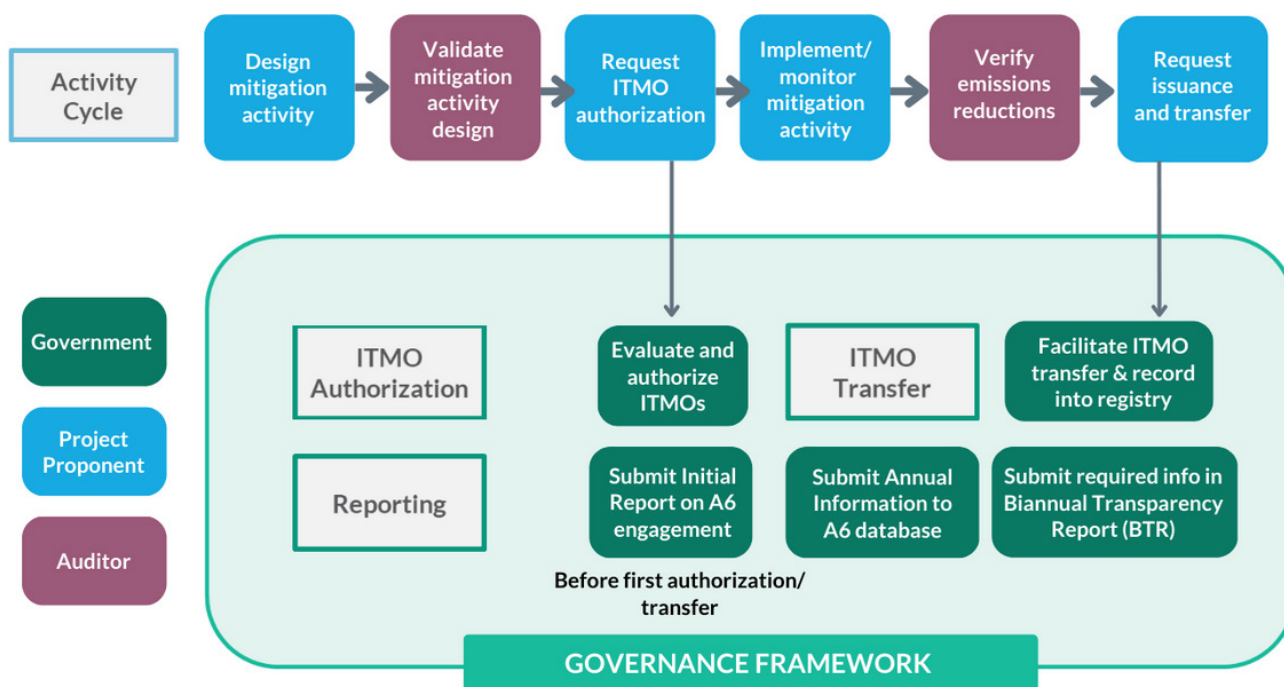


Figure 1. Simplified governance framework for managing Article 6 engagement.



A host country's governance framework reflects its unique national circumstances. Therefore no single design approach exists. Moreover, the Article 6 guidance is deliberately high-level and provides flexibility to countries regarding their engagement with the still-evolving international carbon market. Host countries need to decide among various options when designing an Article 6 governance framework.

This Insight Brief outlines five key areas where options exist, requiring host country governments to make decisions. It complements the Global Green Growth Institute's (GGGI) guidance on governance models for host country engagement in Article 6 by detailing the decisions made to date by various host countries.<sup>7</sup> The brief bases its analysis on a range of publicly available policy documents. Some of these are still in draft form while others do not yet have an official English translation.

The five key areas comprise:

- i. Eligible activities for ITMO authorization.**
- ii. Share of mitigation outcomes reserved for domestic use.**
- iii. Accounting approach for applying corresponding adjustments.**
- iv. Carbon crediting mechanism for issuing MOs that can be authorized as ITMOs.**
- v. Developing a fee structure.**

<sup>7</sup> GGGI (2022). Guidance on governance models for host country engagement in Article 6, V2.0. <https://ggi.org/report/guidance-on-governance-models-for-host-country-engagement-in-article-6/>

## 2. Current state of Article 6 readiness

It is critical that Article 6 voluntary cooperation occurs on an equal playing field. Currently this is not the case. For example, countries lacking sufficient capacity, expertise or resources to effectively trade in MOs may have limited access to buyers or be unable to secure a fair price. The implementation of Article 6 must ensure trading mechanisms include provisions that promote equal outcomes for all participating countries.

Countries are increasingly indicating they will use Article 6 market mechanisms. A 2021 analysis found that 77 percent of countries who submitted updated NDCs anticipate using Article 6, with almost half of these being countries in Sub-Saharan Africa or Latin America.<sup>8</sup> However, most countries are still preparing to implement Article 6 approaches. These preparations primarily focus on establishing formal institutional arrangements, such as designating a responsible ministry. But readiness preparations are less advanced, including administrative arrangements and legal frameworks for implementing cooperative approaches.<sup>9</sup>

Potential host countries also need capacity and confidence to fully engage in the international carbon market. An Article 6 readiness survey in 2022 of GGGI Member and partner governments found that, although countries are eager to engage in cooperative approaches, uncertainties and risks temper how and when they are likely to undertake transactions.<sup>10</sup> Forty-eight percent of countries felt the Article 6 market lacked equal opportunities for buyers and sellers. Concerns exist that the market disproportionately favors buyers, potentially undermining host country confidence in participating in and benefitting from cooperative approaches. Developing robust governance frameworks for Article 6 and sharing other host countries' experiences can help address some of these concerns.

GGGI supports several potential host countries in developing strategies and governance frameworks for Article 6 engagement. It is collaborating with a consortium of partners through the Supporting Preparedness for Article 6 Cooperation program<sup>11</sup> to provide readiness support to the governments of Colombia, Pakistan, Thailand, and Zambia. The program tailors this support to each country's priorities based on in-depth readiness assessments. These assessments also assist in developing governance frameworks for Article 6, strategies, regulations, and institutional arrangements in the four countries.

Another example of GGGI supporting host countries in developing an Article 6 strategy is its Designing Article 6 Policy Approaches program, which has helped the Government of Senegal to develop such a strategy. GGGI also supports the governments of Nepal and Cambodia through the Mobilizing Article 6 Trading Structures program to develop governance frameworks that will guide them in operationalizing cooperative approaches. In Cambodia, the Article 6 Operations Manual is awaiting the Minister for Environment's approval. More generally, the Supporting Preparedness for Article 6 Cooperation program is developing implementation tools and six guides for partner countries and the broader global community. The guides cover topics such as designing Article 6 strategy and governance frameworks, integrating Article 6 with other carbon pricing instruments, and developing contractual options and models for Article 6 transactions.

Other countries, such as Ghana, have received support from international organizations to develop governance frameworks. Some have developed frameworks without external assistance; for example, Indonesia has developed comprehensive guidelines for implementing carbon market-related activities, including cooperative approaches.<sup>12</sup>

GGGI is increasing the number of countries it works with on Article 6 readiness through global activities such as the Mobilizing Article 6 Trading Structures program or the Article 6 Readiness Facility to be launched under GGGI's Carbon Transaction Facility. GGGI is also expanding country-specific programs, such as a project in Lao PDR with the Australian Department of Foreign Affairs and Trade and a project being prepared in Uganda with the European Union.

The remainder of this paper outlines the five areas where host countries have options in implementing Article 6 and recommends an approach to Article 6 that countries may wish to consider. It also details the approaches taken to date by selected host countries. These provide benchmarks and examples that can guide the decisions of other early movers.

<sup>8</sup> Michaelowa et al. (2021). Article 6 readiness in updated and second NDCs. Perspectives Climate Group and Climate Focus. [https://www.perspectives.cc/public/fileadmin/user\\_upload/PCG-CF\\_Art6\\_Readiness-NDCs\\_27.10.21.pdf](https://www.perspectives.cc/public/fileadmin/user_upload/PCG-CF_Art6_Readiness-NDCs_27.10.21.pdf)

<sup>9</sup> Gold Standard (2023). Implementing Article 6 – An overview of preparations in selected countries. [https://www.goldstandard.org/sites/default/files/implementing\\_article\\_6-an\\_overview\\_of\\_preparations\\_in\\_selected\\_countries.pdf](https://www.goldstandard.org/sites/default/files/implementing_article_6-an_overview_of_preparations_in_selected_countries.pdf)

<sup>10</sup> GGGI (2022). Global Survey on Article 6 Readiness Report. <https://ggi.org/wp-content/uploads/2022/11/GGGI-Global-Survey-on-Article-6-Readiness-Report.pdf>

<sup>11</sup> <https://www.greenpolicyplatform.org/initiatives/SPAR6C>

<sup>12</sup> Available at [https://jdih.menlhk.go.id/new/uploads/files/2022pmlhk021\\_menlhk\\_10252022143318.pdf](https://jdih.menlhk.go.id/new/uploads/files/2022pmlhk021_menlhk_10252022143318.pdf)



## 3. Option areas

The options host countries have in implementing Article 6 give them flexibility in designing approaches that meet their specific needs. However, it is crucial that host countries use this flexibility carefully to ensure that participation in cooperative approaches contributes to the Paris Agreement's goals.

This brief identifies five areas where host countries can identify and exercise favorable options for engaging in Article 6's cooperative approaches.

### i. Eligible activities for ITMO authorization

The Article 6 rulebook provides only high-level guidance on the types of mitigation activities that are eligible to generate ITMOs for use under Article 6 cooperative approaches. It allows countries to set their eligibility criteria, provided they describe how their mitigation activities will ensure environmental integrity and promote sustainable development.

As ITMOs cannot count towards a host country's NDC targets, establishing robust eligibility criteria for mitigation activities helps host countries minimize the risk of overselling ITMOs. The criteria also offer a way to mobilize additional finance flows toward national priority areas; for example, by channeling climate finance towards specific types of technology.

Countries have tended to set eligibility criteria in two main ways (Table 1):

1. Through a strategic list of activities.
2. According to an activity's place in the NDC (i.e., whether it is a conditional or unconditional NDC measure).

Both approaches can be combined. In addition, most countries have adopted criteria related to alignment with national sustainable development goals.





Table 1. ITMO authorization eligibility criteria approaches adopted by different countries.

Country	Eligibility criteria approach(es) taken	
	Strategic list of activities	Based on the activity's place in the NDC
Ghana	✓	✓
India	✓	X
Jordan	X	✓
Vanuatu	X	✓
Zambia	✓	X
Zimbabwe	✓	X

As Table 1 indicates, India, Zimbabwe and Zambia have chosen the first approach exclusively, and are discussed below.

India proposes considering certain priority areas of activities for authorization during a three-year pilot period of Article 6 trading.<sup>13</sup> Examples include compressed biogas, alternate materials such as green ammonia, and carbon capture and storage. India's policy outlines additional criteria for activities to be eligible for Article 6 authorization, including an emphasis on facilitating technology transformation in India. For example, priority may go to projects that present significant potential for clean energy transition, provide intellectual property rights, or tackle hard to abate sectors. The approach is not wholly prescriptive. Other activities may be considered for trading, making the authorization criteria flexible.

Zimbabwe has prioritized several suggested non-prescriptive carbon trading activities across its national sectors; for example, electrifying the transport sector and promoting conservation farming.<sup>14</sup>

Zimbabwe's NDC is entirely conditional upon receiving international support. Therefore, all activities within the greenhouse gas inventory sectors could potentially be eligible for Article 6 trading, pending meeting further conditions.

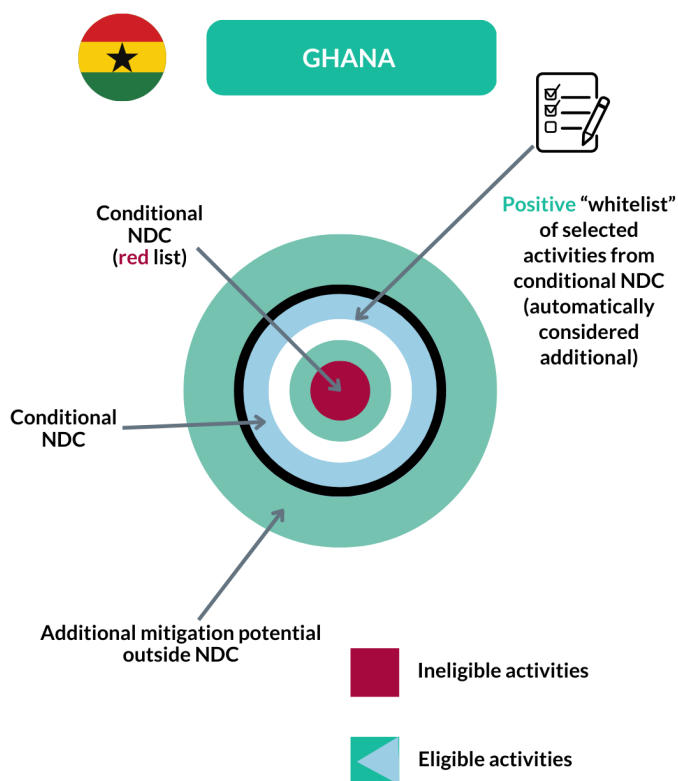
Zambia has similarly outlined a more general set of activities eligible for consideration in its interim guidelines.<sup>15</sup> Like India and Zimbabwe, several of Zambia's eligible activities focus on measures that support a clean energy transition. Other eligible activities include actions in the agriculture, transport, waste, and forestry sectors. In Zambia and Zimbabwe, mitigation activity proponents must detail how their proposed activity contributes to national development or climate priorities, among other criteria. GGFI supports Zambia in updating these interim guidelines through the Supporting Preparedness for Article 6 Cooperation program.

<sup>13</sup> Available at <https://moef.gov.in/wp-content/uploads/2023/02/Draft-papers-on-Sustainable-Development-Evaluation-Framework-SDEF.pdf#page=8>.

<sup>14</sup> Available at <https://www.infomin.org.zw/wp-content/uploads/2023/05/14TH-POST-CABINET-PRESS-BRIEFING-final-1.pdf#page=10>.

<sup>15</sup> Available at <https://www.mgee.gov.zm/wp-content/uploads/2022/12/Interim-Guidelines-Regulation-of-Carbon-Markets-in-Zambia-1.pdf>.

Figure 2. Ghana's combination of Article 6 mitigation activity selection strategies.



Vanuatu, Jordan and Ghana have taken the second approach to setting eligibility criteria (i.e., according to an activity's place in the NDC). Vanuatu has determined that all NDC activities noted as conditional on international support are eligible for authorization.<sup>16</sup> Since all of Vanuatu's NDC activities are conditional, all mitigation activities are eligible for ITMO authorization.

In contrast, Jordan's draft Article 6 policy takes the converse approach by detailing a list of measures that form part of its NDC achievement plan. Consequently, transferring ITMOs from these measures could create an overselling risk.<sup>17</sup> Activities on the list must satisfy an overselling risk assessment before they are eligible to generate MOs for authorization.

Ghana combines both approaches to eligibility criteria (Figure 2).<sup>18</sup> It has developed a "whitelist" of activities deemed to confer automatic additionality and a "red list" of activities deemed ineligible for authorization due to being already in Ghana's unconditional NDC mitigation activities. All transferrable MOs must come from either conditional mitigation activities within Ghana's NDC, or from activities outside the scope of the NDC.

For activities not on the whitelist, Ghana and the foreign party must confirm their eligibility. Such activities must be consistent with (a) the Article 6 rulebook, (b) Ghana's climate mitigation co-benefits plan, and (c) its economic diversification plans. All proposed activities, including whitelist activities, must then meet an additional set of criteria. These include contributing to sustainable development and aligning with Ghana's sectoral regulatory or standard requirements.

<sup>16</sup> Available at <https://registry.imrvtool.com/about-ndc-programme/information-and-docs/>

<sup>17</sup> Available at [http://www.moenv.gov.jo/ebv4.0/root\\_storage/ar/eb\\_list\\_page/jordan\\_a6\\_policy\\_framework\\_draft.pdf](http://www.moenv.gov.jo/ebv4.0/root_storage/ar/eb_list_page/jordan_a6_policy_framework_draft.pdf).

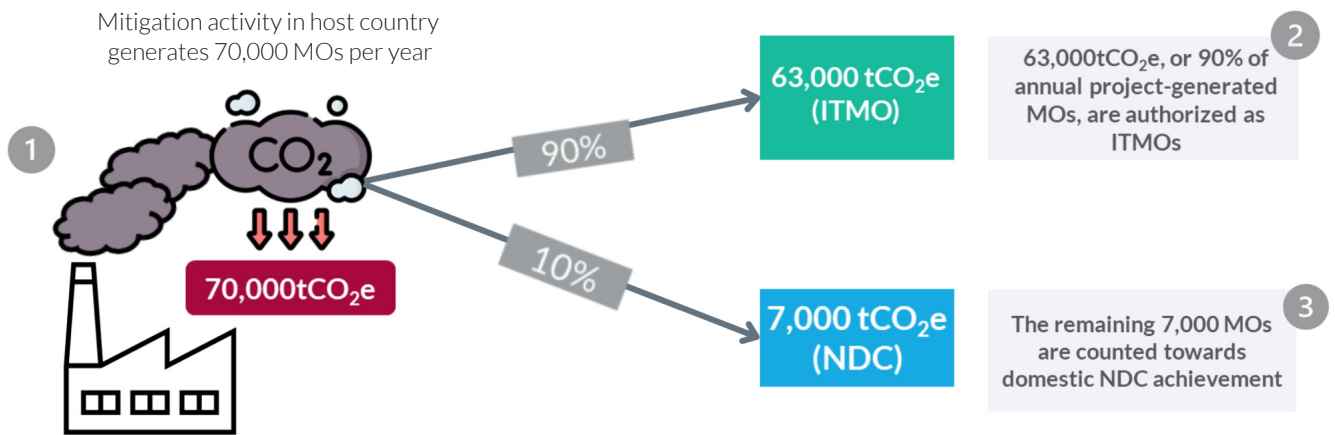
<sup>18</sup> Ghana's framework is available at [https://cmo.epa.gov.gh/wp-content/uploads/2022/12/Ghana-Carbon-Market-Framework-For-Public-Release\\_15122022.pdf](https://cmo.epa.gov.gh/wp-content/uploads/2022/12/Ghana-Carbon-Market-Framework-For-Public-Release_15122022.pdf).

## ii. Share of mitigation outcomes reserved for domestic use

In addition to using selection criteria to determine which activities are suitable for Article 6, host countries can try minimizing the risk of overselling ITMOs by applying strategic parameters to authorizations. One parameter is reserving a share of MOs for use towards domestic NDC achievement. In such situations, an activity proponent requesting an authorization would need to present an analysis of the action's total emissions reductions. The host country would then authorize only a specified portion of the total MOs the activity generates, using the remainder to achieve its NDC or enhance its NDC's ambition (Figure 3).

While countries like Jordan have opted to take the reservation approach, few countries have specified a reservation amount. Determining the share of MOs to reserve presents significant challenges for host countries.<sup>19</sup> Of those that have specified an amount of MOs to be reserved for domestic use (Figure 4), Ghana reserves one percent of an activity's MOs in a national buffer account and Paraguay three percent.<sup>20</sup>

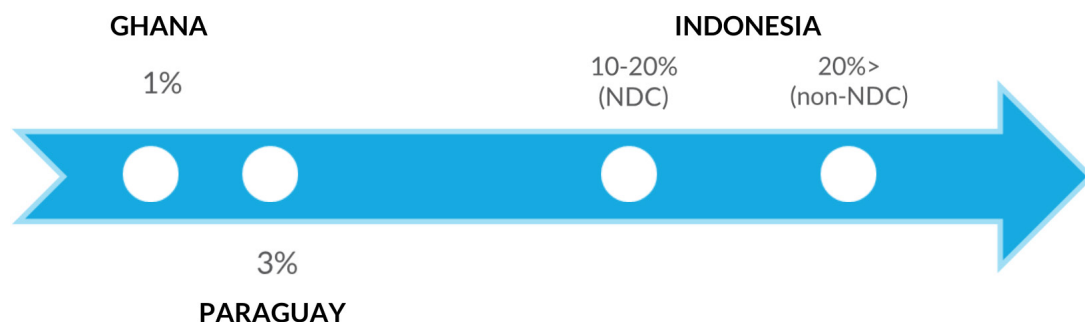
Figure 3. Sharing a portion of MOs for domestic use - example scenario.



Indonesia has proposed a higher buffer range, depending on whether an activity is within its NDC's scope. It proposes reserving 10 to 20 percent of MOs for domestic use from NDC activities and a minimum of 20 percent from non-NDC activities.

The responsible minister determines the exact value of the buffer reservation amount. Indonesia suggests the buffer can be partially or wholly returned after sectoral, sub-sectoral, and sub-sub-sectoral NDC targets are achieved for two consecutive years.<sup>21</sup>

Figure 4. Proposed share of MOs to be reserved for domestic use in selected host countries.



<sup>19</sup> Kreibich, N. and Schell, J. (2023). Sharing mitigation outcomes: How should climate benefits under Article 6 be distributed? Carbon Mechanisms Research Policy Paper 01/2023. Wuppertal Institute for Climate, Environment, Energy.

<sup>20</sup> Available at <http://silpy.congreso.gov.py/expediente/127825>

<sup>21</sup> Aforementioned regulation [https://jdih.menlhk.go.id/new/uploads/files/2022pmlhk021\\_menlhk\\_10252022143318.pdf](https://jdih.menlhk.go.id/new/uploads/files/2022pmlhk021_menlhk_10252022143318.pdf).



### iii. Accounting approach for applying corresponding adjustments

When host countries authorize the MOs generated by a mitigation activity, they commit to applying corresponding adjustments for those MOs once transferred internationally. Applying corresponding adjustments requires the transferring host country to add back the amount of ITMOs transferred to the emissions balance it reports to the UNFCCC. Applying corresponding adjustments is central to preventing the double counting of MOs and to helping ensure the environmental integrity of Article 6 approaches. Figure 5 provides a simplified example of how corresponding adjustments are applied.

As many countries have set single-year targets in their NDC (e.g., a target for 2030) but will be implementing mitigation activities and transferring ITMOs throughout the NDC period (i.e., up to 2030), the Article 6.2 guidance provides two options for how countries with single-year targets may apply corresponding adjustments:

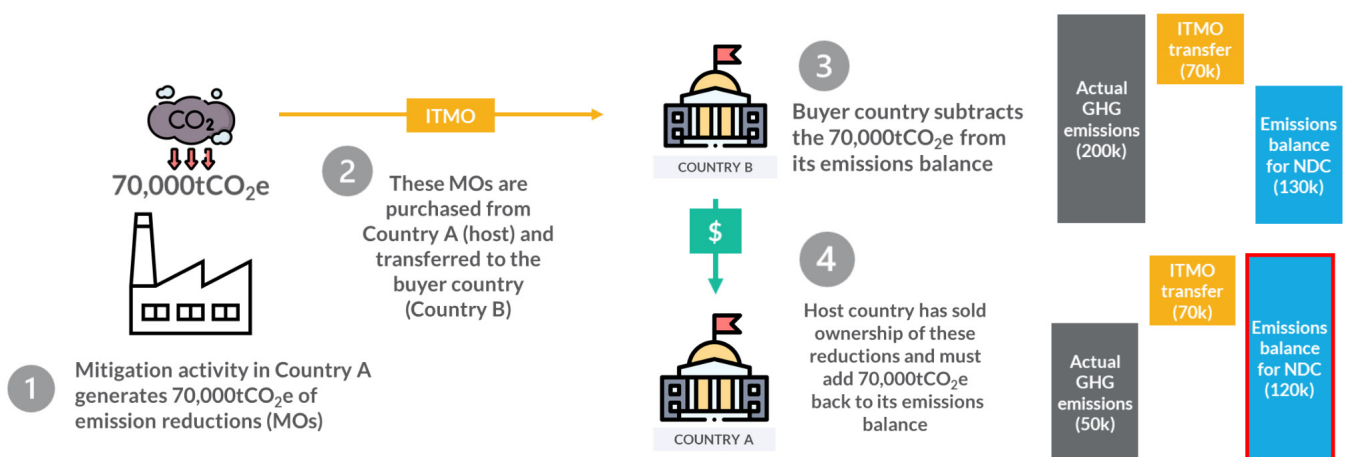
1. Multi-year accounting – establishing a multi-year emissions trajectory or budget for the NDC implementation period and applying corresponding adjustments against this trajectory annually.

2. Averaging – determining the average annual amount of ITMOs first transferred and used over the NDC implementation period and applying the average values to the reported emissions in the target year.

Most countries have indicated they will use the averaging approach to applying corresponding adjustments. Host countries that will use averaging include Ghana, Zimbabwe and Thailand.<sup>22</sup> Jordan is the only host country that will use multi-year accounting. Switzerland, an ITMO-acquiring country, has stated it will apply the multi-year trajectory approach.<sup>23</sup>

The main advantage of the averaging approach for host countries is that it is simple to implement and does not require determining a multi-year trajectory, which can be resource intensive. However, averaging creates uncertainty for countries about how many ITMOs they can transfer and still achieve their NDC.<sup>24</sup> This is because the number of ITMOs a country can transfer without missing its NDC goal is determined by the country's emissions in a single target year, which could be subject to unforeseen economic or weather-related events.

Figure 5. Simplified example of corresponding adjustments.



<sup>22</sup> Thailand has indicated this in the Letter of Authorization issued by the Office of Natural Resources and Environmental Policy and Planning for the Bangkok e-bus program. Available at <https://www.onep.go.th/letter-of-authorization/>

<sup>23</sup> See Switzerland's initial Article 6.2 report, available at [https://unfccc.int/sites/default/files/resource/230517\\_InitialReport\\_Switzerland.pdf](https://unfccc.int/sites/default/files/resource/230517_InitialReport_Switzerland.pdf)

<sup>24</sup> Siemons, A. and Schneider, L. (2022). Averaging or multi-year accounting? Environmental integrity implications for using international carbon markets in the context of single-year targets. *Climate Policy* 22(2): 208-221.

#### iv. Carbon crediting mechanism for issuing MOs that can be authorized as ITMOs

For countries engaging in cooperative approaches, the Article 6 guidance provides flexibility regarding the crediting mechanism through which MOs that can be authorized as ITMOs are issued. Credits issued by international, bilateral, national, subnational or independent mechanisms may be authorized as ITMOs by a host country (Figure 6). This flexibility to issue credits against different standards and methodologies contrasts with the Kyoto Protocol's Clean Development Mechanism, where only the mechanism itself could issue credits.

Given that the Article 6.4 mechanism<sup>25</sup> is not expected to be operational until the end of 2024 at the earliest, countries engaging in cooperative approaches prior to this date will need to use credits issued through other types of crediting mechanisms. Ghana and Thailand already have authorized ITMOs under separate Article 6.2 cooperative approaches with Switzerland and will issue them through their national crediting mechanisms.

Using a national crediting mechanism allows host countries greater control over the methodologies used to measure and verify emission reductions and greater visibility over their transfer and use. But establishing a national crediting mechanism is likely to be time and cost intensive, and the credits issued by national mechanisms could potentially be less fungible than those issued by international or independent mechanisms.

Japan has entered into agreements with 26 countries through its Joint Crediting Mechanism (JCM), a bilateral mechanism through which Japanese companies implement mitigation activities in a host country. Emission reductions issued through the JCM are shared between the two governments.<sup>30</sup> While Japan aims for the JCM to generate ITMOs it can put towards its 2030 NDC target, no credits (MOs) issued through the mechanism to date have been authorized for international transfer under Article 6.

Figure 6. Types of crediting mechanisms for issuing MOs authorizable as ITMOs under Article 6.2.



Thailand has used its pre-existing national crediting mechanism, the Thailand Carbon Credit Registry<sup>26</sup> while Ghana has established the Ghana Carbon Registry<sup>27</sup> specifically to issue ITMOs from mitigation activities implemented in the country and to track their transfer and use. Countries such as Indonesia, Peru<sup>28</sup> and Fiji<sup>29</sup> have also indicated they plan to establish national registry systems for issuing and transferring ITMOs.

<sup>25</sup> See <https://www.gob.pe/institucion/minam/campa%C3%B1as/13214-registro-nacional-de-medidas-de-mitigacion-gei>

<sup>26</sup> See [https://cdn.climatepolicyradar.org/navigator/FJI/2021/climate-change-act-2021\\_04d6f5504eae68097cc4fa108e2a1123.pdf](https://cdn.climatepolicyradar.org/navigator/FJI/2021/climate-change-act-2021_04d6f5504eae68097cc4fa108e2a1123.pdf)

<sup>27</sup> See <https://gcr.epa.gov.gh/>

<sup>28</sup> See <https://www.jcm.go.jp/about>

<sup>25</sup> Article 6.4 establishes an international mechanism to issue MOs, replacing the Clean Development Mechanism.

<sup>26</sup> See <https://registry.tgo.or.th/en>.

<sup>27</sup> See <https://gcr.epa.gov.gh/>.

Another option host countries can consider is allowing the authorization of MOs issued by independent crediting mechanisms. For example, mitigation activity proponents in Ghana can choose to have ITMOs issued by recognized independent mechanisms. However, the activity proponents will still need to maintain an account with the Ghana Carbon Registry. Similarly, Zimbabwe has indicated it will establish the Zimbabwe Carbon Registry to register all carbon credits generated from its activities in the country, including ITMOs issued by independent crediting mechanisms<sup>31</sup> Nepal has indicated that it will rely on third-party infrastructure (i.e., independent mechanisms) to issue ITMOs, although this is yet to be finalized.<sup>32</sup>

Singapore, a likely buyer of ITMOs, is home to a domestic carbon tax regime that will allow emitters from 2024 onwards to offset up to five percent of their emissions using correspondingly adjusted international credits (i.e., ITMOs).<sup>33</sup> The Government of Singapore originally stated that offset units must meet the eligibility criteria of the Carbon Offsetting and Reduction Scheme for International Aviation.<sup>34</sup> It has since entered into agreements with independent mechanisms such as the Gold Standard, Verified Carbon Standard, and Global Carbon Council, allowing ITMOs issued through these mechanisms to be purchased by companies in Singapore and counted towards their carbon tax obligations.<sup>35</sup>

## v. Developing a fee structure

Countries may implement fees on Article 6 transactions to cover the administrative costs of Article 6 infrastructure and to generate revenue for further mitigation and adaptation actions. Fees should capture some of the benefits of hosting mitigation activities while not increasing the cost of the mitigation activity to the point of eroding its viability.

Several countries, such as Jordan and Vanuatu, have indicated they will charge fees for authorizing ITMOs and associated processes. However, few countries have implemented fee structures. Ghana, Zimbabwe, and Tanzania are early movers in this regard.

Ghana has specified seven types of fees, listed in Schedule 11 of Ghana's Carbon Markets Framework.<sup>36</sup> The fees cover actions such as mitigation activity proponents creating an account on the Ghana Carbon Registry, listing authorized ITMOs on the registry, applying corresponding adjustments by the Government of Ghana, and reimbursing administration costs.

Some fee categories are flat charges, while others are calculated per unit of ITMO. For example, the fees for applying for an account on the Ghana Carbon Registry range from USD 300 to USD 1000, depending on the activity type. Meanwhile, the corresponding adjustment fees range from USD 3-5 per ITMO unit, again depending on the activity type. Ghana provides a justification for each class of fee. For example, the corresponding adjustment fee covers the opportunity cost of meeting Ghana's NDC, including the cost of creating authorized ITMOs.

While Ghana has classified its levies and fees into specific charges and activity types, Zimbabwe has taken a less detailed approach. It prescribes three categories of charges for Article 6.2 transfers. These comprise a USD 500 registration fee, a share of 50 percent of project revenue with the Government of Zimbabwe, and a contribution to Zimbabwe's NDC or other mitigation purposes, to be specified in the project idea note.

The government also provides for potential additional fees to be set in project agreements for local authority levies, community benefits and project partner activities. The 50 percent levy is considerably higher than in other host countries and has been criticized by some market participants.<sup>37</sup> While the levy will contribute to Zimbabwe's adaptation and community development efforts, critics claim it will imperil private investment and forest all Article 6 projects in Zimbabwe.

Like Zimbabwe, Tanzania has designated fees for general project registration and carbon trading, though these are not specific to Article 6. Tanzania has not yet set authorization fees or other Article 6 specific processes. The Government of Tanzania's fees are flat figures or percentages of income accrued from sold certified emission reductions (CERs). For example, government approval of a project requires a payment of USD 250 for citizens and USD 500 for non-citizens. There is also an annual administrative charge of three percent of income from sold CERs. The government also determines how the revenue from selling CER units is shared among domestic agencies.

<sup>33</sup> See <https://www.nccs.gov.sg/singapores-climate-action/mitigation-efforts/carbon-tax/>.

<sup>34</sup> CORSIA eligibility criteria are available at [https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO\\_Document\\_09.pdf](https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO_Document_09.pdf)

<sup>35</sup> See <https://carbon-pulse.com/195068/>.

<sup>36</sup> Aforementioned framework, available at [https://cmo.epa.gov.gh/wp-content/uploads/2022/12/Ghana-Carbon-Market-Framework-For-Public-Release\\_15122022.pdf](https://cmo.epa.gov.gh/wp-content/uploads/2022/12/Ghana-Carbon-Market-Framework-For-Public-Release_15122022.pdf)

<sup>37</sup> See <https://carbon-pulse.com/203600/>

<sup>31</sup> See <https://www.vpo.go.tz/uploads/publications/en-1674038035-National%20Carbon%20Trade%20Guidelines.pdf>

<sup>32</sup> Gold Standard, 2023.



## 4. Recommended approach for host countries

As noted in the preceding section, strategic and successful participation in Article 6 requires host countries to carefully weigh their various options in implementing cooperative approaches with other countries. Choosing suitable options regarding eligibility criteria for authorization, the share of MOs reserved for domestic use, accounting approaches and carbon crediting mechanisms for issuing ITMOs, among others, is challenging. This Insight Brief aims to help countries successfully navigate these options by offering the following recommendations.

To move towards implementation, host countries will need to ensure that they both meet the requirements of the Article 6 rulebook (i.e., meeting the Article 6.2 participation requirements, and preparing for ITMO authorization and transfer) and have made strategic Article 6 engagement decisions. Once these fundamental readiness elements are in order, host countries can execute decisions for specific mitigation activities. These include authorizing ITMOs for use, transferring ITMOs, and reporting on the cooperative approaches they are engaged in.

Host countries have many options in implementing Article 6. This paper has identified five areas where host countries can exercise choice when engaging in Article 6 cooperative approaches. It also outlined the approaches adopted by various host countries to date. Given the nascent state of the Article 6 carbon market and the apprehension felt by many potential participants, sharing the experiences of early movers can help alleviate some host country concerns about market participation. As more countries move towards implementation, norms on areas will likely emerge.

While host country engagement in Article 6 cooperative approaches is highly context-dependent, some general observations can be made on the five areas identified in this paper. These are summarized below.

### i. Eligible activities for ITMO authorization

Developing eligibility criteria to guide ITMO authorization decisions is critically important for host countries. These criteria provide a set of strategic parameters that both minimize the risk of overselling ITMOs (for example, by not allowing unconditional NDC measures to generate ITMOs) and direct Article 6 carbon finance to priority activities.

A strategic list of activities, such as those developed by India and Zambia, signals the host country government's priorities to activity proponents and investors and helps direct carbon finance to those priority sectors or activities.

However, defining such a strategic list can be difficult and may require additional analysis. Establishing eligibility based on an activity's place in the NDC minimizes the overselling risk and is easy to implement but may not direct finance to the most strategic areas. Using both approaches identified in this paper in combination – developing a strategic list of activities and establishing eligibility based on an activity's place in the NDC – will likely help maximize the benefits of Article 6 participation while mitigating the risk of overselling.

Countries could consider integrating and updating eligibility considerations in their next NDC update; for example, by clearly defining which mitigation activities will be eligible for Article 6 authorization. Doing so in tandem with the NDC update process will ensure coherence in the overall NDC implementation and financing approach.

### ii. Share of MOs reserved for domestic use

Reserving a share of MOs for use towards a host country's own NDC (i.e., not authorizing all MOs generated by an activity) is relatively simple to implement and reduces the risk of overselling by ensuring the host country retains a portion of the climate benefits derived from hosting mitigation activities.

However, as yet there are no benchmarks for determining the proportion of MOs to reserve for domestic use. Host countries might consider if reserving a higher portion for domestic usage will impact their mitigation activities' commercial viability and deter investment. Host countries may wish to consider determining the amount case-by-case until a more explicit benchmark emerges.

### iii. Accounting approach for applying corresponding adjustments

Most early moving host countries have indicated they will use the averaging approach for applying corresponding adjustments. This accounting approach is more straightforward and does not require countries to invest resources into developing a multi-year trajectory.

However, there are risks associated with using an averaging approach. If unforeseen circumstances impact a country's greenhouse gas emissions in the single target year, overall NDC achievement may be jeopardized. A multi-year trajectory provides greater visibility of a country's overselling risk throughout the NDC period. It also allows for corrective actions to be taken earlier by, for example, not providing further authorizations. Countries may wish to consider developing multi-year targets as part of their next NDC updates. This would allow for a more robust accounting approach going forward.

### iv. Carbon crediting mechanism for issuing MOs that can be authorized as ITMOs

The type of carbon crediting mechanism a host country allows to issue credits authorizable as ITMOs highly depends on its resources, capabilities and needs. For larger countries with existing or planned national crediting mechanisms, such as Thailand, allowing these mechanisms to issue ITMOs is a pragmatic choice. Using a national mechanism gives a host country greater control over key design elements; for example, the types of eligible methodologies or the ability to develop more tailored methodologies.

Still, establishing a national crediting mechanism can be a resource-intensive process that requires significant technical capacity and stakeholder buy-in. For resource constrained host countries or those that consider establishing a national crediting mechanism inappropriate, outsourcing the issuance of ITMOs to independent crediting mechanisms is probably a sensible approach. At a minimum, host countries could consider allowing independent mechanisms to issue ITMOs, as in Ghana. Finally, virtually all host countries will likely allow the Article 6.4 mechanism to issue ITMOs once the mechanism is established.

### v. Developing a fee structure

The issue of which fees, charges, and levies host countries apply to Article 6 transactions is highly context-specific. Host countries should ensure the opportunity and administrative costs of participating in Article 6 cooperative approaches are captured through an appropriate fee structure while also considering how excessive fees may impact the commercial viability of mitigation activities. Regardless of the fee structure host countries adopt, the structure must be defined transparently, communicated clearly and applied consistently.



## 5. Looking Ahead

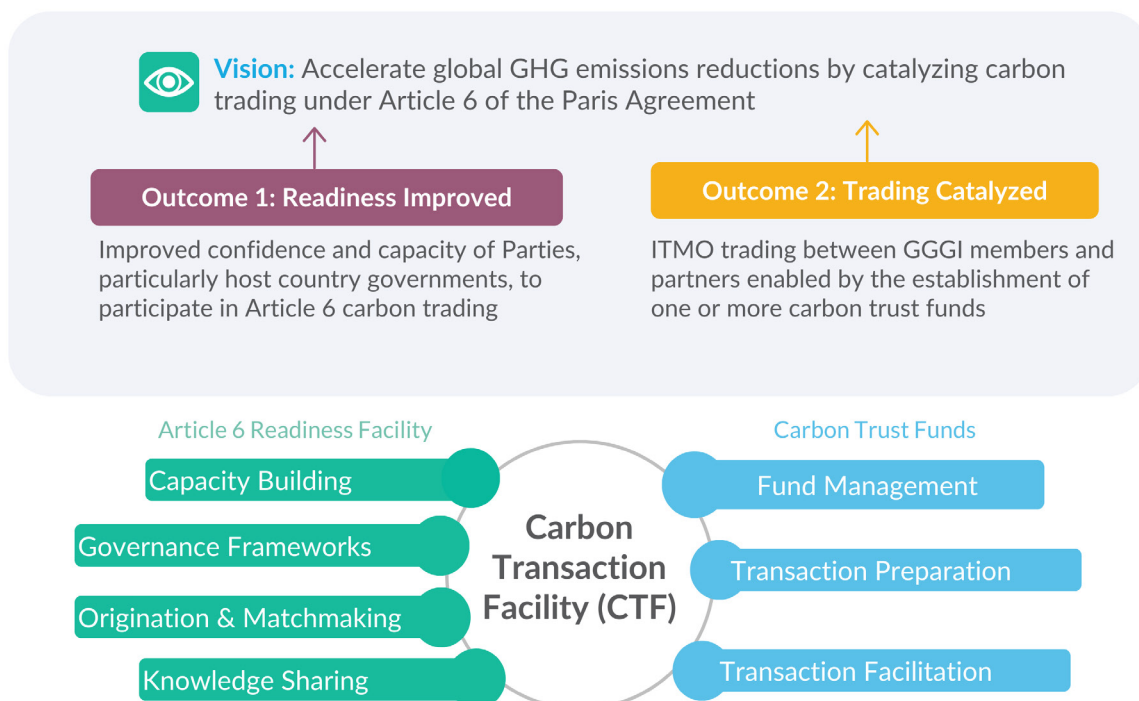
The five areas outlined in this paper demonstrate some of the challenges and complexities associated with Article 6 participation, particularly for host countries. GGGI is well positioned to continue supporting member and partner countries looking to engage in Article 6 cooperative approaches. This includes supporting the design of Article 6 governance frameworks and advising on the areas identified in this paper.

In October 2022, GGGI's Council authorized the establishment of the Carbon Transaction Facility. Referred to at the time as the Carbon Transaction Platform, it provides technical assistance through an Article 6 Readiness Facility and supports ITMO trading through carbon trust funds.<sup>38</sup> The Carbon Transaction Facility is illustrated in Figure 7. Through the Article 6 Readiness Facility, GGGI will provide technical assistance to host country stakeholders to prepare them for participation in international carbon trading under Article 6.

Readiness activities for countries will be tailored to meet identified needs and host country requests. The Readiness Facility will also provide extensive opportunities for knowledge sharing to ensure the exchange of diverse lessons and experiences regarding Article 6 participation. This paper has outlined several areas where countries may wish to learn from each other as they increasingly move towards implementing Article 6.

As this Insight Brief demonstrates, and in line with its mission of accelerating a global transition toward a model of green growth that achieves poverty reduction, social inclusion, environmental integrity and sustainable economic development, GGGI is ready to help countries effectively participate in Article 6, meet their NDC targets and aim for more ambitious mitigation and adaptation outcomes.

Figure 7. Overview of the GGGI Carbon Transaction Facility



<sup>38</sup> Decision C/2022/DC/5, <https://ggi.org/wp-content/uploads/2022/11/C2022DC5-Decision-on-Establishment-of-the-Carbon-Transaction-Platform.pdf>





The Global Green Growth Institute

19F Jeongdong Building, 21-15, Jeongdong-gil,  
Jung-gu, Seoul, Korea 04518

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