

ARTICLE 6 APPROACH PAPER SERIES

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Developing an Article 6 Strategy for Host Countries





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Developing an Article 6 Strategy for Host Countries

Abstract

The objective of this paper is to develop guidance for host countries on assessing and choosing their approach to participation in Cooperative Approaches of Article 6 of the Paris Agreement. The main audience is government officials in charge of Article 6 in potential host countries. Decisions on Article 6 engagement for host countries could happen on three levels:

- High-level (“strategic”): the overall decision on **whether** to participate. This answers the question, “under what conditions would it be beneficial to participate in Article 6?”
- Mid-level (“tactical”): the overall decision on **how** to participate. This would address key considerations for host countries once they have decided to participate in Article 6, both to minimize risks and to maximize opportunities (for example, using international versus domestic standards, bilateral versus multi-lateral cooperation, detailed approaches to minimizing overselling risks)?”
- Low-level (“operational/technical”): the choices on implementing the various strategic and tactical decisions. This answers the question, “**what** specific tools, practices and steps are necessary to participate?” (for example, choice of registry, detailed project cycle, requirements to ensure environmental integrity, options for reporting).

This paper addresses the *first two* levels only, while the operational decisions will be addressed in other Article 6 Approach Papers and related guidance. After presenting some fundamental concepts related to Article 6 in section 2, sections 3 and 4 explain the considerations for the strategic and tactical decisions about participation in Article 6. Section 5 then focuses on chronological process and steps to make these decisions. This paper builds on and references other Article 6 Approach Papers, Partnership for Market Readiness (PMR) work on developing Article 6 participation guidance for selected countries, and the experience of the Carbon Initiative for Development (Ci-Dev)’s Standardized Crediting Framework.¹

¹ <https://www.ci-dev.org/standardized-crediting-framework>

1. Introduction

In terms of understanding the role of Article 6 as the basis for host country strategy development, Article 6 of the Paris Agreement uses the language that countries may use voluntary cooperation to “allow for higher ambition in their mitigation and adaptation actions”. Given the fact that there are corresponding adjustments associated with the transfers under Article 6.2 and Article 6.4, there is an assumption that the emission reductions that are transferred through Article 6 cooperative activities are not meant to hamper the ability of countries to meet their NDC pledges, but to support those efforts.

This can be understood that the use of cooperative approaches will help countries meet the NDC in a more efficient manner and also lead to an increased mitigation level by implementing more climate actions with additional market-generated revenues. In other words, countries have different abatement cost curves, and economic efficiency of the market mechanisms can enable countries to abate cost-effectively; countries with higher abatement costs can mitigate at a lower cost. At the same time, these trades generate extra financial streams that were not available without the use of markets, with which host countries can use to either strengthen the implementation of NDC activities or invest in additional mitigation actions (i.e., incorporate higher-hanging fruits). According to a study, it is estimated that trading in carbon credits could reduce the cost of implementing countries’ NDCs by more than half – by as much as \$250 billion by 2030, which could facilitate the removal of 50 percent more emissions (about 5 gigatons of carbon dioxide per year by 2030) at no additional cost.² Furthermore, such trades can help countries move towards economy-wide targets over time as per Article 4 of the Paris Agreement.

In order for countries to effectively utilize market mechanisms, there has to be a sound understanding of the implication of participation in international carbon markets (in consideration of their rules and

requirements), including the risks and opportunities, and establishment of a clear national strategy on using Article 6 in the context of meeting the country’s own NDC.

The paper outlines a list of considerations that countries need to take into account for developing an Article 6 strategy. Given the desire for early Article 6 engagement, some tasks may happen later or in parallel with piloting activities.

The purpose of developing and establishing the Article 6 strategy is to create transparency, bring confidence to the market through a credible policy framework, and reduce uncertainty for project participants – particularly for the private sector. Clear guidelines from the host country on what type of Article 6 cooperation is allowed or preferred will speed up Article 6 cooperation even though this strategy development takes some time.

Countries can begin immediately to develop pilots, for example, that are limited in the scope of transfers, even while working on their full Article 6 strategy. Limiting the size of early Article 6 activities will make it easier for host countries to engage and collaborate even while they continue to develop a comprehensive approach to Article 6. In addition, while the focus of the paper is on Article 6, most of the same considerations would apply for other international carbon markets (for example, Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)) and potentially for considerations relevant to voluntary carbon markets. Finally, the analysis presented in the paper is primarily from the perspective of countries that would transfer or sell mitigation outcomes under Article 6, not those who are the buyers, even though today’s sellers might decide to buy at some point in the future (see section 3.2.3). Host countries face a very different set of considerations in choosing how to engage with Article 6 to countries who intend to acquire mitigation outcomes.

² “The Economic Potential of Article 6 of the Paris Agreement and Implementation Challenges”, IETA, University of Maryland and CPLC https://www.ieta.org/resources/International_WG/Article6/CLPC_A6%20report_no%20crops.pdf

2. Context: crediting under the Paris Agreement

2.1 Corresponding adjustments

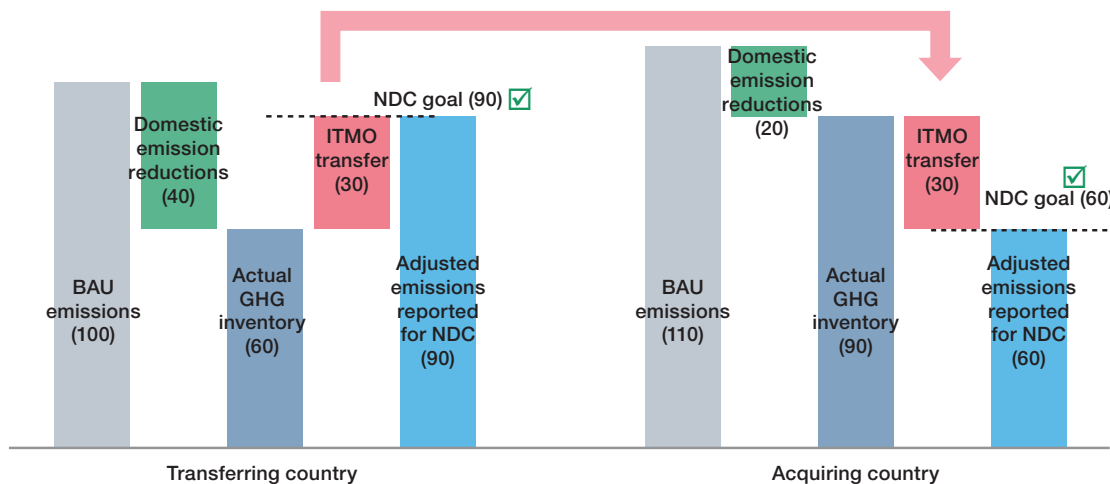
Before considering an Article 6 strategy, it is essential to understand the fundamental difference between Article 6 and the Clean Development Mechanism (CDM) under the Kyoto Protocol. Under the Paris Agreement, all countries have mitigation pledges, and the mitigation outcomes from cooperative activities need to take into account corresponding adjustments, an accounting mechanism agreed under Article 6 to ensure that double counting does not occur, which did not exist under the Kyoto Protocol.

Under Article 6, emission reductions that have been authorized for transfer by the selling country's government may be sold to another country, but only

one country may count the emission reduction toward its NDC. Avoidance of double counting is ensured through “corresponding adjustments”, in which any internationally transferred mitigation outcomes (ITMOs)³ are added back to the host country's emissions (emissions balance/NDC) for purposes of reporting NDC progress (see Figure 1).⁴ While this figure shows the corresponding adjustments in units to emission reductions, the same process would be followed for countries with NDC goals and ITMOs in other metrics.

In the figure, the transferring country reduces their emissions from the business-as-usual (BAU) level of 100 down to 60, and part of this is through cooperative actions. The mitigation outcomes from the cooperative actions are transferred (30 in this example), so the corresponding adjustment for this amount is added back to the host country's inventory when reporting on NDC progress. Importantly, this may not necessarily change the host country's greenhouse gas (GHG) inventory itself, and countries will report the “adjusted emissions” that reflect these ITMO transfers and compare them to the host country's goal, which was 90 units in this example. If the host country's NDC goal was to be at 80 units, however, then the transfer

Figure 1. Illustration of ITMO transfers, corresponding adjustments and reporting NDC progress



Source: Spalding-Fecher et al. (2021)

³ The Paris Agreement sets out principles for cooperation between countries that involve the international transfer of mitigation outcomes. When authorized by the selling country and transferred internationally to another country, a mitigation outcome becomes an ITMO.

⁴ The Paris Agreement does not require NDCs to be expressed in emissions and also does not require that ITMOs be in units of emission reductions. Other metrics are possible, but the requirement to avoid double counting remains the same. This illustration uses emission reductions because it is likely to be the most common metric both for NDC goals themselves as well as for ITMOs.

of 30 units would mean that the country would miss its NDC goal by 10 units. In addition, if the emission reductions were supported by climate finance rather than carbon markets, it does not involve the transfer of carbon credits from the recipient project, and those mitigation outcomes generated would remain with the host country. If the host country decides to use them for its own NDC instead of monetizing them,⁵ the host country would report adjusted emissions of 60 units for NDC progress, and over-achieve their goal by 30 units because there would be no corresponding adjustments (as there was no transfer).

2.2 Metrics in accounting and GHG inventories

Under the Paris Agreement there are two types of pledges: the collective one which is to limit global temperature increase to below 2°C or as close as possible to 1.5°C and the national one which is the NDC. The global stocktake tracks the progress of the collective pledge every five years, and in doing so, it will examine the GHG inventory balances (that is, inventories adjusted by taking ITMOs into consideration) and NDC compliance (that is, compliance with whatever commitments that were made in NDCs, in the metric of the NDC, which could be in units other than GHGs). This requires attention by countries that have NDC pledges in metrics other than tCO₂e because there may be two parallel accounting systems for them: the inventory balance accounting which is in tCO₂e and the NDC accounting in the metric that is not tCO₂e. It is important to note that if the NDC is economy wide in units of tCO₂e, the two accounting systems will be identical, as is the case in Figure 1 (volume of ITMOs transferred being exactly the same as the measured change in the national GHG inventory). For countries whose NDC is not in the metric of tCO₂e, however, this may not be the case due to the difference between the quantification

protocols for GHG inventories and the quantification methodology used for the Article 6 activity by a carbon crediting standard; often GHG inventories use highly aggregated estimates of emissions.⁶ The risk for the host country, therefore, is that the national GHG inventory might not decrease as much as the corresponding adjustment, and their emissions balance could increase as a result of Article 6 cooperation, moving them further away from their NDC goals.

As part of defining an Article 6 strategy, therefore, host countries should be cautious about engaging in activities where their national GHG inventory might not capture the emission reductions from Article 6-related activities. Alternatively, the host country could undertake parallel work to improve the level of detail in the GHG inventory so that it would fully reflect any emission reductions from approved Article 6 activities. An analysis⁷ of typical inventory aggregation levels in the common project types for carbon crediting found that these risks were highest for forestry (that is, reduced emissions from deforestation and degradation (REDD), as well as forest management and enhancement), cement production and nitric acid production. Low-risk areas included renewable energy, energy efficiency, fuel switching, and power generation based on captured methane. Areas with medium risk included biomass power and heat, aerobic waste treatment systems and methane flaring.

⁵ However, the climate finance provider may require that the project owner not sell the mitigation outcomes to a third party.

⁶ For example, consider an emission reduction project based on capturing and destroying methane at a landfill site. The existing methodologies in carbon crediting standards are conservative, transparent and accurate for this project type. National GHG inventories for methane emissions from waste management, however, often rely on high level (i.e., "Tier 1") assumptions about not only waste production and methane generation but also on the treatment regimes for waste across the country. If landfill gas capture and flaring is uncommon in the country, the national GHG inventory may assume, by default, that there is no treatment of any waste to capture or flare the methane. This would mean that, even after the Article 6 activity is implemented and has a material impact on emissions, there may be no change in the national GHG inventory for solid waste.

⁷ "Visibility of carbon market approaches in greenhouse gas inventories" <https://www.tandfonline.com/doi/full/10.1080/17583004.2022.2075283>

3. Strategic issues: risks and opportunities

Article 6 participation should support NDC achievement, long-term decarbonization, national sustainable development and ambition raising. This implies the need for examining the NDC to understand the commitments made under the NDC, what needs to be done to achieve the target, and the timeline within which it is to be acquired. Understanding the country's own NDC will answer the key strategic question: "under what conditions would it be beneficial to participate in Article 6?". This strategic question has two main dimensions: **risks** and **opportunities**. In entering into Article 6 cooperation, the major risk that needs to be managed, which requires a strategy for selling countries, is that of overselling. With corresponding adjustment requirements, when selling ITMOs, the transferring country's NDC burden increases by the volume transferred, and the country is exposed to the risk of not being able to meet the increased NDC. In addition, since every country has limited mitigation opportunities available, and because those mitigation options have different cost, if not planned properly, countries would have to implement more expensive mitigation activities to meet their NDCs as a result of corresponding adjustment. On the other hand, Article 6 cooperation provides potential **opportunities** to host countries, such as additional financing for low-carbon development, sustainable development "co-benefits," technology transfer, and capacity building.⁸ The host country may capitalize on these benefits by how they position themselves in the global market, as well as how Article 6 supports longer-term decarbonization goals. This chapter covers both risks and opportunities from a strategic perspective. Understanding overselling risks and how these could be mitigated are addressed in section 3.1, and capturing opportunities is considered in section 3.2.

3.1 Managing risks

3.1.1 Overselling risks and the relationship between current NDC and Article 6

The fundamental strategic risk for the host country is how to ensure that exporting mitigation outcomes not only supports its long-term climate ambition but also does not compromise its current NDC goals. This section explains what this risk is and how countries might assess the magnitude of the risk, while later sections explain different types of strategies that can be used to reduce overselling risks.

As NDCs increase in ambition, the price of international credits may increase and provide selling opportunities. However, in entering into an agreement for ITMO transfers, the risk of overselling is very real. It is likely that in most cases a corresponding adjustment will be needed by the selling country, which means that the country will have to somehow "make up" the sold ITMOs at a cost that does not exceed what has been sold. Otherwise, that may prove to be a short-term gain, resulting in long-term hardship for the country or the risk of not meeting its NDC.

Assessing overselling risks starts with a thorough understanding of the mitigation opportunities in the country, and how their cost and potential are related to the current (or recently revised) NDC mitigation pledges. Many countries did assess their mitigation opportunities prior to submitting their initial NDC in 2015, while others have conducted such analysis since then as part of developing an NDC implementation plan. In addition, countries will have a range of other policy and planning documents with information on mitigation opportunities, as well as the policies and instruments that could be used to implement them. This could include sectoral policy documents, ongoing initiatives to promote low-carbon technologies and practices, and studies or market information on these technologies or practices.

⁸ "Considerations for Article 6 engagement: The host country perspective" https://newclimate.org/sites/default/files/2020/11/NewClimate_Article6_Engagement_HostCountryPerspective_Nov2020.pdf These benefits were also key features of earlier carbon markets, where the CDM, for example, leveraged hundreds of billions of dollars in financing for climate friendly investment while providing additional benefits beyond GHG reduction. (Kirkman et al. 2012)

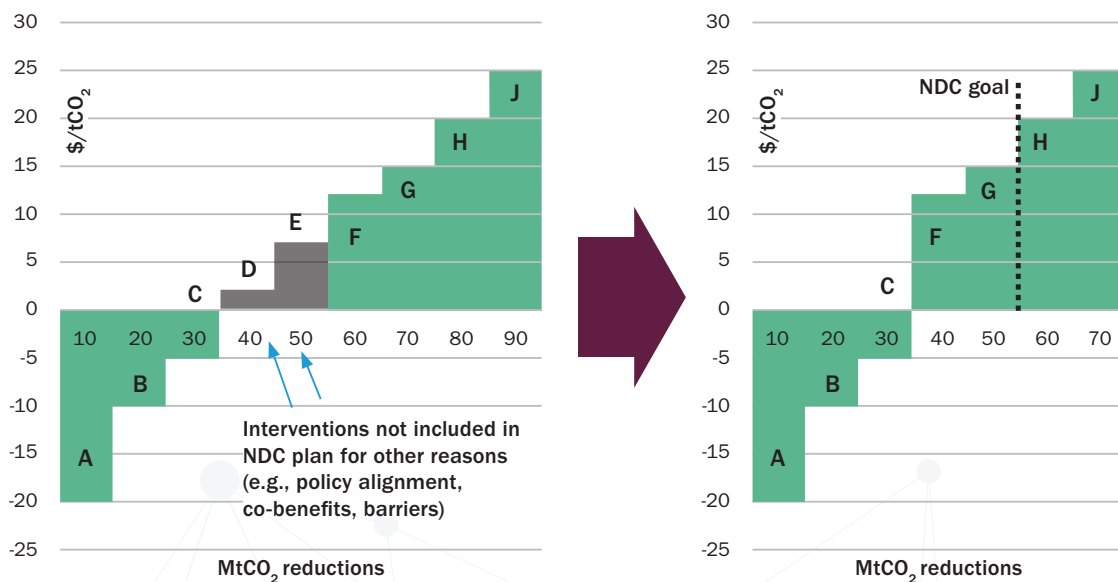
For countries with NDC goals expressed as emissions or emission reductions, one specific tool that can support countries in assessing the magnitude of overselling risks is a marginal abatement cost curve (MACC), which ranks mitigation options according to their abatement cost (e.g., $\$/\text{tCO}_2\text{e}$ emission reductions) and shows their mitigation potential in a given time period (e.g., in MtCO_2) (Figure 2). Based on which of the identified measures also fit with the country’s other development priorities, the country could estimate not only which options might be critical to achieving the goal, but also what the cost of reaching the NDC goal would be, which is important for understanding Article 6 opportunities.

Of course, there are limitations with the MACC analytical approach, most importantly the difficulty of finding enough detailed data on the costs and mitigation potential of a large number of mitigation options. Another challenge is that the mitigation options may overlap,⁹ so they are not mutually exclusive and adding them may overestimate the total emission reductions achievable. Some options may need to be sequenced or may have cross-effects or even synergies, requiring multiple iterations, while the estimated costs could change significantly over time. More importantly, other social, environmental and

economic attributes may be important to the country when ranking the interventions. The host country would not necessarily choose only those interventions with the lowest economic cost for the NDC implementation plan because stakeholders would also be concerned about other development impacts of the interventions and their coherence with national policy objectives.

In the example shown in Figure 2, the country might decide not to include options D and E in the selected interventions for implementing the NDC – the “NDC package”. If the NDC goal was emission reductions of 50 MtCO_2 in this example, then the country might choose options A, B, C, F and G (leaving out D and E) to meet this, based on considerations of not only the costs but also other attributes of the interventions. This means that, if the country is able to implement these mitigation interventions, the marginal cost of their NDC will be $\$/\text{tCO}_2$ (i.e., this is the cost of the *next* tCO_2 of emission reduction beyond the NDC goal, shown by column H). The overselling risk for participation in Article 6, therefore, is the risk that the country may have to spend more to meet their NDC goal if, for example, mitigation outcomes from one of the NDC package interventions were transferred and had to be replaced with a higher cost intervention (and without sufficient revenue to the country to replace the intervention).

Figure 2. Marginal abatement cost curves and choosing interventions to meet an NDC goal



Source: adapted from Spalding-Fecher et al. (2020)

⁹ For example, an electricity efficiency program and a renewable electricity program can both reduce emissions, but as the electricity grid becomes cleaner, the potential emission reductions from the electricity efficiency program would also decrease.

While different strategies to address overselling risks are presented in more detail later in this paper, they fall into three main categories, which may be used separately or in combination:

- Carefully choosing which sectors, project types, technologies, and investments will be used for Article 6 so that this does not interfere with the interventions selected by the host country to meet its NDCs. This section and the next explain some of the reasons to choose project types, technologies or investments.
- Keeping some of the mitigation outcomes from a cooperative activity in the host country rather than exporting them (e.g., through shorter crediting periods, agreements to share the resulting emission reductions from a large program, etc.). This is developed in more detail in sections 3.1.2 and 4.2.
- Setting prices for ITMOs high enough that, even if the host country must replace the underlying mitigation intervention with a more expensive option to still meet its NDC, there is sufficient revenue to cover these mitigation costs. The next section (3.1.3) introduces this idea, while section 4.7 provides more details on how to implement it.

While these options all have their complexities and present new analytical and policy development challenges, if countries do not address these risks, then this could lead to missed NDC goals and therefore lower global ambition. Both host and buyer countries have an interest in ensuring that Article 6 does not lead to host countries missing their NDC targets, and therefore, there is a need to work together on methodological approaches, tools, and guidelines that will allow Article 6 cooperation to create a “win-win” situation.

3.1.2 Overselling risks and sharing mitigation outcomes

Rather than qualitative restrictions on project eligibility, countries might choose quantitative restrictions by only allowing a share of the mitigation outcomes from the

cooperative activities to be transferred internationally. The remaining mitigation outcomes could therefore be used towards the host country’s NDC. This approach might use a fixed share upfront for all mitigation outcomes that would be shared, or the share might vary by sector, project type or specific activity/partner or by any other appropriate rationale/measure. Implementing such an approach would be transparent and reasonably simple. The challenge would be how to define the level of sharing so that it keeps sufficient mitigation outcomes within the host country without making the potential Article 6 cooperation programs unattractive for buyers. If a certain level of carbon revenue cashflow is needed to make the mitigation activity possible (e.g., to buy down the cost of a low-carbon technology to make it financially viable), then sharing the mitigation outcomes essentially raises the unit price of the carbon finance (the price per tCO₂ from the perspective of the acquirer). More sharing, therefore, increases the price of mitigation outcomes. In addition, setting the right level of sharing depends on the sector or technology area where the Article 6 cooperation happens. Countries, hence need to be extra cautious, and proper due diligence needs to be carried out when MOs are transferred. This can be a useful approach especially in the short term when countries need time for capacity building.

3.1.3 Overselling risks and pricing considerations

As discussed in the previous section, pricing ITMOs is another key component of mitigating overselling risks.¹⁰ As a starting point, host country governments may or may not have a direct role in the pricing of ITMOs. The guidance for Article 6.2, for example, only addresses the transfers of ITMOs and their accounting. The financial flows associated with those transfers will not be governed by UNFCCC rules but will be up to the contractual agreements of host and buyer countries, as well as any parties they authorize to participate in transactions. Under the CDM, the host country was almost never a party to the emission reduction purchase agreement (ERPA), unless the project activity was owned by the government. Some countries did, however, charge a levy on

¹⁰ This discussion assumes that ITMOs are directly linked to underlying mitigation activities and not just transfers of “surplus” emission reductions beyond the country’s NDC goal.

transactions purchasing certified emission reductions (CERs) or, as in the case of China, set floor prices for the transactions. Under Article 6, there could be different models for Mitigation Outcome Purchase Agreement (MOPA) transactions and financial flows:

- Agreements between two governments (i.e., “sovereign-to-sovereign”), where all of the payments also flow to the host country government, which may then be passed through to project developers or other market actors.
- Agreements between a buyer government and an authorized project owner in a host country (i.e., “sovereign-to-private”), where the MOPA is supported by an agreement between governments on tracking and accounting for the ITMO transactions. In this case, there might or might not be a financial flow to the host country government. The government, for example, might choose to charge a fee for authorizing ITMOs (see section 4.6).
- Agreements between an authorized project owner in a host country and an authorized buyer in an acquiring country (i.e., “private-to-private”), which would also need to be supported by an agreement between the governments. Again, there might or might not be financial flows between the two governments or between the authorized buyer and the host country government.

Regardless of the contractual arrangements, key factors that could influence the pricing of ITMOs include the following:¹¹

- The abatement cost of the specific mitigation intervention used for the Article 6 cooperation.
- The marginal cost of meeting the NDC of the host country – in other words, the cost per tCO₂ of the next unit of emission reductions beyond the NDC goal (see discussion of this concept in section 3.1.1).

- An international market price for ITMOs when the market was mature enough to provide this information.
- A possible premium based on the co-benefits associated with the underlying emission reduction activities. This has been the case in the voluntary carbon market in the past, and many of the Article 6 pilot activities are focused on areas with high development benefits.¹²

If the host country allowed Article 6 cooperation based on activities that were part of the basket selected to meet the country’s unconditional NDC, then the cost of replacing these and still meeting the NDC goal would be the marginal cost of the NDC (the second bullet above), which would be higher than the abatement cost of the intervention. The host country could decide that in order to address the risk of overselling, all ITMOs must have a price above/higher than the marginal cost of the NDC. In this case, the country would not need to restrict Article 6 cooperative activities to manage overselling risks, because even if ITMOs were transferred based on these lower cost activities, the revenue would be sufficient to replace the mitigation options. In other words, this pricing strategy could be an alternative to qualitative restrictions of the project types and technologies that could be used for Article 6 cooperation¹³ (see further discussion of negative lists in section 4.2).

The strategic approach assumes, however, that the host country can identify the marginal cost of the NDC, can collect the extra revenue beyond the abatement cost needed for a given intervention, and can channel that revenue into additional higher cost mitigation activities in the countries. These are all challenging assumptions, and imply significant analytical, administrative, and financial management capacity in the host country authorities overseeing Article 6.

¹¹ Discussion on investor and/or project participant perspective is still required, because prices may also include other direct and indirect taxes.

¹² Greiner, Sandra, Nicole Kramer, Federico De Lorenzo, Axel Michaelowa, Stephan Hoch, and Juliana Kessler. ‘Article 6 Piloting: State of Play and Stakeholder Experiences’. Amsterdam: Climate Focus & Perspectives, December 2020. https://climatefocus.com/wp-content/uploads/2022/06/Climate-Finance-Innovators_Article-6-piloting_State-of-play-and-stakeholder-experiences_December-2020.pdf; Forest Trends Ecosystem Marketplace. ‘The Only Constant Is Change. State of Voluntary Carbon Markets 2020, Second Installment Featuring Core Carbon & Additional Attributes Offset Prices, Volumes and Insights’. Washington, DC: Forest Trends Association, December 2020. <https://www.forest-trends.org/publications/state-of-the-voluntary-carbon-markets-2020-the-only-constant-is-change/>.

¹³ As part of the Article 6 Approach Paper series, a separate approach paper on corresponding adjustment pricing was developed and is available on the climate warehouse website: <https://www.theclimatewarehouse.org/>.

3.2 Capturing opportunities

3.2.1 Opportunities for Article 6 to support long-term strategies and net zero targets

Host countries can use their long-term low emission development strategy (LT-LEDS) as an opportunity to demonstrate how international cooperation can support decarbonization. The LT-LEDS should identify technology and financing needs over time in comparison to the current situation in order to identify gaps. The LT-LEDS can also explore the co-benefits from mitigation action, as part of prioritizing the country's strategy to reach net-zero emissions. While all Parties to the Paris Agreement pledged to develop LT-LEDS (Article 4.19), so far only 57 countries have done so.¹⁴ For potential host countries with an LT-LEDS, part of the Article 6 strategy development process could be to review any discussion about the contribution or role of carbon markets or other international cooperation in the LT-LEDS (see also next section for future carbon pricing policies). Countries that are still developing an LT-LEDS could identify as priorities for Article 6 cooperation, the project types or technology areas that are important for long term but currently face high costs, limited domestic capacity and knowledge, or other barriers. Conversely, in cases where the project types or technologies are currently low-cost options (even if they face other barriers) but have some domestic technical capacity and are important for long-term goals, countries may choose to exclude them from Article 6 cooperation. In other words, Article 6 could be used to open up new opportunities for the host country in its LT-LEDS implementation.

3.2.2 Opportunities for co-benefits

Emission reductions and removals can also lead to a significant amount of co-benefits, and in choosing the strategy for participation in Article 6, it is important to ensure that the strategy takes it into account. The co-benefits can cover many of the sustainable development goals (SDGs), including health, gender equality, adaptation, economic diversification, and just transition. Taking a holistic view will not only ensure a better outcome for the country and society but will also help address other issues that are a priority for different host countries.

3.2.3 Opportunities for market positioning through “branding”

Another important opportunity for host countries is branding, which will influence their participation in Article 6. It will define their market access as well as the value that they can derive from participation in the carbon markets under the Paris Agreement, and it will also influence the balance between opportunities and risks in participating in Article 6.

Branding was relatively well established under the Kyoto Protocol market both on the demand and the supply side. The European Union (EU) differentiated between different types of CERs, with many not accepted in the EU emissions trading system (ETS), both in terms of technology as well as geographical origin. CERs from hydrofluorocarbons (HFC) projects were not accepted in many jurisdictions. Assigned amount units (AAUs) from green investment schemes (GIS) were clearly divided by quality, with some countries attracting different value and being more desirable. Many sovereign buyers put “filters” for the type of CERs that they would source. Also, it was becoming clear that many buyers preferred credits that had a large sustainable development component, with Gold Standard-certified credits having better market access and commanding higher prices.

This situation is expected to continue and accentuate under Article 6, especially, but not only in Article 6.2. It is likely that market access and prices will be dependent on a number of factors such as stringency of the NDC, stringency of activity's baseline, sustainable development criteria, and use of revenues, all of which affect a given host country's opportunity to benefit from Article 6 to drive investment in low-carbon activities. Given the fact that countries will allow greater latitude, especially when it comes to Article 6.2 protocols and standards, branding is likely to play an important role.

Branding may also depend on the stage of the market, but early signals show its great importance for many of those that have declared their decision to join this market. Whether this will persist in the face of higher compliance costs by all countries remains to be seen. The high transparency that emerges from the reporting that comes with the Paris Agreement and Article 6 will also play an important role in emphasizing branding and the opportunities that it provides for host countries.

¹⁴ <https://unfccc.int/process/the-paris-agreement/long-term-strategies>.

4. Tactical issues

This section explains key considerations for host countries once they have decided to participate in Article 6, both to minimize risks identified earlier, and to maximize opportunities. This will include decisions on which specific sectors, technologies, and activities will form part of the country's Article 6 portfolio, and how the national criteria, procedures, and financing structures support implementation.

4.1 Domestic carbon pricing instruments and Article 6

Many potential host countries are developing or have already developed other carbon pricing instruments (CPIs) such as ETS or carbon taxes. These CPIs may have implications for the elaboration of a country's Article 6 strategy, particularly if the ETS or carbon tax systems allow offsets from other sectors outside the coverage of the CPI. Carbon taxes and ETS are designed to achieve a certain level of mitigation (i.e., reflected in the tax level or ETS caps) based on an understanding of the costs of mitigation within the covered sectors. If some mitigation options in those sectors were used for Article 6 cooperation instead, then they would not be available to the domestic compliance entities without risking double counting of the emission reductions (i.e., counting them as domestic reductions while also transferring them to another country to use against the acquiring country's NDC). More importantly, most ETS and carbon tax systems allow for offsets – carbon credits generated in other domestic sectors that can be used to meet part of the compliance obligations of covered entities. Offsets are meant to reduce compliance costs in the covered sectors by supplying lower-cost mitigation options from the offset sectors or project types. If these low-cost offset options were used for Article 6 cooperation instead, this could increase the compliance costs for entities covered under an ETS or carbon tax.¹⁵ For existing and planned CPIs,

therefore, the host country might need to assess the trade-offs and balance the costs associated with meeting obligations under the domestic CPIs and participation in international carbon markets.¹⁶

4.2 Eligibility criteria for Article 6: qualitative and quantitative

Eligibility criteria for Article 6 activities could be designed to address the overselling risks highlighted earlier and the opportunities for Article 6 to benefit the host country. The analytical outputs from the NDC analysis, and even the assessment of low-cost mitigation opportunities in the LTS could support the host country in developing a comprehensive and transparent list of eligibility criteria for Article 6 cooperative activities. This is important for engaging the private sector because project owners are willing to invest in mitigation activities for Article 6 if they know that these activities are likely to be approved by the government and enables access to additional financing sources from Article 6 markets. The lack of clarity on what types of activities are, or are not allowed for Article 6 cooperation would be a barrier to private sector participation.

This section first explains how the risk mitigation might be included in the criteria, and then turns to capturing opportunities. As discussed in section 3.1, a strategy to avoid overselling may include a variety of policy measures and tools. These fall into three broad groups: qualitative restrictions on which project types are allowed; quantitative restrictions on the amount of ITMOs that can be transferred, and pricing ITMOs high enough to fund any additional mitigation needed to still meet the NDC goal. All of these might be reflected in the criteria that the countries use to approve Article 6 activities.

For example, in terms of qualitative restrictions, the country might decide to exclude specific interventions identified for their “NDC package” from Article 6 cooperation. In other words, one way to ensure that Article 6 cooperation would not create risks for the NDC would be to create a “negative”¹⁷ list of project types,

¹⁵ While it is possible that the host country could still allow the same mitigation activity to be used as a domestic offset project when the emission reductions were transferred as ITMOs, this does not necessarily mean the ETS or carbon tax would be contributing less to achieving the national NDC goal. This would be a form of domestic double claiming of mitigation outcomes, but at the international level, only one country is claiming them for its NDC.

¹⁶ A country could also consider allowing covered entities in an ETS or carbon tax to use imported ITMOs for part of their compliance obligations. This would mean that the country would take the position as a buyer of ITMOs, not a seller. The considerations for buyer countries is beyond the scope of this paper.

technologies, or investments that could not be used as the basis for Article 6 cooperative activities. This could be informed not only by the analysis of the NDC, but also the analysis of other domestic CPIs, the national inventory, and even the LT-LEDS to identify areas that would be more or less risky for Article 6 engagement.

A different fundamental approach may be to simply put quantitative limits that are related to the NDC progress – in other words, quantitative limits on overall transfers for the entire country, transfers from a particular sector, or even the transfers from a specific cooperative activity. This might not be relevant at the start of the NDC period and when many Article 6 activities are at the pilot phase but could become more relevant later in the NDC period. For example, if the country is not making sufficient progress towards its NDC goals, it might decide not to authorize additional transfers. Therefore, it is important that all selling programs are centrally monitored and that while private sector participation is authorized and encouraged, it needs to be accompanied with clear approval, monitoring and reporting systems that are connected to those responsible for NDC compliance.

Other quantitative approaches such as limiting crediting periods to ensure predictability in how much credit is exported from each activity could also provide alternatives that some countries may want to avail themselves of. As with qualitative criteria, clarity and predictability would be important for encouraging private sector engagement with Article 6 activities.

Finally, the pricing issues discussed in section 3.1.2 could also be incorporated into eligibility criteria. Ensuring that part of the funds received in the country is put aside and used to compensate for the corresponding adjustments, depending on how the Article 6 rulebook is formulated, can be an important aspect of this approach (see section 4.7). A host country might choose to adopt one of these approaches, or to use them in combination. The final combination of considerations could be quite different to those used by some Article 6 pilot funders or potential ITMOs buyers because the purpose of the criteria is to protect the interests of the host country while still opening up new areas for Article 6 cooperation.

In terms of opportunities, the eligibility criteria could also be used to signal priorities and increase private sector engagement. For example, a country might choose to create a “positive list” of mitigation options that would not interfere with the implementation plan for the unconditional NDC and fast track any requests for authorization or transfer from those project types, technologies or investments identified as being in need of support for long-term goals. This can catalyze market development and provide clear signals to project developers and investors.

For all of these, whenever the NDC or the LT-LEDS is revised (e.g., as the country raises its ambition or as the underlying assumptions, such as technology costs, change over time), the country would need to re-assess which project types or technologies should be on either a negative or positive list.

4.3 Standards and programs

One choice that Parties that engage in Article 6 have, more precisely in Article 6.2, is whether to develop completely its own protocols for measurement, issuance, and transfers of ITMOs, or use some elements of existing international standards.

Article 6 will have two types of emission reductions. One type is units issued under Article 6.4, which is under multilateral governance like the CDM. These will have a well-defined protocol for the generation and issuance of Article 6.4 emissions reductions.

A second type of unit may be issued by Parties under Article 6.2. These units are issued under bilateral or plurilateral agreements and governance. They will be issued under a protocol that may be defined unilaterally by the issuing Party which will then find a market that accepts that issuing standard. Alternatively, they will be issued under a protocol defined or accepted bilaterally or in a plurilateral manner.

The protocol for measuring and issuing ITMOs under Article 6.2 may be something that is entirely domestic, or a combination of domestic and independently developed approaches. While there are many independent protocols, countries can decide to develop their own measurement protocol as well as their own issuance procedures (including corresponding adjustments).

¹⁷ In order to maximize the market opportunities, however, instead of a negative list, using a positive list that specifies eligible activities for Article 6 is more recommendable.

Alternatively, they can decide to develop a (domestic) protocol for issuance and transfers (including corresponding adjustments) but opt to use an international standard for the rest of the Article 6.2 cycle. This can be seen as a menu, where some parts may be developed nationally, and others used from independent standards.

Examples exist, with Japan developing its own Joint Crediting Mechanism (JCM) approach, and Switzerland working with Peru to develop a common approach. Others may opt to use an independent standard as the measurement protocol.

In the case of an all-national approach at all stages, there is significant room to define its own standards tailored to national needs or international consensus between Parties. This will also allow for additional scope for developing own services adapted to these standards, as well as maintain full national control over the whole process.

The advantage of using existing international standards for a portion of the Article 6.2 activities is considerable. Setting new standards, including developing procedures, infrastructure, and agreements is significant and takes time – the capacity and resources that need to be deployed, and the time it takes to develop such new approaches are considerable.

What also needs to be emphasized is that bilateral international cooperations, as envisaged under Article 6.2, will allow countries to overcome some of the limitations of existing standards. Methodology development or improvement is one way to speed up the start of Article 6 activities considerably.¹⁸

4.4 Opportunities as a trading hub

In participating in Article 6, Parties will have to decide whether their participation is for NDC compliance purposes or whether they have a broader view and would like to become a center and “hub” for secondary markets. This will have implications for many components, including agreements with other countries and specifications for the registry. It will also lead to different benefits for the

country because if it chooses to become a trading center, it will benefit from hosting legal services, consulting services, financial services, etc.

A Party may intend to use its participation as a buyer in order to meet its NDC or contribute to increasing its level of ambition by providing carbon market funds that will allow additional mitigation in other countries. Alternatively, it may be willing to be a seller which may fund the achievement of its NDC or an increase in ambition by accessing funds from other Parties.

Finally, a Party may also wish to allow domestic entities that have compliance obligations under domestic legislation (e.g., EU ETS) to use international credits. In this case, such Party may not want to allow anyone that has no domestic obligations to buy on its behalf, or just hold ITMOs as an asset to retain them in its registry. Also, that Party may then only allow ITMOs that meet its own criteria, in terms of quality and according to the metrics in which they are expressed in the national registry. Finally, all transactions may be the result of agreements that the Party has entered into with other Parties, with mutual corresponding adjustment commitments when there is a transfer into its registry. Essentially, that is the case when a Party is only willing to participate in a compliance market, and all trades and transfers are done bilaterally without further transfers.

The alternative is for a Party to develop a hub for carbon markets under Article 6. In this case, it may allow anyone to open an account and may allow any ITMOs to be held in this registry, without specifying that they are for compliance with its own NDC or any promise that it will undertake a corresponding adjustment when an ITMO is transferred into its registry. In this case, it is clear that the only viable solution is for a corresponding adjustment to take place only when that Party uses the ITMO for its own compliance. An ITMO in its registry does not imply ownership by the Party and use towards its own NDC. All qualities of ITMOs will be allowed, as well as any metrics. This may allow that Party to develop a hub for carbon market services, including consulting and trading, such as a carbon exchange.

¹⁸ For example, with CDM methodologies for power generation projects which generally use a grid emission factor, it is not possible to quantify mitigation outcomes generated in countries that have a clean grid but use diesel generators. The bilateral cooperation through Article 6.2, while complex, could cover such areas.

4.5 Partnerships and types of cooperation

Article 6 engagement will provide countries with many options on how to participate, should they choose to. One decision, discussed already, is whether they want to have a compliance participation or whether they wish to become a hub for secondary markets. Another set of strategic decisions will involve how they want to engage.

Some countries will want to engage bilaterally, and we see some countries already working that way. This will lead to negotiating bilateral agreements under which there could be sovereign-to-sovereign transactions and transfers. Alternatively, countries could put bilateral framework agreements in place and then allow private entities to transact under these agreements with normal commercial terms and contracts.

In other cases, there may be so-called clubs that are formed, and that will bring together a number of countries which will aim to have common standards.

Another way that countries can participate is through regional alliances that can play a very useful role at an early stage in ensuring that regional standards and approaches are developed. These alliances could include both buyers and sellers. Countries can cooperate in designing registries, MRV systems, developing joint projects, entering into agreements with buyers through regional agreements, and so forth. This will help in areas such as infrastructure development which could be shared for registries, capacity building, and in setting standards that would ensure that competition does not take place on the basis of a race to the bottom.

4.6 Sustainability of institutional arrangements

When engaging in Article 6 activities, one critical aspect will be defining a strategy and approach for governance and institutional arrangements to ensure good governance and ways to ensure the stability and sustainability of institutional arrangements. This is not a minor issue, and practical experience has illustrated its importance. When the CDM was established, insufficient resources were made available, especially to the CDM secretariat, and led to a dysfunctional mechanism and urgent calls for its reform from Parties and stakeholders alike.

The CDM secretariat was meant to be financed through the share of proceeds from the issuance of the CERs. This led to a chicken and egg situation as there was no issuance due to a lack of resources to consider projects, and it took time to go through the project cycle anyway. Additionally, the existing staff complement lacked experience in regulatory matters. It took three years to get the regulatory machine going. These lessons should be considered in the strategy of countries involved in Article 6. This is even more important when considering that host countries involved in carbon markets under the Kyoto Protocol, had a very limited role in terms of regulation and governance. However, in both Article 6.2 and even in Article 6.4, the role of host countries will play a more complex role, performing functions that they did not have to previously.

In order for countries to experience a successful engagement in Article 6, it is important to put a strategy to ensure sustainability of institutional arrangements in place.

While the long-term sustainability of institutional arrangements will have to come from a share of the funds that is received from exports of ITMOs, it will be necessary to provide the resources to get started. That would include financial resources that may come from the government, donors, multilateral bodies, and so on.

However, the staff needs to be knowledgeable in regulatory matters so that they can use the resources. This will apply to establishment of the domestic institutions related to Article 6 as well. How staff and capacity is made available and developed will require a strategy, possibly drawing on experience from financial and energy regulatory bodies in the country.

4.7 Creating and managing a mitigation fund based on Article 6 levies

One option in the strategy to engage in Article 6 activities is for the country to set up a fund to manage the money received from transactions under Article 6. Some transactions may have the state as a counterparty, where the state would receive all funds that could be channeled into this fund. In many other circumstances, the counterparty would be a private sector organization, acting under the approval of multilateral, plurilateral or multilateral governance (which would be the case under Article 6.4), that would have to pay a royalty to the host government for any



export of emission reductions. This has been put in place in some jurisdictions, such as China, where a percentage of the revenues from HFC projects was channeled into a climate fund.

It must be emphasized that if designed properly, such a fund could support the country in meeting its NDC. However, the fund does not need to be established immediately. Other simpler mechanisms may be available in the short-term to allow for a prompt start, given the regulatory and institutional groundwork needed to launch such a fund.

Funds that are collected through government transactions or from royalties and put into this fund can be used in several ways. One function will be to provide a visible and transparent way in which the revenues from Article 6 are used. This will certainly help in branding any emissions reductions (both under Article 6.4 and 6.2) in the international carbon market.

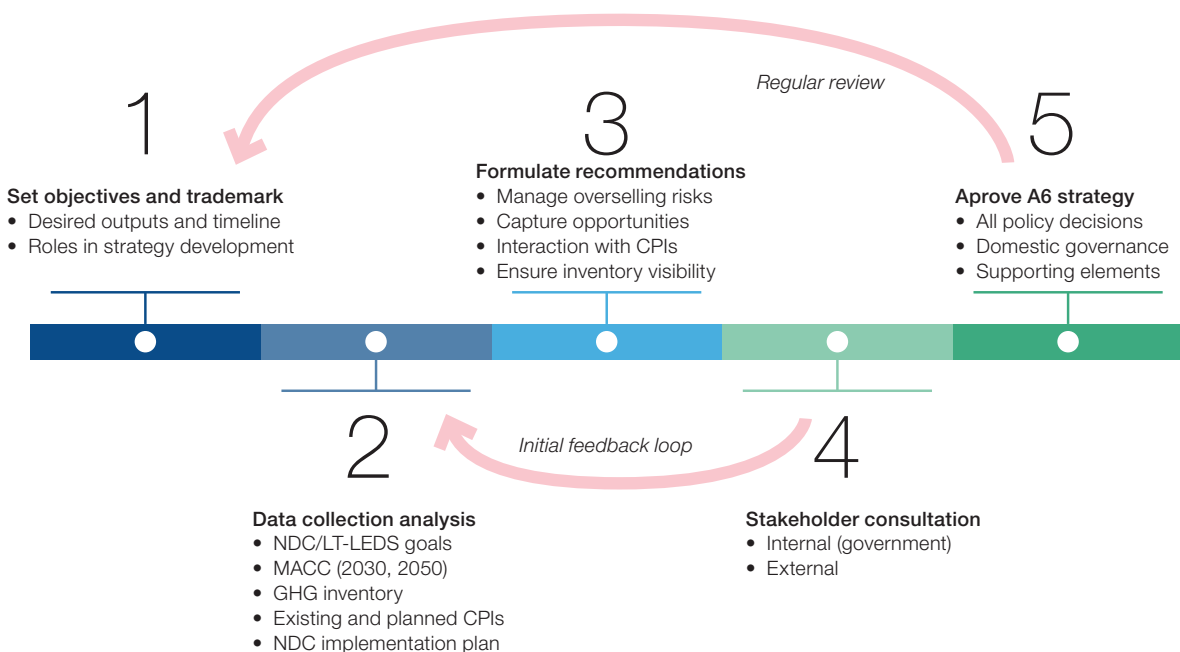
Funds can be used for meeting administrative expenses related to participation in Article 6, including running the registry, for the negotiation and administration of international agreements, the development of MRV systems, and so on.

Resources from the fund will primarily be used to “make up” for the corresponding adjustments that need to take place under Article 6. The process for selecting these projects will be developed once the fund governance has been established, but a reverse auction may be considered for this purpose. Alternatively, sectors and types of projects may be prioritized.

5. Strategy development steps

This section highlights the key steps that a host country would take to address all of the considerations explained in sections 3 and 4 to arrive at an initial decision on its Article 6 strategy and update or revise over time. Figure 3 presents a process that could address both the key strategy and tactical issues for engaging in Article 6.

Figure 3. Key steps in the development of an Article 6 strategy



The general steps are described above but some issues will need to be treated sequentially, while some will be done in parallel. In general, it can be expected that many strategic decisions taken early on may need to be revisited based on the experience gained, lessons learned and any changing conditions. This is the “regular review” feedback loop from the last step back to the first one. Also, some of the tactical considerations will need to be addressed early on in order to start participation in Article 6, while others may be considered in parallel with early participation.

Early stage decisions: If from a general approach the country wishes to participate in Article 6, there is no choice but to have an initial review of strategy options. This would also be true whether it chooses to join Article 6.2 or Article 6.4, or both. The result of this review can be preliminary and subject to further review once some experience is gained with early pilots. This review should also consider if this is a final decision or there is a desire for testing the approach first before launching into full participation.

Once the first round of strategic and tactical decisions are made, the following needs have to be identified:

- Capacity building
- Accessing funding for capacity building and technical assistance
- Establishing governance arrangements, training government staff and other stakeholders

If the country decides to participate in Article 6.2, it needs to consider whether it will rely solely on domestic protocols or whether it will adopt some of the existing international or independent protocols. It is essential that the criteria and processes for approving projects are decided at an early stage, since developing projects and getting them approved takes a long time.

The role of the private sector will need to be determined at an early stage, as well as the role of the state: is the latter limited to the approval of projects, issuance of mitigation outcomes, approval of international transfers (together with tracking and corresponding adjustments), or does it also take on the role of being a project participant for some activities?

Another decision that needs to be made at an early stage is regarding the institutional arrangements for operationalizing Article 6: what are the institutions and what are they responsible for? This is especially true if there is a real gap in institutional responsibility and capacity, possibly as it relates to the accreditation of third-party verifiers that will play a critical role, as well as the approval of baseline and monitoring methodologies.

Later stage decisions: Other issues are critical, but those elements will be needed at a later stage – registries will be essential, but they will not be needed until there is an issuance, and this will take time. Sectors that would be open to Article 6 will need to be determined, but that should not delay starting and testing the approach with a few early starters.



