

Considerations for Additionality Concepts to Article 6.2 Approaches



© 2023 International Bank for Reconstruction and Development / The World Bank

1818 H Street NW

Washington, DC 20433

Telephone: 202-473-1000

Internet: www.worldbank.org

This work is a product of the staff of the World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of the World Bank, its Board of Executive Directors, or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Rights and Permissions

The material in this work is subject to copyright. Because the World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Attribution

Please cite the work as follows: The World Bank. "Considerations for Additionality Concepts to Article 6.2 Approaches," World Bank Working Paper, Washington, DC.

Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

Design by Clarity Global Strategic Communications (www.clarityglobal.net)

Table of Contents

Abstract

1. Introduction	1
2. Role of additionality in earlier market-based mechanisms	2
3. Considerations for the role of additionality for Article 6.2 approaches	5
4. Relationship between Environmental Integrity and Additionality for Art. 6.2	9
5. Transition period to streamlined additionality	12



Acknowledgements

This technical approach paper has been written for the Climate Warehouse Program at the World Bank, which seeks to operationalize Article 6 through piloting activities. The paper has been prepared jointly by a team of experts that includes Jessica Wade-Murphy (Atmosphere Alternative) and Sandeep Kanda (World Bank). Harikumar Gadde (World Bank) and Seoyi Kim (World Bank) provided substantive inputs and managed the project. Chandra Shekhar Sinha (World Bank) provided valuable comments and suggestions to the authors. This work also benefited greatly from consultation with the Climate Market Club. The Climate Market Club, as of September 2023, has representatives from 14 countries and five non-sovereign entities as its members with the MDB Working Group on Article 6 acting as the secretariat.

Considerations for Additionality Concepts to Article 6.2 Approaches

Abstract

This approach paper examines the role of additionality for environmental integrity under Article 6.2 approaches. It analyzes the relevance of additionality determination methods from market mechanisms including Joint Implementation (JI), Clean Development Mechanism (CDM), and voluntary offset mechanisms, wherein additionality has been judged as a yes/no dichotomy, albeit with inherent uncertainty. It also reviews other performance-based market mechanisms such as emission trading systems, wherein no additionality demonstration was needed. A6.2 has more similarities with JI and International Emission Trading (IET), including the capping of emissions of all participants and performing corresponding adjustments (CA). It is noted that A6.2 differs from former project-based mechanisms, where the additionality demonstration has been linked to the absence of the project activity and relied on business-as-usual (BAU) scenario for baseline. The A6.2 guidance state that the impact of mitigation activities should be evaluated compared to a country's commitment and to future-looking performance of a below-BAU scenario. In the A6.2 context, the host country must assess and decide how much and which MO it wishes to sell, or not, to ensure it achieves its own NDC commitments, without overselling or underachieving by not engaging sufficiently in international markets. Additionality may become a risk-management tool, rather than a yes/no decision tool, to determine the quantity of MO from an activity that may be authorized by the host country for international transfer. This approach paper provides scenarios of when and how activity-based additionality could be evaluated to mitigate risks to the host and buyer.

1. Introduction

Article 6.2 approaches must contribute to achieving Nationally Determined Contributions (NDC), enabling climate action and sustainable development through cooperation, while ensuring environmental integrity. Environmental integrity (EI) is ensured when mitigation outcomes (MOs) are transferred internationally, and the transferring country can still meet its NDC and is enabled to undertake further climate action, such that there is no net increase in global emissions. Internationally transferred mitigation outcomes (ITMOs) will be subject to corresponding adjustments, meaning they are not counted toward the NDC achievement of the transferring country.

The Paris Agreement Art. 6.2 (A6.2) text does not refer to mitigation outcomes being “additional”, while the Glasgow decision CMA.3 includes guidance that ITMOs from A6.2 cooperative approaches are real, verified, and additional; however, there is no detailed guidance on how this should be demonstrated.

Paris Agreement Article 6.2

Article 6.2: ‘Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement’.

In this context, the potential role of additionality for environmental integrity under A6.2 needs to be examined carefully. This working paper builds further on the approaches cited in the ‘[Ensuring Environmental Integrity under Article 6 Mechanisms](#)’ paper (World Bank, 2021) and explores the purpose additionality could serve in A6.2 activities. Also, it examines how and when additionality may need to be applied in the A6.2 context, analyzing the relevance of additionality determination methods from project based mechanisms including Joint Implementation (JI), Clean Development Mechanism (CDM), and voluntary offset mechanisms, as well as the approaches of other performance based market mechanisms such as emission trading systems / cap-and-trade schemes.

2. Role of additionality in earlier market-based mechanisms

The Conference of the Party at their first meeting (COP1) took a decision regarding criteria for a pilot phase for activities implemented jointly (AIJ) as indicated in Art. 4.2 (a) of the UNFCCC. It was decided: “... (d) *That activities implemented jointly should bring about real, measurable and long-term environmental benefits related to the mitigation of climate change that would not have occurred in the absence of such activities* (author’s emphasis); (e) *That the financing of activities implemented jointly shall be additional to the financial obligations of Parties included in Annex II to the Convention within the framework of the financial mechanism as well as to current official development assistance (ODA) flows;*”.

These two requirements were called the additionality criteria for AIJ. The first refers to the realness of GHG abatement, i.e. emission reduction compared to a baseline, whereas the second describes that the funds earmarked for AIJ have no other objective (i.e. fulfilling previous commitments to development assistance or parallel commitment to climate finance). Related literature also cited that if strict additionality criteria were not defined, AIJ crediting would soften the commitments of Annex I countries (Puhl, 1996).

Different possible methods of additionality demonstration were proposed under AIJ, including:

- a. Measuring additionality for an AIJ against a credible, quantitative baseline;
- b. Defining narrow categories of activity types whose emission benefits will *a priori* be considered additional; or
- c. Assessing additionality by evaluating whether an AIJ overcomes financial, institutional, technological, or other barriers to project development.

Subsequently, the reference to additionality of emissions reductions from COP3 was in the context of the Kyoto Protocol Article 6 and Article 12 market mechanisms, Joint Implementation and the Clean Development Mechanism, respectively, where the text of the Kyoto Protocol Article 6 states that, “*emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that: ... Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;*” and in Article 12 that, “*Emission reductions resulting from each project activity shall be certified ... on the basis of ... Reductions in emissions that are additional to any that would occur in the absence of the certified project activity.*”

Furthermore, for the latter case, the Marrakech Accords at COP7 gave the more detailed definition that, “*a CDM project is additional if anthropogenic emissions of GHGs by sources are reduced below those that would have occurred in the absence of the registered CDM project activity ... The baseline for a CDM project activity is the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity.*”

As the requirements evolved from COP1 to COP7, the focus went from a unified requirement for mitigation of climate change that would not have occurred “in the absence of such activities”, to separate requirements for both additionality, defined as emissions reduced below those in the absence of the activity, and a baseline, defined as the absence of the specific project activity.

In the Kyoto Protocol context, baseline setting and additionality demonstration have been used to judge whether mitigation activities, mostly from host Parties with no emission reduction commitments, were deserving of generating credits and receiving carbon finance from cooperative mechanisms. This process sought to mitigate the risk of generating credits from business-as-usual (BAU) activities, by providing a test to seek to identify whether project activities differed from business-as-usual.

Cooperation for Mitigation

Cooperative approaches prioritize less-expensive mitigation for financing, in place of costlier mitigation that could happen elsewhere. Prioritizing lower cost mitigation should allow countries to achieve more, faster, since at lower abatement costs, the same amount of finance will result in more mitigation. Still, the equation is only effective if the replacement mitigation occurs as a result of the cooperative scheme.

Baseline alternatives were defined, usually employing historic data to describe how the contemporary circumstances would bode for different choices about new investment or continuation of existing practices. Then, an additionality test was carried out following various steps. The foremost step involved checking that the project activity and baseline alternative(s) complied with legal requirements. Subsequently, investment analysis and/or barrier analysis were applied to demonstrate the activity was not economically attractive or faced justifiable barriers to implementation. Thereafter, common practice analysis was undertaken

as a sense-check on how commonplace such activities were in the same geographical area. All of these steps sought to check whether the activity was different than the BAU. Particularly for barrier analysis and common practice analysis, the additionality demonstration used data from the previous one to three years to differentiate the project from the hypothetical baseline.

Apart from the Kyoto Protocol-related market schemes, the voluntary standards, too, have relied upon the CDM additionality tools for emission offsets originating from host countries and sectors without a GHG reduction obligation.

In mathematical terms, it could be stated that emission reductions (ER) from a CDM activity were a function of additionality and baseline¹.

Emission reductions (ER) = fn(additionality, baseline)

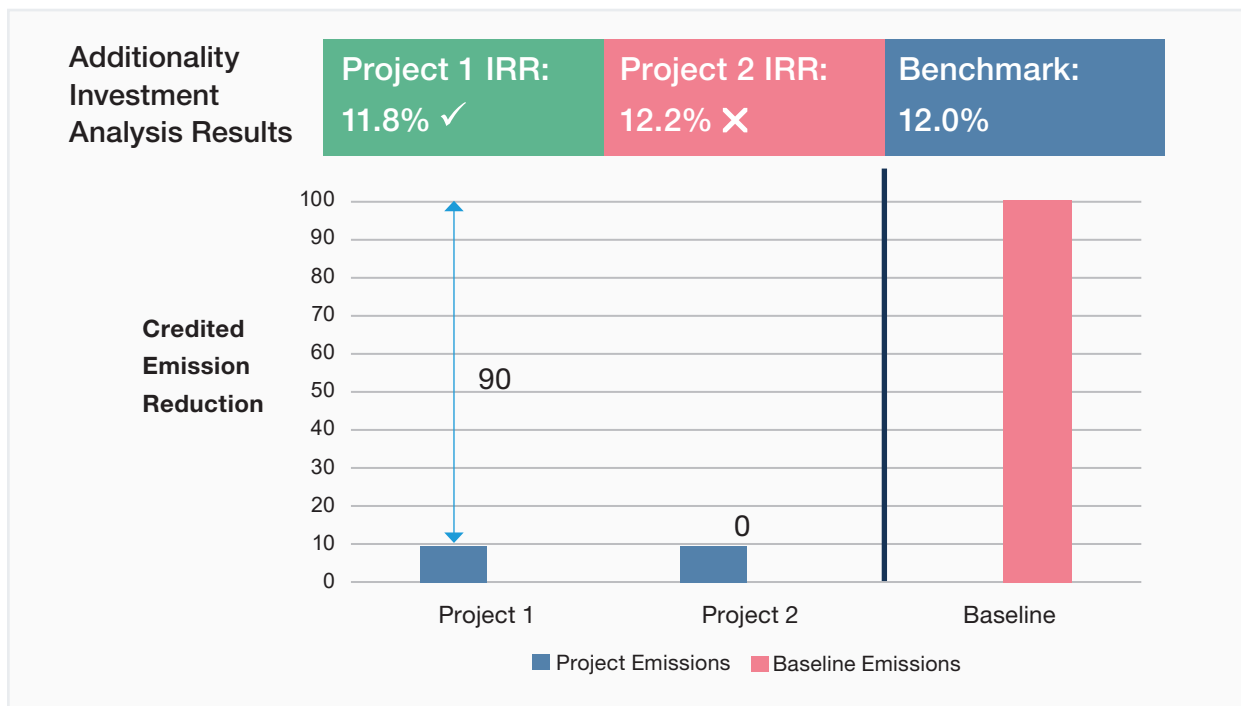
ER = fn(additionality) x fn(baseline)

Wherein, additionality provided a binary signal (1,0) and baseline, a continuous (analog) signal.

In that context, additionality has been judged as a yes/no dichotomy, albeit with inherent uncertainty. As an example, in the case of investment analysis, in which a project's financial indicator is compared to the indicator of an alternative investment or to a benchmark, a project indicator that is just slightly lower than the alternative would be deemed additional, whereas the project whose indicator is just slightly higher is deemed non-additional. This results in an all-or-nothing outcome where, for two nearly identical projects, one could certify emission reductions for all of its impact as compared to the baseline, while the other could certify none at all. The same has applied in the case of the demonstration of barriers.

¹ MRV is also a critical component of certified emission reductions, but it is not addressed here, since it is expected to have a similar role in earlier market-based project mechanisms and Article 6 cooperation.

Figure 1: An example of additionality investment analysis to illustrate all-or-nothing approach



Furthermore, under this all-or-nothing test, in the case of a potential investment with economic attractiveness that reduced GHG emissions, often such a reduction would be assessed as (entirely) non-additional. Over time, the investment analysis became the de facto method of demonstration of project-specific additionality.

So far, the role of the host country governments in directing the flow of carbon revenues to particular mitigation activities has been very limited. Additionality as a part of environmental integrity has not been a central criterion for host parties to approve mitigation actions in their jurisdiction, with the focus rather being on the voluntary nature of the activity and its sustainable development benefits. In the circumstances of host countries with no emission reduction commitments, a general view has prevailed that the more carbon finance the better.

In a related way, the additionality demonstration has acted as a risk management tool for carbon credit buyers seeking to direct the flow of carbon finance to

eligible activities. Buyers have relied on the additionality filter to justify directing of incentives to mitigation activities whose associated emissions reductions would otherwise not have occurred. Additionality has taken on a central role in the narrative of legitimacy of carbon finance directed at mitigation outcomes from projects and programmes.

Responsibility for additionality in the CDM

The responsibility for demonstrating additionality lay with the project proponent, while the responsibility for confirming additionality occurred in parallel via the validation process by the Designated Operational Entity (DOE) and acceptance of the assessment by the regulator, the CDM Executive Board (CDM EB).

3. Considerations for the role of additionality for Article 6.2 approaches

To analyze the potential role of additionality for A6.2 activities, first, the characteristics of A6.2 are compared to those of other market mechanisms (including performance based and project based)² to identify similarities and differences. As the role of additionality and its application are analyzed, conclusions are drawn on which past models may not apply, and which experiences provide lessons learned for the consideration of additionality in A6.2. In the following table, A6.2 is compared to Kyoto crediting and offsetting mechanisms and other market mechanisms.

Considering the characteristics shown in the table, A6.2 has most similarity with the JI crediting mechanism. In the case of JI, trading carbon credits between a buyer country and a host country would be climate neutral, because of the cap on GHG emissions for developed countries. This is unlike the case of CDM, wherein over-generated CERs could lead to global GHG emission increase, as host countries did not have any cap on their emissions.

Additionality under JI received further inputs from COP18, which requested the Subsidiary Body for Implementation (SBI) to recognize, “*such concepts as positive lists of project types that would automatically be deemed additional and prior consideration of joint implementation projects, taking into account, as appropriate, the application of standardized baselines.*” It appears that the experience with JI led to the conclusion that standardized methods could be more effective for additionality, using concepts such as positive lists and standardized baselines. Given the similarities between 6.2 and the JI mechanism, this conclusion may hold true for the new context.

A6.2 also has significant similarities with International Emission Trading (IET), wherein no additionality demonstration was needed. The similarities between the two include that the participants are capped, Corresponding Adjustments (CA) / equivalent allowance trading are applied, and reduced emissions under an NDC are like reductions below a cap by regulated entities. Whereas the main differences between A6.2 and IET include that emissions units derive from identified activities under A6.2, and caps are set by countries themselves and not an outside regulator. This latter difference contributes to concerns about the environmental integrity of A6.2 mitigation outcomes, and that they could represent “hot air” due to unambitious NDC goals. This concern is very similar to the situation observed in the context of JI, where there was concern of ‘hot air’ emanating from low ambition levels in the Kyoto pledges; however, additionality testing did not address this concern, since additionality addressed only whether the particular activity would have happened or not. “Hot air” in an emission trading scheme would be addressed by stringent caps.

² Additionality refers to the eligibility requirement that offset credits must be in addition to what would have happened in the absence of the project, and that reductions are above and beyond business-as-usual. A performance standard establishes a threshold for technologies or processes that must be met or exceeded in order for a project to be additional. A project-based standard evaluates projects on a case-by-case basis and allows for the use of different additionality tests (e.g., financial, technological, common practice), depending on the type of project. (PMR, 2015)

Table 1: Comparison of Article 6.2 to Kyoto crediting and offsetting mechanisms and other market mechanisms

Characteristic	Paris Agreement Article 6.2	JI	CDM	Cap-and-trade or International Emission Trading (IET)	Offset mechanisms (e.g. Gold Standard, VCS, JCM, Alberta, CARB, RGGI)
Emissions limit	Paris Agreement requires host countries define their own nationally determined contributions (NDC) and targets set under those could become a reference for Article 6 activities	Kyoto Protocol set them for hosts (host country – has agreed target), within national emissions mitigation commitments under the Convention Assigned Amount Units -AAU	Did not exist for host countries of CDM project activities (host country – no target)	Participants have targets set by regulator / Assigned Amount Units (AAU)	Unregulated
Usage/transfer of units	Mitigation Outcomes of host may be used to meet own mitigation targets or NDC of the buyer	Emission Reduction Units (ERU) of host may be used to meet emissions targets of buyer	Certified Emissions Reductions (CER) of host may be used to meet emissions targets of buyer	Allowance units traded to attain emissions limits / AAU trading at the national level	Reduction credits / offsets generated outside the covered sectors and traded/retired
Corresponding adjustments (CA)	Host country must make corresponding adjustments to NDC for transferred MO	Host country cancels an amount of AAUs corresponding to the ERU emission reduction from the JI project, equivalent to CA	None by host	Trading of allowances is similar to trading with corresponding adjustments	Not needed
Objectives	Achieving NDC (host and buyer)	Meeting of commitments (host and buyer)	Meeting of commitments (of buyer only)	Not exceed emissions cap (supplier and buyer)	Incentivize emissions reductions/removals outside covered sectors
Environmental integrity	<ul style="list-style-type: none"> • No net increase in global emissions • Baseline below ‘business as usual’ • Addressing non-permanence risk 	<ul style="list-style-type: none"> • Ensured by conservative baseline, or positive lists, or CDM additionality tool & ERU to AAU conversion³ 	<ul style="list-style-type: none"> • CDM Additionality tools 	<ul style="list-style-type: none"> • Ensured by targets and bookkeeping of allowance units 	<ul style="list-style-type: none"> • Positive list, voluntary, beyond BAU, etc.

Note: The elements that are similar between A6.2 and the other mechanisms are put in bold.

³ JI operated in two tracks (Track 1, Track 2), and subsequently the paragraph 15e of the Doha guidance (2012) relating to JI Parties agreed on the new unified JI track with “clear, transparent and objective requirements to ensure that projects are additional to what would otherwise occur.”

Delving further into similarities and differences, under CDM, JI and other offset mechanisms, the emission reductions have been linked to the *absence of the project activity*, and baselines generally have been developed considering the continuation of historic conditions, e.g. last three years' operation. The concept of additionality demonstration has required assessment of hypothetical scenarios in the absence of the project. Under Article 6 and the related Glasgow decisions, there is no reference to mitigation outcomes accruing in comparison to a scenario without the mitigation activity; instead, the impact of a mitigation action will be evaluated compared to a country's commitment, and future-looking performance compared to a below-BAU scenario. Further, the requirement for no net increase in global emissions relates the outcomes to the NDC commitments. Specifically for A6.2, its aim is cooperative approaches not limited to projects and programmes. Thus, the guiding question of the CDM additionality test, "would the mitigation happen in absence of the project activity?", does not suit the A6.2 context. A6.2 activity additionality cannot be judged on the basis of whether an individual action is different than the scenario without that particular action. Another way in which A6.2 differs greatly from CDM, arises since host countries have their own emissions target under the Paris Agreement, changing the context of mitigation activities significantly as compared to CDM or other offset mechanisms.

The relevance of additionality testing to address the different risks of concern to host countries and buyers for A6.2 mitigation may be as follows.

Risk – Overselling: The Paris Agreement establishes incentives for host countries neither to sell non-additional units, nor to oversell credible mitigation outcomes. Since the main risk to the host lies with overselling, the host country should define eligibility of activity types and approve MO transfer to control this risk.

Risk – Crediting of "hot air": In the context of JI, where there has been concern of 'hot air' emanating from low ambition levels in the Kyoto pledges, additionality did not address this concern. In this A6.2 context, this concern would be better addressed by confirming the stringency of NDC commitments, via an independent assessment. This step would ensure that the operation of A6.2 mirrors more closely the circumstances of International Emission Trading (IET), wherein no additionality demonstration was needed.

Risk – Crediting of activities required by regulation: A6.2 activities must go beyond regulatory requirements, since all existing policies must be considered in the baseline/reference levels. Using positive lists and standardized baselines set by the host country, for activity types that surpass the goals of their regulatory and policy framework, could provide a streamlined method for qualifying activities. Such information is also critical for mitigating buyers' reputational risk and developer risk of materializing carbon finance.

Based on this analysis, it does not seem appropriate to apply the same additionality requirements as CDM or other voluntary offset mechanisms to A6.2 mitigation, and more adequate to explore how requirements to ensure the environmental integrity of the results under JI and IET would be applicable to A6.2 mitigation.



MANAGING RISKS IN A6.2 ENVIRONMENTAL INTEGRITY

In the case of A6.2, host countries have their own emissions targets; therefore, the host country needs to have an active risk management strategy both in terms of avoiding excess transfer of mitigation outcomes (i.e., overselling and not meeting its own NDC), and also in terms of underachieving mitigation (i.e. by not engaging in international markets and attaining only the mitigation it can finance without cooperation).

Host countries need risk management tools to support them in the expanded role that will be required of them by the A6.2 conditions, as compared to their very limited role in the CDM. Risk management tools can help host countries judge which mitigation actions generate outcomes suitable for transfer, and how much mitigation outcome should be transferred⁴.

Early in the discussion of additionality, the probabilistic nature of additionality demonstration was highlighted (Meyers, 1999). The question of whether or not mitigation actions will go ahead without carbon finance is rarely a strict yes/no answer, but a question of likelihood that can be answered generally across a sector or project type. As a simple example, when considering a class of new investments with investment indicators in a normal distribution around a benchmark, the probability could be that 50% would have gone ahead without carbon finance, and 50% would not have gone ahead.

In this context, historic additionality demonstration methods could be adapted by host countries as a risk management tool, to judge the likelihood that project types would be implemented without incentives from cooperation. The conclusions could serve as a gatekeeper to the amount of mitigation outcome to transfer internationally, thereby helping the host country to avoid overselling and also to ensure no net increase in global emissions.

One identified risk to *buyer* countries, on the other hand, is reputational, related to the credibility of purchased units, and the additionality test has been perceived as a tool that minimizes this risk to buyers. Buyers have used additionality demonstration as a filter for directing the flow of carbon finance, as a proxy to answer the question, “will the project happen only with carbon finance?” Again, in most cases, it is not possible to answer simply “yes-or-no” if a project will happen without carbon finance, with the exception of the actions that entail costs but no other income sources, like landfill gas flaring. For buyers of Art. 6.2 mitigation outcomes, a check of the host country’s NDC should help to gauge reputational risk. Reviewing the project types or technologies included, or not, in the NDC could improve the buyer’s understanding of how likely it is that their financing of mitigation outcomes will catalyze or expand mitigation. ITMOs from a host country with a stringent NDC would pose low reputational risk of unintentionally financing mitigation action that would be likely to happen without incentives from carbon finance.

⁴ Different tools would be needed to determine the optimum price for ITMOs.

4. Relationship between Environmental Integrity and Additionality for Art. 6.2

Under project-based mechanisms, environmental integrity in the past has been judged largely on a project-by-project basis⁵. While in emissions trading schemes, environmental integrity has relied on stringent emissions caps. In the context of the Paris Agreement, the A6.2 approach straddles project-based mechanisms and ETS, entailing cooperative approaches not limited to projects and programmes.

Environmental integrity of A6.2 approaches and activities can be judged on the basis of expanded information, namely, the host country's NDC, in which it identifies which mitigation actions it considers realistic and achievable. In the future, periodic reporting under the enhanced transparency framework will provide even more context for evaluating A6.2 activities. The availability of this information will be guaranteed by the participation requirements for A6.2, including up to date NDC and national inventory report (NIR) submissions. Note that the NDC provides information on country context for types and categories of mitigation action, even if the NDC does not provide a specific performance benchmark or project baseline. The NDC, no matter its stringency, provides new, expanded information for evaluating mitigation actions against the country context and mitigation commitments.

Environmental integrity under A6.2 is a broader concept than additionality under the CDM. If the NDC is defined rigorously, baselines/reference levels are set accordingly, and corresponding adjustments are undertaken, then additionality, as a test of approval at the activity level, may not be needed for A6.2 actions, since additionality would be demonstrated already by the mitigation going below the BAU scenario and being consistent with a rigorous NDC.

[The Ensuring Environmental Integrity under Article 6 Mechanisms](#) approach paper provided proposals for ensuring EI under different scenarios, linked to NDC stringency and unit quality, where “unit quality” meant the level of confidence that the face value of the MOs is correctly calculated and fairly represents the quantity of MOs created. Further, it highlighted that NDC stringency would be best assessed by an independent entity, using the assumptions, data, sources and methodology of the NDC, and suggested terms of reference for independent assessment of NDCs.

The following table analyses the requirements toward ensuring environmental integrity for A6.2 mitigation outcomes under different country conditions, assuming that independent NDC assessment is applied.

In the A6.2 context, the host country must assess and decide how much and which MO it wishes to sell, or not, to ensure it achieves its own NDC commitments, without overselling or underachieving by not engaging sufficiently in international markets. Additionality becomes a risk-management tool for the host country to determine which MO may be authorized for international transfer. The host country may decide up-front, via a positive list, or may decide on an activity basis, about whether MO from an approach may be fully or partially transferred. For an activity-based decision, there will need to be tools for the host to assess the transfer and decide whether transferring would impact the ability to achieve NDC goals, such that there is no net increase of global emissions (GE) from the transaction.

⁵ Employing the information provided by the project participant and validated by an independent auditor, considering the individual project circumstances.

Table 2: Requirements for ensuring environmental integrity for Article 6.2 mitigation outcomes under different country conditions

Where Independent Assessment of NDC is	NDC Stringency	Corresponding adjustments	Requirements to ensure Environmental Integrity*		Remarks
			Baseline/ Reference level	No net increase in GE	
Possible	More stringent than BAU	Required	Describe consistency with NDC	Addressed by host and buyer attaining NDC All mitigation outcomes may be transferable	Activity-based additionality testing is not needed
	Less stringent than BAU	Required	Required through conservative cap/baseline, using NDC/BAU as point of reference	All MOs below the stringent cap/baseline transferable	Activity-based additionality testing is not needed
Not possible	Difficult to ascertain	Required	Required through conservative cap/baseline, using technical determination, not based on NDC	Part of MOs transferable	Activity-based additionality evaluation required
n.a.	n.a.	Required	Required through conservative cap/baseline, using technical determination	Part of MOs transferable	Activity-based additionality evaluation required
*The requirement for minimizing risk of non-permanence is not addressed here					

This assessment will vary on a country basis, depending on the country circumstances and respective NDC. Scenarios that may be observed are presented in the table and described as follows. In the green row, the host country NDC can be assessed, and it is found to be more stringent than BAU, so the assumption is that the host country has its bearings on the likelihood of implementation of mitigation activities in different sectors and has developed its NDC accordingly, thereby the overselling risk is minimized, and activity-based assessment is not needed. Therefore, the buyer's confidence comes from the confirmed stringency of the NDC, whereas the seller's confidence in the transaction is from its informed decision-making about the net benefits of MO sales in comparison to the baseline/reference level.

Whereas the yellow row shows the case where information is available to assess the NDC, and the conclusion is that it is less stringent than BAU; still, given that information is sufficient to draw this conclusion, it will also be sufficient to set a stringent baseline. In this case, buyer confidence stems partly from the assessment of the NDC along with the defined baseline/reference level below BAU scenario. In this case, the seller will mitigate its risk by acknowledging the below-BAU scenario.

On the other hand, the orange row demonstrates the case where information about the host country context from the NDC is incomplete, sparse, of low quality and so forth, such that NDC assessment is not possible, and the host country may not be able to quantify the risk of over-transferring, nor the buyer to make an informed decision about unit quality. In this case, activity-specific methods may be required to define a stringent, below-BAU scenario, while at the same time, it may be advisable to transfer less than 100% of the mitigation outcomes to provide a cushion that mitigates the risk of over-selling. In such a case, it may be appropriate to adapt the CDM additionality tool for an activity-level additionality demonstration, not as a yes/no output, but rather to assuage the buyer risk and to enable the host country to arrive at the quantity of MO for international transfer.

Finally, the grey row analyses the case of mitigation action outside the scope of the NDC, where similar to the orange row case, NDC assessment will not provide the information needed to judge the stringency of a baseline in the country context. As in the previous case, activity-level methods and a "haircut" on the international transfer of mitigation outcomes may be appropriate, to contribute to raising ambition and as a nudge toward expanding the scope of future NDCs.

In mathematical terms, it could be stated that internationally transferable mitigation outcome from an A6.2 activity that is real, verifiable and additional is a function of environmental integrity⁶.

$$ITMO = fn(EI) = fn(IT) \times fn(MO)$$

$$ITMO = fn(\text{no net increase in GE}) \times fn(\text{Baseline/reference level})$$

$$ITMO = fn(\text{NDC, Additionality}) \times fn(\text{Baseline/reference level})$$

Wherein, a stringent NDC that partially or wholly addresses the buyer reputational risk could still be a binary signal, whereas the additionality assessment and baseline may be continuous (analog) signals and address any residual buyer risk as well as host country overselling risk. The mitigation outcomes are a function of a stringent below-BAU scenario, and these MO become ITMO upon receiving an authorization for transfer that is linked to an additionality assessment by the host country. This additionality check need not be a pass/fail determination, but rather an expression of risk management by the host country leading to the outcome of the authorized quantity of MOs that may be transferred internationally, and still achieve the NDC. The host country authorization labels units as transferable, whereby the host country indicates what is additional by their positive list or the stringent baseline/reference level definition and confirms all MO below that level can be ITMOs. On the other hand, actions outside the pre-approved positive list, would be subject to the evaluation and judgement of the host government, as to what percentage is transferable⁷.

⁶ Again, MRV is also important, similar to the case for emission allowances or Kyoto emission reductions.

⁷ To provide predictability, it may be useful to refer to the example of JCM, whereby an ex-ante percentage was defined for the host country and the buyer (50% for each).

INDEPENDENT NDC ASSESSMENT

With respect to the feasibility of independent assessment of NDC stringency, there are concerns that the diversity of NDCs in terms of coverage (e.g., economy wide target, sectoral targets, etc.), level of ambition, and conditionality, as well as different national circumstances and development priorities, would be a barrier to developing a standardized framework for assessment. Also, there is uncertainty regarding the level of complexity and time to acquire data underpinning emissions projections and potential discrepancies between information requirements at the NDC level and the activity level. Furthermore, countries' policies are constantly changing, requiring reassessment

of the new conditions with respect to ambition. These circumstances could potentially cause operational delays to NDC assessment, which may affect investor confidence. The question also remains as to who would conduct such NDC assessment and sensitivities related to the results generated. At the same time, the NDC assessment approach warrants serious consideration, to bring more transparency around NDC formulation, to support increasing ambition levels and as a nudge toward harmonization. There are precedents for independent assessment related to country policies, e.g. sovereign credit ratings. Here, it is assumed that such NDC assessments are feasible.

5. Transition period to streamlined additionality

The proposed approach of not applying a separate additionality test may fit particularly well for sectoral and policy crediting approaches. In such cases, use of independent NDC assessments may be feasible, and the additionality test may not be needed. However, the majority of activities in the early days of the market are expected to be implemented at the project level, prior to implementation of the NDC assessment approach. Therefore, a transition period could be in order, in which all activities are treated along the red row of the Table 2. In other words, apply activity-specific methods define a forward-looking, below-BAU scenario as the baseline/reference level, and consider transferring less than 100% of the mitigation outcomes to mitigate the risk of over-selling As countries subject their NDCs to independent assessment, their EI assessment for A6.2 activities may change to align with the yellow or green row in Table 2.

There should be a process whereby NDCs are continuously improved, and the Glasgow decision guidance for A6.2 approaches nudges countries toward increasing the transparency and ambition of their NDCs by requiring regular NDC updates and NIR reporting for participation. In the transition period, in which NDCs are yet to converge in their transparency, clarity, and ambition, the proposed approach suggests a means to move towards a systematic way to address additionality concerns and unlock the potential of mitigation investments through clear market signals that would drive more advanced investments.

An independent assessment of the NDC could further support the understanding of the rigor of the contributions of each country, and whether they go beyond BAU. The assessment would, as well, facilitate the application of streamlined additionality for A6.2 activities.

