

# Working Paper

Options for implementing 'first transfer' for contributions to the  
Article 6.4 buffer pool account

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#### Abstract

This working paper provides a preliminary technical analysis of options for implementing the concept of 'first transfer' in the context of contributions to the reversal risk buffer pool account under the Paris Agreement Crediting Mechanism (PACM). The paper identifies three options to address this matter: not effecting a first transfer, effecting a first transfer when the contribution to the buffer pool account is made, or effecting a first transfer when reversals occur. This is followed by a discussion of the implications of these options, including whether reversals are compensated for, whether any unused units in the buffer pool account provide for an additional safeguard, the implications for host countries, and what changes would be necessary to decisions on Article 6 to implement the option. The paper shows that the implications of the options are complex and depend on multiple factors that are beyond the influence of the PACM and that all three identified options have advantages and disadvantages.



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## 1 Introduction

Over the past two years, the Supervisory Body of the Article 6.4 Paris Agreement Crediting Mechanism (PACM) has developed key requirements for addressing non-permanence under the mechanism. This includes the following three documents<sup>1</sup>:

- **Removals standard:** This standard, referred to as 'Requirements for activities involving removals under the Article 6.4 mechanism' (A6.4-STAN-METH-0-02), was adopted in October 2024. It establishes the basic approaches and requirements for addressing non-permanence under the mechanism.
- **Non-permanence standard:** This standard, referred to as 'Addressing non-permanence and reversals in mechanism methodologies' (A6.4-STAN-METH-0-07), was adopted in October 2025. It provides further specifications to the removals standard and establishes requirements that mechanism methodologies need to incorporate to address non-permanence.
- **Non-permanence information note:** This information note, referred to as 'Elements related to non-permanence and reversals for inclusion in relevant regulatory documents' (A6.4-SBM0-18-A14), was agreed upon in October 2025. This document also provides further specifications to the removals standard but is addressed to activity participants and the administrator of the mechanism registry. The elements in the information note will be incorporated in the 'Standard: Article 6.4 activity standard for projects' (A6.4-STAN-AC-0-02), the 'Procedure: Article 6.4 activity cycle procedure for projects' (A6.4-PROC-AC-0-02), the 'Procedure: Article 6.4 mechanism registry' (A6.4-PROC-REGS-0-0-1), and the 'Standard: validation and verification standard for projects (A6.4-STAN-AC-0-03)' at a future point in time.

A key feature of all three documents is the establishment of a reversal risk buffer pool account to manage non-permanence risks. All Article 6.4 activities with reversal risks must contribute a fraction of the issued carbon credits, referred to as Article 6.4 emission reductions (A6.4ERs), into this buffer pool account. When a reversal is reported, a respective number of A6.4ERs in the buffer pool account is cancelled. If these reversals are avoidable, i.e. caused by factors over which the activity participants have influence or control, activity participants are obliged to replenish the buffer pool account. For unavoidable reversals, no such replenishment is required.

This working paper explores one specific question that remains unresolved: whether the forwarding of authorised A6.4ERs to the buffer pool account should be effected as a 'first transfer'. A first transfer would imply that the host country must report a 'corresponding adjustment' in its emission balance. This means that the host country cannot count the emission reductions or removals from these A6.4ERs towards its NDC.

This question is addressed neither in decisions by the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA) on Article 6.2 or Article 6.4, nor in the removals standard. The Methodological Expert Panel (MEP) of the Supervisory Body included an approach in its recommendation to the Supervisory Body whereby contributions from authorised A6.4ERs to the buffer pool account would be effected as a first transfer. The MEP requested that the Supervisory Body confirm that this approach is appropriate.<sup>2</sup> The Supervisory Body subsequently discussed this matter and decided to launch a call for public inputs and to request that the Secretariat prepare a concept note. Until the Supervisory Body has made a decision on the implications of this work,

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<sup>1</sup> <https://unfccc.int/process-and-meetings/bodies/constituted-bodies/article-64-supervisory-body/rules-and-regulations>

<sup>2</sup> <https://unfccc.int/sites/default/files/resource/A6.4-MEP008-A03.pdf>

transfers of A6.4ERs to the buffer are to be considered as 'forwarded' without effecting a first transfer.<sup>3</sup>

In the discussions of the Supervisory Body on this matter different issues were raised. One concern is that host countries would already account for reversals when accounting for their NDCs, by reporting higher levels of emissions when reversals occur. Countries would thus account for the reversals twice: once by applying corresponding adjustments for A6.4ERs contributed to the buffer pool account and once by reporting higher emissions. This topic also led to the question of whether host countries that account for reversals could use credits from the buffer to make up for the reported reversals. Another concern is avoiding a situation in which host countries would need to apply two corresponding adjustments with respect to the same A6.4ER buffer contribution (e.g. once at the point of putting the A6.4ERs into the buffer pool account and once when the A6.4ERs in the buffer pool account are subsequently used to compensate for reversals). Furthermore, the timing of the first transfer was discussed, including the possibility of it only occurring when reversals have taken place and A6.4ERs in the buffer pool account are cancelled.

This working paper further explores these questions. It identifies potential options for how this issue could be addressed and discusses their implications. The paper aims to provide a preliminary exploration of this matter through a technical analysis and therefore refrains from providing recommendations.

The paper is organised as follows: Sections 2 and 3 lay the foundation for the further analysis of options. Section 2 recaps the provisions on first transfer in decisions by the CMA and assesses the implications if no further rules were agreed on this matter. Section 3 analyses the circumstances under which countries account for emission reductions or removals from Article 6.4 activities and compensate for any reversals. This is important for understanding the consequences of effecting a 'first transfer' or not, as well as for any options to let host countries benefit from the buffer. Based on this analysis, section 4 identifies and discusses different options for effecting the first transfer, including how to avoid that a first transfer is effected twice with respect to the same A6.4ER. Section 5 briefly explores how host countries or other institutions assuming responsibility for reversals might benefit from the buffer. Section 6 draws brief conclusions.

## 2 First transfer in the context of the buffer pool account

### 2.1 Relevant rules under the Paris Agreement

The concept of 'first transfer' has been addressed in various decisions under Article 6 of the Paris Agreement. Despite the name, a 'first transfer' is not necessarily the first action in relation to a carbon market unit. Rather, the 'first transfer' describes the action that turns a mitigation outcome into an 'internationally transferred mitigation outcome' (ITMO) and triggers the application of a corresponding adjustment by the host country in order to prevent double counting.

What constitutes a 'first transfer' depends on the purpose for which mitigation outcomes are authorised as well as further specifications by the host country (paragraph 2 to the Annex of decision 2/CMA.3). For mitigation outcomes authorised for use towards NDCs, the 'first international transfer' is the 'first transfer'. In the context of the PACM, this could be understood as the transfer of A6.4ERs from an account of the host country to an account of another country. For mitigation outcomes authorised for use towards 'other international mitigation purposes' (OIMP), such as use

<sup>3</sup> <https://unfccc.int/sites/default/files/resource/A6.4-SBM018.pdf>

for CORSIA or in the voluntary carbon market, the host country may specify the 'first transfer' as the (a) authorisation, (b) issuance, or (c) use or cancellation. This means, for example, that the cancellation of carbon credits used by airlines for CORSIA could be a 'first transfer'.

Subsequent decisions further clarified the concept of first transfer (decisions 7/CMA.4 and 4/CMA.6). This includes the following elements:

- **Authorisation for use towards NDC or OIMP:** Where mitigation outcomes are authorised for use towards either NDCs or OIMP, the earlier of the two first transfers shall apply.
- **Treatment of SOP and OMGE:** Both the transfer of A6.4ERs to provide a share of proceeds (SOP) to the Adaptation Fund and the cancellation of A6.4ERs to deliver an overall mitigation in global emissions (OMGE) shall constitute a first transfer, except where a first transfer has already been effected with respect to the mitigation outcomes.
- **Time limits on effecting first transfer:** Where a mitigation outcome has been authorised for use for OIMP, the first transfer of the mitigation outcome shall be recorded no later than 31 December of the year prior to the submission of the final biennial transparency report (BTR) for the NDC implementation period. This provision is important because the emissions balance for an NDC implementation period is finalised in that report. If a first transfer were to happen thereafter, the host country would no longer apply a corresponding adjustment, which could lead to double counting.

The decisions under Article 6 and the removals standard do not address how the first transfer should be effected for contributions of authorised A6.4ERs to the buffer pool account.

## 2.2 Implications on the first transfer status of authorised A6.4ERs in the buffer pool account if no further rules are in place

In this section, we analyse whether authorised A6.4ERs contributed to the buffer pool account would be subject to a first transfer if no further rules were agreed on this matter. Table 2-1 summarises these implications.

**Table 2-1: First transfer status of authorised A6.4ERs contributed to the buffer pool account if no further rules on first transfer are in place**

Authorisation purpose	First transfer specification by the host country	First transfer effected at the time of forwarding A6.4ERs to the buffer?	First transfer effected at a later point in time?
<b>NDC</b>	-	No	No
	Authorisation	Yes	-
<b>OIMP</b>	Issuance	Yes	-
	Use or cancellation	No	Depending on when reversals occur

Source: Oeko-Institut Consult GmbH

Where mitigation outcomes are authorised for use towards NDCs, a first transfer would not be applicable, as the contribution to the buffer pool account is not an international transfer. A first transfer would also not apply at a later point in time, as A6.4ERs in the buffer pool account can only be cancelled but are not eligible for any international transfer. This means that A6.4ERs in the buffer pool account that are only authorised for use towards NDCs would never be subject to a first transfer.



Where mitigation outcomes are authorised for use for OIMP, or either OIMP or NDC, the implications would depend on how host countries have specified first transfer in the context of OIMP. Where the host country has specified 'authorisation' as the first transfer, any authorised A6.4ERs contributed to the buffer pool account would already have been first transferred, given that they have been authorised before. The same holds for the specification of 'issuance' as the first transfer: according to the rules of the PACM, issuance precedes the forwarding of A6.4ERs to the buffer pool account. Therefore, a first transfer has already been effected at the point of issuance.

Where the host country has specified 'use or cancellation' as the first transfer, a first transfer has not been effected at the point in time when the authorised A6.4ERs are forwarded to the buffer pool account. A first transfer may be effected at a later point in time when the A6.4ERs are cancelled in the buffer account, depending on when the cancellation occurs. Paragraph 14 of decision 4/CMA.6 establishes a time limit on effecting the first transfer in order to ensure that the emissions balance for an NDC implementation period can be finalised in a timely manner. A first transfer would thus only be effected if the A6.4ERs are used within a relatively short time period after the emission reductions or removals have been generated. For example, if a reversal occurs ten years after A6.4ERs have been issued, the cancellation of A6.4ERs held in the buffer pool account could occur after the first BTR following the end of the NDC implementation, despite the requirement that first transfers be effected no later than 31 December of the year prior to the BTR submission.

In summary, without any further rules on this matter, some authorised A6.4ERs contributed to the buffer pool account would be subject to first transfer, while others would not. Whether buffer A6.4ERs are subject to first transfer would depend on three factors: (a) the purpose for which they are authorised (NDC or OIMP), (b) the host country specification of first transfer for OIMP and (c) when any reversals occur and the A6.4ERs in the buffer account are cancelled to compensate for reversals (before or after the submission of the BTR pertaining to the NDC implementation period in which the A6.ERs were generated). This outcome is problematic because the extent to which reversals for authorised A6.4ERs are addressed would depend on factors not related to the underlying risk of non-permanence. For example, whether buffer A6.4ERs are subject to first transfer should not depend on when reversals occur, but this outcome could occur if no further rules were agreed. In section 4 below, we identify and discuss options for addressing this matter.

### 3 In what circumstances do host countries account for emission reductions or removals from Article 6.4 activities and assume responsibility for reversals?

Under the Paris Agreement, all countries participating in Article 6 must quantify their NDCs in metric tons of CO<sub>2</sub> equivalent. To account for their NDCs, countries compare the emissions and removals that are covered by their NDC with this quantified NDC target. In theory, this implies that the emission reductions or removals, and any reversals, from Article 6.4 activities may be automatically accounted for in this emissions balance. In practice, however, this outcome depends on several factors. Effectively, emission reductions or removals, and any reversals, from Article 6.4 activities may be 'accounted' or remain 'unaccounted,' and even if reversals are 'accounted' for, this does not necessarily mean that they are also compensated for through remediation measures.

In this section, we explore the circumstances under which host countries account for emission reductions or removals from Article 6.4 activities and assume responsibility for any reversals from Article 6.4 activities. For this purpose, we differentiate between three different layers of responsibility:

1. **Reporting:** Whether and under what circumstances host countries report emission reductions or removals from Article 6.4 activities as lower levels emissions or higher levels of removals, and



any reversals as higher levels of emissions or lower levels of removals, in their national greenhouse gas (GHG) inventories;

2. **Accounting:** Whether and under what circumstances reported changes emissions or removals are accounted for by the host country when accounting for its NDC;
3. **Compensation for reversals:** Whether and under what circumstances the reporting and accounting of higher levels of emissions or lower levels of removals due to reversals actually leads to a compensation for the reversals by the host country, i.e. the balancing out of the increased emissions by means of additional mitigation action elsewhere.

The three questions build upon each other. Reporting emissions or removals from Article 6.4 activities is a prerequisite for accounting for such emissions or removals towards NDCs. And accounting is, at least in most instances, a prerequisite for the host country to take enhanced mitigation action in response to reversals.

### 3.1 Reporting

In principle, national GHG inventories should reflect all anthropogenic emissions by sources and removals by sinks from host countries. This means that emission reductions or removals from Article 6.4 activities would be reflected as lower levels of reported emissions or higher levels of reported removals, and any reversals would be reflected as higher levels of reported emissions or, in some cases, as lower levels of removals. In practice, this is not always the case, for different reasons:

- **Inconsistencies between inventory and PACM methods:** The methodologies used to estimate GHG emissions in GHG inventories and to quantify emission reductions or removals, and any reversals, from Article 6.4 activities may differ. Methodologies under the PACM may be more granular than inventory methodologies. This holds in particular where simpler methods, such as 'Tier 1' methods, are used for GHG inventories. This may occur more frequently for some developing countries, as the enhanced transparency framework under the Paris Agreement allows those developing country Parties that need it in the light of their capacities to apply simpler methods for a larger share of their total emissions.<sup>4</sup> Moreover, methodologies under the PACM aim to ensure a conservative quantification whereas GHG inventory methods aim to provide the most accurate estimate, which could lead to different quantification outcomes even where methodologies are aligned.
- **Coverage of the GHG inventory:** The GHG inventory of the host country may not completely cover all existing emission sources. This can occur under a range of circumstances:
  - The host country considers emissions from the respective source category as not significant and abstains from an emission estimation in accordance with the GHG inventory reporting rules under the Paris Agreement. This risk may also be larger for some developing countries, as the enhanced transparency framework provides flexibility to exclude a larger share of emissions;<sup>5</sup>

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<sup>4</sup> See paragraph 25 in the Annex to decision 18/CMA.1.

<sup>5</sup> See paragraph 32 in the Annex to decision 18/CMA.1.

- The 2006 IPCC Guidelines and their supplements<sup>6</sup> may not provide any methods for the emissions source (e.g. reversals from enhanced rock weathering and carbon storage in products) and the host country does not apply its own, country-specific methodology;
- The host country may lack the necessary data for applying an estimation methodology and thus omit the source category from its inventory. While such a scenario would not be in line with the UNFCCC reporting rules for GHG inventories, it may nevertheless happen in practice, due to limited capacities for GHG inventory compilation.
- **Granularity of the inventory methods to estimate emissions:** The methodology applied for estimating GHG emissions in the relevant source category may lack granularity to reflect the emission reductions or removals, or any reversals, occurring in a given project. This will be the case when low-tier methodologies are applied which rely on default factors. Such a granularity issue will often arise in relation to emissions or removals in the land use, land-use change and forestry (LULUCF) sector (Schneider et al. 2022).

In summary, it cannot be taken for granted that emission reductions or removals, and any reversals, from Article 6.4 activities will be fully reflected in national GHG inventories under the UNFCCC. Whether and the degree to which they are reflected depends on a range of factors, as summarised above.

## 3.2 Accounting

Reporting in national GHG inventories is a necessary but not sufficient condition for ensuring that host countries account for emission reductions or removals, and any reversals, from Article 6.4 activities when accounting for their NDCs. For the following two reasons emissions could be reported but not accounted for:

- **NDC coverage:** While national GHG inventories should cover all anthropogenic emissions and removals, developing countries are encouraged but not required to include all emission sources, gases, activities, and carbon pools in the scope of their NDC. The emissions balance is only applied to the scope of the NDC, meaning that only the emissions and removals covered by the NDC – and not the entire national GHG inventory – are compared to the target level. This means that reversals are only accounted for in the emissions balance if they are covered by the NDC.
- **Accounting for single-year targets:** If countries have multi-year targets, emission reductions or removals, and any reversals, from Article 6.4 activities are counted in all years of the NDC implementation period. Most countries have, however, communicated only single-year targets in their NDC. In this case, reversals occurring in the target year (e.g. 2035) would be counted towards the NDC while those occurring in non-target years (e.g. 2031 to 2034) would not necessarily be included in the country's NDC accounting.

Under Article 6.2, countries have two options for accounting for single-year targets: they can either use 'averaging,' which means that the average amount of ITMOs first transferred or used over the NDC implementation period is accounted for in the target year, or they can use multi-year accounting approaches, such as trajectories or budgets. Under 'averaging,' the generation and use of ITMOs is considered over the full NDC implementation period; however, any emissions from reversals in non-target years are not necessarily accounted for, since the emissions are compared with the target level for the target year only. In the case of multi-year

<sup>6</sup> 2006 IPCC Guidelines for National Greenhouse Gas Inventories (IPCC 2006), in conjunction with the 2013 Wetlands Supplement (IPCC 2014) and the 2019 IPCC Refinement (IPCC 2019).

accounting approaches, reversals in non-target years are accounted for as long as the host country compares the emissions with the trajectory or budget in each year of the NDC implementation period or cumulatively over all years of the NDC implementation period.<sup>7</sup>

In summary, whether countries account for emission reductions or removals, and any reversals, from Article 6.4 activities depends on the coverage of the NDC and the method chosen to account for single-year targets.

### 3.3 Compensation for reversals

Where countries report and account for emissions from reversals, this may or may not lead to an actual compensation of reversals, i.e. to the balancing out of the atmospheric damage caused by the reversal similar to the cancellation of A6.4ERs held in the buffer pool account. A compensation would occur if the host country implemented additional mitigation action that balances out the emissions from reversals. This could depend on several factors, such as:

- **Ambition of NDCs:** If countries have ambitious NDCs, they may need to address any additional emissions from reversals by implementing additional mitigation action to still achieve their NDCs. This may effectively compensate for the reversals. However, if a country has an NDC that it can achieve without taking any additional mitigation actions, then it may not necessarily compensate for the reversals.
- **Non-binding and conditional nature of NDCs:** While countries must submit NDCs under the Paris Agreement, the achievement of NDCs is not legally binding. Many NDCs from developing countries are also entirely or partially conditional upon the provision of external support. If a country does not achieve its NDC (e.g., because it did not receive the support it required), then it may be unclear whether any additional emissions due to reversals would lead to any further mitigation action by that country in the absence of further external support.
- **Ability of the host country to balance out larger reversals:** If a host country faces a large reversal, it may practically not be able to implement sufficient additional mitigation action to balance the emissions from the reversals and might not achieve its NDC, although it was on track to achieve its NDC.

In summary, whether accounting for reversals also leads to a compensation of reversals by the host country is uncertain and depends on various factors.

## 4 Assessment of options for effecting a first transfer

In this section, we assess different options for effecting a first transfer with respect to A6.4ERs contributed to the buffer pool account. We identify the following options:

**Option A Not effecting a first transfer.** Parties could agree that authorised A6.4ERs contributed to the buffer pool account should never be subject to a transfer, neither when they are authorised, nor when they are issued, nor when they are forwarded to the buffer pool account, nor when they are cancelled in the buffer pool account.

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<sup>7</sup> Note that the accounting approaches for single-year targets have not been further specified in Article 6 decisions. While a work programme on this matter was foreseen in earlier decisions, this matter will now only be reconsidered as part of the review in 2028.

- Option B **Effecting a first transfer when A6.4ERs are contributed to the buffer pool account.** Parties could agree that authorised A6.4ERs are subject to a first transfer when they are contributed to the buffer pool account. This option would also need to address that a first transfer is not applied twice for the same A6.4ER.
- Option C **Effecting a first transfer when A6.4ERs are cancelled in the buffer pool account and not effecting a first transfer prior to that.** Parties could agree that A6.4ERs contributed to the buffer pool account should not be subject to a first transfer when they are authorised, issued and forwarded to the buffer pool account but only when they are cancelled in the buffer pool account.

We do not identify options in which some A6.4ERs would be subject to first transfer while others would not, as this would imply different levels of assurance for different Article 6.4 mitigation activities that reversals are compensated for.

We assess the above options with regard to the following issues:

- **Whether reversals are compensated for:** We explore whether any reversals that are experienced are compensated for by reducing emissions or enhancing removals by an equivalent amount elsewhere. In doing so, we consider the net effect to the atmosphere in terms of emissions in metric tons of carbon dioxide equivalent (t CO<sub>2</sub>e).
- **Whether any unused A6.4ERs in the buffer pool account provide for an additional safeguard:** A further consideration is whether any unused A6.4ERs in the buffer pool account provide for an additional safeguard for the integrity of the overall approach to address non-permanence. This depends on whether such units represent mitigation that is not used for any purposes, such as achieving NDCs. If the mitigation is not otherwise used, any unused A6.4ERs in the buffer pool account would provide for additional mitigation, which could be a safeguard if reversals were not compensated for in some instances.
- **Implications for host countries:** We explore how the option to address reversals affects the host countries of Article 6.4 activities. This includes whether host countries may gain a mitigation benefit from provisions to address reversals (e.g. because they can use part of the mitigation from Article 6.4 activities to achieve their own NDCs while not applying any corresponding adjustments) or whether they may face a mitigation liability (e.g. because they need to compensate for the reversals to still achieve their NDCs). We also explore the predictability for host countries, where relevant.
- **What changes would be necessary to decisions on Article 6 to implement the option:** We briefly explore whether the options would only require amendments to current decisions on Article 6 of the Paris Agreement or whether previous decisions would need to be changed.

In assessing these options, it is important to consider that the buffer account under Article 6.4 is 'pooled,' meaning that it consists of A6.4ERs from different Article 6.4 activities located in different host countries. When a reversal has been determined, the administrator of the buffer pool account will first cancel A6.4ERs from the Article 6.4 activity that has experienced the reversals. If these are not sufficient, A6.4ERs from other Article 6.4 activities will be used, which may also include activities located in other countries.<sup>8</sup> This means that, in some instances, reversals from an Article 6.4 activity

<sup>8</sup> See paragraphs 59 and 61 in the non-permanence information note.

in one country may be compensated for through A6.4ERs from an Article 6.4 activity in another country. We therefore distinguish between the following two countries:

- **Buffer contribution country:** The host country of the Article 6.4 activity which contributes A6.4ERs to the buffer;
- **Reversal country:** The host country of the Article 6.4 activity which is experiencing reversals.

Because the rules for cancelling A6.4ERs in the buffer pool account require the registry administrator to first cancel A6.4ERs contributed from the Article 6.4 activity that experiences the reversal, at least part of the compensation for reversals involves only one country, such that the buffer contribution country and reversal country are the same. When a reversal is larger than the quantity of A6.4ERs contributed by the activity experiencing the reversal, however, then the A6.4ERs cancelled from the buffer pool would involve other Article 6.4 activities, which could be from one or more other countries. For simplicity, we do not consider situations involving more than two countries, noting that the same technical issues arise as for two countries.

As shown below, the extent to which reversals are compensated for depends, inter alia, on the following two conditions:

- **Whether the buffer contribution country reports and accounts for the emission reductions or removals from the Article 6.4 activity:** If this is the case, then the mitigation associated with the A6.4ERs in the buffer pool account may be used by the host country to achieve its NDC and would no longer be available to compensate for reversals, unless a corresponding adjustment is applied.
- **Whether the reversal country compensates for the reversals from the Article 6.4 activity experiencing reversals:** If this is the case, then the reversals would be compensated for by the reversal country, irrespective of whether any A6.4ERs in the buffer pool account are cancelled.

Based on these two conditions, we construct four different scenarios to facilitate understanding of the implications of the different options in the next sections (see Table 4-1):

- In **Scenario 0-0**, neither of the two conditions is fulfilled. The buffer contribution country does not report and account for the emission reductions or removals from the Article 6.4 activity that contributes to the buffer pool account, and the reversal country does not compensate for the reversals from the Article 6.4 activity experiencing the reversals.
- In **Scenario 1-0**, the first condition is fulfilled but the second is not. This means that the buffer contribution country reports and accounts for the emission reductions or removals from the Article 6.4 activity that contributes to the buffer pool account, whereas the reversal country does not compensate for the reversals from the Article 6.4 activity experiencing the reversals.
- In **Scenario 0-1**, the second condition is fulfilled but the first is not. The buffer contribution country does not report and account for the emission reductions or removals from the Article 6.4 activity that contributes to the buffer pool account, whereas the reversal country reports, accounts and compensates for the reversals from the Article 6.4 activity experiencing the reversals.
- In **Scenario 1-1**, both conditions are fulfilled. The buffer contribution country reports and accounts for the emission reductions or removals from the Article 6.4 activity that contributes to the buffer pool account and the reversal country reports, accounts and compensates for the reversals from the Article 6.4 activity experiencing the reversals.

**Table 4-1: Scenarios considered to assess the implications of different options**

	Reversal country	
	Does not compensate for reversals	Compensates for reversals
Does not report and account	Scenario 0-0	Scenario 0-1
Reports and accounts	Scenario 1-0	Scenario 1-1

Source: Oeko-Institut Consult GmbH

## 4.1 Option A: Not effecting a first transfer

### 4.1.1 Compensating for reversals

Whether reversals are compensated for depends on the scenarios introduced above. Under this option, reversals would be compensated for in Scenarios 0-0 and 1-1, compensated twice in Scenario 0-1, and not compensated for in Scenario 1-0:

- **Scenario 0-0:** In this scenario, the emission reductions or removals, and any reversals, from the Article 6.4 activities do not alter the mitigation action otherwise pursued by the respective countries. Therefore, the buffer pool account operates as if the buffer contribution country and the reversal country did not have any NDCs. For this reason, the buffer pool account would compensate for reversals.
- **Scenario 0-1:** As the buffer contribution country does not report and account for the emission reductions or removals from the Article 6.4 activity, the cancellation of A6.4ERs held in the buffer pool account effectively compensates for the reversals. At the same time, the reversal country also compensates for the reversals, thus leading for a double-compensation of the reversals.
- **Scenario 1-0:** As the buffer contribution country reports and accounts for the emission reductions or removals from the Article 6.4 activity, the mitigation from the A6.4ERs contributed to the buffer pool account has already been used by that country to achieve its NDC and can thus not also be used to compensate for reversals. At the same time, the reversal country does not step in to compensate for the reversals. Therefore, the reversals would not be compensated for.
- **Scenario 1-1:** As in Scenario 1-0, the mitigation from the A6.4ERs contributed to the buffer pool account has already been used by the buffer contribution country to achieve its NDC and can thus not also be used to compensate for reversals. However, in contrast to Scenario 1-0, the reversal country compensates for the reversals. For this reason, the reversals would be compensated for.



The outcome thus depends on the specific scenario.

#### **4.1.2 Safeguards from unused A6.4ERs in the buffer pool account**

Whether any unused A6.4ERs in the buffer pool account provide for an additional safeguard also depends on the scenarios introduced above. In Scenarios 0-0 and 0-1, the buffer contribution country does not report and account for the emission reductions or removals from the Article 6.4 activity that contributes to the buffer pool account. This means that the A6.4ERs in the buffer pool account represent mitigation that is not otherwise used, and hence any unused A6.4ERs provide for an additional safeguard. By contrast, in Scenarios 1-0 and 1-1, the emission reductions or removals are reported and accounted for by the buffer contribution country. This means that the A6.4ERs in the buffer pool account do not represent mitigation that is otherwise not used, and hence any unused A6.4ERs do not provide for an additional safeguard.

#### **4.1.3 Implications for host countries**

The implications for host countries also depend on the scenarios introduced above. We differentiate between the situation in which only one country is involved (i.e. the buffer contribution country and the reversal country are the same) or in which two countries are involved (i.e. the buffer contribution country and the reversal country are two different countries).

Table 4-2 summarises the findings and provides the rationale. A 'mitigation benefit' is denoted for situations in which the country gains a mitigation benefit from the provisions to address reversals because it can use part of the mitigation outcomes to achieve its own NDC while not applying any corresponding adjustments. A 'mitigation liability' is denoted for situations in which the implementation of the Article 6.4 activity creates a mitigation liability for the country because it would need to compensate for the reversals to still achieve its NDC. A 'neutral' outcome is denoted for situations in which the provisions to address reversals either do not affect the country or create both a 'mitigation benefit' and a 'mitigation liability' (e.g., the country can use the emission reductions or removals from the Article 6.4 activity to achieve its NDC but also has the responsibility to compensate for any reversals).

The table shows that the implications are mixed. Some situations are neutral, while others lead to a mitigation benefit or liability for the countries involved.



**Table 4-2: Implications for host countries under Option A**

	One country involved	Two countries involved	
		Buffer contribution country	Reversal country
<b>Scenario 0-0</b>	Neutral (No implications)	Neutral (No implications)	Neutral (No implications)
<b>Scenario 0-1</b>	<b>Mitigation liability</b> (Country cannot use the emission reductions or removals to achieve its NDC but compensates for reversals)	Neutral (No implications)	<b>Mitigation liability</b> (Country compensates for reversals in another country)
<b>Scenario 1-0</b>	<b>Mitigation benefit</b> (Country can use the emission reductions or removals to achieve its NDC but does not compensate for reversals)	<b>Mitigation benefit</b> (Country can use the emission reductions or removals to achieve its NDC)	Neutral (No implications)
<b>Scenario 1-1</b>	Neutral (Country can use the emission reductions or removals to achieve its NDC but also compensates reversals)	<b>Mitigation benefit</b> (Country can use the emission reductions or removals to achieve its NDC)	<b>Mitigation liability</b> (Country compensates for reversals in another country)

Source: Oeko-Institut Consult GmbH

#### 4.1.4 Necessary changes to Article 6 decisions

Implementing Option A would require changes to current rules adopted under the CMA. Specifically, the CMA would need to adopt rules that ensure that no first transfer is applied to A6.4ERs forwarded to the buffer pool account.

This is particularly complex where the host country has specified the authorisation as the first transfer, given that the authorisation could occur well in advance of the issuance of A6.4ERs. By that point in time, it may not yet be known which share of the A6.4ERs are to be forwarded to the buffer pool account and hence which share of the authorised A6.4ERs should not be considered to be a first transfer. Implementing this option is, therefore, rather complex. One option could be that host countries report a first transfer for all A6.4ERs upon authorisation, and apply the respective corresponding adjustments, and then rectify this information in a later report when the share of A6.4ERs contributed to the buffer pool account is known. However, this would cause retroactive changes in the amounts of first transfers and corresponding adjustments being reported by countries, which would add further complexity to the accounting system.

Implementing this option may be less complex where the issuance has been specified as the first transfer by the host country, given that the share of A6.4ERs to be forwarded to the buffer pool account is known at the point of issuance. Similarly, for the case that use or cancellation or specified as first transfer or where A6.4ERs are authorised for use towards NDCs, only additional clarifications or amendments to current rules adopted under the CMA would be necessary.

## 4.2 Option B: Effecting a first transfer when A6.4ERs are contributed to the buffer pool account

### 4.2.1 Compensating for reversals

As before, whether reversals are compensated for depends on the scenarios introduced above. In addition to the scenarios above, for Option B the consequences of the host country applying corresponding adjustments for A6.4ERs contributed to the buffer pool account need to be considered. The corresponding adjustment implies that the host country cannot use the mitigation outcome from A6.4ERs contributed to the buffer pool account to achieve its NDC.

Under this option, reversals would be compensated for in Scenarios 0-0 and 1-1, would be compensated twice in Scenario 0-1, and would not be compensated for in one Scenario 1-0:

- **Scenario 0-0:** In this scenario, the reversal country does not compensate for the reversals. Whether reversals are compensated for thus depends on the buffer country and the functioning of the buffer pool account. The buffer contribution country does not report and account for the emission reductions or removals from the Article 6.4 activity, but nevertheless applies a corresponding adjustment for A6.4ERs contributed to the buffer pool account. Depending on the factors discussed in section 3 above, this may or may not lead to a situation in which the country would pursue additional mitigation action to achieve its NDC. If these factors led to additional mitigation action by the buffer contribution country at the time of contributing the A6.4ERs to the buffer pool account, then this scenario would lead to a situation in which the reversals are compensated for twice. Otherwise, they would be compensated for once.
- **Scenario 0-1:** This scenario differs from Scenario 0-0 in that the reversal country also compensates for reversals, in addition to the compensation occurring under Scenario 0-0. This means that the reversals would be compensated for twice or even three times.
- **Scenario 1-0:** In this scenario, the buffer contribution country reports and accounts for the emission reductions or removals from the Article 6.4 activity and also applies a corresponding adjustment for the mitigation from the A6.4ERs contributed to the buffer pool account. This means that the buffer contribution country cannot use the mitigation outcome from the A6.4ERs contributed to the buffer pool account to achieve its NDC; hence, the cancellation of A6.4ERs held in the buffer pool account effectively compensates for the reversals. As the reversal country does not also compensate for these reversals, this scenario leads to a single compensation for the reversals.
- **Scenario 1-1:** As in Scenario 1-0, the cancellation of A6.4ERs contributed to the buffer pool account can effectively compensate for the reversals. In addition, under this scenario, the reversal country also compensates for the reversals. Therefore, the reversals would be compensated for twice.

As with Option A, the outcome under Option B thus also depends on the specific scenario.

### 4.2.2 Safeguards from unused A6.4ERs in the buffer pool account

Under this option, all A6.4ERs in the buffer pool account represent mitigation that is not otherwise used. This is because the buffer contribution country applies a corresponding adjustment for all A6.4ERs contributed to the buffer pool account, regardless of whether the A6.4ERs are cancelled to compensate for reversals. Therefore, all unused A6.4ERs in the buffer pool account provide for an additional safeguard.

### 4.2.3 Implications for host countries

As before, the implications for host countries also depend on the scenarios. Table 4-3 summarises the findings and provides the rationale. In contrast to Option A, under none of the situations does the host country gain a mitigation benefit from the provisions to address reversals. In some situations, the outcome is neutral; in other situations, a mitigation liability is created for the respective country. In one situation (Scenario 0-1 where only one country is involved), the country would have two mitigation liabilities: one from applying a corresponding adjustment without being able to use the emission reductions or removals from Article 6.4 activities to achieve its NDC, and one from the responsibility to compensate for any reversals. This is denoted a 'double mitigation liability'.

Overall, Option B puts a higher burden on host countries than Option A. While there is a neutral outcome in some situations, there are several scenarios in which Option B creates a mitigation liability for host countries.

**Table 4-3: Implications for host countries under Option B**

	One country involved	Two countries involved	
		Buffer contribution country	Reversal country
<b>Scenario 0-0</b>	<b>Mitigation liability</b> (Country cannot use the emission reductions or removals to achieve its NDC but must apply a corresponding adjustment)	<b>Mitigation liability</b> (Country cannot use the emission reductions or removals to achieve its NDC but must apply a corresponding adjustment)	Neutral (No implications)
<b>Scenario 0-1</b>	<b>Double mitigation liability</b> (Country cannot use the emission reductions or removals to achieve its NDC but must apply a corresponding adjustment and compensates for reversals)	<b>Mitigation liability</b> (Country cannot use the emission reductions or removals to achieve its NDC but must apply a corresponding adjustment)	<b>Mitigation liability</b> (Country compensates for reversals in another country)
<b>Scenario 1-0</b>	Neutral (Country can use the emission reductions or removals to achieve its NDC but must also apply a corresponding adjustment and does not compensate for reversals)	Neutral (Country can use the emission reductions or removals to achieve its NDC but must also apply a corresponding adjustment)	Neutral (No implications)
<b>Scenario 1-1</b>	<b>Mitigation liability</b> (Country can use the emission reductions or removals to achieve its NDC but must also apply a corresponding adjustment and compensates for reversals)	Neutral (Country can use the emission reductions or removals to achieve its NDC but must also apply a corresponding adjustment)	<b>Mitigation liability</b> (Country compensates for reversals in another country)

Source: Oeko-Institut Consult GmbH

#### **4.2.4 Necessary changes to Article 6 decisions**

Implementing this option would require the CMA to only amend the current rules adopted but not to change them. Similar to the decisions on the SOP for the Adaptation Fund or the delivery of OMGE in decision 4/CMA.6, a CMA decision could clarify that the transfer to the Article 6.4 buffer pool account shall constitute a first transfer, unless a first transfer has been effected with respect to the authorised A6.4ERs at an earlier point in time. Furthermore, it could be clarified that the cancellation of A6.4ERs in the pooled buffer account does not constitute a first transfer, in order to avoid that two first transfers would be applied with respect to the same A6.4ER.

### **4.3 Option C: Effecting a first transfer when A6.4ERs are cancelled in the buffer pool account and not effecting any first transfer prior to that**

#### **4.3.1 Compensating for reversals**

In principle, Option C has the same implications as Option B. Compared to Option B, the main difference of Option C is that the first transfer is effected, and the corresponding adjustments are applied, at a later point in time – when the reversals occur, rather than when the A6.4ERs are contributed to the buffer pool account.

#### **4.3.2 Safeguards from unused A6.4ERs in the buffer pool account**

With regard to safeguards from unused A6.4ERs in the buffer pool account, Option C has the same implications as Option A. This is because unused A6.4ERs in the buffer pool account are not subject to any corresponding adjustment. Therefore, the value of unused A6.4ERs as a safeguard depends on the specific scenario (notably whether the mitigation represented by the A6.4ERs contributed to the buffer pool account is used by buffer contribution country to achieve its NDC).

#### **4.3.3 Implications for host countries**

As for Options A and B, the implications of Option C for host countries depend on the scenarios. Furthermore, the outcome depends on whether A6.4ERs in the buffer pool account are used or remain unused.

Where the A6.4ERs in the buffer pool account are not used, the implications are the same as those under Option A. Where the A6.4ERs in the buffer pool account are used, the implications are similar to those under Option B. Accordingly, one advantage of Option C is that it avoids the additional burden created by Option B for any A6.4ERs that are not actually used.

However, Option C has also disadvantages for host countries. The corresponding adjustments would need to be applied at a later point in time than under Option B. This could be several decades later. By that time, many countries may already have reduced their emissions significantly or even achieved net zero emissions. The obligation to apply an additional corresponding adjustment would create a liability that may only be compensated for through potentially higher-cost domestic or by buying ITMOs on the market, which for similar reasons could be more expensive in the future. Furthermore, and maybe more importantly, countries would not be able to plan for this obligation but would have to apply corresponding adjustments at relatively short notice when reversals occur. This could make it difficult for countries to achieve their NDCs. It could also be problematic where two or more countries are involved.

The following example illustrates this: An Article 6.4 activity in country A operates between 2026 and 2040, contributes to the buffer pool account, and never experiences any reversals any reversals but contributed to the buffer pool account. In 2050, an Article 6.4 activity in country B causes a large reversal, which cannot be compensated through buffer contributions from that individual activity. Accordingly, A6.4ERs from the Article 6.4 activity in country A are cancelled in the buffer pool account. In this case, country A would be notified by the administrator of the buffer pool account of the cancellation and first transfer of the A6.4ERs. Country A would thus – very unexpectedly – have to apply a corresponding adjustment in the year 2050 for a reversal in another country, based on the past contribution of A6.4ERs to the buffer pool account from an Article 6.4 activity in country A that has already terminated its operation. For this reason, Option C creates more unpredictable liabilities than Options A and B.

#### 4.3.4 Necessary changes to Article 6 decisions

Implementing this option would require changes to current rules adopted under the CMA. The CMA would need to adopt rules that ensure that (1) no first transfer is applied to A6.4ERs forwarded to the buffer pool account and that (2) buffer contribution countries must report a first transfer when A6.4ERs are cancelled in the buffer pool.

The first matter raises the same challenges as identified for Option A. The second matter creates a further complexity: under current rules, corresponding adjustments are applied to the calendar year in which the mitigation outcomes are generated. This is not possible under Option C. By the time that the reversals occur, the final emissions balance of the buffer contribution country may already have been finalised (see section 2). The first transfer and the respective corresponding adjustment therefore need to be reported in a different NDC implementation period. For example, if an A6.4ER is generated in 2026 but the reversal occurs in 2050, the country would need to report the first transfer and apply the corresponding adjustment in an NDC implementation period that covers the year 2050, rather than in the NDC implementation period that covers the year 2026.

### 4.4 Comparison of options

The above analysis shows that the three options have different implications. Furthermore, the exact implications do not depend on the rules of the PACM but multiple other factors, such as the methods used by countries in national GHG inventories, the coverage of NDCs and the approach chosen by countries to account for single-year targets. Moreover, it is important to note that, in practice, multiple scenarios may apply to one Article 6.4 activity. For example, a portion of the reversals may be reported in national GHG inventories (e.g. above-ground biomass for which more detailed inventory methods are used), whereas other portions of the reversals may not be reported (e.g. changes in soil carbon for which a simple inventory method is used).

Table 4-4 summarises the findings for how the options compensate for reversals. We have identified only one situation in which reversals would not be compensated for (Scenario 1-0 under Option A). In all other instances, reversals would be compensated for, but sometimes even twice or possibly three times. Options B and C provide a greater assurance than Option A that all reversals are compensated for but also lead to reversals being compensated more than once in several scenarios. Such “over-compensation” puts an additional burden on host countries.

This raises the question of whether Option A would be sufficient to address reversals. This depends on how many reversals will be subject to Scenario 1-0 and whether Scenario 0-1, in which reversals are compensated twice, applies to more reversals than Scenario 1-0. In other words, would the over-compensation in Scenario 0-1, on average across all Article 6.4 activities, balance out the lack of

compensation in Scenario 1-0? This is rather uncertain and difficult to answer. Nevertheless, there are some considerations that can be given to this question. On the one hand, it is reasonable to assume that the methods for reporting GHG emissions will improve over time and that the coverage and ambition of NDCs will increase over time. As any reversals occur at a later point in time than the generation of the emission reductions or removals, this speaks to Scenario 0-1 being more frequent than Scenario 1-0. On the other hand, the use of averaging as an approach to account for single-year targets poses significant risks that Scenario 1-0 could be more frequent than Scenario 0-1, given that under averaging reversals would only be accounted for in target years but not in non-target years.

**Table 4-4: Degree to which reversals are compensated for under the different options and scenarios**

	Option A	Option B	Option C
<b>Scenario 0-0</b>	Compensated	Compensated or compensated twice	
<b>Scenario 0-1</b>	Compensated twice	Compensated twice or three times	
<b>Scenario 1-0</b>	Not compensated	Compensated	
<b>Scenario 1-1</b>	Compensated	Compensated twice	

Source: Oeko-Institut Consult GmbH

Table 4-5 summarises the findings on whether unused A6.4ERs in the buffer pool account provide for an additional safeguard. The table shows that under Options A and C, this depends on the applicable scenario, whereas under Option B this is always the case. Option B provides thus a higher assurance in this regard.

**Table 4-5: Whether unused A6.4ERs in the buffer pool account provide for an additional safeguard**

	Options A	Option B	Option C
<b>Scenario 0-0</b>	Yes	Yes	Yes
<b>Scenario 0-1</b>	Yes	Yes	Yes
<b>Scenario 1-0</b>	No	Yes	No
<b>Scenario 1-1</b>	No	Yes	No

Source: Oeko-Institut Consult GmbH

Table 4-6 summarises the findings on implications for host countries for the situation that only one country is involved. Option B creates more mitigation liabilities for host countries than Option A in which the outcomes for host countries are more balanced. Option C partially mitigates the liabilities created under Option B, as the consequences of Option B would only apply to those A6.4ERs in the buffer pool account that are cancelled to compensate for reversals.



**Table 4-6: Implications for host countries where only one country is involved**

	<b>Option A</b> (and Option C where A6.4ERs in the buffer pool account remain unused)	<b>Options B</b> (and Option C where A6.4ERs in the buffer pool account are used)
<b>Scenario 0-0</b>	Neutral	Mitigation liability
<b>Scenario 0-1</b>	Mitigation liability	Double mitigation liability
<b>Scenario 1-0</b>	Mitigation benefit	Neutral
<b>Scenario 1-1</b>	Neutral	Mitigation liability

Source: Oeko-Institut Consult GmbH

Lastly, the options have different implications for Article 6 rules. Option B is the simplest to implement as only amendments to current rules are necessary. Options A and C require agreed rules to be changed and add further complexity to the accounting rules, with Option C raising some more complexities than Option A.

## 5 Approaches to make host countries benefit from the buffer

A key challenge in addressing reversals is that the pooled buffer account under the PACM operates in isolation from the broader accounting approaches under the Paris Agreement, under which countries may also assume responsibility for emissions from reversals. This can lead to overlapping accounting responsibilities, including that reversals are compensated for by both the buffer pool account and countries. This issue has been characterised as a disconnect or misalignment between accounting at the level of the carbon crediting programme and the accounting at the level of countries (FAO 2024).

This raises the question of whether the pooled buffer account under the PACM could be integrated into the accounting rules of the Paris Agreement. This could potentially reduce the overlap and provide benefits to host countries or other entities assuming responsibility for reversals.

One such model could work as follows: A6.4ERs contributed to the buffer would be subject to a first transfer, in the same manner as under Option B above, but in the instance of unavoidable reversals, the A6.4ERs would not be cancelled but transferred to the country in which the reversals occurred. The country could then compensate for its higher reported emissions resulting from the reversals by using the A6.4ERs to achieve its NDC. This approach could potentially also apply to third parties that provide guarantees to address reversals (see paragraph 62 of the removals standard). The basic idea of the approach is that host countries face a debit when A6.4ERs are contributed to the pooled buffer account but receive a credit when they face unavoidable reversals.

A full exploration of this model is beyond the scope of this working paper, but a few potential challenges can be identified:

- This model only addresses reversals if countries report and account for the reversals. If this is not the case, the transfer of the A6.4ERs to the countries would allow them to increase their emissions while still achieving their NDC. As highlighted in section 3 above, several conditions influence whether countries report and account for reversals. It is likely that these conditions are not fulfilled for all countries. At the same time, it may be technically complex and politically difficult to agree on rules that specify circumstances under which A6.4ERs are transferred to host countries (because the host country accounts for the emissions from the reversals) and under



which they are cancelled in the buffer pool account (because the host country does not account for the emissions from the reversals).

- The model could lower the incentives for host countries to avoid and reduce unavoidable reversals. Under Scenarios 0-1 and 1-1 in section 4, host countries have incentives to avoid or reduce reversals. They could do this by only authorising mitigation activities in areas that have lower reversals risks (e.g. avoiding the registration of Article 6.4 activities in areas prone to forest fires).
- The model would only work for addressing unavoidable reversals. In the case of avoidable reversals, i.e. reversals caused by factors over which the activity participants have influence and/or control, it could create moral hazard issues.
- The model would require changes to several accounting rules agreed under the Paris Agreement. For example, under current rules, ITMOs must be used in the NDC implementation period in which they were generated. Under the model, authorised A6.4ERs (and hence ITMOs) would be transferred from the buffer pool account to host countries, which could then use them to achieve their NDCs. This means that the ITMOs would not be used in the same NDC implementation period but potentially at a much later point in time.

Given these potential challenges and that this model would constitute a major change in the accounting approaches under Article 6 and the operation of the buffer pool account, a more in-depth analysis and careful consideration are needed before it is adopted.

## 6 Conclusions

This working paper provides a preliminary technical analysis of options for implementing the concept of first transfer in the context of contributions to the reversal risk buffer pool account under the PACM. The paper identifies three options to address this matter and discussed their implications. To this end, we identify key factors that underpin the implications, such as the conditions under which countries report and account for emission reductions or removals, and any reversals, from Article 6.4 activities.

The findings of the paper reveal that the implications of the options are complex and depend on multiple factors that are beyond the influence of the PACM. All three identified options have advantages and disadvantages. Table 6-1 provides a summary of key features of the options.

**Table 6-1: Summary of key features of the identified options**

	<b>Option A (No first transfer)</b>	<b>Options B (First transfer at contribution to buffer)</b>	<b>Option C (First transfer when reversals occur)</b>
<b>Are reversals addressed?</b>	In most but not all scenarios	Yes	Yes
<b>Do unused buffer units provide for an additional safeguard?</b>	In some scenarios	Yes	In some scenarios
<b>What are the implications for host countries?</b>	Relatively neutral (Creating benefits in some situations and liabilities in others)	Liabilities for host countries and over-compensation of reversals in several scenarios	Liabilities for host countries and over-compensation, but to a lesser degree than under Option B
<b>Are changes to Article 6 decisions necessary?</b>	Yes, major changes needed	Only a few amendments needed	Yes, major changes needed

Source: Oeko-Institut Consult GmbH

Our analysis also points to a key overarching challenge: while the buffer pool account under the PACM addresses reversals at the level of specific Article 6.4 activities, it operates in isolation of the broader accounting provisions of the Paris Agreement, according to which countries may, under certain conditions, also assume responsibility for reversals by reporting, accounting and compensating for them. This raises the broader policy question of whether the functioning of the buffer pool should be integrated in the broader accounting or whether it should operate as a separate, lower-level tool to address reversals at the level of specific Article 6.4 activities.

In this context, it is important to note that the buffer pool account may be important even if countries report and account for reversals. Firstly, it may provide a safeguard in situation in which countries do not report and account for reversals. Maybe more importantly, it provides financial incentives to implement Article 6.4 activities in locations with lower reversals risks and provides incentives for activity participants to reduce reversals risks, given that the size of buffer contributions depends on the reversal risk. Finally, any unused A6.4ERs in the buffer may provide an additional safeguard for situations in which reversals may not be addressed. In this context, another key policy question is how well the buffer pool account should be capitalised, i.e. with what likelihood it should be able to compensate for reversals. This will also impact the size of the contributions that Article 6.4 activities will need to make.

While the scope of this working paper has been limited to the PACM, the same questions may arise for buffer pool approaches under other carbon crediting programmes. Therefore, another issue to consider is whether the CMA should only provide guidance on how this matter should be addressed under the PACM, or whether it should also provide guidance in contexts where buffer pool approaches are used under cooperative approaches under Article 6.2.

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