

IN-MEETING

Draft Standard

Requirements for activities involving removals under the Article 6.4 mechanism

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DRAFT



United Nations
Framework Convention on
Climate Change

COVER NOTE

1. Procedural background

1. At its 10th meeting, the Supervisory Body of the Article 6.4 mechanism (SBM) provided guidance for further work on the methodological products for the Article 6.4 mechanism. The guidance related to two documents developed by the SBM at its ninth meeting (A6.4-SB009-A01: Requirements for the development and assessment of Article 6.4 mechanism methodologies and A6.4-SB009-A02: Activities involving removals under the Article 6.4 mechanism¹) includes work to improve the understanding of concerns raised by Parties at the fifth session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA 5) through a call for inputs. This call for inputs was opened for a period of six weeks beginning on 4 March 2024.² The SBM requested the secretariat to provide a compilation of the inputs received, including a high-level analysis, for its consideration at its 12th meeting.
2. At the same meeting, the SBM also requested the secretariat to organize an event to engage with Parties and stakeholders during the sixtieth session of the Subsidiary Bodies (SB 60), with a view to facilitating its work on methodological requirements and guidance on activities involving removals.
3. At its 12th meeting (SBM 012), the SBM considered the information notes “A6.4-SBM012-AA-A01: Compilation and analysis of stakeholder inputs on the requirements for Article 6.4 methodologies” and “A6.4-SBM012-AA-A02: Compilation and summary of stakeholder inputs on activities involving removals under Article 6.4 mechanism” as contained in annex 1 and annex 2 to the annotated agenda of SBM 012,³ respectively, and requested:
 - (a) The secretariat to update these information notes based on any inputs received at the engagement event at SB 60 and guidance provided by the SBM at SBM 012, for consideration by the SBM at its 13th meeting;
 - (b) The secretariat to include in the updated information notes options for revising the documents developed by the Supervisory Body at its ninth meeting (i.e., A6.4-SB009-A01 and A6.4-SB009-A02);
 - (c) The Methodological Expert Panel to consider the inputs mentioned above in its work programme as mandated by the SBM.

¹ Documents of the 9th meeting of the Article 6.4 Supervisory Body are available at <https://unfccc.int/event/Supervisory-Body-9>.

² The call was open from 4 March to 15 April 2024 and 36 submissions were received. See Stakeholder interactions: Further input on requirements for methodologies and activities involving removals, available at: <https://unfccc.int/process-and-meetings/the-paris-agreement/paris-agreement-crediting-mechanism/calls-for-input/call-for-input-2024-stakeholder-interactions-further-input-requirements-for-methodologies-and>.

³ Documents of the 12th meeting of the Article 6.4 Supervisory Body are available at <https://unfccc.int/event/Supervisory-Body-12>.

4. The SBM, at its 13th meeting, considered the information notes “A6.4-SBM013-AA-A11: Options to revise the recommendation on the requirements for Article 6.4 methodologies, taking into account stakeholder inputs” and “A6.4-SBM013-AA-A12: Options to revise the recommendation on activities involving removals under the Article 6.4 mechanism, taking into account stakeholder inputs”, and requested the secretariat to iterate the draft guidance contained in annex 1 and annex 2 of the meeting report of the ninth meeting, taking into account the stakeholder inputs and the feedback from the Supervisory Body provided at its 13th meeting for the consideration of the Supervisory Body at its 14th meeting.
5. Due to the nature of changes and feedback now included, and in order to correctly apply the document hierarchy,⁴ the document type has been amended from ‘recommendation’ to ‘draft standard’ in order to reflect its regulatory function.
6. The relevant informal working groups of the SBM discussed the respective drafts prior to the meeting of the Supervisory Body.

2. Purpose

7. This document provides a new iteration of the requirements for activities involving removals under the Article 6.4 mechanism that builds on and replaces the document developed by the SBM at its ninth meeting (i.e. A6.4-SB009-A02).

3. Key issues and proposed solutions

8. The secretariat further iterated the document “A6.4-SB009-A02: Activities involving removals under the Article 6.4 mechanism” on the basis of the extensive review and discussions of this document at the 13th meeting of the SBM.
9. The following points apply in relation to the current iteration of the document:
 - (a) The numbering of options does not indicate hierarchy (e.g., option 1 is not necessarily preferred over option 2). Square brackets are used to indicate sub-options. Curly brackets are used for explanatory text;
 - (b) Text that requires special attention from the SBM is highlighted in yellow;
 - (c) At the request of the members of the informal working group, the document has been restructured, including merging and rearranging sections, clarifying and streamlining the text within paragraphs, and removing redundancies across the paragraphs. As a result, the numbering of sections and paragraphs **has changed and a paragraph-by-paragraph comparison with the previous version may not be expeditious.**
 - (d) Text without highlights indicates that either the text is unchanged from the previous version of the document (i.e. A6.4-SB009-A02) or there is no further disagreement among the members of the informal working group;
 - (e) Text in grey indicates paragraphs or sentences which pertain to further work of the SBM and is proposed for deletion in the main text body since these elements have

⁴ See document hierarchy: <https://unfccc.int/sites/default/files/resource/A6.4-INFO-GOV-005.pdf>.

been incorporated in the section “subsequent work and timelines” of this cover note.

- (f) Some sentences or phrases are square bracketed but with no alternative text proposed, the alternative in that case is “no text” on the issue.

4. Subsequent work and timelines

- 10. The SBM, at its 11th meeting, mandated the Methodological Expert Panel to develop the following regulatory documents⁵ for the consideration and adoption by the SBM, in an executive manner, including:

- (a) Standard on addressing non-permanence/reversals including:
 - (i) Post-crediting period monitoring, reporting, and remediation of reversals, post-reversal actions, and (host Party roles)
 - (ii) Late, incomplete or missing monitoring report submissions and treatment of activities for which a reversal results in a removals level that falls below baseline;
 - (iii) Reversal risk assessment;
 - (iv) Avoidable and unavoidable reversals, and reversal compensation

5. Recommendations to the Supervisory Body

- 11. The SBM may wish to consider the document, make any modifications as appropriate, and adopt the “Standard: Requirements for activities involving removals under the Article 6.4 mechanism”.

⁵ See <https://unfccc.int/sites/default/files/resource/a64-sb011-a02.pdf>.

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Draft Standard: Requirements for activities involving removals under the Article 6.4 mechanism

1. Procedural background

1. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA), by its decision 3/CMA.3 “Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement”, paragraph 6(c), requested the Supervisory Body of the mechanism established by Article 6, paragraph 4, of the Paris Agreement (Article 6.4 mechanism) to elaborate and further develop, on the basis of the rules, modalities and procedures of the Article 6.4 mechanism (RMP), recommendations on activities involving removals, including appropriate monitoring, reporting, accounting for removals and crediting periods, addressing reversals, avoidance of leakage, and avoidance of other negative environmental and social impacts, in addition to the activities referred to in chapter V of the RMP (Article 6, paragraph 4, activity cycle), to be considered at its fourth session (November 2022).¹
2. In response to this request, the Supervisory Body agreed on the recommendations on activities involving removals under the Article 6.4 mechanism contained in the annex to the addendum of its annual report to the CMA at its fourth session².
3. The CMA, by its decision 7/CMA.4, paragraphs 19 and 20, invited Parties and admitted observer organizations to submit, via the submission portal, by 15 March 2023, their views on activities involving removals and requested the Supervisory Body to consider the views of Parties and observers in elaborating and further developing recommendations on activities involving removals, while taking into account the mandate provided to the Supervisory Body contained in paragraph 24(a)(ix) of the RMP, and considering broader inputs from stakeholders provided in a structured public consultation process.
4. Based on the request of the CMA in its decisions 3/CMA.3 and 7/CMA.4 and considering views of Parties and observers as well as inputs from stakeholders, the Supervisory Body agreed on the updated recommendation to the CMA as contained in the addendum of its annual report to the CMA at its fifth session.³
5. The CMA, at its fifth session, requested the Supervisory Body to continue the relevant work to operationalize the mechanism with a view to elaborating and further developing recommendations for consideration and adoption at CMA 6.
6. Based on its further work on this matter, the Supervisory Body adopted the draft “Standard: Requirements for activities involving removals under the Article 6.4 mechanism”, as contained in this document.

¹ Document FCCC/PA/CMA/2021/10/Add.1 available at <https://unfccc.int/documents/460950>.

² Document FCCC/PA/CMA/2022/6/Add.1 available at <https://unfccc.int/documents/621980>.

³ Document FCCC/PA/CMA/2023/15/Add.1 available at <https://unfccc.int/documents/632332>.

2. Context of removals under this standard

2.1 Context

7. Relevant extracts from the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) Working Group III (WGIII) definitions of activities involving removals include the following:
- (a) Anthropogenic removals as the withdrawal of greenhouse gases (GHGs) from the atmosphere as a result of deliberate human activities. (IPCC AR6 WGIII report, glossary);
 - (b) Carbon dioxide removal (CO₂; CDR) as anthropogenic activities removing CO₂ from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products. It includes existing and potential anthropogenic enhancement of biological, geochemical or chemical CO₂ sinks, but excludes natural CO₂ uptake not directly caused by human activities. (IPCC AR-6 WG III report, technical summary).

2.2 Definitions

8. For this document,
- (a) **Removals** are the outcomes of processes by which greenhouse gases are removed from the atmosphere and are either destroyed or durably stored through anthropogenic activities.
 - (b) **Activities involving removals** meet the requirements referred to in paragraph 9. Any examples in this standard relating to specific activity types or categories are for illustrative purposes only and do not have the force of decisions by the Supervisory Body regarding their use under the Article 6.4 mechanism, unless explicitly so stated.
 - (c) **[Creditable removals are equal to the net removals calculated as the difference between the removals resulting from the implementation of the mitigation activity and the removals resulting from the baseline scenario, plus the difference between any emissions resulting from the baseline scenario and the emissions resulting from the implementation of the project activity, minus any deductions to account for leakage;]**
 - (d) **[Reversals are any 'negative' net removals in a given period;]**
 - (e) **[Avoidable reversals are reversals caused by factors over which the activity participants have influence or control. These include project management, omission or redefinition of a part of the activity area, harvesting, and tillage;]**
 - (f) **[Unavoidable reversals are reversals caused by factors over which the activity participants have no influence or control. These include hurricanes, earthquakes, flooding, drought, fires, tornados and storms, and human-induced events such as acts of terrorism, crime, or war. Interventions by outside actors, such as logging, mining, or fuelwood collection, are considered unavoidable when these are demonstrably unforeseeable or beyond the control of the activity participants.]**

3. Requirements

9. Activities involving removals [and emission reduction activities with reversal risks] under the Article 6.4 mechanism shall meet the requirements contained in the following sections, all the applicable standards and procedures of the Article 6.4 mechanism and any further requirements approved by the Supervisory Body in this regard.

3.1. Monitoring

10. Activity participants shall⁴ ensure that monitoring of removals is carried out based on data derived from measurements, sampling, remote sensing, third party sources and published literature that are robust and statistically representative, conservative and take appropriate account of the associated uncertainties.
11. Methodologies shall include provisions that specify the monitoring approaches for all parameters necessary to calculate removals according to the types of removal activities.
12. The methodologies shall ensure that the net removals are calculated in a conservative manner, taking due account of the associated uncertainties.
13. To allow for flexibility in monitoring, default values may be used in the calculation of removals provided that the use of the default values results in a conservative estimate of net removals, taking due account of the associated uncertainties.
14. Methodologies shall include provisions for appropriate quality assurance and quality control measures, such as cross-checking of monitoring results with other data sources and published literature, or calibration of measuring equipment at regular intervals.
15. The methodologies shall include provisions for monitoring and mitigating the risks identified in section 3.6.1 *Assessment of risks of reversal*, and the risks identified in the Sustainable development tool of the Article 6.4 mechanism, including risks related to the free, prior and informed consent of indigenous peoples directly or indirectly affected by the activity.
16. Methodologies shall include provisions requiring the activity participants to submit a monitoring plan as part of the project design document submitted with the request for registration. The monitoring plan shall be reviewed and updated at the beginning of each renewed crediting period and in any of the following circumstances:
- (a) The designated operational entity (DOE) or the Supervisory Body identifies the need to revise the monitoring plan based on any concerns identified with the monitoring plan and the risk assessment plan;
 - (b) Additional risk factors are identified following a reversal that are not included or are not adequately addressed in the monitoring plan and the risk assessment plan;
 - (c) The applicable national or regional regulations require the consideration of risk factors that are not included or are not adequately addressed in the monitoring plan and the risk assessment plan.

⁴ For normative references, refer to section *Normative reference* of the Standard: Application of the requirements of Chapter V.B (Methodologies) for the development and assessment of Article 6.4 mechanism methodologies.

~~(NOTE: The requirements in paragraphs 10 to 14, and the first sentence of paragraph 16 are also contained in the Article 6.4 Activity standard for projects (AS-P). These paragraphs can be mapped as follows: paragraphs 10-11: AS-P paragraph 102-103; paragraph 12: AS-P paragraph 7(d); paragraph 13: AS-P paragraph 49; paragraph 14: AS-P paragraph 54; paragraph 16, first sentence: AS-P paragraph 51)~~

3.2. Reporting

17. Activity participants shall prepare a monitoring report after implementing the monitoring activities specified in the monitoring plan.
18. Monitoring reports shall be based on the monitoring plan contained in the registered activity design document and shall include:
 - (a) A description of the monitoring activities and methods used;
 - (b) The estimated net removals occurring during the monitoring period, together with the associated uncertainty;
 - (c) Data collected, including the remote sensing data, or if the data set is too large, a summary of the data and an indication of how the full data set can be accessed;
 - (d) Records and logs of the observed events of GHG release that **potentially could** have led to the reversal of removals along with a summary of the GHG release notifications referred to in paragraph 44 that were submitted during the period covered by the monitoring report;
 - (e) Information on how the risks of reversal were assessed and addressed, consistent with the risk mitigation measures described in the registered project design document.
 - (f) Information on how any negative environmental and social impacts have been assessed, mitigated, and managed, consistent with the measures described in the registered project design document.
19. Monitoring reports shall be prepared without a gap between the two consecutive monitoring periods, which may be of equal or different duration.

~~(NOTE: This requirement of paragraphs 17, 18(a)-(d), and 19 are also contained in the Article 6.4 Activity standard for projects (AS-P). These paragraphs can be mapped as follows: paragraph 17 and 18(a)-(d): AS-P paragraphs 92, 93; paragraph 19: AS-P paragraph 93(a))~~

20. Methodologies shall specify the frequency of submission of the monitoring reports, based on the nature, the type and the risk of reversals associated with the activity involving removals identified through the application of necessary standards and tools. The specified frequency shall include at least the following elements:
 - (a) The maximum permissible interval between the start date of the first crediting period and the submission of the first monitoring report shall be between one and five years;
 - (b) The maximum permissible interval between the submission of two consecutive monitoring reports after the first monitoring report shall be between one and five years.

21. The activity participants may choose a shorter time period than the time period specified in paragraph 20.

~~(NOTE: Since paragraph 20 prescribes the maximum interval, the requirement in paragraph 21 is redundant)~~

22. In addition to the monitoring reports referred to in paragraphs 20 and 21, a monitoring report shall also be submitted following the observation of an event of GHG release that could potentially lead to a reversal, as specified in paragraph 48.

- ~~23. The activity participants may request the Supervisory Body, providing a transparent and verifiable justification, to extend the due date for submission of a monitoring report by [15] [30] days beyond the due date determined in accordance with paragraphs 20 to 22. The Supervisory Body shall consider the request for the extension of the due date and shall either grant or refuse such an extension.~~

- ~~23-24. If the activity participants fail to submit a monitoring report by the due date determined in accordance with paragraphs 20 to 23, there shall be consequences as determined by the Supervisory Body in its guidance on and procedures for addressing late, incomplete, or missing monitoring report submissions, including suspension of the operations of issuance, transfer, and cancellation of A6.4ERs resulting from the activity for which the monitoring report was due.~~

- ~~24. [If the activity participants do not submit a monitoring report within 15 calendar days of the due date determined in accordance with paragraphs 20 to 23, the Supervisory Body shall instruct the registry administrator to suspend the operations of issuance, transfer, and cancellation of A6.4ERs resulting from the activity for which the monitoring report was due and from other activities being implemented by the activity participants.]~~

- ~~25. [The activity participants shall be notified of the outstanding monitoring report and of the resulting decision of the Supervisory Body to suspend the operations of issuance, transfer, and cancellation of A6.4ERs referred to in paragraph 24.]~~

- ~~26. [If the activity participants fail to submit a monitoring report within 30 calendar days of the date of receipt of the notification referred to in paragraph 25, all the A6.4ERs previously issued for the activity shall be deemed to be avoidable reversals and shall be remediated by the activity participants in accordance with the provisions of section 3.6.3 Remediation of reversals.]~~

- ~~27-25. [The Supervisory Body will develop guidance on and procedures for addressing late, incomplete, or missing monitoring report submissions including remedial measures to address situations where monitoring is stopped prematurely, (i.e., prior to the conclusion of the crediting period(s) and fulfilment of requirements for post-crediting period monitoring). [The guidance may include measures such as specifying that the registry administrator shall be unable to issue, transfer, or cancel A6.4ERs from the activity for which the monitoring report is due as well as any other activity in which they are a participant]. The guidance will address options for giving effect to the remediation of reversals of removals for which 6.4ERs have been issued in such circumstances.]~~

3.3. Post-crediting period monitoring and reporting

- ~~28-26. Monitoring shall continue after the end of the last active crediting period of the activity to to assess whether any reversals have occurred, quantify the amount of reversals and confirm the continued storage of the GHGs, ~~[, except where the GHGs were destroyed]~~.~~

~~29.27.~~ No A6.4ERs shall be issued for the net removals occurring during the post-crediting monitoring period.

~~30.28.~~ The activity participants may request the Supervisory Body to allow termination of the post-crediting monitoring if they can demonstrate, by providing transparent and verifiable information, that:

- (a) The stored GHGs are at a negligible risk of reversal; or
- (b) The [potential future] reversals have been remediated in accordance with the provisions of section 3.6.3 *Remediation of reversals*.

~~31.29.~~ [The Supervisory Body will develop further guidance in this regard including:

- (a) Further requirements and identification of the existing requirements that are applicable during the post crediting period for monitoring, reporting, and verification of removals and remediation of reversals, including consideration of options to use methods based on digital technologies and remote sensing;
- (b) The timeframe for post-crediting monitoring, including factors that inform duration and phasing which provides assurance on the permanence of removals, taking into account expert scientific inputs;
- (c) The submissions referred to in paragraph 23 above, including inter alia on the evidence-based demonstration by the activity participant and on the criteria for consideration and approval given by the Supervisory Body to ensure that there is high confidence in the conclusion and that the conclusion remains valid over [the climate relevant time frames] [long timeframes].]

3.4. Accounting for removals

~~32.~~ **Option 1.** Removals eligible for crediting shall exceed the applicable baseline determined in accordance with requirements for the development and assessment of Article 6.4 mechanism methodologies and are calculated for each year in the crediting period. In each given monitoring report, such calculations are done in accordance with the following:

- (a) ~~by calculating net removals, which involves the estimation and deduction of emissions within the activity boundary that result from the implementation of the activity and/or from an event that could potentially lead to a reversal of removals, and any leakage emissions, in accordance with the applicable provisions of the Activity Standard, requirements for the development and assessment of Article 6.4 mechanism methodologies, and the applicable methodology; and~~
- (b) ~~by comparing the current cumulative net removals to cumulative net removals in the previous monitoring report. Current cumulative net removals that fall below the cumulative net removals in the previous monitoring report constitute reversals.~~

Option 1A

~~For the period covered by a monitoring report:~~

- (i) ~~The creditable removals [, or the [debitable] [remediable] reversals,] shall be equal to the actual net removals achieved by the activity *minus* the net removals that would have occurred in the baseline;~~

~~(ii) The actual net removals achieved by the activity shall be equal to the total removals achieved by the activity *minus* the activity emissions *minus* the leakage emissions;~~

~~(iii) The total removals achieved by the activity shall be equal to:~~

~~a. The difference between the total GHG stocks in the carbon pools within the activity boundary at the beginning and at the end of the period covered by the monitoring report; or~~

~~b. The total GHG mass injected into the storage reservoir *minus* the GHG mass that was released from the reservoir into the atmosphere [plus the GHG mass that was destroyed] during the period covered by the monitoring report.~~

Option 2. Removals and reversals are accounted as follows:

~~(a) Net removals are calculated as the difference between removals occurring with the implementation of the mitigation activity and removals occurring in the baseline scenario:~~

~~(i) Plus (+) the difference between emissions from other relevant sources occurring in the baseline scenario and emissions from other relevant sources occurring with the implementation of the mitigation activity;~~

~~(ii) Minus (-) any emission increase outside of the mitigation activity boundary linked to the activity.~~

~~(b) Reversals are 'negative' net removals or emission reductions and are calculated as the difference between:~~

~~(i) The cumulative emission reductions or net removals resulting from the mitigation activity until the end of monitoring period "p"; and~~

~~(ii) The cumulative emission reductions or net removals from the mitigation activity until the end of the previous monitoring period "p-1";~~

~~(c) In paragraph 26 (b), the cumulative emission reductions or net removals should be calculated from the beginning of the mitigation activity. Reversals shall be quantified over a period. The Supervisory Body will develop further guidance on appropriate minimum and maximum length of this period, considering different contexts and types of removal activities.~~

[Option 3. Delete option 1A and para (a) and (b) of the option 2, since the accounting of removals is already specified in the definition section.]

30. Removals eligible for crediting shall be determined as follows:

(a) The net change in carbon storage shall be calculated by subtracting the sum of the change in carbon stored in each applicable greenhouse gas reservoir in the baseline scenario from the sum of the change in carbon stored in each applicable greenhouse gas reservoir in the activity scenario, calculated from the start date of the period covered by a monitoring report to the end date of the same period.

(b) The net change in emissions, not including any carbon storage losses from the greenhouse gas reservoirs referred to in paragraph (a), shall be calculated by

subtracting the total emissions in the baseline scenario from the total emissions in the activity scenario, calculated from the start date of the period covered by a monitoring report to the end date of the same period

(c) If the net change in carbon storage is positive, then the number of A6.4ERs issued to the activity is calculated by combining the following terms:

(i) The net change in carbon storage, specified in paragraph (a).

(ii) Minus (-) the net change in emissions, specified in paragraph (b).

(iii) Minus (-) any applicable leakage effects.

(iv) Minus (-) any crediting deficit, specified in paragraph (d).

(d) If the calculation in paragraph (c) is negative, then no A6.4ERs shall be issued for the period covered by that monitoring report and the negative number shall be recorded as a crediting deficit and included in future A6.4ER issuance calculations.

(e) If the net change in carbon storage is negative, then there is a reversal of an equivalent quantity.

~~33.31.~~ A carbon pool, a GHG reservoir or a greenhouse gas may be optionally excluded from accounting if it is demonstrated, through transparent and verifiable information, that such exclusion results in a more conservative calculation of the net removals.

~~34.32.~~ The calculation referred to in paragraph 30 shall be carried out for each year of the post-crediting monitoring period, and reversals shall be deemed to have occurred if the result of the calculation is a negative number.

~~35.33.~~ Where an activity involving removals also results in emission reductions, the accounting of removals and emission reductions shall be separated in the monitoring report in accordance with [the methodology or the combination of methodologies applicable to the activity] ~~[the provisions to be developed by the Supervisory Body].~~

3.5. Methodologies applicable for a renewed crediting period

~~36.34.~~ At the renewal of the crediting period, the activity participants shall apply the latest version of the applicable methodology.

~~(NOTE This requirement is also contained in the Article 6.4 Activity standard for projects (AS-P), paragraphs 112-115)~~

3.6. Addressing reversals

~~37.35.~~ The activity participants shall prevent and minimize the risk of the release of the stored GHGs that could potentially lead to a reversal, and if such a release occurs, shall fully remediate the reversal in accordance with the provisions of section 3.6.3 *Remediation of reversals*.

3.6.1. Reversal risk assessment

~~38-36.~~ ~~[The risks of reversals]~~ ~~[An event causing the release of the stored GHGs]~~ may be avoidable or unavoidable and may be related to, inter alia:

- (a) Activity finance and management, asset ownership, rising opportunity costs;
- (b) Regulatory uncertainty and social instability; political, governance and legal risks; human-induced events such as acts of terrorism, crime, and war
- (c) Natural disturbances and extreme events such as fires, pests, and droughts, hurricanes, floods, and landslides; Geological events such as earthquakes, volcanic eruptions, geological faults, and fractures;
- ~~(e)~~
- ~~(d)~~ ~~Human-induced events such as acts of terrorism, crime, and war;~~
- ~~(e)~~ ~~Geological events such as earthquakes, volcanic eruptions, geological faults, and fractures;~~
- ~~(f)~~ ~~Accidental or unavoidable release of GHGs from the geological reservoir through leaks, venting, or seepage;~~
- ~~(g)~~ ~~Accidental release of GHGs during the handling of GHGs such as the compression, transportation and temporary storage of GHGs;~~
- ~~(h)~~(d) Climate change impacts exacerbating any of the above risks.

~~39-37.~~ Activity participants shall conduct a risk assessment for an activity involving removals, using the reversal risk assessment tool to identify, assess and mitigate reversal risks, and calculate an overall percentage-based risk score, taking into account, inter alia, the nature, magnitude, likelihood, and duration of the risks and whether the risks relate to avoidable or unavoidable reversals.

~~40-38.~~ The percentage-based risk score calculated in paragraph 37 above shall inform, inter alia, the proportion of A6.4ERs to be transferred to the buffer pool referred to in paragraph 54 below.

~~39.~~ The risk assessment and the related information referred to in paragraphs 37 and 38 above shall form part of the project design document submitted with the request for registration.

[Classification of risk as high, medium, low]

~~41-40.~~ Activity participants shall review and revise the risk assessment every five years from the start of the first crediting period and in any of the circumstances referred to in paragraph 16.

~~42-41.~~ [The Supervisory Body will develop a reversal risk assessment tool to identify risks with a view to minimize, monitor and manage them. The tool shall incorporate the latest peer-reviewed scientific research and shall be regularly updated, at least every 5 years, to account for new scientific findings. The tool shall incorporate geographical context, historical risk record, and projections for future risk development. The tool shall also define a minimum default risk rating for activities facing a reversal risk, potentially distinguished

by broader activity type. Methodologies [shall] [may] include additional guidance on the application of the tool.]

3.6.2. Reversal-related notifications and actions

43.42. [The activity participants shall notify the Supervisory Body of any observed event involving the release of stored GHGs that could potentially lead to a reversal (hereinafter referred to as “the observed event”) within [15] [30] days of becoming aware of the event. The notification, which may be in digital form, shall include a brief description of the event, including the date or the dates of its occurrence and its location.]

44.43. Upon the receipt of the notification referred to in paragraph 44, the Supervisory Body shall instruct the administrator of the mechanism registry to suspend the operations of issuance, transfer, and cancellation of A6.4ERs resulting from the activity involving removals.

45.44. The activity participants shall prepare a preliminary assessment report in order to determine whether the observed event has resulted in an actual reversal. If the observed event is an ongoing event, the preliminary assessment report shall be prepared after the event has ended or has been fully contained.

46.45. If the preliminary assessment report referred to in paragraphs 45 and 46 concludes, on the basis of transparent and verifiable evidence, that the observed event did not result in an actual reversal, the report shall be verified by the DOE and submitted to the Supervisory Body within 90 days of the end of the observed event. If the Supervisory Body approves the preliminary assessment report, it shall notify the activity participants of such approval and shall instruct the administrator of the mechanism registry to resume the suspended registry operations referred to in paragraph 45.

47.46. If the Supervisory Body does not approve the preliminary assessment report, or if the preliminary assessment report concludes that the observed event has resulted in an actual reversal, the activity participants shall prepare a monitoring report in accordance with paragraph 18 and, after its verification by the DOE, shall submit the monitoring report to the Supervisory Body within [365] days of the end of the observed event.

48.47. Upon receipt of the monitoring report referred to in paragraph 48, the Supervisory Body shall assess the monitoring report and determine whether the report accurately estimates the magnitude of the reversal and correctly characterizes it as avoidable or unavoidable, and, based on that determination, proceed to take the actions described in section 3.6.3 Remediation of reversals.

49.48. Following the submission of the monitoring report referred to in paragraph 48, the activity participants shall review and update the risk assessment of the activity, considering, inter alia, the following:

- (a) Revising the risk rating of the activity, resulting in an increased buffer contribution, if necessary;
- (b) Developing plans to prevent further releases of GHGs, such as fire prevention and containment, improved control and safety measures, storage conditions and handling procedures for stored GHGs;
- (c) Reviewing the compliance with the applicable local and international regulations;

- (d) Strengthening the engagement of, and communication with, the stakeholders in the safety and security of the GHG storage site;
- (e) Reviewing the compliance with the requirements and safeguards contained in the Sustainable development tool, taking into account the actual negative environmental and social impacts caused by the reversal, if any, and developing plans to prevent the recurrence of such negative environmental and social impacts.]

~~50.49.~~ The activity participants shall remain responsible for the implementation of the activity, including carrying out the processes, actions and measures required by this section.

~~51.50.~~ [The Supervisory Body will develop further guidance regarding the measures in this section, including the format and procedures for notifications and reports that may be submitted digitally and to enable notifications from third parties to the Supervisory Body of [observed events that could potentially lead to reversals] [potential reversals].]

3.6.3. Remediation of reversals

51. A reversal occurring in an activity involving removals shall be remediated by the cancellation of an equivalent amount and type (i.e., authorized or MCU) of A6.4ERs.

52. A reversal occurring in an activity involving removals that is determined to be an avoidable reversal shall be remediated through:

- (a) Cancellation of A6.4ERs from the activity participant's account
- (b) Purchase of A6.4 of equivalent units with negligible risk of reversal purchased by the activity participants from the other A6.4 activity participants
- (c) Other measures deemed appropriate by the SBM, in case the above actions do not suffice

53. A buffer pool [shall be][is hereby] established by the SB to remediate reversals occurring in activities involving removals.

54. For each activity involving removals, a proportion of the A.64ERs, to be determined by the applied methodology based on the reversal rating referred to in paragraph 39, shall be deducted and transferred to the buffer pool at the time of issuance of A6.4ERs.

55. A reversal occurring in an activity involving removals that is determined to be an unavoidable reversal shall be remediated through the cancellation of an equivalent amount and type (i.e., authorized or MCU) of A6.4ERs from the buffer.

56. When a reversal resulting from a GHG release has been fully remediated in accordance with paragraphs XX and XX, the Supervisory Body shall instruct the administrator of the A6.4 mechanism registry to resume the operations of issuance, transfer, and cancellation of A6.4ERs resulting from the activity.

57. The Supervisory Body shall oversee a regular stress-test of the buffer pool at least every three years to assess, inter alia, the resilience of the pool to a range of plausible reversal risk scenarios, including reasonable worst-case scenarios, affecting the activities linked to the buffer pool, and to consider and implement any potential remedial actions necessary to manage risk to the robustness of the pool. The actual composition of the buffer pool,

including the share of A6.4ERs by vintage, region and country, type of activity, activity of authorisation, reversal risk category, and methodology, shall be published annually.

58. The SBM will consider ways to increase the resilience and solvency of the buffer, including:

- (a) Requirements of insurance policies
- (b) Modalities for third-Party guarantees
- (c) "Fund 401.K"

59.

52. A buffer pool of A.64ERs shall be established by the Supervisory Body.

53. For each activity involving removals, a proportion of the A.64ERs, to be determined by the applied methodology based on the reversal rating referred to in paragraph 39, shall be deducted and transferred to the buffer pool at the time of issuance of A6.4ERs.

54. The buffer pool shall be operated by the administrator of the A6.4 mechanism registry in accordance with the instructions of the Supervisory Body.

55. A reversal occurring in an activity involving removals shall be remediated by the cancellation of an equivalent amount of A6.4ERs held in the buffer pool, provided that the reversal:

- (a) Occurs during an active crediting period of the activity; and
- (b) Is determined to be an unavoidable reversal in accordance with paragraph 49; and
- (c) Relates to an activity that has contributed to the buffer pool in accordance with paragraph 54; and
- (d) Is within the capacity of the buffer pool without compromising its resilience and solvency.

56. If a reversal cannot be fully remediated in accordance with paragraph 56 above, the [remaining] reversal shall be remediated by:

- (a) Cancellation of A6.4ERs from the holding account of the activity participants;
- (b) Cancellation of A6.4ERs [with negligible risk of reversal] resulting from other activities implemented by the activity participants;
- (c) Cancellation of A6.4ERs [with negligible risk of reversal] purchased by the activity participants from the market and deposited in the buffer pool;
- (d) A guarantee by the host Party or the acquiring Party to replace the A6.4ERs to fully remediate the [remaining] reversal.

57. To exercise the option referred to in paragraph 57(c), the activity participants shall obtain and maintain sufficient coverage under an insurance policy, or a comparable guaranteed product approved by the Supervisory Body to ensure the continued implementation of the activity in the event of a reversal, which shall be submitted with the project design document.

~~58. When a reversal resulting from a GHG release has been fully remediated in accordance with paragraphs 56 and 57, the Supervisory Body shall instruct the administrator of the A6.4 mechanism registry to resume the operations of issuance, transfer, and cancellation of A6.4ERs resulting from the activity.~~

~~59. The Supervisory Body shall oversee a regular stress test of the buffer pool at least every three years to assess, inter alia, the resilience of the pool to a range of plausible reversal risk scenarios, including reasonable worst-case scenarios, affecting the activities linked to the buffer pool, and to consider and implement any potential remedial actions necessary to manage risk to the robustness of the pool. The actual composition of the buffer pool, including the share of A6.4ERs by vintage, region and country, type of activity, activity of authorisation, reversal risk category, and methodology, ~~(should) (shall)~~ be published annually.~~

60. [The Supervisory Body will develop further guidance and/or procedures in regard to the measures in this section for, inter alia:

- (a) Review by the Supervisory Body of monitoring reports that reflect reversals, including its consideration of whether an event that led to a reversal was avoidable or unavoidable as represented by activity participants, and its response to instances of possible mis-categorization of such events and subsequent notifications of the registry administrator and activity participants;
- (b) Reversal Risk Buffer Pool use, operation, and composition, including the treatment of uncanceled Buffer 6.4 ERs and options for addressing buffer insufficiency;
- (c) Direct cancellation of 6.4 ERs from other 6.4 activities in lieu of contributing to and using the Reversal Risk Buffer Pool, including the threshold for a reversal risk rating that constitutes a negligible risk of reversal and would qualify an activity to apply these procedures, as well as the basis and procedures for the Supervisory Body's initial and periodic review and approval of the sufficient coverage of insurance policy or comparable guarantee products for insuring the activities that apply these procedures;
- (d) The nature of 6.4 ERs from other 6.4 activities that are cancelled to remediate reversals in accordance with the requirements in this section, including whether they are issued in respect of removals and/or emission reductions.
- (e) The treatment of activities for which a reversal results in calculated removals within the activity boundary that fall below the baseline level.]

61. [The Supervisory Body will develop further guidance on avoidable and unavoidable reversals, including how they are distinguished and demonstrated:

- (a) An avoidable reversal is a reversal over which the activity participant has influence or control. This includes poor project management, removal or redefinition of a portion of the activity area, harvesting and tillage;
- (b) An unavoidable reversal is a reversal over which the activity participant has no influence or control. This includes hurricanes, earthquakes, flooding, drought, fires, tornados and winter storms, and human-induced events such as acts of terrorism, crime, or war. Encroachment by outside actors (e.g., logging, mining, or fuelwood collection) are considered unavoidable when demonstrably unforeseeable and out of the activity participant's control. Unavoidable reversals should take into account

attributed effects of climate change such as increased incidence of droughts, higher temperatures, increased precipitation events and cyclones;

- (c) The Supervisory Body shall prioritize the development of the criteria for determining whether a reversal is 'avoidable' or 'unavoidable'.]

3.7. Avoidance of leakage

62. The activity participants shall address the risk of leakage and account for any residual leakage in calculation of net removals in accordance with the requirements set out in "Standard: Application of the requirements of Chapter V.B (Methodologies) for the development and assessment of Article 6.4 mechanism methodologies", ~~and "Standard: Addressing leakage in Article 6.4 mechanism activities"~~. The methodologies and associated tools may include additional requirements for specific types of removal activities.

3.8. Avoidance of other negative environmental and social impacts **and respecting human rights and the rights of indigenous peoples**

63. The activity participants shall apply robust social and environmental safeguards to minimize and, where possible, avoid negative environmental and social impacts of the activity ~~[and, where possible, promote positive environmental and social impacts] [and demonstrate positive outcomes of the activity for biodiversity, ecosystem restoration, indigenous peoples and local communities where relevant to the activity]~~, in accordance with the requirements contained in:

(a) The Article 6.4 mechanism Sustainable development tool⁵;

~~(a)~~(b) The Article 6.4 mechanism activity standard⁶;

~~(b)~~ The Article 6.4 mechanism Sustainable development tool⁷; Article 6.4 mechanism activity procedure, including the provisions for local and global stakeholder consultation contained therein

(c) The Article 6.4 mechanism Appeals and grievance procedure⁸;

(d) Any other relevant provisions developed by the Supervisory Body in this regard.

64. [In addition to the above requirements, the Supervisory Body will develop further requirements in relation to specific categories or types of activities involving removals, considering indigenous, national and international best practices, standards, and obligations relating to environmental and social safeguards, human rights, indigenous peoples' rights.]

⁵ [A6.4-SB008-A10- Draft Tool: Article 6.4 sustainable development tool.](#)

⁶ A6.4-STAN-AC-002 Standard: Article 6.4 activity standard for projects.

⁷ ~~[A6.4-SB008-A10- Draft Tool: Article 6.4 sustainable development tool.](#)~~

⁸ A6.4-SB008-A09 - Draft Procedure: Appeal and grievance processes under the Article 6.4. mechanism.

3.9. Host Party roles

65. Subject to further guidance to be developed by the Supervisory Body, a host Party may, on the basis of the RMP and the guidance in this [document] [standard], adopt and notify to the Supervisory Body its voluntary arrangements for:

(a) Requiring the activity participants to comply with the applicable national or regional regulations, including those specifying the frequency, timing, and the basis for updating and submitting an updated monitoring plan, in addition to, and subject to and consistent with, the guidance in this [document] [standard], referred to in paragraph 16(c);

(b) Where the host Party assumes the role of an activity participant in the post-crediting monitoring period, the provision of a sovereign guarantee to apply corresponding adjustments in respect of any reversals that occur, as an alternative measure to those described in section 3.6.3. *Remediation of reversals*, in a manner consistent with the guidance to be developed by the Supervisory Body in this regard.

Document information

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| 3 July 2024 | A6.4-SBM013-AA-A12 – Information note: Options to revise the recommendation on activities involving removals under Article 6.4 mechanism, taking into account stakeholder inputs (v.02.0) |
| 23 May 2024 | A6.4-SBM012-AA-A01 - Information note: Guiding questions for the SBM engagement event at the sixtieth session of the Subsidiary Body (SB 60) (v.01.0) |
| 16 May 2024 | A6.4-SBM012-AA-A02 - Information note: Compilation and summary of stakeholder inputs on activities involving removals under Article 6.4 mechanism (v.01.1) |
| 1 March 2024 | A6.4-SB010-A05 - Information note: Further work on the methodological products for the Article 6.4 mechanism (v.01.0) |

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|-------------------|---|
| 17 November 2023 | A6.4-SB009-A02 - Recommendation: Activities involving removals under the Article 6.4 mechanism (v.01.1) |
| 7 November 2023 | A6.4-SB008-A14 - Draft Recommendation: Activities involving removals under the Article 6.4 mechanism (v.04.1) |
| 16 October 2023 | A6.4-SB008-AA-A15 - Draft Recommendation: Activities involving removals under the Article 6.4 mechanism (v.03.0) |
| 14 September 2023 | A6.4-SB007-A07 - Draft Recommendation: Activities involving removals under the Article 6.4 mechanism (v.02.0) |
| 1 September 2023 | A6.4-SB007-AA-A13 - Information note: Compilation of the public inputs on removal activities under the Article 6.4 mechanism (v.02.1) |
| | A6.4-SB007-AA-A14 - Information note: Draft elements for the recommendation on activities involving removals (v.02.0) |
| | A6.4-SB007-AA-A15 - Draft recommendation: Activities involving removals under the Article 6.4 mechanism (v.01.0) |
| 5 July 2023 | A6.4-SB006-AA-A09 - Information note: Compilation of the public inputs on removal activities under the Article 6.4 mechanism (v.01.0) |
| | A6.4-SB006-AA-A14 - Information note: Draft elements for the recommendation on activities involving removals (v.01.0) |
| 3 June 2023 | A6.4-SB005-A02 – Information note: Guidance and questions for further work on removals (v.02.0) |
| 17 May 2023 | A6.4-SB005-AA-A09 – Information note: Removal activities under the Article 6.4 mechanism (v.04.0) |
| | A6.4-SB005-AA-A10 – Information note: Summary of the views submitted by Parties and observers on activities involving removals (v.01.0) |
| 10 March 2023 | A6.4-SB004-A02 - Information note: Guidance and questions for further work on removals (v.01.0) |
| 28 February 2023 | A6.4-SB004-AA-A04 - Information note: Removal activities under the Article 6.4 mechanism (v.03.0) |
| 07 November 2022 | A6.4-SB003-A03 - Recommendation: Activities involving removals under the Article 6.4 mechanism (v.01.0) |
| 25 October 2022 | A6.4-SB003-AA-A03 - Draft recommendation: Removal activities under the Article 6.4 mechanism (v.02.0) |
| | A6.4-SB003-AA-A04 - Information note: Removal activities under the Article 6.4 mechanism (v.02.0) |
| 15 September 2022 | A6.4-SB002-AA-A05 - Draft recommendation: Requirements for the development and assessment of mechanism methodologies pertaining to activities involving removals (v.01.0) |
| | A6.4-SB002-AA-A06 - Information note: Removal activities under the Article 6.4 mechanism (v.01.0) |
| 08 July 2022 | A6.4-SB001-AA-A05 - Concept note: Removal activities under the Article 6.4 Mechanism (v.01.0) |