

Responses to Consultation on Article 6.4 Mechanism - A6.4-SB005-A02

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Dear CMA Supervisory Body,

Thank you for the opportunity to provide feedback on the draft guidance and questions for further work on removals under Article 6.4 of the Paris Agreement. Pachama acknowledges the mandate given to the Supervisory Body of the mechanism established by Article 6, paragraph 4, of the Paris Agreement (the Supervisory Body) to elaborate on activities involving removals. We also support the inclusion of broader inputs from stakeholders through a structured public consultation process.

We appreciate the effort put into developing this document and would like to offer the following responses and suggestions, related to Elements for structured consultation and further work: Cross-cutting questions.

The accelerated deployment of nature-based solutions is critical if we are to meet the targets set forward in the Paris Agreement. There is widespread scientific consensus that we need to decarbonize our economy, bring net deforestation to zero by 2030, and rapidly increase ecosystem restoration to catalyze increased carbon sequestration in vegetation and soil. Funding forest conservation projects to reduce emissions from deforestation is an effective tool available today to begin to reduce global emissions. While increased reforestation and other nature-based approaches to carbon removal will be increasingly important in the coming decades, reducing land use and land use change emissions is currently a more pressing priority. We believe that removals activities supported by the guidance provided in this document play a crucial role in balancing emissions with removals by mid-century. It is essential to ensure that removals contribute significantly to achieving climate goals. The roles and functions of the activity proponent(s), Article 6.4 mechanism Supervisory Body (6.4SB), 6.4 mechanism registry administrator, Host Party, and stakeholders should be clearly defined and coordinated to ensure effective implementation of the operations referred to in this guidance.

The understanding of interrelationships in functions, timeframes, and implementation of the elements, such as monitoring periods, crediting periods, and timeframes for addressing reversals, should be clearly communicated to stakeholders. Clarity on these aspects will enhance the transparency and credibility of the mechanism. We suggest following definitions and frameworks set out in major Voluntary and Compliance carbon market registries such as Verra, Climate Action Reserve, or California ARB.



Questions on specific elements:

A. Definitions:

We suggest that the definition of "Removals" should initially only include the removal or reduction of greenhouse gasses from the atmosphere through deployment of nature-based solutions including but not limited to afforestation, reforestation, and sustainable land management practices. "Blue carbon" approaches that enhance carbon sequestration in freshwater and coastal systems may also provide opportunities. Many early stage technological carbon dioxide removal concepts, such as enhanced weathering, ocean alkalinity enhancement may prove beneficial in the future, but we believe they present too many uncertainties and potential risks to be deployed right away. As such, removals should focus on restoring native ecosystems and reducing social and environmental impacts as further discussed in section G below.

With regard to engineered solutions like direct air capture, we agree with the conclusion of A6.4-SB005-AA-A09 Information note: Removal activities under the Article 6.4 mechanism Version 04.0 which states, "Engineering-based removal activities are technologically and economically unproven, especially at scale, and pose unknown environmental and social risks (P-12, R-83:a, R-84:a, R-50:c,d). Currently these activities account for removals equivalent to 0.01 MtCO2 per year (P-15:a) compared to 2,000 MtCO2 per year removed by land-based activities.

These activities do not contribute to sustainable development, are not suitable for implementation in the developing countries and do not contribute to reducing the global mitigation costs, and therefore do not serve any of the objectives of the Article 6.4 mechanism".

B. Monitoring and Reporting:

- The timeframes and procedures specified for monitoring and reporting elements should align with the Paris Agreement's reporting requirements. These timeframes should provide sufficient intervals for accurate data collection and reporting.
- The core elements for monitoring and reporting should consider the scope of relevance to all 6.4
 mechanism activities, removals activities, and specific removal activity categories or types.
 Harmonization of monitoring and reporting requirements will facilitate comparability and
 consistency across different removal activities.

To the extent possible, these elements should harmonize with major existing voluntary and compliance carbon market rules such as Verra, Climate Action Reserve, or California ARB. We would also like to emphasize that MRV mechanisms should evolve over time and include Digital MRV solutions where feasible. DMRV (Digital MRV) is a software solution or service capable of data collection, processing, analysis, or synthesis for any MRV application, including project development, validation, verification, and registration. DMRV platforms may use remote sensing techniques, machine learning or artificial intelligence algorithms, mobile device applications, smart sensors, and other digital technologies.



C. Accounting for removals:

- The core elements for accounting for removals should be comprehensive and applicable to all 6.4
 mechanism activities. They should also consider the specific requirements for removal activities, all
 relevant sinks, sources and reservoirs, as well as all six Kyoto gasses and their respective
 categories or types. Utilizing accounting techniques, such as dynamic baselines to assess net GHG
 reduction ex post will improve the integrity of transacted credits.
- Activities involving removals that result in emissions reductions should align with the requirements
 for the development and assessment of major voluntary and compliance market methodologies.
 Clear guidance should be provided to ensure consistency and coherence between removals and
 emissions reduction activities, such as separation for reporting in terms of quantification of any
 reversal risk and potential buffer deductions.

D. Crediting period:

The core elements for crediting periods should be designed to ensure the integrity and accuracy of credit issuance. These elements should be applicable to all 6.4 mechanism activities, removals activities, and specific removal activity categories or types.

E. Addressing Reversals:

To minimize the risk of non-permanence of removals over multiple NDC implementation periods, it is essential to have a robust framework for addressing reversals. The guidance should emphasize the full and timely mitigation of any reversals that occur.

F. Avoidance of Leakage:

The applicability and implementation aspects of measures such as non-permanence risk buffer, insurance/guarantees for replacement of ERs, and other measures for addressing reversals should be assessed on a case-by-case basis.

G. Avoidance of any other environmental, social impacts:

Considerations for the avoidance of other negative environmental and social impacts are crucial in the context of activities involving removals under the Article 6.4 mechanism. These considerations aim to ensure that such activities not only contribute to emission reductions but also align with broader sustainable development goals and principles.

In addressing this aspect, it is important to identify and assess the potential environmental and social impacts associated with removal activities. This includes considering the direct and indirect effects on ecosystems, biodiversity, water resources, air quality, land use, and local communities. The scope of these considerations should encompass all 6.4 mechanism activities to maintain consistency and coherence in the implementation of avoidance measures.

To effectively avoid negative environmental and social impacts, it is essential to establish clear guidelines



and safeguards. These may include conducting environmental and social impact assessments, implementing mitigation measures, and promoting the participation of local communities and indigenous peoples in decision-making processes. Additionally, mechanisms for grievance redressal and monitoring of impacts should be incorporated to ensure accountability and transparency throughout the project lifecycle.

Furthermore, specific attention should be given to identifying and addressing potential disproportionate impacts on vulnerable groups, including marginalized communities and indigenous peoples. Adequate measures should be implemented to safeguard their rights, traditional knowledge, and livelihoods, and to prevent any potential harm resulting from removal activities. Considering the diverse range of removal activity categories or types, it is essential to tailor the avoidance measures accordingly. Different activities may present unique challenges and require specific considerations to mitigate their environmental and social impacts effectively. Therefore, it is important to analyze the characteristics and potential risks associated with each removal activity category or type and develop appropriate mitigation strategies accordingly.

The avoidance of other negative environmental and social impacts should be a fundamental aspect of activities involving removals. By integrating robust environmental and social safeguards, conducting impact assessments, promoting stakeholder engagement, and addressing the specificities of different removal activity categories or types, the mechanism can ensure that removal activities contribute to sustainable development while minimizing any adverse consequences.

Conclusion:

Our feedback on the draft guidance and questions for further work on removals under Article 6.4 of the Paris Agreement emphasizes the importance of clear definitions, comprehensive monitoring and reporting, consistent accounting, robust frameworks for addressing reversals, and the avoidance of negative environmental and social impacts.

We suggest that the definition of "Removals" should focus on nature-based solutions and sustainable land management practices that restore native ecosystems and minimize social and environmental impacts. Carbon capture and storage and technological carbon dioxide removal activities should be limited due to their unproven technology, unknown risks, and limited contribution to sustainable development.

Harmonization with existing voluntary and compliance carbon market rules such as Verra, Climate Action Reserve, or California ARB should be considered to ensure consistency and comparability. The timeframes for monitoring and reporting should align with the Paris Agreement's reporting requirements, and should include the latest Digital MRV solutions where possible.

Comprehensive accounting elements should be applicable to all removal activities, maintaining coherence with emissions reduction activities. Crediting periods should be designed to ensure credit issuance integrity and accuracy. Robust frameworks for addressing reversals and minimizing non-permanence risks are essential.

To avoid negative environmental and social impacts, clear guidelines and safeguards should be established, including impact assessments, mitigation measures, stakeholder engagement, and mechanisms for grievance redress and impact monitoring. Vulnerable groups, such as marginalized



communities and indigenous peoples, should receive special attention to protect their rights and livelihoods.

In summary, our suggestions aim to ensure that removal activities contribute significantly to achieving climate goals while aligning with sustainable development objectives and principles. By implementing these recommendations, the mechanism can enhance transparency, credibility, and accountability, paving the way for effective implementation and long-term success in combating climate change. Thank you for your thoughtful consideration of public responses to these complex topics and your timely and critical mission.

With all best regards,
Dr. Guy Pinjuv
Director of Forest Science and Policy, Pachama