44.moles GmbH / Finn Grundmann

Structured public consultation:

Further input – Requirements for the development and assessment of mechanism methodologies

August 2023

Dear members of the Supervisory Body,

To consider the various topics referred to in A6.4-SB007-AA-A## the following input will be structured around each paragraph separately. Our input will reflect the draft recommendation's potential impact on activities involving Improved Forest Management.

Overall, some paragraphs seemed specific to <u>reduction</u> activities, where the outlined requirements and criteria did not match the scope of <u>removal</u> activities. We recommend not to group reduction and removal activities by referring to 'emission reductions' collectively. Most requirements and criteria would benefit from differentiating the two activity types to provide adequate guidance both for removal and for reduction activities respectively.

5. Reducing emissions, increasing removals and mitigation co-benefits of adaptation actions and/or economic diversification plans in relation to reducing emissions of GHGs are collectively referred to as 'emission reductions' in this document.

Grouping emissions reductions and removals and consequently providing guidance on methodologies to be developed both for removals and reductions simultaneously has led to confusion in following the specifications of the document. Especially as certain paragraphs don't seem to be applicable to removal projects, whether that is regarding baselines below business as usual (BAU), or additionality criteria.

For example, removal projects in forests would benefit from baselines set below BAU, as the baseline usually refers to removals (negative emissions) that would have occurred anyway. To assume usual sequestration through forests is lower than BAU would hence allow foresters to produce more additional offsets.

Setting baselines below BAU only applies to reduction activities where baselines represent positive emissions and does not create the same effect when the baseline represents negative emissions, as in most removal activities.

12. Mechanism methodologies should ensure that crediting levels are progressively reduced to encourage ambition over time.

Encouraging ambition over time is crucial to the Article 6.4 Mechanism. Especially when referring to removal projects, we believe that the progressive reduction of crediting levels would not encourage ambition. Removal projects in the forest sector tend to require upfront investments with most

removals achieved in the later phases of the project. Reducing the gains by reducing crediting levels in the last phase of the activity would make nature-based removal activities less viable.

As <u>reduction</u> activities produce offsets, referred to as avoided emissions, it is common practice to reduce crediting levels, as additionally of said avoided emissions is only assumed to remain true for a limited period.

Again, the suggested mechanism would only work for reduction activities, while significantly counteracting the work of removal activities.

14. Mechanism methodologies shall encourage ambition over time by prioritizing technologies that are not widely used or available in specific locations, thereby facilitating technology transfers, removing barriers to deployment of clean technologies, reducing the cost of decarbonization, and unlocking investment in low-carbon solutions.

By prioritizing 'technologies', the natural potential of terrestrial carbon sinks maintained and grown through improved forest management, reforestation, afforestation, climate-smart agriculture, etc. would be entirely neglected. The Supervisory Body should not advocate or prioritize certain solutions over others. While technological solutions are required, project developers in the AFOLU sector should not be at a disadvantage, especially as nature-based solutions are currently the only activities applicable at the necessary scale to prevent further global warming.

15. Mechanism methodologies shall encourage ambition over time by including <u>progressively more</u> <u>efficient and less GHG intensive technologies</u>, supporting replicable and scalable mitigation activities, enabling an <u>expanded user base</u> and greater penetration of <u>lowcarbon solutions</u> after initial deployment.

It should be specified that this paragraph applies to <u>reduction activities</u> only. Removal activities do not use GHG intensive technologies, nor do they work with a user base. Nature-based removal activities do not shift from being carbon intensive to becoming a low carbon solution, but rather go form already removing carbon form the atmosphere to removing significantly more due the Article 6.4 Mechanism's financial incentive.

16bis. [Where applicable, and appropriate, mechanism methodologies [may] [shall] encourage ambition over time by requiring the application of a qualitative or quantitative approach detailed in section 4.8. Application of qualitative or quantitative approaches detailed in section 4.8 should be discouraged where their use could negatively affect financial viability of high-cost transformational actions.]

Methodologies <u>shall</u> encourage ambition over time, and we believe a quantitative or qualitative approach should be required even when it affects financial viability. Neglecting section 4.8, if it negatively affects financial viability would indirectly encourage project developers to design activities that appear financially viable only if the approach outlined in section 4.8 is not applied, which would significantly decrease transparency and trust in the mechanism.

19. Mechanism methodologies shall require transparent descriptions of the source of the data used, and disclosure of data sources unless they are confidential, the assumptions made, the references used and the steps followed in deriving the estimates of the results of Article 6.4 activities, where necessary, including equations. [The calculations shall provide repeatable and reproducible results when input parameters are identical.]

Data sources should always be disclosed. Confidential sources should not be allowed. Building trust around emission reductions is crucial to ensure demand and hence the ability to globally finance sustainable action.

If data sources are not disclosed, it would contradict the mechanism's goal of transparency.

Calculations shall provide repeatable and reproducible results when input parameters are identical. If through the use of machine learning or deep learning models the results deviate, although the same input data has been provided, the resulting standard error should not only be published and considered in the crediting levels associated with that activity, but the methodology overall should be questioned by the Supervisory Body, as reproducibility is required for the mechanism and its activities to be considered scientific and trustworthy.

20. Mechanism methodologies shall result in conservative emission reduction estimates, from the measures applied, options chosen or assumptions made, and shall not overestimate the emission reductions from Article 6.4 activities.

Who and how would overestimation be identified and with what consequence. The use of references and confidential sources, as referred to in paragraph 19 could prevent a third party from identifying overestimation. Only by preventing the use of secondary data can the risk for overestimation be eliminated fully. At 44.moles GmbH we use primary data from the activity area, with offsets issued expost to ensure overestimation risks are minimal and ensured through the monitoring structure and methodology.

Forest projects currently estimate removals based on a variety of models, secondary data, and seldomly primary data from the activity area. As discussed by the media extensively (The Guardia, Die ZEIT), overestimation of additional removals in forest projects is currently the standard. The only way to detect over-estimation, not simply by comparing results from two different models or from a differing set of secondary data, is through destructive sampling, which would result in cutting down the forest.

Avoiding overestimation in forestry cannot be achieved through proofing mechanisms once the activity has been established, it can only be achieved structurally, by ensuring activity proponents apply methods that minimize the risk for overestimation e.g., by not allowing the use of secondary data.

21. Mechanism methodologies shall require Article 6.4 activities to have a robust monitoring and data capture system as well as a reporting system. Where secondary data is used, the mechanism methodologies shall require that the activity developer demonstrate that it is from a best available source.

"(...) shall require that the activity developer demonstrates that it is from a best available source and that the collection of primary data was not possible due to the activities scope."

Where possible the Supervisory Body should require activity proponents to use primary data. Current Improved Forest Management activities use secondary data to model removals, while our technology at 44.moles GmbH shows that the collection of primary data for each project is more exact, and financially viable. To grow trust is the mechanism the Supervisory Body should condemn the use of secondary data for activity types that can collect more accurate primary data, while ensuring the project remains financially viable.

22. Mechanism methodologies shall ensure that baselines are real, transparent, conservative, credible [and below business as usual BAU] by:

We do not believe the use of BAU and baseline concepts that refer to historic values, reference plots, or modelled scenarios effectively represent the projects additionality. The fraudulent use of those concepts has allowed project proponents and developers to exploit the market, leading to great skepticism, especially around nature-based removal projects.

BAU concepts should be applied only to reduction projects, as removal activities can use alternative, more effective tools to provide proof of additionality and permanence. A greater focus on permanence, ensuring removals are stored beyond what is considered BAU, would ensure additionality, not just when initiating the activity, but throughout the entirety of the activities crediting period and beyond. Not relying on projected baselines and historic and modeled data to establish additionality would greatly simplify the mechanism and provide a tangible asset to investors that worry about the long-term additionality of the market as a whole.

29. [Mechanism methodologies can contribute to the equitable sharing of mitigation benefits between participating Parties, where the following measures are applied to activities, inter alia,

(b) Where only mitigation contribution units are generated and no adjustment on the part of the host Party is required;

Mitigation contributions should be defined in the document.

30. [Mechanism methodologies shall apply any guidance from the host Parties in relation to equitable sharing.]

Yes.

33. Mechanism methodologies shall contribute to the equitable sharing of mitigation benefits between participating Parties by setting baselines that are well below BAU through the application of [a quantitative] [a qualitative] [either a qualitative or quantitative] approach[es] detailed in section 4.8.

By setting baselines that are well below BAU, the financial viability of projects could be at risk. The mechanism should promote viable, scalable activities. By undermining the impact of an activity by setting baselines well below BAU, the mechanism would distort the market by suppressing supply of projects that effectively remove large quantities of carbon from the atmosphere.

Representing and accurately quantifying emissions removals should be at the core of Article 6.4 activities, eliminating the need for amended baselines and crediting levels to account for errors and inaccuracies.

44. [(b)] [(iii)] An approach based on existing actual or historical emissions, adjusted downwards to ensure alignment with paragraph 33 above [in the RMP]."

Baselines based on historical emissions, especially for nature-based removal projects do not reflect the activities true added value. Forests today differ from forests in the past and with climate change the weather, and consequently the growth of forests is increasingly more difficult to predict and increasingly less comparable to historic values.

Using historic data for nature-based removal projects or modelled baselines fueled by historic data should not be allowed, as it misrepresents the activities true comparable alternatives and future BAU.

46. (...) and providing full flexibility to reflect local conditions and host Party circumstances (e.g. by referring to specificities of technologies/measures or sector(s) covered by the methodology such as homogeneity or variability of emission sources, data required for the parameters for a conservative and reliable estimation of the baseline, where applicable drawing from experience from typical mitigation activities that have been already implemented).

A minimal scientific standard should be expected, independent of the host Parties circumstances, to ensure emissions reduction are real, and additional.

{Question for additional inputs: should the above paragraph (46/46bis) be split to improve clarity?}

No.

{Question for additional inputs: should the downward adjustment be eligible/applicable for all the approaches to setting the baseline?}

No, downward adjustment should not be eligible for nature-based removal activities.

{Question for additional inputs: should it be specified that only activities triggered by policies can be credited? Will there be complexities in relation to additionality assessment in this regard?}

Crediting activities triggered by policies would lead to complexities in relation to additionality assessment. Emission reductions achieved due to policies are better accommodated under Article 6.2.

53. (a)

Option 1.1: Increasing the stringency of baselines over time by updating the parameters in the methodologies at regular intervals based on [latest science] [latest IPCC reports], reassessing the parameters of the baseline at the renewal of the crediting period, accounting for autonomous

improvements of baseline parameters, operationalized through methodology procedures and rules applicable to registered activities;

Updating parameters in the methodologies at regular intervals based on latest science would be too vague in regard to the temporal scope and it could lead to updates based on inconclusive or premature scientific findings, destabilizing activities and the relationship with buyers. Updates should occur regularly in alignment with the release of IPCC reports.

53. (b)

Option 1.2: Top-down development of downward adjustment factors for emission reductions estimates in a methodology, by the Supervisory Body, using IPCC Integrated Mitigation Pathways (IMPs) differentiated by sector or region to accommodate different circumstances of the Host Parties;

Yes.

53. (c)

Option 1.3: Bottom-up development of country specific downward adjustment factors for emission reduction estimates in a methodology, where necessary differentiated by sector or region, operationalized through the Standardised Baseline procedures, i.e. submissions from host Parties through its DNAs will be considered by the Supervisory Body for approval, or through activity level guidance provided by the Supervisory Body;

Yes. It should be considered that activity proponents in countries without a designated national authority (DNA) should be able to propose methodologies directly to the Supervisory Body to ensure broad participation is not halted due to the lack of administrative infrastructure.

54. Option 2bis:

Yes.

{Question for additional inputs: would option 2 above fit under 'adjustment downwards? And is it linked to additionality demonstration? How can 'transformative' be defined?}

Especially when using positive lists, project activities fulfilling the criteria of being "transformative" should not have to provide further proof of additionality.

Transformative: To turn a sustainable activity, formerly financially non-viable into a scalable, profitable activity.

57. (c) Take into account the context on the ground in host Parties, including institutional arrangements, and provide options to facilitate the meeting of requirements, such as by enabling the drawing from multiple data sources to address any data gaps, particularly for lesser developed

countries, and use of conservative default values and benchmarked data from comparable regions to the extent they can be applicable;

While providing lesser developed countries with an equal opportunity to participate, by adjusting the scientific standard downward, accounting for a lack of scientific infrastructure, this approach (similar to the Tier 1 Option within the IPCC Guidelines for National Greenhouse Gas Inventories) does not encourage investment into scientific infrastructure within the host country.

If a high scientific standard were required independent of the circumstances in the host country, project developers would be encouraged to invest and establish scientific infrastructure, which would not only benefit future activity proponents in the region, but also the countries' ability to provide detailed biannual reports and data driven nationally determined contributions (NDC).

Identifying host countries with insufficient scientific infrastructure could aid in determining fees that would support the collection of data and the procurement of scientific tools and infrastructure when buying offsets from a host country granted the right to charge said fee.

79. After the validity of a standardized baseline has expired, the updated standardized baseline shall be considered by the Supervisory Body for approval subject to the host Party making a request for the update. The updated standardized baseline shall not impact already registered activities up to the end of their first crediting period.

As updates are to be requested by the host country and as the updated baselines shall not impact already registered activities, this could encourage project developers to register activities and updates at specific times, which could potentially result in higher crediting levels. As economic projections, growth and weather models, fueled with historic data are often the basis for baselines, the timing of requesting a baseline update could influence the resulting baselines.

We recommend updating baselines in regular intervals, independent of host party requests to ensure updates are not requested during economic crisis or weather phenomena, ensuring baselines remain objective and unbiased.

{Question for additional inputs: should pre-project activity emissions and upstream emissions be accounted as activity emissions or leakage emissions, or be identified by the Supervisory Body as being beyond the scope of activity accounting guidance? What further assessment is needed in this regard?}

Pre-project activity emissions and upstream emissions should be considered within the scope of the activity.

100. (e) Larger-scale implementation: sectoral, sub-national or national level implementation.

Potential for larger-scale (...).

Thanks for your dedication and continued communication,

Finn Grundmann