Climate Analytics comments in connection with papers prepared for October session: paper A6.4-SB008-AA-A15 on activities involving removals

26 October 2023

The Article 6.4 Supervisory Body has previously put out calls for inputs on recommendations for activities involving removals. We have responded to previous calls for inputs on 25 May, 23 June and 1 August. We now write to reflect at a high level on the paper "Draft recommendation: Activities involving removals under the Article 6.4 mechanism, Version 03.0".

The latest draft of document A6.4-SB008-AA-A15 continues, at paragraph 23, to refer to a potential acceptance of activities with high reversal risk.

As we stated in our earlier comments, temporary land-based removals should not be eligible for inclusion in the Article 6.4 mechanism, due to their significant risk of reversal over centuries and their lack of equivalence to emission reductions. Buffer pools that have been established by various programmes to try to address these two challenges have not been able to address them in a robust manner. See Haya et al., 2023. Buffer pools cannot enable temporary removals to substitute for permanent removals. Accordingly, our inputs discussed the issue of buffer pools only in the context of permanent removals, e.g., removals achieved through DACCS.

We further expressed the view that activities that exceed a certain reversal risk threshold should not be permitted for registration, with these activities including afforestation / reforestation, soil carbon sequestration. Non-permanence risks render these land-based removals problematic for inclusion, including those risks related to natural disturbances (e.g., fires, pests, storms), climate impacts themselves, feedback loops and land use decisions. Uncertainties in measurement and monitoring only amplify these elements. These impermanent land-based removals are not able to guarantee long-term sequestration on the necessary timescales and should not be used to compensate fossil fuel emissions.

Where the Article 6.4 Supervisory Body lacks the scientific basis to establish a rating or to review an individual activity risk assessment, activities also should not be permitted for registration as Article 6.4 activities.

We are cognizant that the Article 6.4 Supervisory Body cannot take on board all comments from all Parties. However, **reliance on best available science** is meant to be a hallmark of the Paris Agreement. And environmental integrity is a stated requirement of Article 6. **Nevertheless, the latest draft of document A6.4-SB008-AA-A15 continues, at paragraph 23, to refer to a potential acceptance of activities with high reversal risk**.

Many studies have noted that there are significant risks to UNFCCC and Paris Agreement goals in treating impermanent removals as equivalent to emission reductions. This is even more particularly the case in an offsetting context.

These risks include the concern that reversals from large scale land-based activities may have the unintended result of *increasing CO_2 concentrations beyond what they would have been in the absence of such activities having been undertaken in the first place*. See citations below. This is an issue separate and apart from the potential biophysical impacts of large-scale land or ocean-based activities, which are context-specific and also cause for great concern. The increasing impacts of climate change also threaten to reverse existing sinks.

Any UN process will need to base its work on best available science, to ensure public confidence and credibility in the results of this process. Accordingly, it would be beneficial for the Article 6.4 Supervisory Body to pause and seek input from the scientific community on the implications of this lack of equivalence between temporary removals and fossil fuel emissions, in the particular context of Article 6, before proceeding further with certain categories of removals.

See e.g.,

- Kirschbaum, Miko Uwe Franz, 2009 IOP Conf. Ser.: Earth Environ. Sci. 6 152008, *Temporary carbon sequestration cannot prevent climate change* (https://iopscience.iop.org/article/10.1088/1755-1307/6/15/152008/pdf)
- Kirschbaum, Miko Uwe Franz, 2003, Climatic Change 58(1): 47-71, *Can Trees Buy Time: An assessment of the role of vegetation sinks as part of the Global Carbon Cycle* (https://www.researchgate.net/publication/227061758_Can_Trees_Buy_Time_An_Assessment_of_the_Role_of_Vegetation_Sinks_as_Part_of_the_Global_Carbon_Cycle)
- Korhonen R., *et al.*, *The role of carbon sequestration and the tonne-year approach in fulfilling the objective of the climate convention* (2002), Environmental Science & Policy, 5(6) (2002), 429-441.