

From: Mike Kelland <mike@planetarytech.com>
Sent: Monday, 22 May, 2023 11:26
To: Supervisory-Body <Supervisory-Body@unfccc.int>
Subject: Input to SB005 annotated agenda and related annexes.

Dear Supervisory Body,

Planetary is a company working in the field of Ocean Alkalinity Enhancement. We were dismayed by the recent information note provided to this body by the UNFCCC Secretariat, specifically section 3.2 "Eligibility of activity types under the Article 6.4 mechanism". The note is inaccurate and inappropriately cherry picks pros and cons of various carbon removal mechanisms. The note suggests, through its description of "cons", that engineered removals should not be included article based on technological immaturity and a lack of contribution to sustainable development.

As the Article 6 mechanisms are intended to be powerful tool for the climate and in place over long time horizons, the suggestion to exclude removals based on their current immaturity is, at best, naive. As has been demonstrated in almost every technological field, exponential growth and distribution is the rule rather than the exception. Solar and wind power cost and deployment curves are good analogues. While engineering methods currently have low volumes of removals, these volumes have more than doubled every year for the past three ([cdr.fyi](#)). Continuing this trend would result in a significant scale of removals in the very near term. Excluding engineering removals based on current technological immaturity has the very real risk of building near term obsolescence into the Article 6 mechanisms.

While portions of engineering removals, in some cases, benefit from excess renewable energy and strong technological advancement, indicating less of an alignment with sustainable development, this is not true of all parts of that value chain, nor is it true of every method. Enhanced rock weathering, for example, can provide strong agricultural benefits in developing nations and for disadvantaged communities with no need for advanced infrastructure or energy use. Our own process of Ocean Alkalinity Enhancement, in which pure forms of antacid (hydroxides) are added to seawater, is easily segmented between high scale engineering systems to produce low-carbon hydroxides and distributed, low energy and simple systems to distribute the hydroxide in the sea to create carbon removals. This process has been shown to restore corals in local areas (<https://doi.org/10.1038/nature17155>) - ecosystems that over 500 million people worldwide rely on for their livelihoods. The local ecosystem and economic benefits for developing coastal communities of this approach, among others, easily shows that the stated "con" of engineering removals as relates to sustainable development is inaccurate.

The science is clear that massive scales of carbon removals will be required. This note's inaccurate and biased depiction of engineering removals sets a narrative that would undermine progress on climate and limit any chance that we have to meet our climate targets. The note should be amended to properly represent the pro's and con's of these approaches and I would urge the Supervisory Body to ensure that engineering removals are explored in a scientifically valid and holistic way.

Kind Regards,
Michael Kelland
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