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**Sent:** Tuesday, 11 October, 2022 22:09  
**To:** Supervisory-Body <Supervisory-Body@unfccc.int>  
**Cc:** Ana Serdoner <ana@bellona.org>; Samantha Tanzer <tanzer@bellona.org>  
**Subject:** Call for input 2022 - activities involving removals under the Article 6.4 Mechanism of the Paris Agreement

Dear secretariat of the Supervisory Body,

Please find attached The Bellona Foundation's response to the call for input on activities involved removals under the Article 6.4 Mechanism of the Paris Agreement.

We thank you for your work and look forward to engaging further on this matter.

Best Regards,  
Mark

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## *Call for input 2022 - activities involving removals under the Article 6.4 Mechanism of the Paris Agreement*

The Bellona Foundation is an independent non-profit NGO that aims to meet and fight the climate challenge, by identifying and implementing sustainable environmental solutions. Bellona welcomes the above call for input and has some recommendations for the Supervisory Body on Carbon Dioxide Removal (CDR).

### **In-meeting working document on “Recommendations for activities involving removals under the Article 6.4 mechanism”**

A reliable and accurate definition of ‘removal activities’ is crucial to ensure a sound policy framework from the beginning. The document presents three options to define ‘removal activities’, neither of which fully capture the definitional principles of CDR.

The four principles<sup>1</sup> proposed by [Tanzer and Ramirez in their 2019 paper](#) and adopted by [the Advisory Council of the European Zero Emission Technology and Innovation Platform](#), clearly outline the need for removal activities to specify the **atmospheric origin and permanent storage of the removed CO<sub>2</sub>**, but also specifically mentions that all emissions associated with the removal process should be included in the emission balance and that **the ‘net’ balance of a removal process should always be negative** (i.e. remove more than is emitted) for it to qualify as a removal.

Crucially for this document, the definition for ‘removal activities’ should include the fact that these must be **‘net of all associated emissions’**, to ensure that any certificate or credit issued on the basis of CDR actually results in a net removal from the atmosphere.

For the sake of clarity, it is **preferable to only focus on the removal of CO<sub>2</sub>** from the atmosphere, since the removal of other GHGs is not currently anticipated at relevant scales and it is unclear if the removal of other greenhouse gases has a comparable mitigation effect to the removal of CO<sub>2</sub>.

**The proposed ‘crediting period’ of removal activities is wholly insufficient** for the purposes of climate mitigation and should be expanded to the magnitude of (at least) centuries rather than decades. **It should also be specified that if a removal activity is reversed it ceases to be a removal**, unless the reversal has been replaced. A removal which fully reverses should be cancelled, as should any accounting transactions that have been made on the basis of this removal (e.g. an emission which was balanced out by that removal) along with a relevant liability or penalty.

**It is important to also define the timeframe of the CO<sub>2</sub> removal itself.** Some removal activities take multiple years or decades to fully materialise, for example via photosynthesis or enhanced weathering. Failing to incorporate this slow removal process may result in removal activities being ‘frontloaded’ and accounted for before they have actually occurred or have had their reversal risk appropriately managed (e.g. a reversal is linked with an obligation to remove more CO<sub>2</sub> again).

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<sup>1</sup> 1. Carbon dioxide is physically removed from the atmosphere.

2. The removed carbon dioxide is stored out of the atmosphere in a manner intended to be permanent.

3. Upstream and downstream greenhouse gas emissions, associated with the removal and storage process, are comprehensively estimated and included in the emission balance.

4. The total quantity of atmospheric carbon dioxide removed and permanently stored is greater than the total quantity of greenhouse gases emitted to the atmosphere.

## **Draft recommendation: Requirements for the development and assessment of mechanism methodologies pertaining to activities involving removals**

The document is clear on the need to manage land-based and geological-storage-based removal activities in distinct ways. However, the draft recommendations go into depth on the requirements for geological storage, which is necessary, but **fail to provide sufficient clarity on the reversibility of land-based removal activities**. This is highly problematic since land-based removal activities tend to have a much higher risk of reversal and require more active management than geological sinks.

**The proposal to use of the ‘ton-year’ approach to account for land-based removals is not relevant and should be discontinued.** At no stage was this methodology requested and its merits as a basis for CDR accounting is heavily contested by multiple stakeholders, including both [CarbonPlan](#) and [Carbon Market Watch](#), among others.

At the same time, the Tonne-based crediting approach suffers from the same fundamental issue of accurately Monitoring, Reporting and Verifying the land sink, sets a crediting period of only 65 years at most, and does not provide sufficient monitoring or liability to safeguard against the relatively high risk of reversals resulting from land-based removals.

Since these sinks have vastly different storage characteristics, it would be preferable to handle the land and geological sinks in a non-fungible manner, with the addition of sink-specific frameworks to manage the risk of reversals. [Bellona’s briefing on managing permanence](#) goes into more detail on this issue.

### **The rapid timeline of the process**

The development of frameworks to account for and reliably deploy CDR is essential to any long-term climate plan. However, the political and technical discussions on CDR remain nascent and there are still significant uncertainties in the scientific understanding of many of the components of CDR. Despite the growing pressure on policymakers to implement incentives for the deployment of CDR, much of the groundwork still needs to be laid out. This is exemplified by the fact that the Supervisory Body has not yet come to an agreement on the definition of CDR, which is clearly fundamental. This brings into question the ability or relevance of engaging in more technical discussions, such as how to manage the land-based removals, within such a short time span.

Given the essential role of CDR in long-term targets and the importance of deploying CDR in a manner consistent with our climate goals, the Supervisory Body should not rush this process and should develop its recommendations on CDR reliably rather than quickly.

### **Further reading from the Bellona Foundation**

[Carbon Credits Conundrum: Why Governments need to regulate CDR](#)

[Addressing differences in permanence of Carbon Dioxide Removal](#)

[List of Bellona’s CDR articles](#)

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