

From: David Andersson <david.andersson@ecoera.se>
Sent: Friday, 16 June, 2023 11:41
To: Supervisory-Body <Supervisory-Body@unfccc.int>
Subject: Structured Public Consultation - Removal Activities

From: David Andersson M.Sc M.Sc. CEO
ECOERA AB
Sweden

To: United Nations Framework Convention on Climate Change (UNFCCC) UN Campus Platz der Vereinten Nationen 1 53113 Bonn, Germany

Dear Members of the UNFCCC,

I am writing to bring to your attention a significant and viable method of mitigating climate change: Biochar Carbon Removal (BCR). The critical role that carbon dioxide removal plays in our global effort to reach net-zero CO₂ emissions cannot be overstated. It is crucial to the successful execution of our shared climate goals and to the well-being of future generations. BCR offers a robust and effective means to this end.

Biochar Carbon Removal (BCR) is an engineered removal method, distinguishing it from conventional nature-based approaches. Biochar is produced through the process of pyrolysis, which involves heating organic matter in the absence of oxygen. This process results in a stable form of carbon that can be sequestered in soil for centuries to millennia, effectively removing it from the atmospheric carbon cycle.

With its scalability potential, BCR can indeed be climate-relevant. Existing agricultural and forestry residues, as well as biosolids streams, provide ample feedstock for producing biochar on a significant scale. Moreover, biochar application to soils can be integrated into existing agricultural and forestry management systems, allowing for seamless and effective incorporation into daily practices.

The monitoring, reporting, and verification (MRV) process for BCR is both transparent and robust. Through advanced scientific methodologies, we can accurately measure the amount of carbon sequestered in biochar and account for it effectively in carbon inventories. This provides the necessary checks and balances to ensure that biochar is used as a reliable and credible solution to CO₂ removal. Several robust methodologies exist: Verra, puro.earth and European Biochar Certificate C-sink.

Moreover, the permanence of BCR offers a distinct advantage. The stability of biochar implies the long-term sequestration of carbon. This minimizes the risk of carbon leakage back into the atmosphere, thereby enhancing the overall effectiveness of this method. Research by Sanei et al 2023 shows how biochar is considered an inertinite - the geological endpoint of biomass carbon, meaning stability far beyond millennia. Thereby a permanent carbon removal method.

While some engineered removal methods may have potentially negative impacts on the environment and social structures, BCR stands apart. With careful sourcing of sustainable residual biomass, biochar production and use can significantly reduce and remove greenhouse gas emissions, improve soil health, enhance crop yields, and even support rural livelihoods.

Furthermore, the co-benefits of BCR extend beyond carbon removal. These include improving soil

fertility and water retention, reducing agricultural waste, providing a renewable source of energy during pyrolysis, and reducing the need for synthetic fertilizers. Thus, BCR can be part of a comprehensive, holistic solution to sustainable development and climate change mitigation.

In conclusion, the integration of Biochar Carbon Removal in our fight against climate change is a promising, effective, and robust solution for permanent carbon removal. It is my earnest hope that the UNFCCC will acknowledge and incorporate this method into its climate strategies, helping us make substantial progress towards our shared goal for a living planet.

Thank you for your attention and consideration.

Sincerely,

David Andersson CEO ECOERA AB.