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To: Supervisory-Body@unfccc.int
From: Diana Maranga, Business Development & Policy Lead, Octavia Carbon Co
Subject: A Retort to Article 6.4 On Engineering Based Activities

To the Article 6.4 Supervisory Body,

The IPCC has emphasised the urgent need to actively remove CO2 from the atmosphere to fulfil the objectives of the Paris Agreement and mitigate global warming. While land-based activities such as forestry have been utilised for many years, the current climate crisis necessitates the recognition of the vital role of engineered CDR as advocated by leading climate scientists (Larsen et al, 2019). It is imperative to state that engineered CDR complements and enhances land-based approaches, working together towards a shared objective.
We would subsequently like to dispute the claims that Article 6.4 has made about engineered carbon dioxide removal (CDR).

· "**Engineering CDR activities are technologically and economically unproven"** The viability of engineered CDR is demonstrated by pilot projects like Climeworks' and Carbfix's joint Direct Air Capture (DAC) and carbon mineralization project in Iceland, showcasing technical feasibility and innovation. The demand for durable carbon credits, including those from engineered CDR, exceeds the current supply, which demonstrates its vast economical potential. By implementing appropriate regulations and policies, technologies like Direct Air Capture (DAC) can and will leverage economies of scale to be economically viable. (Fasihi, 2019)

· "**… and pose unknown environmental and social risks …"** Engineered CDR methods, particularly of a 'closed system' approach such as in DAC+Storage installations, pose minimal environmental or social risks. Both Direct Air Capture and CO2 mineralization have been practised at scale for 7 and 15 years, respectively. What is more, various forms of geological CO2 storage have been practised for decades longer and have shown no disproportional environmental or societal risks (Matter, Stute & Snæbjörnsdottir, 2016). Other methods of engineered carbon removal such as biochar, enhanced rock weathering, or ocean alkalinization have been practised at some scale, and while their ecosystem impacts need to be carefully assessed, they in fact have great promise for environmental and social co-benefits (IPCC, 2022)

· "**…do not contribute to sustainable development, are not suitable for implementation in the developing countries and do not contribute to reducing global mitigation costs."** Engineered CDR companies in the Global South, while nascent, have already started contributing substantially towards sustainable development. Companies like Octavia Carbon or Cella Mineral Storage in Kenya, Takachar in India, and InPlanet in Brazil have pilot safe engineered CDR methods in the Global South, and in their short history have created >50 mid- to highly skilled jobs between them. While applying the highest standards of safety, these companies should be encouraged to keep innovating and driving highly value-adding engineered CDR investment into the Global South. These companies provide templates for green growth to emerging economies in the Global South and have the potential to become catalysts for much larger-scale green transformation in countries of the Global South, by providing new bankable industrial demand for energy that can help accelerate investments in renewables (Mwangi, 2021).

Thank you.

Yours faithfully,

D.M

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