

1200 18th St NW #700 Washington, DC 20036 carboncapturecoalition.org

May 25, 2023

Article 6.4 Supervisory Body (SB005) United Nations Framework Convention on Climate Change Bonn, Germany

RE: The 5th Meeting of the Article 6.4 Supervisory Body – Input on A6.4-SB005-AA-A09

Dear Article 6.4 Supervisory Body:

We write to provide comments in response to the A6.4-SB005-AA-A09: Removal activities under Article 6.4 mechanism, which will be considered at the upcoming 5th meeting of the Article 6.4 Supervisory Body. This document mischaracterizes the necessary role that engineered-based removal activities, including Direct Air Capture (DAC), must play in meeting the Paris Agreement by stating that they are "technologically and economically unproven" and "do not serve any of the objectives of the Article 6.4 mechanism".

The Carbon Capture Coalition recognizes that while a full suite of emissions reduction and carbon dioxide removal strategies must be deployed to meet the Paris Agreement, scaling available engineered carbon dioxide removal (CDR) methods is increasingly recognized as a central component to both offsetting emissions in those sectors with challenging-to-abate emissions, such as shipping and aviation, and post-2050, reducing the concentration of CO₂ remaining in the atmosphere. DAC is one type of engineered CDR that offers permanent removal of CO₂ from the atmosphere when paired with geologic storage; alternatively, captured CO₂ can also be reused to produce essential fuels, chemicals, and products and offset emissions from these emissions intensive sectors.

Indeed, the IPCC's recent Working Group III Climate Change 2022: Mitigation of Climate Change confirms the critical role that dramatically accelerated deployment of carbon management technologies must play in managing emissions from existing industrial facilities and power plants, balancing emissions from challenging-to-decarbonize sectors, and removing legacy CO₂ emissions from the atmosphere. IPCC's Synthesis Report of the IPCC Sixth Assessment Report (AR6) stated that the use of carbon dioxide removal to reach net-zero emissions is "unavoidable".

Among the pathways IPCC considers there is a median of 665 gigatons (billion tons) of carbon dioxide cumulatively captured and stored between now and 2100, or nearly 9 gigatons captured or removed and stored on average, globally, per year. The

<u>International Energy Agency</u> estimates that to meet net zero, the DAC sector must be scaled up globally to capture more than 85 million tons of CO₂ per year in 2030, and nearly 1 gigaton (or billion tons) of CO₂ per year by 2050.

There has been tremendous and encouraging progress in this industry over a very short period, and we disagree with the characterization that these technology pathways are "technologically and economically unproven". Currently, there are 18 direct air capture plants operating worldwide, capturing 10,000 tons of CO₂ per year— these facilities are pilot scale, except for Climeworks' Orca, the world's first commercial-scale DAC facility. Additionally, 1PointFive's direct air capture facility, Stratos, began construction in April 2023 in the United States and is expected to capture up to 500,000 metric tons of CO₂ per year, with the ability to scale up to capture 1 million metric tons per year. As identified by the <u>Great Plains Institute</u>, The United States offers several regions that are prime locations to develop regional DAC hubs, including regional factors such as available sources of low-carbon heat and power, climate and atmospheric conditions, as well as proximity to available geologic storage and infrastructure.

In addition to commercial developments, the U.S. is providing the most forward looking policy supports for the large-scale deployment of DAC, including but not limited to the U.S. Department of Energy's <u>DAC Hubs</u> program. The DAC Hubs program makes available \$3.5 billion in funding to establish four regional DAC hubs capable of capturing, storing, and/or utilizing at least one million metric tons of CO₂. The DAC Hubs program combined with the policy support for DAC provided by the Section 45Q tax credit, federal policy support in the United States is providing a strong market signal to develop and deploy this technology at climate scale. These developments and investments in the United States will reduce costs of deploying these critical technologies so that they are commercially available globally in timeframes that enable meeting the Paris Agreement.

Additionally, DAC deployment can help advance sustainable development goals, a goal of Article 6.4, by providing well-paying jobs and economic benefits, while removing and permanently storing CO₂. According to the Rhodium Group, the scale-up of the domestic DAC industry could provide hundreds of thousands of jobs in construction, engineering, and equipment manufacturing.

Therefore, we respectfully request that the Supervisory Body revisit its mischaracterization of engineering-based removals in A6.4-SB005-AA-A09 and their overall importance in enabling meeting the temperature targets outlined in the Paris Agreement.

Sincerely,

JK Stolark

Jessie Stolark
Executive Director

Carbon Capture Coalition

About Us:

The Carbon Capture Coalition is a nonpartisan collaboration of more than 100 companies, labor unions, and conservation and environmental policy organizations, building federal policy support to enable economy-wide, commercial-scale deployment of carbon management technologies, which includes carbon capture at industrial facilities, to meet midcentury climate goals, strengthen and decarbonize domestic energy, industrial production, and manufacturing, while at the same time retaining and expanding a high-wage jobs base.

The Coalition works with U.S. policymakers across the political spectrum to enact and implement policies to support the economy-wide adoption of carbon management technologies to address our changing climate. This includes support for the full value chain of carbon management technologies, carbon capture, removal, transport, utilization and storage.