

Ranking Member Deborah Ross (D-NC) of the Subcommittee on Environment

Subcommittees on Energy and Environment Joint Hearing:

Navigating the Blue Frontier: Evaluating the Potential of Marine Carbon Dioxide Removal Approaches

September 19, 2024

Thank you, Chairman Miller and Chairman Williams, for holding this important hearing on an emerging field of science that could help mitigate the ongoing climate crisis. And thank you to our expert witnesses for sharing your testimony and insights on this topic. Global climate is changing at an alarming and unprecedented rate due to ever-increasing atmospheric concentrations of greenhouse gases.

This year alone, the U.S. has experienced the earliest Category 5 Atlantic hurricane on record, massive tornado outbreaks, torrential floods, widespread wildfires, severe heatwaves, and more. Around the world, extreme weather has become more frequent and more dangerous, and is only expected to worsen. The longer we wait to aggressively combat climate change, the more we can expect devastating impacts to humans and the environment.

The ocean is a natural sink of atmospheric carbon. In fact, in the more than 200 years since the Industrial Revolution, scientists estimate that the ocean has taken up one-quarter of the carbon dioxide that humans have emitted into the atmosphere. Marine carbon dioxide removal – or mCDR— aims to enhance the ocean's natural ability to absorb carbon from the atmosphere. This developing field holds great promise as a strategy to reverse some of the harm caused by centuries of greenhouse gas emissions.

However, there are still many uncertainties surrounding mCDR – including its effectiveness and environmental impacts. By design, mCDR has the potential to significantly alter the marine environment. While we hope to use this to our advantage and sequester carbon dioxide, we must ensure that mCDR does not create yet another stressor for marine ecosystems and the human communities that are reliant on them, including along the coast in my home state of North Carolina.

Dedicated and responsible research is necessary to grapple with these uncertainties and ensure the field develops ethically and effectively. This research must be carried out in collaboration with the communities that may be impacted, while leveraging partnerships across levels of government and with the academic and private sectors.

In North Carolina, a form of mCDR using coastal olivine weathering is being explored by the company Vesta – and I look forward to seeing how the results of that work can inform the path forward. The potential for meaningful climate change mitigation through mCDR is exciting – but we must recognize the value of the ocean as a cultural and economic resource and do our best to ensure that mCDR approaches do not jeopardize our treasured coastal and marine environments.

In today's hearing, we will explore the state of the science and discuss a responsible path forward for mCDR. While mCDR and other emerging climate solutions may be critical to our endeavor to mitigate climate change, we must remember that the most straightforward path to keeping carbon dioxide out of the atmosphere is to reduce emissions.

Carbon dioxide removal can be viewed as just one tool in our toolbox to combat climate change – but should not be relied upon as an excuse to avoid acting in the present. We can and should act to decarbonize our economy today – as quickly as we can – and look to novel and innovative climate solutions including mCDR to help us remove legacy carbon emissions in the future.

I look forward to hearing from our expert witnesses about the status of mCDR science and what Congress can do to support its responsible advancement.

Thank you, Mr. Chairman, and I yield back.