



Opening Statement of Energy Subcommittee Chairman Brandon Williams

Joint Environment & Energy Subcommittee Hearing

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

September 19, 2024

Good morning and thank you to all our witnesses for taking the time to join us. Today, the Environment and Energy Subcommittees will jointly examine the status of marine carbon dioxide removal approaches, the costs and benefits they provide for reducing emissions, and potential legislative efforts to support this fledgling industry.

Marine carbon dioxide removal, or mCDR for short, is an up-and-coming solution for long-term carbon dioxide storage.

While we have seen progress in the development of direct air capture technologies over the last two decades, people might overlook the fact that the ocean has the potential to hold up to 50 times more carbon dioxide than the atmosphere. This potential could provide another avenue to regain United States energy independence while also being conscious stewards of the environment.

Like most early-stage science topics, the federal research ecosystem has started to build an understanding of the nuances associated with mCDR. Last year, the Department of Energy's Advanced Research Project Agency funded 11 high-risk, high-reward projects to support novel efforts to measure, report, and validate mCDR and identify cost-effective and energy efficient carbon removal solutions.

And in June of this year, the National Oceanic and Atmospheric Administration announced a memorandum of agreement with DOE to ensure their ocean science expertise is combined with and utilized by DOE's research efforts.

Separate from these public sector efforts, private industry has been and will be crucial to facilitating the commercialization of these approaches and creating valuable by-products that can thrive in the free market. Academia has also conducted crucial research that provides the foundation for advancements in the public and private sectors.

In order for mCDR technologies to complete the path to commercialization, public-private partnerships synchronizing all of these efforts will be paramount.

Our witnesses today are well suited to discuss this, as they represent a diverse range of expertise and sectors. Our panel will discuss several different types of mCDR approaches, such as nutrient fertilization, ocean alkalinity enhancement, or direct ocean capture.

These approaches vary in the amount of carbon dioxide they can sequester, as well as the duration of storage. Different approaches are at different technology readiness levels and different stages of commercialization. But there is one commonality amongst them: collectively, they have the potential to mitigate and remove hundreds of millions of tons of carbon dioxide emissions.

Therefore, I hope today's hearing is a chance for us to learn how we in Congress can enable and accelerate the most promising innovations associated with mCDR. As the Chairman of the Energy Subcommittee, I want to ensure that the Department of Energy's world-leading resources serve as a productive counterpart to NOAA's expertise in ocean science. Together with the private sector, these advancements can usher in a new era of United States energy dominance and a clean environment.

With that, I look forward to our conversation, and I yield back.