House panel hears about hopes, risks of CCS in Gulf

A House hearing heard from supporters touting the nascent technology’s benefits, while greens pointed to accidents and environmental justice issues.

BY: HEATHER RICHARDS | 04/29/2022 07:26 AM EDT

Storing carbon dioxide beneath the Gulf of Mexico is achievable, but the jury is out on its value in the fight against climate change, witnesses told lawmakers yesterday during a House Natural Resources subcommittee hearing.

The hearing of the Energy and Mineral Resources Subcommittee was convened to explore offshore storage’s potential and its risks. Chair Alan Lowenthal (D-Calif.) was among the members to acknowledge the Gulf’s ability to hold carbon.

“The outer continental shelf has tremendous potential to permanently store large amounts of carbon dioxide that would otherwise be emitted into the atmosphere,” Lowenthal said, flagging its “unique geology” and proximity to Gulf industries that emit pollution.

The idea is being championed by some of the largest oil companies in the world. They see the Gulf as a place to store carbon emissions captured from heavy industry in the southeastern U.S. and sequester that gas permanently in the saltwater formations and depleted oil fields beneath the ground.

But echoing the reservations of several witnesses on the panel, Lowenthal said carbon storage is “no silver bullet” for climate change and does nothing for other dangerous pollutants from industrial activities.

Ranking member Pete Stauber (R-Minn.) warned of partisanship slowing carbon storage. He argued that offshore storage requires “forward thinking policy,” like robust offshore pipeline networks, and flagged the “general attitude” of opposition toward pipelines from...
the Biden administration and Democrats on the committee as a potential hindrance to that goal.

Stauber also steered the discussion toward the shortcomings of the administration when it comes to permitting and leasing in oil fields, questioning if that would also be a problem for storage.

“Joe Biden must get on the side of American energy,” Stauber said.

A want or a need?

Carbon storage in the Gulf is a new area of jurisdiction for the committee. Last year, Congress greenlighted the use of offshore leases for long-term storage of the greenhouse gas, as part of the bipartisan infrastructure law.

Interior is currently working on the first-ever regulations to cover the practice offshore. Those in the industry have called for expanded federal subsidies to support the practice, while watchdog groups have criticized carbon capture and storage (CCS) as a risky and costly distraction from retiring fossil fuel development.

Supporters of the practice say it can play a critical role in the energy transition. They point to places like the Houston Ship Channel, where an alliance of large offshore oil and chemical companies say they would work together on a CCS project (Energywire, April 20, 2021).

“Trying to address our energy needs and industrial emissions will be more expensive and less effective without CCS,” Tip Meckel, senior research scientist at the University of Texas at Austin's Bureau of Economic Geology, told lawmakers. “CCS is not a want. It is a need.”

Meckel said the science behind CCS is “mature” and industry know-how can accomplish these projects safely.

Erik Milito, president of the National Ocean Industries Association, said industry is poised to engage in Gulf carbon capture but will need more certainty from the federal government, arguing in favor of expanding 45Q tax credits to subsidize offshore carbon dioxide injection and storage.

Greens point to risks

Carroll Muffett, president of the Center for International Environmental Law, firmly disagreed with several comments, pointing to the many setbacks industry has suffered in
successfully utilizing CCS projects around the world.

He argued that “opposition to CCS is rising rapidly” because of its risks, particularly offshore where regulators have already noted difficulty in monitoring oil and gas pipeline infrastructure for leaks and degradation.

Muffett cited a 2020 CO2 pipeline rupture onshore that sent dozens to the hospital in Mississippi, with reports of people “frothing at the mouth and wandering around like zombies” from exposure to high concentrations of CO2, which is an intoxicant and asphyxiant.

The CCS subindustry will also add to the long history of environmental racism in the Gulf, Muffett argued, exacerbating existing impacts of fossil fuel development and industry pollution predominantly in communities of color.

Nichole Saunders, director and senior attorney for the energy transition at the Environmental Defense Fund, said the key issue for offshore storage, which models predict will need to be deployed to meet climate targets, is doing it responsibly.

“There remains much to protect in the Gulf,” she said, arguing Interior's regulations should not be rushed. The agency got one year to pen rules.

The administration must deploy comprehensive research, seek input, conduct modeling and require monitoring to ensure that gas doesn’t leak from reservoirs and pipelines, harming marine ecosystems or threatening human health.

“In the absence of these conditions, the perceived opportunity of carbon storage may fail to overcome the risk that these projects do not live up to their climate promises,” Saunders said.

*Reporter Carlos Anchondo contributed.*

*This story also appears in E&E Daily.*