

Brent spot
\$87.26
▲ +2.09%

Brent futures (1 mo)
\$87.12
▲ +1.76%

WTI spot
\$83.11
▲ +2.09%

WTI futures (1 mo)
\$83.06
▲ +1.88%

UK Nat Gas (1 mo)
101.51p
▼ -1.09%

ENERGY TRANSITION

[See all articles](#)



Offshore carbon capture: Texas state waters in the Houston Ship Channel are available for lease proposals for carbon sequestration. Photo: AP / SCANPIX

Supermajors frustrated by regulation barriers amid high CCS appetite

Federal and Texas state lease sales drive interest in offshore areas that could be used for carbon capture and sequestration, so energy companies want a clear regulatory path forward

12 April 2023 13:31 GMT UPDATED 12 April 2023 17:23 GMT

By [Naomi Klinge](#) in [Houston](#)

Frustrations are growing as federal permitting delays are hindering US energy players from unlocking the vast carbon capture and sequestration potential in the Gulf of Mexico.

The US Gulf Coast is a key region for scaling up carbon capture, given its abundance of depleted oil and gas reservoirs and energy infrastructure.

Upstream companies and US states are poised to scale up the new technology, developing partnerships and leasing pore space, but the permitting delays — including regulatory frameworks for sequestration in federal waters — will need to be sorted before any potential projects can proceed.

The tension over this dilemma was on display last month when oil and gas leaders spoke at an industry conference, and it continues as Texas works to lease offshore acreage this spring for carbon sequestration.

“Society’s demanding us to go through this transition in a cleaner and more sustainable way, and it’s now become economically and technically more feasible with the advent of the Inflation Reduction Act,” ConocoPhillips chief executive Ryan Lance said during the CERAWeek by S&P Global conference. “But it is still procedurally impossible to do this because our permitting doesn’t allow us to do this.”

Beyond the frustration, however, the vision of what companies can achieve in scaling up CCS on the Gulf Coast continues to draw keen interest.

Technologically, “this is certainly something we can do with very large audiences right now” in the Gulf Coast region, said Susan Hovorka, senior researcher at the Gulf Coast Carbon Center out of the University of Texas.

“There are large sources, and a growing number of different types of sources, that want to see the opportunity to decarbonise.”

Currently, the Texas General Land Office is accepting proposals for leases in state waters, in and around the Houston Ship Channel and the Port of Corpus Christi, that will be dedicated to carbon sequestration opportunities.

Through 12 June, the office is accepting proposals for eight large tracts within the Galveston, Chambers, Brazoria and Jefferson counties, along with seven large tracts within the Nueces, Aransas, and Kleberg counties.





The office previously held a successful lease sale in which Talos Energy and Carbonvert were awarded about 40,000 acres of submerged land near Jefferson County, with sequestration capacity of between 225 million and 275 million tonnes.

Since then, Chevron has bought a 50% stake in the project, and the companies have added onshore acreage to bring total sequestration capacity to more than 1 billion tonnes.

Texas state waters and the outer continental shelf, which extends 200 nautical miles (about 370 kilometres) away from the shore, are suitable for carbon capture, Hovorka said, given the vast amounts of geological data from historical oil and gas operations.



Why US supermajors are working to drive down carbon capture costs even after boost in tax credits

[Read more](#)

The Texas state waters extend much farther than other state waters. States typically have authority over waters extending to three nautical miles from shore. Texas has authority over waters extending to nine nautical miles from shore.

Some of the blocks currently available around the Houston Ship Channel are adjacent to blocks that ExxonMobil won in the recent US Gulf of Mexico Oil & Gas Lease Sale 259.

ExxonMobil acquired its blocks in shallow waters of Matagorda Island, near Corpus Christi, and in Galveston and High Island, positioned in strategic proximity to the Houston Ship Channel, where the company has proposed a 100 million tonnes per annum carbon sequestration hub.

This hub includes its 10 million tpa Baytown blue hydrogen project.

The US supermajor's bids were focused on shallow areas while other companies mostly looked towards deeper waters for oil and gas opportunities.

ExxonMobil did not specify whether these bids were intended for fossil fuel development or carbon sequestration.

A spokesperson told Upstream: "ExxonMobil takes a long-term business view, and we will evaluate the seismic and subsurface geology for future commercial potential."

Regulations pending

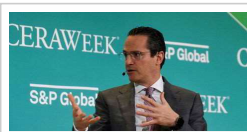
ExxonMobil has said it will work with the Department of the Interior ahead of keenly awaited regulations that will allow the company to move forward with development plans for offshore sequestration in federal areas.

A draft of regulations for carbon sequestration permitting in federal waters was promised in mid-November 2022, under the 2021 Bipartisan Infrastructure Law — but about five months later, no regulations have been published.

Neither the Department of the Interior nor the Bureau of Ocean Energy Management could offer Upstream any update on timing of the draft.

In the meantime, the state of Texas is ahead of the federal government in leasing offshore areas for sequestration.

"[Texas is] a little ahead," Hovorka said. "The federal waters will catch up; they have to be diligent in their rules."



Shut-down oilfields and enforced wind farms: Shell's drastic road to net-zero

[Read more](#)

Permitting backlog

Despite Texas' progressive offshore leasing for carbon sequestration, projects would still need to obtain Class VI permits, which are for dedicated carbon sequestration wells.

Currently, all permit applications outside of North Dakota and Wyoming for Class VI wells have to go through the Environmental Protection Agency (EPA).

Texas is one of several states that are seeking primacy over Class VI wells, so they can handle their own permitting, avoiding a federal backlog of permit applications.

Groups from Texas and other states have asked the EPA to expedite state primacy applications so permits can be

approved faster.

The 2021 Bipartisan Infrastructure Law set aside \$75 million to support Class VI permitting and state primacy programmes.

While federal programmes are delayed and permitting challenges slow down progress, companies are ready to take on the Texas Gulf Coast's opportunities in carbon capture.

"Many companies are interested: major oil companies as well as CCS-specific entrepreneurs who are putting together venture capital, to new companies," Hovorka said.

Read more


- [UK supermajor coming onboard Harbour's Viking carbon capture project](#)
- [Papua New Guinea offshore gas project finally set for FEED lift-off](#)
- [Oil sector needs to dig deep to eliminate flaring](#)

ACCELERATE

ENERGY TRANSITION NEWS FROM UPSTREAM AND RECHARGE

LEIA MARIE PARKER
Editor-in-Chief | Upstream

DARIUS SNIECKUS
Editor-in-Chief | Recharge



Are you missing out on ACCELERATE?

Gain valuable insight into the global oil and gas industry's energy transition from ACCELERATE, the free weekly newsletter from Upstream and Recharge.

Sign up today

[News](#) [Texas](#) [CCS](#) [US Gulf of Mexico](#) [Texas General Land Office](#) [ExxonMobil](#) [Americas](#)

TRENDING TODAY

Rigs And Vessels



BP goes to work with huge drilling rig offshore UK

Finance



Petrofac stock plunges on profit warning two weeks into new chief executive's tenure

Exclusive



Eni puts major new East Med gas project on fast track

 **dn media group** Upstream is part of DN Media Group. To read more about DN Media Group, [click here](#)