



Chevron VP: Linking Gulf Coast hydrogen efforts with Bayou Bend CCS 'makes a lot of sense'

Naomi Klinge

854 words

1 May 2024

Houston Business Journal

HOBJ

English

© 2024 American City Business Journals, Inc. All rights reserved.

Chevron Corp. (NYSE: CVX), a partner in both the Bayou Bend carbon capture and storage project near Beaumont and Port Arthur and the massive HyVelocity hydrogen hub collaboration across the Texas Gulf Coast, is eyeing potential to integrate its hydrogen efforts with its CCS efforts.

Austin Knight, Chevron's vice president of hydrogen, told media at a May 1 event that integrating carbon capture and hydrogen on the Texas Gulf Coast would make sense for both sectors. The Center for Houston's Future and the Houston Energy Transition Initiative of Greater Houston Partnership hosted the event, which detailed a new report from the National Petroleum Council on scaling up hydrogen.

"We're a partner in the Bayou Bend carbon storage project, and this is basically between Houston and Port Arthur, both onshore and offshore. So for us, it makes a lot of sense then to integrate the development of hydrogen into that carbon storage solution in Bayou Bend," Knight said.

However, a Chevron spokesperson clarified that no formal commercial negotiations or otherwise have kicked off between Bayou Bend CCS LLC and the HyVelocity Hub regarding any type of prospective or integrated project.

The Bayou Bend CCS project is a [joint venture between Chevron, TotalEnergies SE \(NYSE: TTE\)](#) and [Equinor ASA \(NYSE: EQNR\)](#), with capacity to store 1 billion tonnes of carbon dioxide underground.

Meanwhile, [the HyVelocity Hub](#) brought seven industry partners with Houston presences — AES Corp. (NYSE: AES), Air Liquide, Chevron, Exxon Mobil Corp. (NYSE: XOM), Mitsubishi Power Americas, Ørsted and Sempra Infrastructure — and other academic, nonprofit and industry partners together to present the Texas Gulf Coast as a candidate for a piece of the up to \$8 billion in hydrogen hub funding the Department of Energy offered. HyVelocity [was one of seven projects selected by the DOE](#), and the team will negotiate with the federal government for up to \$1.2 billion in funding.

Knight said he and the National Petroleum Council do not anticipate repurposing much existing natural gas infrastructure for use in the hydrogen ecosystem — though he said the existing infrastructure in Houston makes it an ideal location for the projects — so new hydrogen and carbon dioxide pipelines will be vital to building out low-carbon-intensity hydrogen.

Last week, the National Petroleum Council presented its "Harnessing Hydrogen" study to Secretary of Energy Jennifer Granholm after developing the report over 18 months. The study was chaired by Chevron CEO Mike Wirth.

The council, made up of 200 members from 100 companies, 30% of which came from the oil and gas industry, gave policy recommendations for scaling up the hydrogen ecosystem to reach net-zero emissions by 2050.

The report found that \$1.9 trillion will be needed through 2050 to scale up the hydrogen industry to reach net-zero goals, and 60% of the industry will be built out on the Gulf Coast, Knight noted.

The other regions of interest were the West Coast and the Great Lakes region.

"We're talking about regions on the basis of where we identify demand, where we identify essentially resources for hydrogen production, but also what's important is delivery, the transmission and also the storage that goes into it," Mark Shuster, deputy director of the energy division at the University of Texas' **Bureau of Economic Geology**, said during a panel at the event.

The Gulf Coast, state of Texas and especially the Houston area [have the infrastructure in place for hydrogen to successfully boom](#) in the coming years, the panelists agreed.

"I think Texas is really going to lead this this hydrogen revolution, and I think it's going to be through the partnerships between industry, local government, universities, and national labs," said Mike Kerby, senior adviser of corporate strategic planning at Exxon. "I think there's a lot a lot that's going to happen here and will tie directly into the hubs."

Bryan Fisher, a managing director at the Rocky Mountain Institute, added that his organization chose Houston as the location of a new venture accelerator due to the city's people and potential for investors.

Finally, Houston's port region has strong access to export terminals that could launch the hydrogen industry faster. Fisher said the export market may develop quicker than domestic demand for hydrogen.

"The concentration [of existing industry] along the Gulf Coast [has resulted in] a lot of the local hydrogen demand and where you have access to terminals for export. And the export component here is one element that makes all of this attractive and helps overcome the economic justification to make these large investments," Knight said.

[Sign up here](#) for the Houston Business Journal's free morning and afternoon daily newsletters to receive the latest business news impacting greater Houston. For more business intelligence, follow us on [LinkedIn](#), [Facebook](#), [X \(formerly known as Twitter\)](#) and [Instagram](#).

Correction:

This story has been updated to better reflect the status of Chevron's integration efforts.

Did you find this article useful? Why not [subscribe](#) to Houston Business Journal for more articles?

Document HOBj000020240501ek510008d