

Livingston Parish Sequestration Hub

FREQUENTLY ASKED QUESTIONS (FAQS)

What is geologic sequestration?

Geologic sequestration means storing carbon dioxide (CO₂) deep underground. These facilities take CO₂ captured from an industrial facility in the area, such as a power plant or cement manufacturer, and inject it deep underground within a subsurface rock formation to be permanently sequestered.

Is Carbon Capture and Sequestration (CCS) proven to work?

Yes. CCS technology and processes have been in use for more than 50 years. According to the Global CCS Institute, there are currently 27 operating CCS facilities around the world capturing over 36 million tonnes per year¹. Additionally, the oil and gas industry has been performing safe geologic sequestration as part of operations with decades of historic data.

How deep will the CCS wells be?

The wells used to inject and monitor the CO₂ underground will reach depths between 5,100 and 7,100 feet. For context, that's deeper than if you stacked the Statue of Liberty head-to-toe over 16 times.

What is being done to protect the groundwater?

The area in which CO₂ will be stored is several thousand feet below the lowest underground source of drinking water. In addition, a nonporous caprock more than 100-feet thick serves as a geologic barrier preventing upward migration of CO₂ into drinking water resources. Monitoring wells will track any fluid movement in the storage area to help ensure the CO₂ remains safely in the storage area. The U.S. EPA permits and monitors wells to ensure compliance with the Underground Injection Controls program authorized by Congress under the Safe Drinking Water Act.

Will there be monitoring and safety programs in place for these wells?

EPA-certified monitoring programs will be in place for construction and operation of the sequestration hub. Our robust monitoring program is designed to protect human health and the environment, and will employ sensors to monitor the CO₂ stored in the formation with numerous safeguards and controls in place at the surface. These comprehensive policies and procedures will help prevent incidents, mitigate risks and prompt quick responses in the unlikely event an incident occurs.

What is the exact location of the CCS hub?

The hub will be located on land leased from Weyerhaeuser Company in the northeastern Livingston Parish between highways 449 and 441.

Is 1PointFive building the pipelines?

1PointFive's pipeline partner for the project is EnLink Midstream. EnLink prides itself on operating pipelines and facilities safely, reliably and with a focus on environmental stewardship.

How will EnLink maintain the pipelines?

EnLink's pipeline infrastructure follows a rigorous asset integrity management program, whereby pipelines undergo smart tool runs, pressure testing, cathodic protection and robust corrosion management. The company's Pipeline Integrity team routinely performs tests that exceed regulatory requirements, reducing risk and increasing the ability to reliably transport products.

EnLink's Pipeline Control Room monitors the operating conditions of the entire pipeline system in real-time 24/7 by utilizing technology, such as automated valve control and leak detection monitoring software—which reduces response time to potential incidents and increases system reliability.

CONTACT INFORMATION

Questions? Email 1PointFiveStakeholders@Oxy.com or call 866-248-9051.

For details on this project please visit 1pointfive.com/livingston.

Will CO₂ be permanently stored or used for Enhanced Oil Recovery (EOR)?

There will be no oil and gas operations associated with the Livingston Parish Sequestration Hub.

Where is the CO₂ coming from?

The CO₂ will come primarily from industrial and power generation sources in the region that would otherwise have been emitted to the atmosphere. This means that this sequestration hub will help regional industrial facilities reduce emissions and permanently and safely store captured CO₂.

Is CCS safe?

Yes. CO₂ poses very little risk to humans. CO₂ is neither flammable nor explosive. It is not toxic to humans, unless released at a very rapid rate and in very high quantities. In fact, CO₂ has been safely and reliably transported in the United States since 1972 with zero fatalities.¹ The likelihood of a leak occurring once the CO₂ is underground is very low. According to the Intergovernmental Panel on Climate Change (IPCC), CO₂ stored in appropriately selected and managed geological reservoirs is 99 percent likely to remain there for over 1,000 years.²

Is CCS cost-effective?

The cost of CCS is quickly declining, due to new business models and increased government and private sector research and development. With more than 140 CCS facilities currently in development globally, costs are projected to decline even further. The IPCC found that it would be, on average, 138 percent more expensive to reach global climate goals without the deployment of CCS.³

Is there enough space to safely store all the CO₂ captured by CCS projects?

The world has more than enough capacity for CO₂, and storage resources can be found in almost every nation in the world. According to the 2021 CO₂ Storage Resource Catalogue,⁴ there are more than 14,000 gigatonnes of storage resources. To put this into context, according to the IEA, global energy-related CO₂ emissions stood at just 33 gigatonnes in 2021.⁵

Sources:

¹ <https://www.globalccsinstitute.com/wp-content/uploads/2021/11/Global-Status-of-CCS-2021-Global-CCS-Institute-1121.pdf>

² Metz, Bert et al, Carbon Dioxide Capture and Storage (Working Group III of the Intergovernmental Panel on Climate Change, Cambridge University Press, 2005), 14

³ Intergovernmental Panel on Climate Change, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

⁴ <https://CO2storageresourcecatalogue.com/>

⁵ <https://www.iea.org/reports/global-energy-review-2021/CO2-emissions>

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