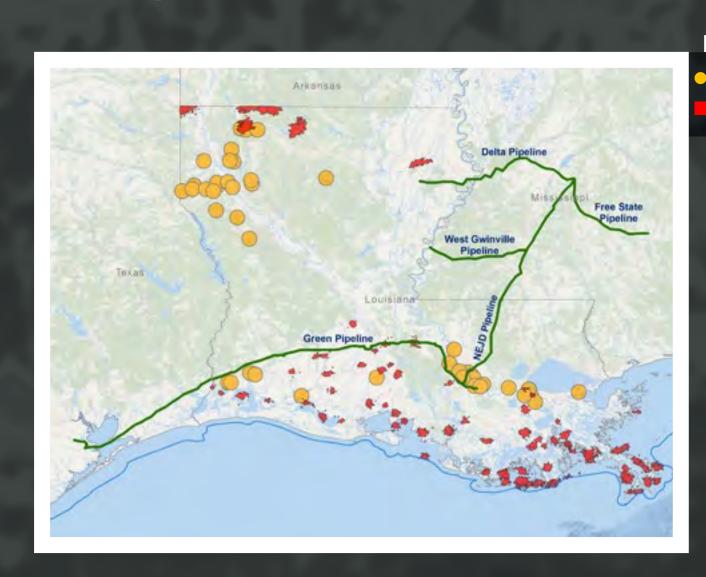






Fast Tracking Infrastructure Development for Future Offshore CO, Storage

- The recently passed Bipartisan Budget Act of 2018 (The Budget Act) may lead to more rapid development of CCUS projects in the United States.
- The Budget Act included language from the Furthering carbon capture, Utilization, Technology, Underground storage, and Reduced Emissions (FUTURE Act). The FUTURE Act provides for tax credits (45Q) for CO, capture, utilization, and/or storage.
- 45Q provides a tax credit of \$12.83 per metric ton captured rising to \$35 per metric ton captured in the next 10 years for CO₂ utilization and \$22.66 per metric ton captured rising to \$50 per metric ton captured in the next 10 years for geologic storage without utilization.
- Construction must begin prior to January 1, 2024.
- Credit is received for 12-year period after equipment is originally placed in service.
- Proper planning of necessary onshore infrastructure could greatly improve the financial viability for future offshore projects.

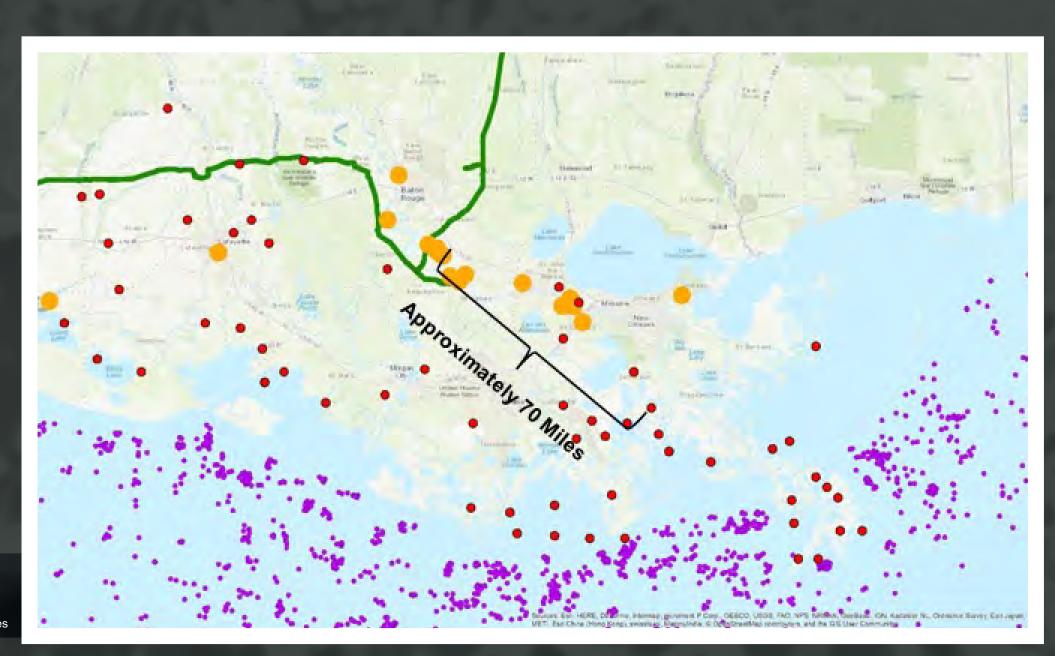


Louisiana CO2-EOR Opportunities Existing CO₂ Pipeline Industrial CO₂ Vents

> **Potential Onshore & Near Shore Opportunities**

CO, Infrastructure Development Opportunity

- Within the Central Gulf Coast Region there are many areas that could benefit from CCUS, both on-shore and off-shore.
- In 2016 SSEB, with assistance from DOE, determined that Louisiana and its industrial corridor along the Mississippi River is uniquely situated to benefit from an integrated CCUS system.
- Additional pipeline infrastructure is needed to connect the Louisiana Industrial Corridor to onshore oilfields with potential for CO₂-EOR.
- Pipeline infrastructure can be sized to allow for expansion into state and federal offshore waters with a relatively small increases in overall spending.



Offshore Projects Are Eligible for 45Q

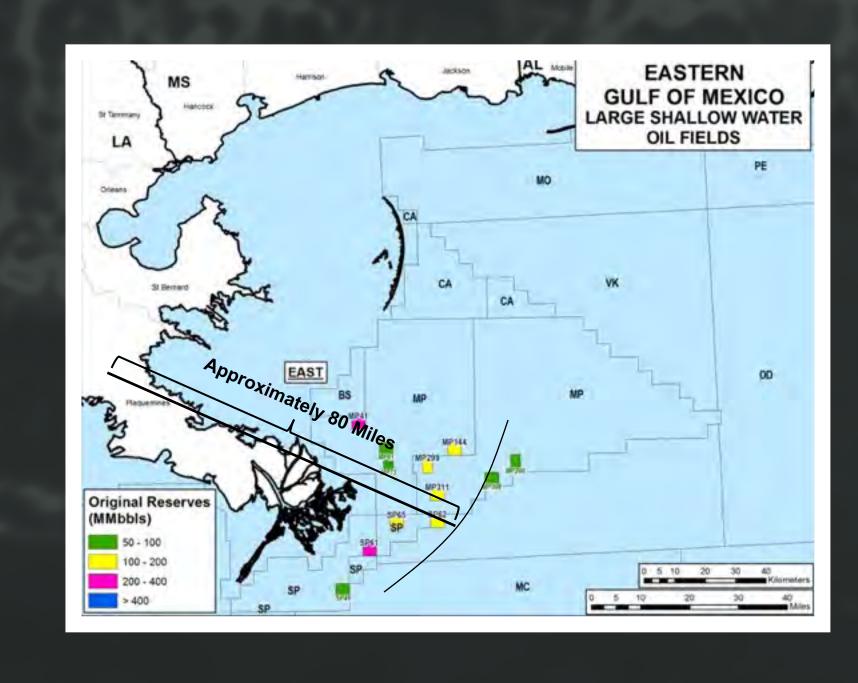
Within the 45Q legislative language only "carbon oxide captured and disposed of or used within the United States" is eligible. The credit shall apply only with respect to qualified carbon oxide the capture and disposal, use, or utilization of which is within:

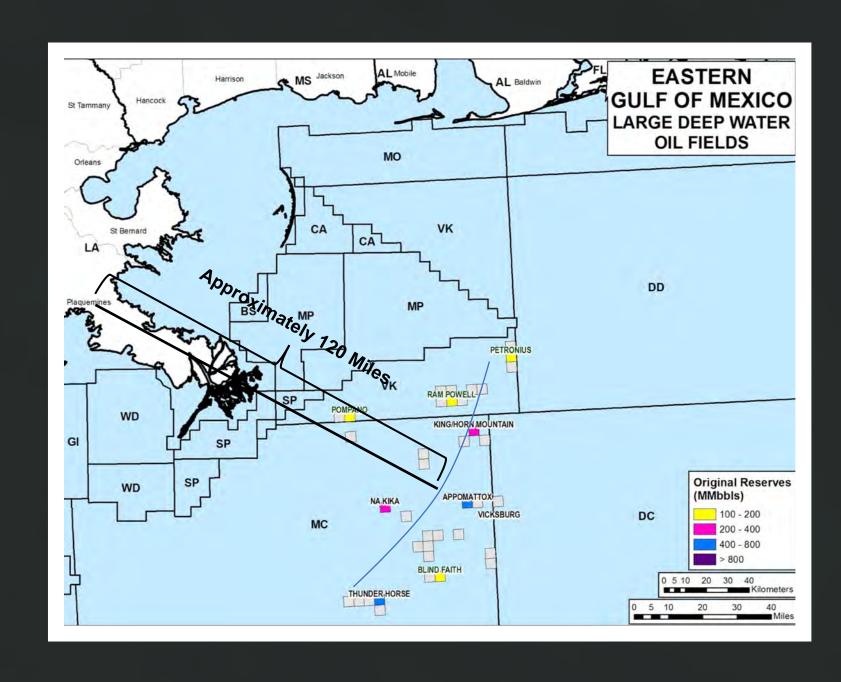
- The United States (within the meaning of Section 638(1)); or
 - 1. The term "United States" when used in a geographical sense includes the seabed and subsoil of those submarine areas which are adjacent to the territorial waters of the United States and over which the United States has exclusive rights, in accordance with international law, with respect to the exploration and exploitation of natural resources;
- A possession of the United States (within the is meaning of section 638 (2))
 - 1. The terms "foreign country" and "possession of the United States" when used in a geographical sense include the seabed and subsoil of those submarine areas which are adjacent to the territorial waters of the foreign country or such possession and over which the foreign country (or the United States in case of such possession) has exclusive rights, in accordance with international law, with respect to the exploration and exploitation of natural resources, but this paragraph shall apply in the case of a foreign country only if it exercises, directly or indirectly, taxing jurisdiction with respect to such exploration or exploitation.

CO₂ Infrastructure Development Opportunity

With oil recovery of 1.89 billion barrels, an oil price of \$72 per barrel (EIA AEO 2017 projected oil price for Year 2020), and a combined shallow and deepwater royalty rate of 18.1%, the Federal Government would receive about \$25 billion dollars of royalty revenues from the oil produced using the GOM CO₂ pipeline systems.

> Source: Advanced Resources International Presented at the 2017 SECARB Annual Stakeholders' Briefing





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