SEEKING FIRST PROJECTS IN THE US OFFSHORE

Context for the GoMCarb Partnership

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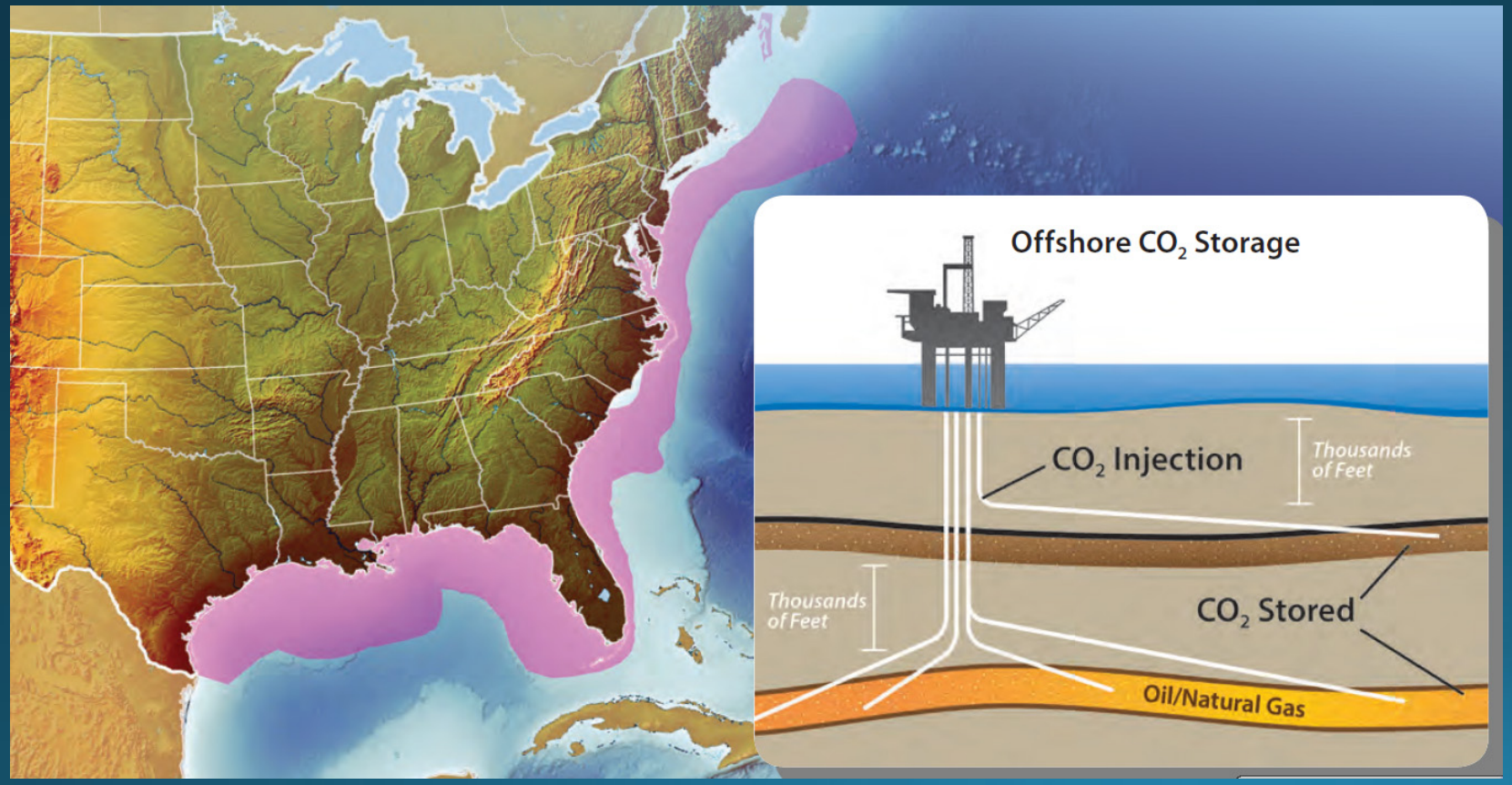
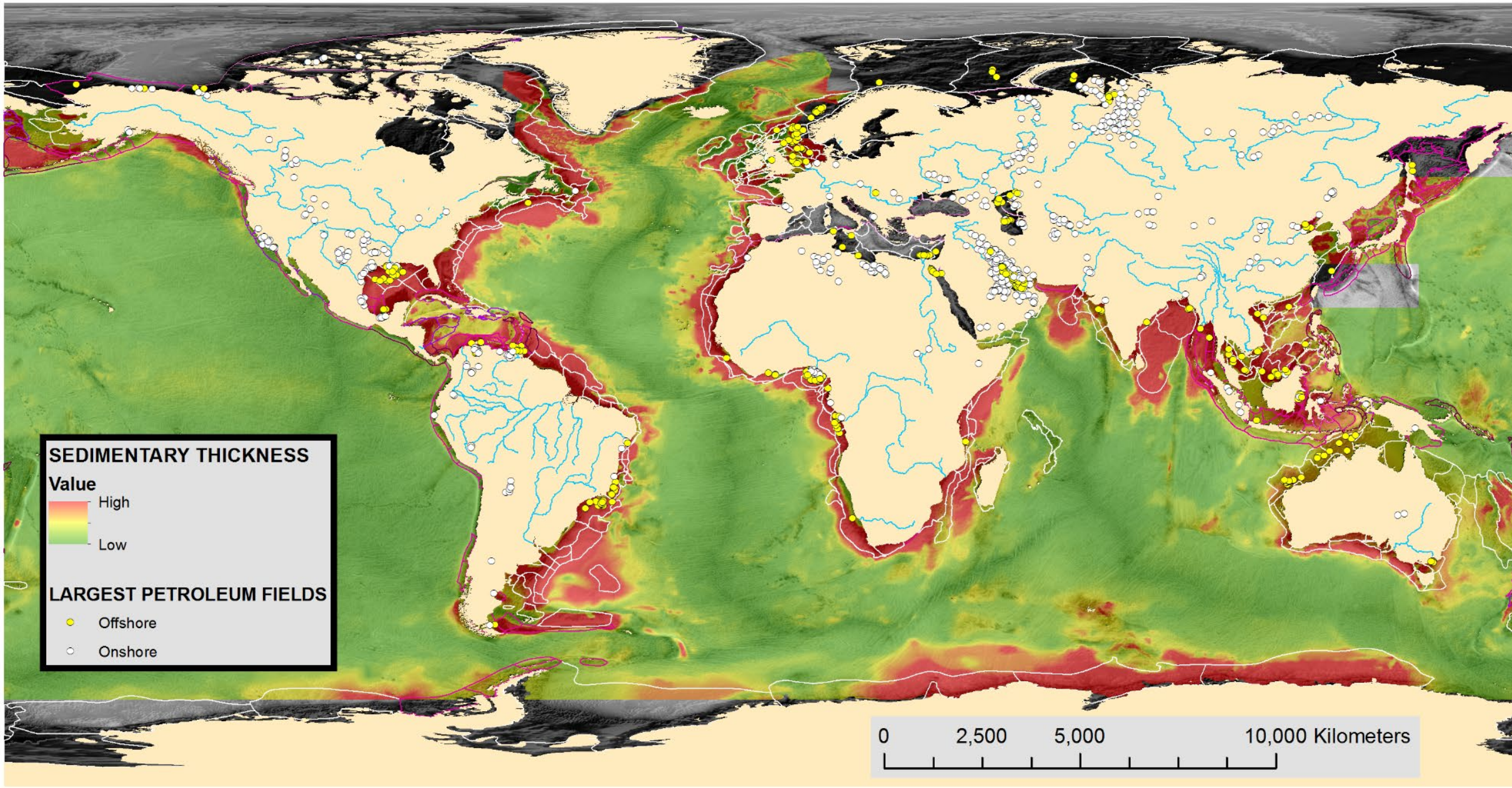
Subsea deep saline storage:

- Adds storage resource for the US
- Reduces multiple risks of onshore storage

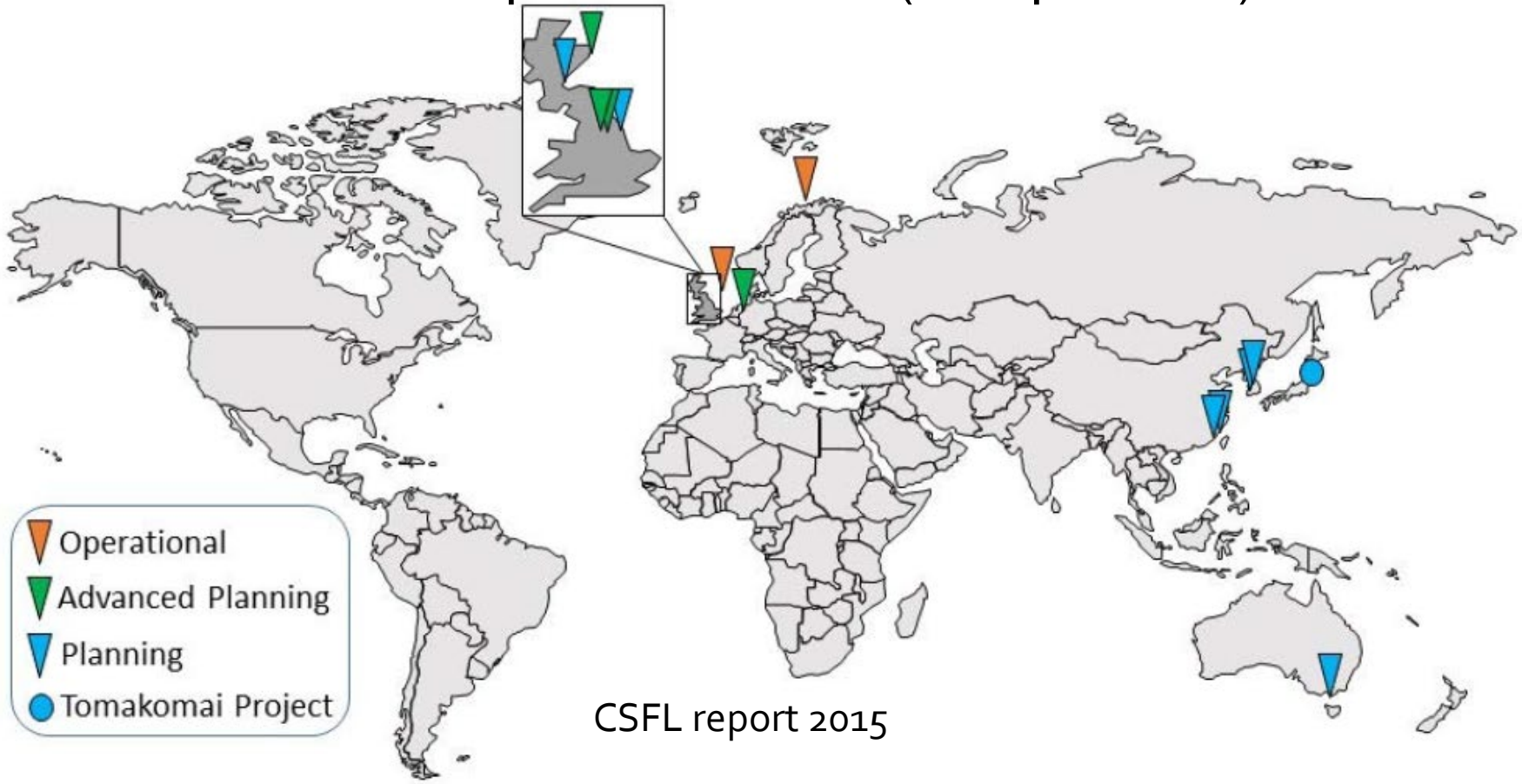


NETL
NATCARB Atlas 2015


SEDIMENTARY THICKNESS
Value
High
Low
LARGEST PETROLEUM FIELDS
Offshore
Onshore
0
2,500
5,000
10,000 Kilometers

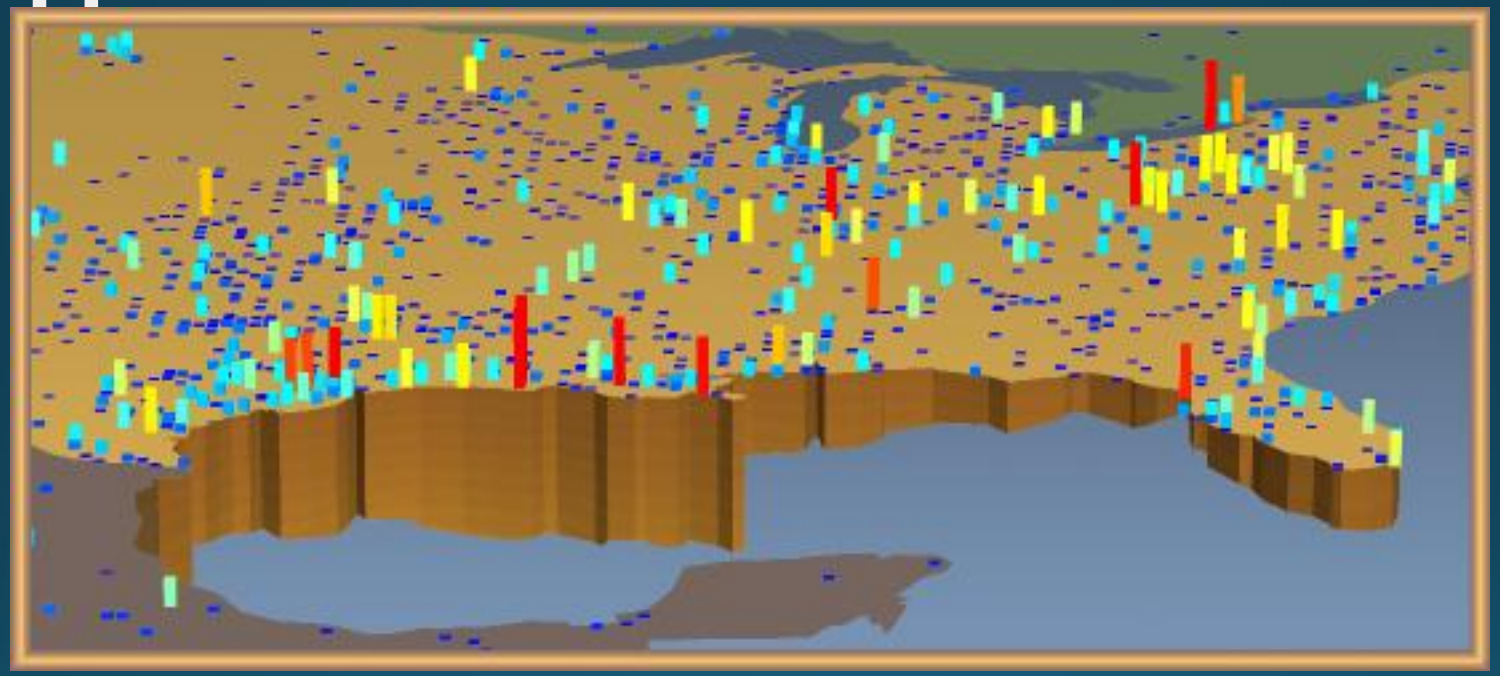
Ready for investment in US?

- Advanced in other parts of world (see panel 2)



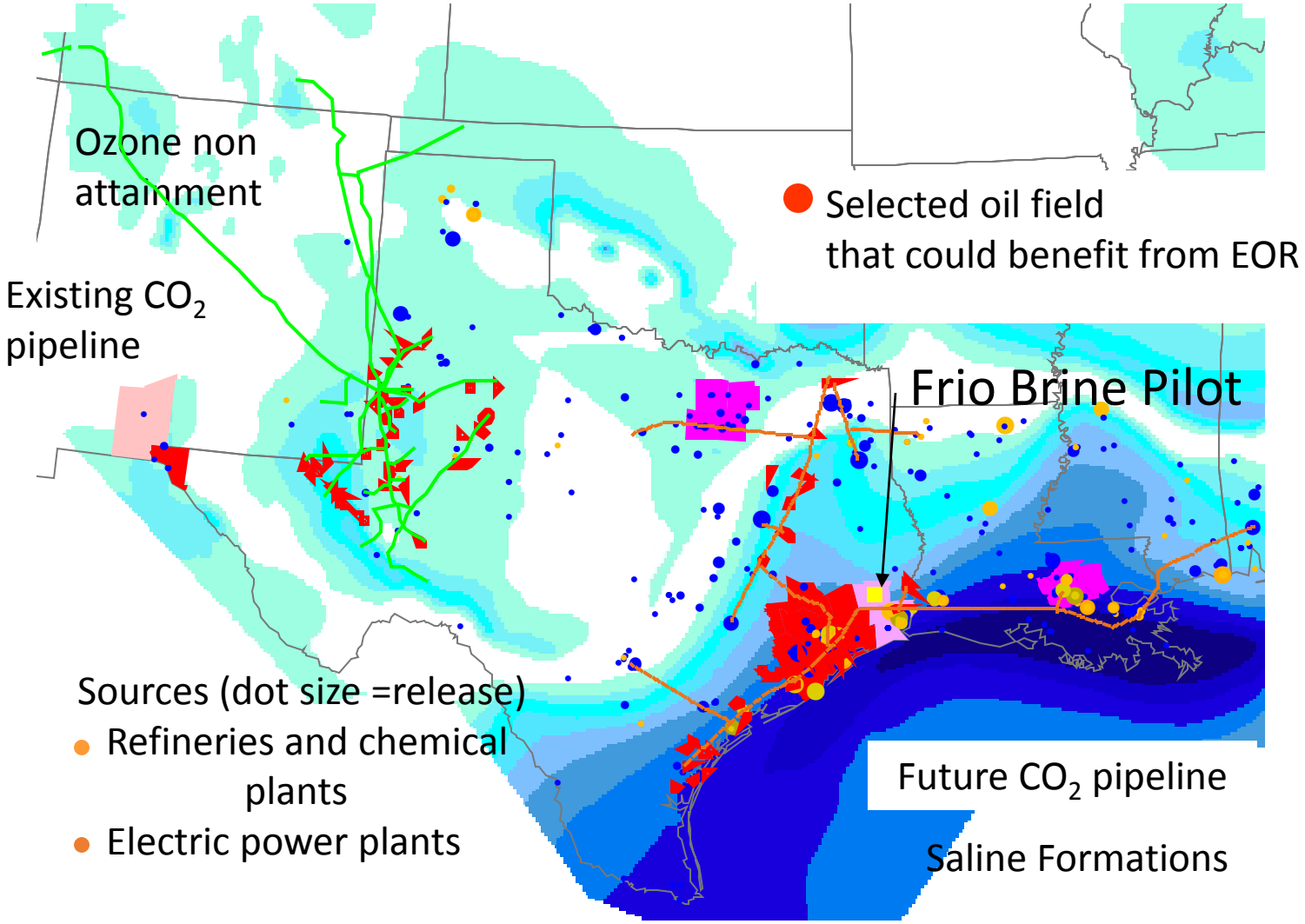
CSFL report 2015

Unique Opportunities and Risks in the Gulf Coast



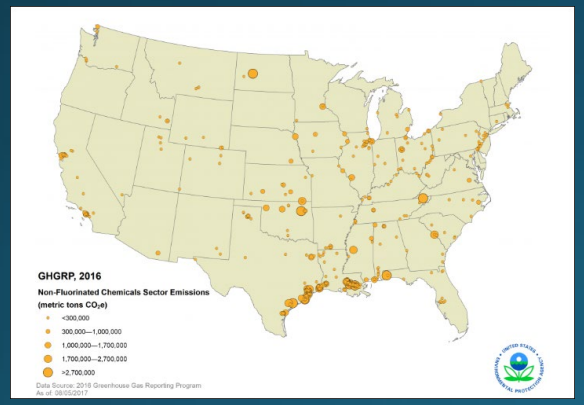
The problem and the opportunity:
Numerous sources of CO_2 in high concentrations are collocated on thick of sedimentary rocks

Focus on the Gulf Coast

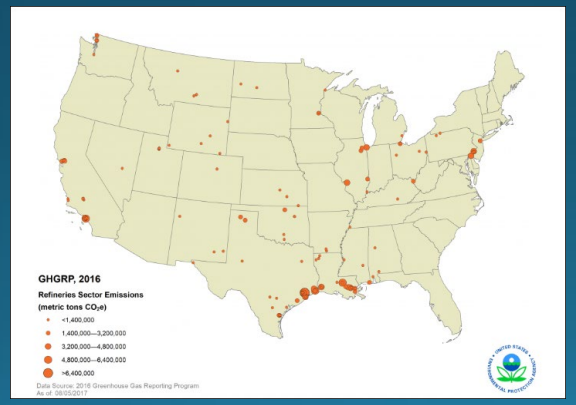


Ready for investment in US?

- .Storage not demonstrated in US waters
  - Lots of progress on feasibility (see rest of this program!)
    - 2008 overall capacity evaluation
    - Characterization studies – SOSRA and TXLA GOM
    - Multi-state characterization studies in eastern US and west coast
    - Two source-sink matching studies in Carbon SAFE Phase
  - How and where will the "show me" moment occur?



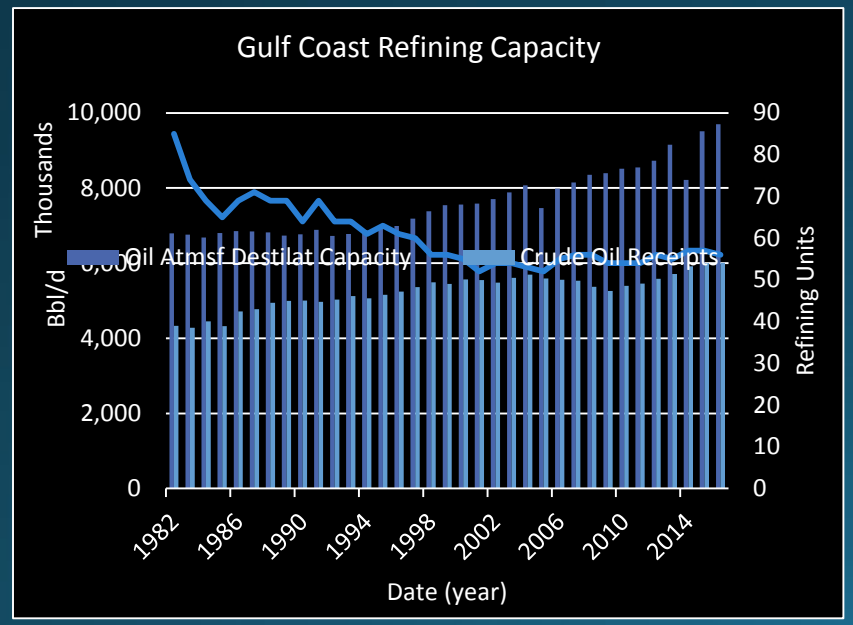
Chemical sector emissions EIA 2018



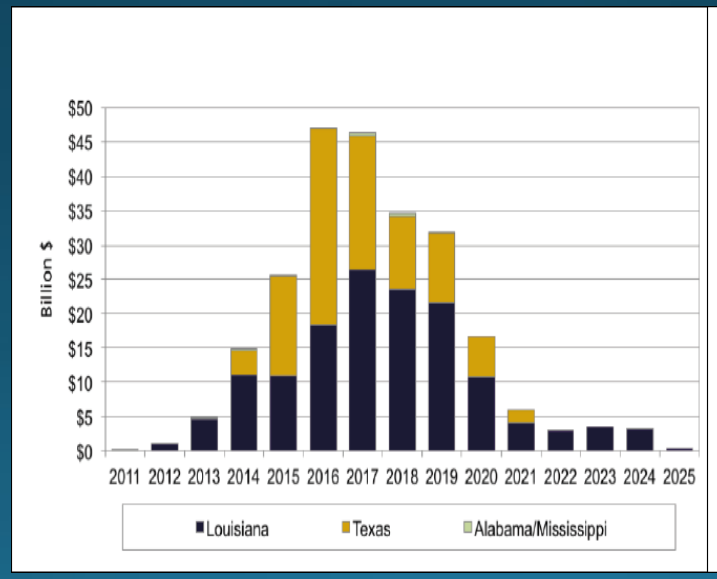
Refineries Sector Emissions IEA 2018

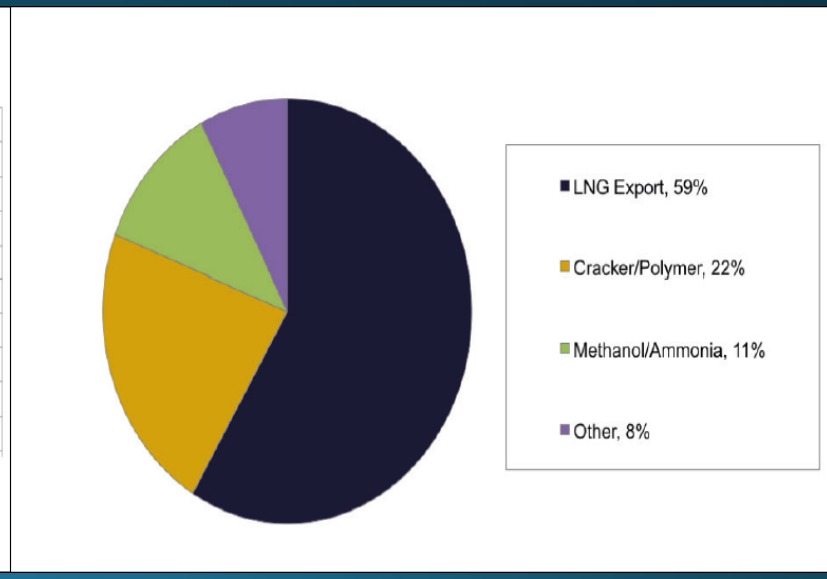
Gulf Coast Case

- Concentrated high concentration sources
  - Petrochemical, natural gas, LNG
  - Investment and growth



Ramon Gil

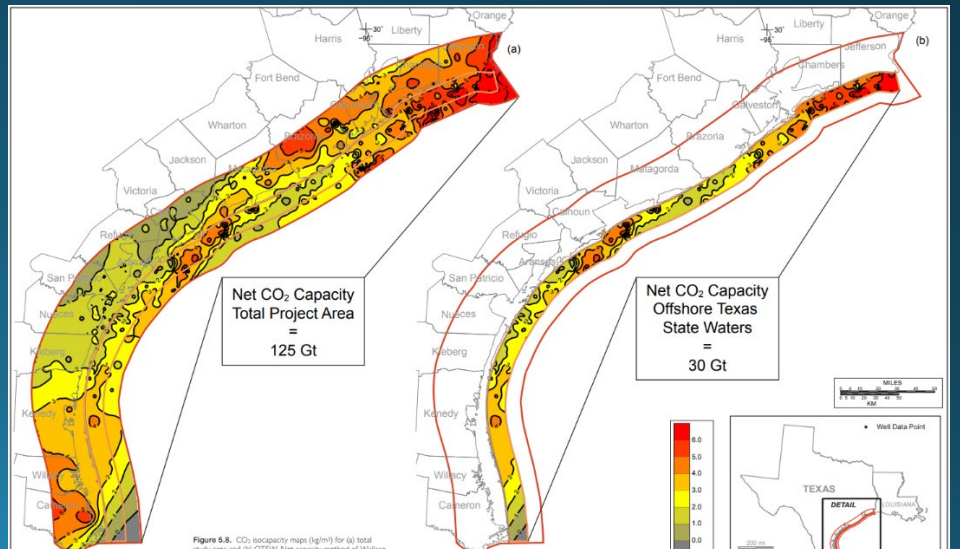




Gulf Coast petrochemical industrial expansions capital expenditures
Coombus, et al, 2017

Gulf Coast Case

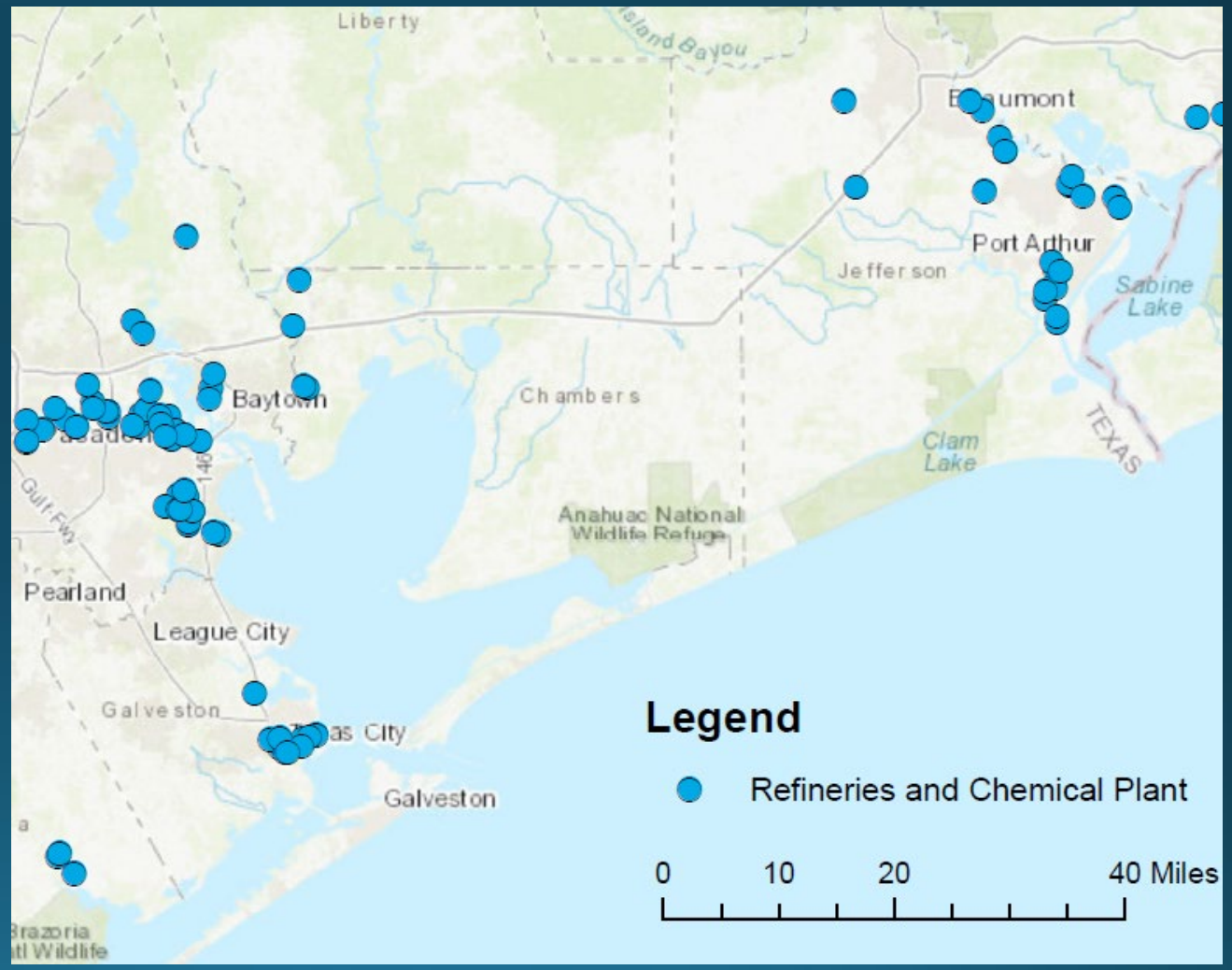
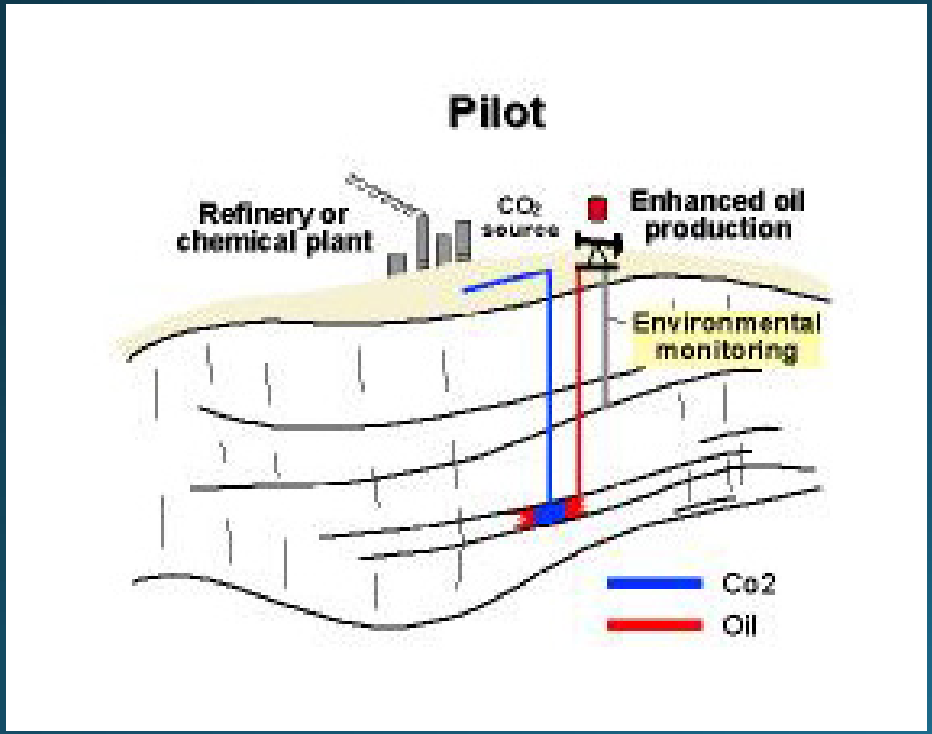
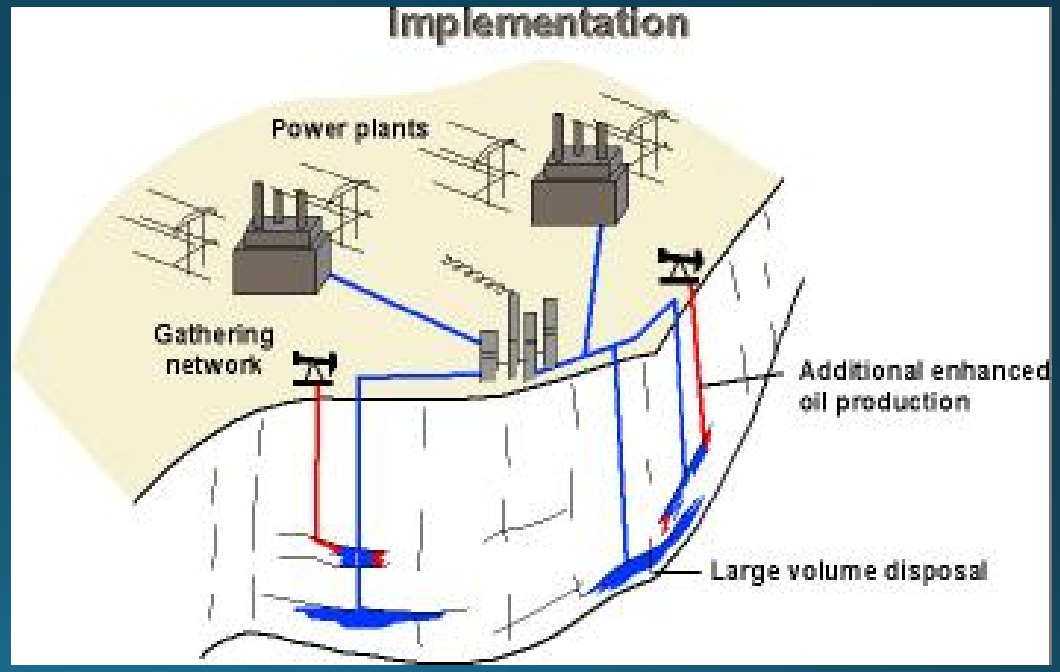
- Extensive storage resource
  - Thick aerially extensive permeable sandstones
  - High quality proven ductile seals
  - Just offshore – proximal to sources
  - State(s) are single surface-subsurface ownership – charged with use for public good



Carr et al. 2011

Focus on Hubs

Aggregation of sources yields higher volumes and lower cost per ton stored



Staging a first project to develop commercial resource