Decarbonization Potential of CO$_2$-EOR

Vanessa Nuñez-López
Research Scientist Associate
Gulf Coast Carbon Center
Bureau of Economic Geology
The University of Texas at Austin

Panel: Clean, Green or In-between: Competing visions of a decarbonized economy
Combining oil recovery with CO₂ storage can provide energy and economic security as well as environmental benefits by reducing CO₂ emissions through permanent CO₂ storage.

But...

Does CO₂-EOR really reduce greenhouse gas emissions?
Can the oil produced through the process of CO$_2$-EOR be net carbon negative?

Carbon Emissions Accounting (through LCA)

Carbon emitted

- Carbon captured
- Carbon utilized (CO$_2$-EOR)
- Oil produced, refined, burned.

Carbon stored
Our results validate CO$_2$-EOR as a greenhouse gas emission reduction technology.