Overview of ExxonMobil CCS Projects

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The presentation is for discussion purposes only. Statements of future events, investment opportunities or conditions in this presentation are forward-looking statements. Actual future results, including project plans and timing, carbon capture and storage results and the impact of operational and technology efforts could vary depending on the ability to execute operational objectives on a timely and successful basis; national, regional and local policies; changes in laws and regulations including laws and regulations regarding greenhouse gas emissions, carbon capture and carbon costs; trade patterns and the development and enforcement of local, national and regional mandates; unforeseen technical or operational difficulties; the outcome of research efforts and future technology developments, including the ability to scale projects and technologies on a commercially competitive basis; changes in supply and demand and other market factors affecting future prices of oil, gas, and petrochemical products; changes in the relative energy mix across activities and geographies; the actions of competitors; changes in regional and global economic growth rates and consumer preferences; the pace of regional and global recovery from the COVID-19 pandemic and actions taken by governments and consumers resulting from the pandemic; changes in population growth, economic development or migration patterns; and other factors discussed in Item 1A. “Risk Factors” in ExxonMobil’s latest report on Form 10-K and subsequent Quarterly Reports on Forms 10-Q, as well as under the heading “Factors Affecting Future Results” on the Investors page of ExxonMobil’s website at www.exxonmobil.com. References to “ExxonMobil” in this presentation are used for convenience and may refer to one or more of Exxon Mobil Corporation and its affiliates.
ExxonMobil is the Global Leader in CCS

- ExxonMobil is the largest capturer of anthropogenic CO$_2$, with equity in ~ 1/5 of the world’s capture capacity (current capture capacity ~ 9 million tonnes of CO$_2$ a year)

- Since 1970, ExxonMobil has captured more CO$_2$ than any other company, accounting for approximately 40 percent of cumulative CO$_2$ captured, with projects operating in the United States, Australia, and Qatar

- ExxonMobil is currently evaluating over 20 CCS opportunities that have potential to be commercially viable through convergence of advantaged technologies and supportive policies

- ExxonMobil has active R&D collaborations with Fuel Cell Energy, Global Thermostat and TDA Research, as well as energy centers with multiple universities

![Cumulative CO2 capture volume since 1970](image-url)
ExxonMobil announced plans for a Houston Ship Channel CCS Hub

**TARGETING**

| ~50 | largest emitting facilities |

**POTENTIAL TO MITIGATE**

| ~100 | million tonnes CO₂ annually |

**GULF COAST STORAGE POTENTIAL**

| ~500 | billion metric tons |

**CRITICAL ENABLERS INCLUDE**

- Supportive regulatory and legal framework
- Adequate financial incentives
- Broad industry and government alignment
- Public support
ExxonMobil has progressed permitting for the expansion of its La Barge CCS facilities in Wyoming, USA, which could enable an additional one million tonnes of CO₂ per year to be captured. Existing facilities currently capture approximately 7 million tonnes per year, which is the largest amount of CO₂ captured by any industrial facility in the world.

ExxonMobil is a partner in Porthos CCS project. The CO₂ from industrial sources in Port of Rotterdam will be stored in a depleted oil and gas field. Government of Netherlands awarded 2 Billion Euros for the project.

ExxonMobil is a partner in several existing joint ventures with Qatar Petroleum that operate a CCS project with an annual capacity of 2.1 million tonnes at Ras Laffan. ExxonMobil is evaluating opportunities to add additional capture capacity in the region.

ExxonMobil is a partner in an ongoing CCS project in Gorgon. As part of this project about 4 MTA CO₂ injected into subsurface using 9 CO₂ injector wells. The project has been partially funded by Government of Australia.

ExxonMobil is planning an ASEAN CCS hub concept to capture, transport and permanently store CO₂ generated by industrial activity in the Asia-Pacific region. The initial project concept is based on a plan to capture CO₂ emissions from Singapore manufacturing facilities for storage in the ASEAN region.

ExxonMobil has proposed 100 MTA CCS project to decarbonize Houston. The CO₂ from all major point sources will be transported to and safely stored in Texas Gulf Coast. The project requires about $100B and will be a collaboration between government and industry.
• **Objective**
  + Develop a quantitative, techno economic understanding of geologic CO$_2$ sequestration options for ASEAN including geoscience, transportation, and policy related issues.

• **Impact**
  + Identify seriatim of regional geologic CO$_2$ opportunities to sequester captured anthropogenic CO$_2$ from ASEAN.
  + CCS critical path for ASEAN meeting CO$_2$ reduction targets

• **Approach**:
  + Geosequestration storage capacity including saline aquifers, depleted oil and gas reservoirs and EOR
  + Transport options, costs: CO$_2$ via pipeline or ship
  + Policy, Regulation, and Incentives

• **Resources (1 year study)**
  + *SgEC - NUS*: three groups in Civil Engineering, Energy Studies Institute
  + *Global CCS Institute*, Melbourne, Australia
  + *ExxonMobil*: US, Singapore, Australia, Malaysia, Indonesia, Thailand, Vietnam
  + *External Advisory Team*: Malaysia, Indonesia, Vietnam, Thailand