ADVANCEMENTS IN CCS AND HYDROGEN

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IOGCC Annual Meeting
November 9, 2021
ExxonMobil Low Carbon Solutions OBJECTIVES

• Build new low-carbon business, establishing industry leadership

• Enable carbon footprint reduction of existing business
WHY CCS?

- Renewables are important, but cannot decarbonize heavy industry and manufacturing.
- IEA, IPCC say net-zero is impossible without CCS.
- Safe, proven technology and immediately deployable.
OUR PROJECTS

ANNOUNCED PROJECTS

- Multiple other opportunities are under evaluation.
SCOPE

- Capture CO$_2$ from ~50 large emitters
- ~350 miles of CO$_2$ pipeline, using existing corridors
- Multiple offshore wells

TIMELINE

- 50MTA by 2030
- 100MTA by 2040
- Help meet Houston's goal to be carbon neutral by 2050

APPROACH

- Cross-industry collaboration
COMMUNITY BENEFITS OF THE HUB

- Improved air quality
- Jobs & economic impact
- Position Houston as leader in lower-carbon energy future
POTENTIAL FOR HYDROGEN

FEED

CH₄ → HYDROGEN MANUFACTURING → H₂ + CO₂ → CARBON CAPTURE → H₂ → Carbon Storage

DEMAND SECTORS

Power
Transportation
Residential / Commercial
Industrial
INDUSTRY COLLABORATION
WHAT’S NEEDED

ENHANCE NON-EOR CCS PRODUCTION TAX CREDIT (45Q)
- Initially increase value to $100 per metric ton from current $50
- Extend eligibility period to 30 years from current 12 years
- Eliminate deadline for starting construction

PROVIDE FINANCIAL SUPPORT FOR CCS INFRASTRUCTURE
- Provide a $10 billion grant to help develop infrastructure in Houston by extending current DOE programs beyond RD&D
- Expand DOE Title XVII program to include the deployment of existing CCS technologies at scale
- Amend TIFIA to add CCS projects, or create a program dedicated to CCS

ENSURE GOVERNMENT APPROVAL FOR CO₂ STORAGE
- Specifically allow offshore storage of CO₂ from sources other than coal
- Authorize the BOEM to issue leases, rights of way and pore space
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