







National Petroleum Council (NPC) CCUS Study

Leslie Savage August 2019

















- Sept. 21, 2017 Energy Secretary Perry
 - Requested that NPC undertake a study to define potential pathways for integrating CCUS at scale into the energy and industrial marketplace, with specific emphasis on the petroleum industry.



- Requested that the study
 - Address value chain from capture to storage/use
 - Consider technologies applicable to power generation, industrial processes, and enhanced recovery
 - Consider different fuel types or energy sources



- Requested that the study consider factors
 - Technology options and readiness
 - Market dynamics
 - Cross-industry integration and infrastructure
 - Legal and regulatory issues
 - Policy mandates
 - Economics and financing
 - Environmental footprint
 - Public acceptance



Questions:

- What are the US and global future energy demand outlooks and environmental benefits from application of CCUS technologies in various end-use sectors?
- What R&D, technology, and infrastructure barriers must be overcome to ensure economic deployment of CCUS at scale?
- How should success of CCUS at scale be defined?
- What actions can be taken to establish an economic framework that guides public policy and stimulate private-sector investment to advance CCUS at scale?
- What regulatory, legal, liability, or other issues should be addressed to progress commercial CCUS investment and enable the US industry to be the global technology leaders?



• Study:

- Executive Summary and Roadmap with Detailed Recommendations
- Chapter 1 Energy & Emissions Landscape
- Technology Overview
 - Chapter 2 Capture
 - Chapter 3 Transport
 - Chapter 4 Use
 - Chapter 5 Storage
 - Chapter 6 -- EOR
- Enabling Factors Overview
 - Chapter 7 Value Chains/Cost Curve
 - Chapter 8 Policy, Regulatory & Legal
 - Chapter 9 Stakeholder Engagement





Wayne Christian, Chairman Christi Craddick, Commissioner Ryan Sitton, Commissioner

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