



Center for Carbon Management in Energy
UNIVERSITY OF HOUSTON



Southern States Energy Board & the University of Houston's Center for Carbon Management in Energy

A Carbon Capture, Utilization, and Storage Commercial Deployment Consortium

Rapid and transformative commercial deployment of carbon dioxide (CO₂) capture, utilization, and storage (CCUS) technologies facilitate the growth of sustainable energy development and require comprehensive business models for success. This transformation involves short-term project activation and commercial demonstrations, as well as the development of a consortium that will enable broad, impactful, long-term commercial deployment. Significant impact is essential to deliver a world-leading set of solutions and U.S. economic growth through jobs and value creation domestically and global leadership for international deployment.

The U.S. Department of Energy’s Fossil Energy and Carbon Management office has achieved significant milestones in the advancement of carbon management and CCUS technologies. The commercial deployment challenges of these technologies span industry, academia, and government topics and are not simply solved by industry, as the challenges facing this technology and marketplace are unique and will be a significant aspect of risk assessment. The partnership of industry, financial sector, government, and academia can address challenges and provide commercial pathways to solutions and frameworks that will enable CCUS market penetration.

In 2020, the Southern States Energy Board (SSEB) and the University of Houston’s Center for Carbon Management in Energy (UHCCME) established a CCUS Commercial Deployment Consortium. The Consortium is comprised of subject matter experts that has grown from 35 companies and organizations initially to now over 70 entities. The Consortium includes the four DOE-funded Regional Initiatives.

The broad mission of the Consortium is to identify risks and uncertainties across the CCUS value chain and catalyze industry investment outside of existing technical research programs. The Consortium utilizes its membership expertise to operate outside of the purview of existing research programs and apply its vast network to communicate industry activities and support ongoing research and commercialization efforts. To this end, the Consortium will focus its efforts on ‘Transformative’ issues, or those that impact the entire CCUS value chain and without which commercialization of CCUS is improbable.

The Consortium is not intended to replace existing research programs; indeed, the goal of this effort is to work in coordination with industries facing pressure to decarbonize and the Regional Initiatives to advance CCUS towards broad commercialization.



Full Consortium

The Consortium meets regularly via web conferences and in-person meetings. These meetings support Consortium activities that are directed by the membership. As such, the Consortium is periodically surveyed to ensure that our emphases and communications are timely, relevant, and effective in positioning its members to address their most challenging CCUS deployment issues.

Consortium members are a resource to each other, SSEB, UHCCME, and DOE by:

- Maintaining a current list of challenges to commercial deployment of CCUS technologies; and
- Working collaboratively to eliminate or substantially reduce the challenges.

SSEB and UHCCME are a resource to Consortium members across the full CCUs value chain. A few examples include:

- Providing subject matter expertise across the full CCUS value chain;
- Conducting data/information assessments and dissemination;
- Assisting states with UIC Class VI primacy and other policy/regulatory compliance;
- Assisting with stakeholder engagement;
- Offering creative strategies for workforce development; and
- Risk assessments and risk reduction (capture, transportation, utilization, storage).

CCUS Commercialization Consortium Partners



Committees

Three Committees are established to address the three transformative impact areas, including:

1. Environmental Justice & Stakeholder Engagement;
2. Policy and Regulatory Capacities; and
3. Commercialization Enablers - Risk Reduction & Financial Markets.

The Committees meet monthly, and we welcome your participation.

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Points of Contact

If you would like to join or have inquiries about the Consortium, please contact Ken Nemeth, SSEB, at nemeth@sseb.org or Chuck McConnell, UHCCME, at cmconne@uh.edu.