



The Future of Carbon Capture, Utilization, and Storage: Technology and Policy Considerations Agenda

Virtual Workshop

Wednesday, September 29 – Thursday, September 30, 2021

Day 1: Technology Considerations for CCUS Wednesday, September 29, 2021	
Time (EDT)	Session Title, Description, and Speakers
1:00– 1:30 PM	<p>Welcome, Opening Remarks, and Keynote for Day One The U.S. Department of Energy plays a pivotal role in the Biden Administration’s energy and climate change agenda and in implementing the Infrastructure Bill. While progress is being made, some sectors remain carbon-intensive and will need to deploy Carbon Capture, Utilization, and Storage (CCUS) technologies. The Office of Fossil Energy and Carbon Management is leading the research on CCUS and is also working with states, industry, and academia on how to address hard-to-decarbonize sectors of the economy.</p> <p>Moderator:</p> <ul style="list-style-type: none"> • David Terry, Executive Director, NASEO <p>Speaker:</p> <ul style="list-style-type: none"> • Dr. Emily Grubert, Deputy Assistant Secretary for Carbon Management, Office of Fossil Energy and Carbon Management, U.S. Department of Energy
1:30 –2:00 PM	<p>Where are we now? The Technological Status of CCUS While progress has been made, capturing, storing, and utilizing carbon remains technologically complicated and economically challenging. This fireside chat will outline what the current technological status of CCUS is and where challenges and barriers remain to provide workshop attendees with a sound background on CCUS.</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Kirsten Verclas, Senior Program Director, NASEO <p>Speaker:</p> <ul style="list-style-type: none"> • Dr. Richard Esposito, Research and Development Program Manager, Geosciences and Carbon Management, Southern Company; National Carbon Capture Center
2:00 – 2:45 PM	<p>Capturing, Using, and Sequestering Carbon – Technological Challenges on the Way Forward After examining the status of CCUS technology, this panel will provide insights into the remaining technological challenges and potential solutions to mainstream CCUS. What is the necessary infrastructure for CCUS? What use cases are possible and will they provide economical and financial support to provide a way forward for CCUS?</p>

	<p>Moderator:</p> <ul style="list-style-type: none"> • Eddy Trevino, Director, State Energy Conservation Office, Texas Comptroller of Public Accounts; Member, NASEO Innovation Advisory Group <p>Speakers:</p> <ul style="list-style-type: none"> • Mahmoud Abouelnaga, Senior Fellow, Center for Climate and Energy Solutions • Erin Burns, Executive Director, Carbon180 • Amishi Kumar, Program Manager for Carbon Utilization Research and Development, Office of Fossil Energy and Carbon Management, U.S. Department of Energy
2:45 – 3:00 PM	BREAK
3:00 – 3:45 PM	<p>From Drawing Board to Implementation: Support for CCUS Projects As CCUS technology becomes more mature, projects will have to be moved from the conceptual and pilot stages to wide-scale deployment. What state and federal support and partnerships are necessary to accomplish this process? What lessons can be learned from successful projects and projects that are just embarking on this journey? This panel will explore these questions from project developers' perspectives.</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Rodney Sobin, Senior Program Director, NASEO <p>Speakers:</p> <ul style="list-style-type: none"> • Dr. Eugene Holubnyak, Petroleum Engineer, Kansas Geological Survey • Shannon Mikula, Special Projects Counsel, Minnkota Power Cooperative
3:45 – 4:00 PM	Closing Remarks and Day 2 Preview

<i>Day 2: Policy Considerations for CCUS</i> Thursday, September 30, 2021	
Time (EDT)	Session Title, Description, and Speakers
1:00– 1:30 PM	<p>Fireside Chat on CCUS Policy Outlook State and federal policies on CCUS continue to provide regulatory as well as financial support to advance the technology. This fireside chat will provide a general outlook on CCUS policy development in the past decades and in the future and will also explore linkages between CCUS and other technologies (i.e., hydrogen) as the U.S. moves to decarbonize its economy overall.</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Kirsten Verclas, Senior Program Director, NASEO <p>Speaker:</p> <ul style="list-style-type: none"> • Dr. Julio Friedmann, Senior Research Scholar, Center on Global Energy Policy, School of International and Public Affairs, Columbia University

<p>1:30 – 2:15 PM</p>	<p>CCUS in the Infrastructure Investment and Jobs Act – Opportunities for States In August 2021, the Senate passed the Infrastructure Investment and Jobs Act, with the House schedule to pass a similar bill in September 2021. Speakers in this session will discuss the implication of the bill for states and state energy offices, in particular the Carbon Utilization Program, a grant program for states, local governments, and public utilities or agencies for the procurement of carbon reduction technologies. What could such a grant program look like, and how can states best take advantage of this opportunity?</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Dr. Marion Gold, Senior Advisor, NASEO <p>Speakers:</p> <ul style="list-style-type: none"> • Jessie Stolark, Public Policy and Member Relations Manager, Carbon Capture Coalition • Kipp Coddington, Director Energy Policy and Economics, University of Wyoming
<p>2:15 – 2:45 PM</p>	<p>State Perspectives on CCUS Policy Landscape This panel will explore CCUS considerations from a state perspective. Federal tax incentives such as 45Q and EPA decisions to grant states Class VI Primacy are all part of broader policy considerations for states on CCUS.</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Ed O’Brien, Lead Economist, State Energy Office, Louisiana Department of Natural Resources <p>Speakers:</p> <ul style="list-style-type: none"> • Kevin Connors, Principal Policy and Regulatory Strategist, Energy and Environmental Research Center, University of North Dakota • Jason Lanclos, Director, State Energy Office, Louisiana Department of Natural Resources
<p>2:45 – 3:00 PM</p>	<p>BREAK</p>
<p>3:00 – 3:45 PM</p>	<p>Engaging Communities on CCUS: Workforce Development and Economic Support As states move forward on CCUS policies and projects, community engagement, workforce development and economic support for communities transitioning away from fossil fuel will become critical. How can states ensure that the workforce and infrastructure is available while also engaging the community? What have been some success stories (even from other sectors)?</p> <p>Moderator:</p> <ul style="list-style-type: none"> • Dr. Will Toor, Executive Director, Colorado Energy Office <p>Speakers:</p> <ul style="list-style-type: none"> • Matt Bright, Senior Advocacy and Communications Adviser, Global CCS Institute • Dr. Rudra Kapila, Senior Policy Advisor for Carbon Management, Third Way • Dr. Sallie Greenberg, Principal Scientist, Illinois State Geological Survey
<p>3:45 – 4:30 PM</p>	<p>Policy Considerations for States</p>

	In the final roundtable, state participants have an opportunity to discuss state-specific opportunities and challenges on CCUS.
4:30–4:35 PM	<i>Closing Remarks</i>