



REGISTER NOW

April 4-5, 2012 in Golden, Colorado

PUTTING THE BUSINESS ELEMENTS TOGETHER FOR CO₂ EOR USING CAPTURED CARBON

CCUS (Carbon Capture, Utilization & Storage)—Technical Staff, for today and tomorrow, is a critical need

A Two-day Interactive Forum by the Permian Basin CCUS Center - with Networking for both Students and Companies

TOPICS

- CO₂ Sources
- Processing/Transportation
- Geology and Reservoir Characterization
- Downhole Operations/Safety
- Surface Operations/Safety
- Barriers to Business Success

Contact Vi Schatzinger
(vschatzinger@pttc.org)
for scholarship
information.

STUDENTS

- CCUS and CO₂ EOR combine to provide long-term career opportunities
- For Many Disciplines Across Multiple Sectors
- CO₂ EOR helps reduce greenhouse gas emissions

INDUSTRY

- Enhance Capabilities of Existing Staff for CO₂ EOR/Carbon Capture
- Entice "Tomorrow's" Tech Workforce
- CCUS Produces American Oil (in potentially very large quantities)

Permian Basin CCUS Center — applying world class training in carbon capture, utilization and storage — experienced individuals familiar with operations, transportation, legal and regulatory, and separation putting the pieces together. The Center is a partnership of three strong organizations, combined, they bring formidable industry knowledge and insight to achieve project goals.



Applied Petroleum Technology Academy

The convening organization for Annual CO₂ Conference, founded in the Permian Basin, which produces 70% of world's CO₂ EOR production

WWW.APTAPB.ORG



Petroleum Technology Transfer Council

Delivering insights about "applied, practical" technologies to an extensive network of independents

WWW.PTTC.ORG



American Association of Petroleum Geologists

World's largest geoscience organization with strong interest in the science of CCUS

WWW.AAPG.ORG

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Forum Agenda

Listing of involved companies/organizations (subject to change)

- *From Industry:* Air Products, Baker Hughes, Gaffney-Cline & Associates (a division of Baker Hughes), Blue Source, Carbon Blue Energy, Clean Energy Systems, Denbury Resources, Kinder Morgan, Legado Resources, Paxton U.S., Inc., Summit Power Group, Tenaska, Whiting Petroleum
- *From Government/Other:* Center for Climate and Energy Solutions, DOE Office of Fossil Energy, DOE's National Energy Technology Laboratory, Energy & Environmental Research Center @ University of North Dakota, Natural Resources Defense Council, TX Bureau of Economic Geology

DAY ONE - APRIL 4, 2012

8:00 am	Check-in, Continental Breakfast
8:30 am	Welcome & Forum Overview E. Lance Cole, Petroleum Technology Transfer Council (PTTC)
8:35 am	Morning Keynote Speaker <i>Closely Watched (Gasification) Trains: The Texas Clean Energy Project and CCUS for the Permian Basin</i> Eric Redman, President, Summit Power Group LLC
9:15 am	Introduction to CO₂ EOR Analysis Spreadsheet Steve Melzer, Melzer Consulting
9:35 am	Mini-Break
9:45 am	Examples, Demonstrations and Sensitivities Steve Melzer and Attendees
10:30 am	CCUS Project Screening & Economics John Steelman, Natural Resources Defense Council
11:00 am	Session One: Anthropogenic CO₂ Sources SESSION CO-CHAIRS: STEVE MELZER, MELZER CONSULTING AND DWIGHT RYCHEL, PTTC <ul style="list-style-type: none"> • <i>Trailblazer & Other Tenaska CCUS Projects</i>, Greg Kunkel, VP Environmental Affairs, Tenaska, Inc. • <i>Follow the CO₂ – How Sources of CO₂ Define Deployment Scenarios for Enhanced Oil Recovery</i>, Joseph “Phil” DiPietro, Analyst, Strategic Energy Analysis & Planning, U.S. DOE’s National Energy Technology Laboratory • <i>On-Site CO₂ Solutions</i>, Chris Peters, VP Business Development, Clean Energy Systems, Inc.
12:30 pm	Luncheon Keynote Speaker <i>CO₂ EOR as the U in CCUS</i> , Charles McConnell, Assistant Secretary of Fossil Energy, U.S. Department of Energy
2:00 pm	Session Two: Clean-up, Compression & Transportation – Getting CO₂ to the Oilfield SESSION CO-CHAIRS: ROBERT D. “BOB” KIKER, APPLIED PETROLEUM TECHNOLOGY ACADEMY AND E. LANCE COLE, PTTC <ul style="list-style-type: none"> • <i>CO₂ Transportation—Getting From A to B (&C&D&E...)</i>, Mike Blincow, Director Anthropogenic CO₂ Supply, Denbury Resources, Inc. • <i>Port Arthur Project: Hydrogen to Enhanced Oil Recovery Through CO₂ Capture and Sequestration</i>, Steve Morrison, Global Director Business Development for Tonnage Gases, Air Products • <i>Generating CO₂ Specifically for EOR – The CryoBlue-R Process</i>, Bret Rhinesmith, VP Technology, Carbon Blue Energy, LLC
3:30 pm	Mini-Break
3:40 pm	Session Three: Geology & Reservoir Characterization SESSION CO-CHAIRS: ROBERT TRENTHAM, DIRECTOR, CENTER FOR ENERGY AND ECONOMIC DIVERSIFICATION, UNIVERSITY OF TEXAS PERMIAN BASIN AND VIOLA RAWN-SCHATZINGER, OPERATIONS MANAGER, PTTC <ul style="list-style-type: none"> • <i>Shallow Groundwater Monitoring at the SACROC Oilfield, Scurry County, TX: Good News for CCUS</i>, Rebecca Smyth, Project Manager, Bureau of Economic Geology, The University of Texas at Austin • <i>Goldsmith-Landreth (San Andres) Unit</i>, Bob Trentham, CEED Director, University of Texas Permian Basin on behalf of Legado Resources, LLC • <i>CO₂ EOR Project Reserves/Appraisal</i>, Kerry Sandhu, General Manager Canada, Gaffney-Cline & Associates (a division of Baker Hughes) • <i>ROZ</i>, Steve Melzer, President, Melzer CO₂nsulting
6 - 7:30 pm	Reception @ Table Mountain Inn 1310 Washington Ave, Golden, CO. Ph 303-277-9898

DAY TWO - APRIL 5, 2012

8:30 am	<p>Session Four: CO₂ EOR – Downhole Operations & Safety SESSION CO-CHAIRS: ROBERT D. “BOB” KIKER, APPLIED PETROLEUM TECHNOLOGY ACADEMY AND DWIGHT RYCHEL, ENGINEERING CONSULTANT, PTTC</p> <ul style="list-style-type: none"> • <i>Using CO₂ for Artificial Lift</i>, Ed Payne, Production Manager, Whiting Petroleum • <i>Kinder Morgan’s Approach to Reliable CO₂ Injection</i>, Darrell Ricketson, VP Permian Basin Operations, Kinder Morgan CO₂ Company • <i>Improving Injection Efficiency by Using Polymer Gels</i>, Kerry Sandhu, General Manager Canada, Gaffney-Cline & Associates (a division of Baker Hughes)
10:00 am	<p>Poster Viewing Session Attending grad students were invited to develop posters summarizing their work. There will be other CO₂ EOR/CCUS-oriented posters also. Posters will be on display throughout the conference, but “presenters” will be standing by their posters during this time. Hearing it personally, in addition to viewing the posters, always strengthens the message.</p>
10:40 am	<p>Session Five: CO₂ EOR – Surface Operations & Safety SESSION CO-CHAIRS: ROBERT D. “BOB” KIKER, APPLIED PETROLEUM TECHNOLOGY ACADEMY AND E. LANCE COLE, PTTC</p> <ul style="list-style-type: none"> • <i>A Field Tour of North Ward Estes Operations by Process Flow</i>, Ed Payne, Production Manager, Whiting Petroleum • <i>Legado Resources GLSAU EOR Development Plan</i>, Lonnie Ashley, Senior VP - Operations, Legado Resources, LLC • <i>Surface Flow Operations-Examples of Other Operators</i>, Robert D. “Bob” Kiker, R.D. Kiker Inc.
12:10 am	<p>Luncheon Keynote Speaker <i>“A National EOR Initiative”</i>, Judi Greenwald, VP, Technology and Innovation, Center for Climate and Energy Solutions</p>
1:10 pm	<p>Business Implications of A Class VI Permit – The Long View? A Kansas Perspective Lynn Watney, Senior Scientific Fellow, Petroleum Geology, Kansas Geological Survey</p>
1:40 pm	<p>Session Six: Barriers to Business Success SESSION CO-CHAIRS: STEVE MELZER, MELZER CONSULTING AND DWIGHT RYCHEL, PTTC</p> <ul style="list-style-type: none"> • <i>The Two Most Dangerous Words in the English Language</i>, John Dobitz, President, Paxton U.S., Inc. • Ray Hattenbach, Blue Source • John Harju, Associate Director for Research, Energy & Environmental Research Center, University of North Dakota
2:40 pm	<p>Revisiting the CO₂ EOR Analysis Spreadsheet Steve Melzer, Melzer Consulting</p>
3:00 pm	<p>Conference Wrap-up & Your Feedback on the Forum E. Lance Cole, PTTC</p>
3:10 pm	<p>Conference Adjourns</p>