



Agenda

Morning Session

- 9:00 Welcome—Dr. Carol Frost—Interim Director, University of Wyoming School of Energy Resources
- 9:20 Overview of CO₂ Capture and Sequestration-Ready Technologies Options—Dr. Carol Frost
- 9:50 Overview of DOE CO₂ Sequestration Partnerships—Dawn Marie Deel—U.S. DOE, National Energy Technology Laboratory (NETL)
- 10:20 Break
- 10:40 Big Sky Partnership: Wyoming Situation—Susan Capalbo—Montana State University
- 11:10 Enhanced Oil Recovery: CO₂ Sequestration—James Steidtmann University of Wyoming, EOR Institute
- 11:40 CBM and other Wyoming Opportunities—Michael Godec—Advanced Resources International

12:00



Luncheon Speaker: Carl Bauer, Director,
National Energy Technology Center

Afternoon Session

- 1:15 Barriers to Widespread Deployment of CO₂ Sequestration—Maha Mahasenan, Rio Tinto Energy
- 1:45 CO₂ Sequestration Infrastructure Needs and Costs—John Tombari—Schlumberger Carbon Services
- 2:15 Measurement, Monitoring and Validation—Ian Duncan—Texas Bureau of Economic Geology
- 2:45 Break
- 3:10 Risks, Liabilities, and Carbon Trading—Kipp Coddington—Alston & Bird, Attorneys
- 3:40 Western Governors' Association's CO₂ Sequestration Activities And Public Awareness—Karen Deike—WGA
- 4:00 Closing Comments/Discussions and Wrap-up

CO₂ Sequestration: OPPORTUNITIES FOR WYOMING

Keynote Speaker, Carl Bauer

Carl Bauer is Director of the National Energy Technology Laboratory (NETL), a national laboratory owned and operated by the U.S. Department of Energy.

Dr. Bauer oversees the implementation of major science and technology development programs to address the environmental, supply, and reliability constraints of producing and using fossil resources. This includes technologies for advanced coal-fueled power generation and hydrogen production; carbon sequestration; environmental control for the existing fleet of coal-fired power plants; and improving the efficiency and environmental quality of domestic oil and natural gas exploration, production, and processing.

Mr. Bauer has more than 30 years' experience in technical and business management in both the public and private sectors. He was appointed NETL Director in August 2005, following six months as Acting Director. He has also served as NETL Deputy Director, Director of NETL's Office of Coal and Environmental Systems, and Director of NETL's Office of Product Management for Environmental Management.

Education

Mr. Bauer received an M.S. in nuclear power engineering from the Naval Nuclear Power Postgraduate Program in 1972, and a B.S. in marine engineering and oceanography from the U.S. Naval Academy in 1971.

Today's Presenters

Susan M Capalbo is the Director of the Big Sky Regional Carbon Sequestration Partnership, Director of Special Programs in the Office of the VP for Research, and professor of agricultural economics and economics at Montana State University. The Big Sky Partnership is funded by US DOE, industry partners, and state and international agencies to address the opportunities and challenges for carbon sequestration in geological and terrestrial sinks. She may be reached at (406) 994-5619 or scapalbo@montana.edu.

Kipp Coddington is a partner in the Washington, D.C. office of the law firm Alston & Bird, LLP. He represents project developers in infrastructure projects involving carbon management (typically the geologic storage of carbon dioxide) and is frequently asked to advise on issues related to carbon capture and storage in the United States and abroad. He received his B.S. in chemical engineering from Purdue University and his J.D. from Georgetown University. He may be reached at (202) 756-3408 or kipp.coddington@alston.com

Dawn Marie Deel is a Project Manager for the Environment and Climate Division at the DOE National Energy Technology Laboratory in Morgantown, WV. She is a chemical engineer and a biologist with experience managing projects related to carbon capture and storage technologies. Ms. Deel is responsible for managing 19 technical contracts, financial agreements, and site support contracts in DOE's Carbon Sequestration Program. Ms. Deel may be reached at (304) 285-4133 or Dawn.Deel@netl.doe.gov.

Karen Deike is the Western Governors' Association's Director of Communications, overseeing media relations, public outreach efforts and publications. The WGA, headquartered in Denver, represents the governors of 19 Western states and three U.S.-flag Pacific islands. A graduate of the University of Wyoming, Ms. Deike has a background in print and broadcast journalism and public relations in Dallas, Washington, D.C., and throughout New Mexico. She may be reached at (303) 623-9378 ext 104 or kdeike@westgov.org.

Ian Duncan is Associate Director for Earth and Environmental Systems at the Bureau of Economic Geology at the University of Texas, Austin. His research covers carbon sequestration, environmental geology, remote sensing (the geologic application of multispectral, radar, and lidar data sets), and geoinformatics. He earned a B.A. in earth sciences from Macquarie University (Sydney, Australia) and a Ph.D. in geological sciences from the University of British Columbia. He may be reached at (512) 471-5117 or ian.duncan@beg.utexas.edu.

Carol Frost, the Interim Director of the University of Wyoming School of Energy Resources, has been on the faculty of the Department of Geology and Geophysics since 1983. She received her A.B. from Dartmouth College and Ph.D. from the University of Cambridge. Her specialization is isotope geology, the application of natural radioactivity to determine age and origin of minerals, rocks, and natural waters. Dr. Frost may be reached at (307) 766-6254 or frost@uwyo.edu.

Michael Godec, Vice President at Advanced Resources International, has 25 years' experience in project evaluation, policy and technology analysis, and energy market analyses with industry and government. He has prepared assessments of the potential capacity and economic benefits of sequestration in oil and gas fields and coal seams. Mr. Godec has an M.S. in technology and human affairs from Washington Univ. (St. Louis) and a B.S. in chemical engineering. He may be reached at (703) 528-8420 or MGodec@adv-res.com.

N. "Maha" Mahasanen is Environmental Technology Manager for Rio Tinto Energy America, where he develops and implements plans for managing the business risks and opportunities of emerging environmental regulations and advanced coal technologies. He is based out of Rio Tinto's Denver offices. Mr. Mahasanen holds an M.S. in engineering and public policy from Carnegie Mellon and an M.S. in mechanical engineering from Tulane University. He may be contacted at (720) 377-2091 or Natesan.Mahasanen@riotinto.com.

Jim Steidtmann is Professor Emeritus in the Department of Geology and Geophysics and Director of the Institute for Enhanced Oil Recovery and Energy Research at the University of Wyoming. He received a B.S. in Geology from Bowling Green State University, an M.A. in Geology from Dartmouth College and a Ph.D. in Geology from the University of Michigan. His career has focused on the origin of sedimentary rocks and the geologic history of Wyoming's mountains. He may be reached at (307) 766-2791 or steidt@uwyo.edu.

John Tombari is the Vice President for North and South America for Schlumberger Carbon Services in Houston, where he develops business around the design, construction and operation of CO₂ geologic storage sites. He has expertise in CO₂ sequestration, storage site selection, site characterization, site design, measurement, monitoring and validation and performance and risk assessment. He holds a degree in mechanical engineering from Cornell University. Mr. Tombari may be reached at 832-216-0665 or tombari@houston.oil-field.slb.com.

Sponsoring Organizations

The University of Wyoming School of Energy Resources, created by the Wyoming legislature and the Governor, is built on the three pillars of teaching, research and outreach. The mission of the SER Energy Outreach Center is to support scientific, engineering, and economic outreach for near-term and long-term energy planning through the dissemination of information related to energy activities in Wyoming. The Energy Outreach Center provides information outreach to the public, state, industry and nation; facilitates data sharing with industry groups and state agencies; and provides consulting specialists for the Wyoming energy industry. For more information, see www.uwacadweb.uwyo.edu/ser or contact the SER at (307) 766-2663.

The University of Wyoming Research Corporation, d.b.a. Western Research Institute (WRI) is a not-for-profit research and technology development organization. WRI is developing the coal technologies of the future, including coal conversion; providing support to the coal and utility industries in Wyoming; and delivering research and technology services for the oil and gas industry, including coal bed methane. WRI is the leading arm for the University of Wyoming's School of Energy Resources Energy Outreach Center. For more information, see www.westernresearch.org or contact WRI at (307) 721-2428.