



School of
Energy Resources



Center for Energy Economics
and Public Policy

***Powder River Basin Coal:
Domestic Challenges and International Opportunities***

**Coal Industry Roundtable
Thursday, December 13, 2012**

**Gillette College Technical Education Center
Gillette, Wyoming**

School of Energy Resources
Center for Energy Economics and Public Policy
University of Wyoming



UNIVERSITY OF WYOMING

AGENDA

Thursday, December 13, 2012

- 8:00am – 9:00am Continental Breakfast and Registration
- 9:00am – 9:10am ***Opening Remarks*** (Review of day, meeting format, goals and outcomes)
Mark Northam, Director, UW School of Energy Resources
Tim Considine, Professor of Energy Economics, UW School of Energy Resources
- 9:10am – 9:35am ***Challenges for Coal Utilization in the United States***
Howard Herzog, Massachusetts Institute of Technology
- 9:35am – 10:00am ***United States Coal Export Potential***
Greg Schaefer, Arch Coal, Gillette, Wyoming
- 10:00am – 10:25am ***Changing Landscape of Federal Regulations and Policies for Coal Mining***
Darryl Maunder, Cloud Peak Energy, Gillette, Wyoming
- 10:25am – 10:45am Coffee Break
- 10:45am – 11:25am ***Current Issues Impacting Basin Electric's Coal-Based Resources***
Lyle Witham, Basin Electric Power Cooperative, Bismarck, North Dakota
- 11:25am – 12:05pm ***Four More Years: What to Expect from EPA & Coal Issues in the Second Term***
Peter Glaser, Troutman & Sanders, Washington, D.C.
- 12:00pm – 1:15pm Lunch – served on site
- 1:15pm – 3:15pm ***Working Roundtable Discussion***
Navigating a Path Forward: Policy Options and Strategies
Facilitator: Shaun Andrikopoulos, UW Ultra Petroleum Visiting Chair
Panel:
Rob Hurless, Governor's Office
Howard Herzog, MIT
Lyle Witham, Basin Electric Power Cooperative
Greg Schaefer, Arch Coal
Peter Glaser, Troutman & Sanders
Bob Green, Cloud Peak Energy
Scott Durgin, Peabody Energy
- 3:15pm – 3:30pm ***Closing Remarks***
Mark Northam, Director, UW School of Energy Resources
Tim Considine, Professor of Energy Economics, UW School of Energy Resources

PRESENTER BIOGRAPHIES

Shaun Andrikopoulos, Ultra Petroleum Visiting Chair, University of Wyoming

Mr. Andrikopoulos has had a 23 year career spanning operating management, investment banking, private investing, entrepreneurship, and community service. He is currently the Ultra Petroleum Visiting Chair at the University of Wyoming where he teaches in the MBA program. Most recently he served as co-founder and President of PointWest Resources, LLC, an oil and gas exploration company focused on the Utica shale of Ohio. Prior to PointWest he was the co-founder, Chairman and CEO of EnerCrest, Inc., an environmentally driven energy services company serving the oil and gas and midstream industries in seven states which he grew to \$46 million in revenues in less than four years. Mr. Andrikopoulos also has direct operating experience in agriculture, commercial real estate, the computer industry, and manufacturing.

Mr. Andrikopoulos has served on the University of Wyoming College of Business Board since 2004 where he is currently on the Governance and Career Services Committees. In 2004 he was appointed by the Wyoming legislature to serve on a panel that investigated the feasibility of establishing a world-class business education institute in Jackson, Wyoming. He has guest lectured at the Stanford Graduate School of Business and at the Tuck School of Business at Dartmouth (where he also authored a series of case studies). In 2005 he and his family were recognized as Wyoming Landowner of the Year by the Wyoming Game and Fish Department for their work to improve waterfowl habitat on his family ranch. He has testified in front of the U.S. Congress on private property and energy development issues and has been involved in various legislative efforts.

Mr. Andrikopoulos holds a Master of Business Degree from the Tuck School of Business at Dartmouth and a Bachelor of Science Degree in Mechanical Engineering from Stanford University. In 2008 he completed the Director's Consortium Program held jointly by The Chicago Booth Business School, The Tuck School, and The Stanford Law School.

Tim Considine, Professor of Energy Economics, UW School of Energy Resources

Dr. Considine is the School of Energy Resources Professor of Energy Economics at the University of Wyoming (UW) and Director of the Center for Energy Economics and Public Policy. Prior to joining UW in August 2008, Dr. Considine served as a professor of natural resource economics at The Pennsylvania State University for 22 years.

Prior to his academic career, he worked as an economist with the macroeconomic forecasting unit in Bank of America, winning the Silbert Award for most accurate economic forecast in 1986. He also served at the U.S. Congressional Budget Office, receiving the Outstanding Service Award for his studies of natural gas market deregulation from 1981 to 1983.

Dr. Considine teaches courses in energy economics, the history of oil, and applied econometrics. His recent research projects include the economic and environmental impacts of the Marcellus Shale, energy efficiency and conservation programs in Jackson Hole, Wyoming, process innovations in the iron casting industry, and the impacts of renewable portfolio standards on electricity rates in California and Arizona.

He holds a Ph.D. degree from Cornell University, an M.S. from Purdue University, and a B.A. with honors from Loyola University of Chicago.

Scott Durgin, Senior Vice President, Peabody Energy

Mr. Durgin joined Peabody Energy in 1995 and has been in his current role of Senior Vice President since June 2010. He is responsible for all of the operations in the Powder River Basin, which includes North Antelope Rochelle Mine, Caballo Mine, and Rawhide Mine. He has been in several different roles since joining Peabody Energy, which include Mine Engineer, Engineering and Environmental Manager, Manager of Operations Support, and Operations Manager. Since 1995, Scott held several positions in engineering with Golden Reward Mining Company and Kiewit Mining Group.

Mr. Durgin earned a bachelor of science degree in Mining Engineering and master's of science in Technical Management from South Dakota School of Mines and Technology. He currently serves on the Board of Directors for the Wyoming Mining Association and the Industrial Advisory Board for the Mining Engineering Program at the South Dakota School of Mines and Technology.

Scott and his wife Lisa have three children Caleb, Cameron, and Hannah and reside in Gillette, Wyoming.

Peter Glaser, Partner, Troutman & Sanders

Peter Glaser is a partner in the Washington, D.C. office of Troutman Sanders LLP. Mr. Glaser practices at the intersection of energy and environmental law. He represents electric utility, mining and other energy industry companies and associations. He specializes in environmental regulation and litigation, particularly in the area of air quality and global climate change. He has participated in numerous EPA and judicial proceedings and in various state and federal, siting and permitting proceedings. He has testified before various congressional committees on a number of occasions on Clean Air Act matters, and speaks frequently on climate change and air quality topics to industry and professional groups. More information on Mr. Glaser's background can be found on the Troutman Sanders website, <http://www.troutmansanders.com/>.

Bob Green, General Manager of Sustainable Development & External Relations, Cloud Peak Energy

Bob's educational background is in wildlife resources, most recently applied to aspects of Sustainable Development. He has been involved in Western mining for 30 years, including work within industry and as a mining regulator. This has included reclamation, regulatory and environmental work, as well as collaborative partnerships with communities and organizations. He is currently General Manager of Sustainable Development and External Relations for Cloud Peak Energy, working out of company headquarters in Gillette, Wyoming.

Howard Herzog, Senior Research Engineer, Massachusetts Institute of Technology

Howard J. Herzog is a senior research engineer in the MIT Energy Initiative. He received his undergraduate and graduate education in chemical engineering at MIT. He has industrial experience with Eastman Kodak (1972-1974), Stone & Webster (1975-1978), Aspen Technology (1981-1986), and Spectra Physics (1986-1988). Since 1989, he has been on the MIT research staff, where he works on sponsored research involving energy and the environment, with an emphasis on greenhouse gas mitigation technologies. He was a Coordinating Lead Author for the IPCC Special Report on Carbon Dioxide Capture and Storage (released September, 2005), a co-author on the MIT Future of Coal Study (released March 2007), and a US delegate to the Carbon Sequestration Leadership Forum's Technical Group (June 2003-September 2007). He was awarded the 2010 Greenman Award by the IEAGHG "in recognition of contributions made to the development of greenhouse gas control technologies".

Rob Hurless, Energy Strategy Advisor, Governor's Office

Rob Hurless is Energy Strategy Advisor to Governor Matt Mead. He also works as the Deputy Director of the School of Energy Resources at the University of Wyoming. Prior to these current assignments he served as Energy and Telecommunications Advisor to Wyoming Governor Dave Freudenthal. He came to this position from a tour as Chairman of the Wyoming Public Service Commission. For the bulk of his career Hurless was Publisher of the Casper Star-Tribune. He served as an officer aboard the USS Quapaw, ATF 110, Pearl Harbor, Hawaii.

Darryl Maunder, Manager, Environmental and Regulator Affairs, Cloud Peak Energy

Darryl Maunder is Manager of Environmental and Regulatory Affairs for Cloud Peak Energy. Mr. Maunder has over 30 years of experience working in the environmental arena. Previous to working in industry, he worked for a short period of time for the Montana Water Protection Bureau with focus on water resource evaluations and compliance. Most of his career has been in a role supporting the development of coal resources. Current responsibilities include managing Cloud Peak Energy's permitting efforts, operational compliance, mined land restoration, environmental assessments and development of environmental management programs certified to the ISO 14001 standard. Mr. Maunder obtained his B.S. in Environmental Engineering from Montana College of Mineral Science and Technology and is a registered professional engineer (civil).

Mark Northam, Director, UW School of Energy Resources

Mark Northam is the Director of the School of Energy Resources at the University of Wyoming. He came to the university in 2007 after a year and a half with Saudi Aramco in Dhahran, Saudi Arabia where he worked as a Research Science Consultant in the Research and Development Center. Prior to joining Saudi Aramco, Mark worked for over twenty years at Mobil and ExxonMobil. He held a variety of positions during that time, including:

- Technical Coordinator/Business Advisor in Geoscience Research at ExxonMobil
- Technology Consultant in the Office of the Chief Technology Officer for Mobil Oil Corporation
- Technology Manager for Mobil Exploration Norway, Inc.
- Manager of Tectonics and Sedimentology
- Manager of Basin Analysis
- Manager of Organic Geochemistry for Mobil R & D
- Exploration/Operations Geologist for Mobil E&P in New Orleans
- Research Scientist – Organic Geochemistry for Mobil R&D

Mark earned a Ph.D. degree in Organic Geochemistry from the University of Texas at Austin and a Bachelor of Science degree in Chemistry from Wake Forest University. He is originally from Virginia.

Greg Schaefer, Vice President External Affairs, Arch Coal

Greg has 26 years of experience in the coal industry. Greg now represents Arch Coal, Inc. as Vice President External Affairs, Western Operations. This function represents Arch in state legislative and regulatory activities, as well as regional and federal regulatory activities.

Greg attended the University of Wyoming where he obtained a B.S. in Civil Engineering in 1978 and an M.S. in Civil Engineering in 1982, and served on the Board of Trustees from 1999-2005.

Lyle Witham, Environmental Manager, Basin Electric Power Cooperative

For the past five years, Lyle Witham has been the environmental manager for Basin Electric Power Cooperative, a nine-state-region generation-and-transmission cooperative headquartered in Bismarck, North Dakota, and the operator and part owner of coal-based power plants near Wheatland and Gillette, Wyoming. For 16 years prior to that he was an assistant attorney general in the Natural Resources division of the North Dakota Attorney General's office where he specialized in environmental and natural resource law. In that position, he was primarily responsible for handling legal and litigation issues for the Environmental Division of the North Dakota

Department of Health, where he was involved in complex issues regarding the Missouri River, air quality control and compliance, and environmental contamination of water and land. Prior to that he acted as States Attorney in McHenry County where he had grown up on a small ranch, and where was also engaged in the private practice of law. He is a graduate of St Olaf College, and received M.A. and J.D. degrees from the University of Minnesota in 1983.