Perspectives on the Future of Oil and Gas
presented by the Payne Institute for Public Policy
Tuesday, November 5, 2019
Colorado School of Mines

As the world confronts an energy transition, the global energy system is being re-imagined and the role of oil and natural gas in that transition is not entirely clear. Governments are pursuing increasingly ambitious initiatives to reduce greenhouse gas emissions and diversify their energy economies. While the world is facing significant energy demand growth from emerging and developing economies, the dual pressures of reducing their carbon footprint, while also providing the necessary resources to fuel energy growth creates complexity for the oil and gas industry.

Day at a Glance

• 10:45am - Registration opens
• 10:50am - Welcome
• 11:00am - Scenarios: What is the Future of Energy?
• 11:45am - Networking Break
• 12:00pm - Implications for Geopolitics & Industry
• 12:45pm - Closing

Agenda (to be held at the CO School of Mines Ben H. Parker Student Center Grand Ballroom - 1620 Maple Street, Golden, CO)

10:45am  Registration Opens

10:50am  to 11:00am  Welcome by Morgan Bazilian, Director, Payne Institute for Public Policy

11:00am  to 11:45am  Scenarios: What is the Future of Energy
                   Wim Thomas, Chief Energy Advisor at Shell
                   Eirik Wærness, Senior Vice President and Chief Economist, Equinor
                   Michael Cohen, Chief US Economist and Head of Oil Analysis at BP

11:45am  to 12:00pm  Networking Break

12:00pm  to 12:45pm  Implications for Geopolitics & Industry
                   Andreas Goldthau, Professor, International Relations, Royal Holloway University of London
                   Amy M. Jaffe, David M. Rubenstein Senior Fellow for Energy and the Environment and Director of the Program on Energy Security and Climate Change, Council on Foreign Relations
                   Sarah Ladislaw, Senior Vice President; Director and Senior Fellow, Energy and National Security Program, Center for Strategic and International Studies

12:45pm  to 1:00pm  Closing Remarks - Morgan Bazilian, Director, Payne Institute for Public Policy

Host Organizations

Speaker Biographies

11:00am to 11:45am

Policy Scenarios: What is the Future of Energy

Wim Thomas
Chief Energy Advisor, Shell

Wim Thomas is Chief Energy Advisor and leads the Energy Analysis practice in Shell. His team is also responsible for Shell’s long-term global energy scenarios, informing Group Strategy. He has been with the Shell Group for some 33 years, with prior positions in drilling operations, subsurface reservoir management and commercial and regulatory affairs in gas. Wim is chairman of the UK national committee of the World Petroleum Council and is a former chairman of the British Institute of Energy Economics. He holds a postgraduate degree in Maritime Technology from Delft University in The Netherlands. Wim has been in his current role for the past 14 years, and also heads up the Energy Analysis Team in Shell’s Global Scenario Group. He leads a team responsible for worldwide energy analysis and long-term global energy scenarios, and advises Shell companies on a wide range of energy issues, including global supply and demand, regulations, energy policy, markets, pricing and industry structure.

Eirik Wærness
Senior Vice President and Chief Economist, Equinor

Eirik Wærness is senior vice president and chief economist at Equinor, group responsible for macroeconomics, energy and commodity market analyses. He is also head of strategy in mid- and downstream. He leads a group of ~55 analysts in four locations. Wærness has broad experience, from government, academics and private sector companies, to an advisor in different leadership positions. In addition to his current role at Equinor, he is the leader of corporate strategy, corporate planning and analysis, economic analysis in upstream Norway, and energy market analysis. His previous work experience includes the Centre for Applied Research at the Norwegian School of Economics, Norwegian Ministry of Finance, Total E&P Norway, and Pöyry Management Consulting/Econ Centre for economic analysis, as well as research experience from University of California, San Diego. He is currently a non-executive member of the Board of Innovation, Norway, and a member of the Global Commission to examine Geopolitics of Energy Transformation, set up by the International Renewable Energy Agency, as well as non-executive member of the Board of Centre for applied research at the Norwegian School of Economics. From July 2016 until February 2018, he served as a non-executive member of the Board of the Norwegian Financial Supervisory Authority (Finanstilsynet). He has served in different energy initiatives under the World Economic Forum, including special advisor for their work on energy architecture and member of the global council on the future of energy. From 2010-2013, he was a member of the executive board of the Central Bank of Norway. He holds a master degree (cand.polit.) in economics from the University of Bergen, with a major in comparative politics. He has additional education from Concordia College in Minnesota, as well as executive management training from IMD, Lausanne, Switzerland, and Harvard University, Boston, Massachusetts.
Michael Cohen
Chief US Economist and Head of Oil Analysis

Michael Cohen is Chief US Economist and Head of Oil Analysis in BP’s Group Economics team. In this role, he is responsible for oil, transportation, and US energy policy related analysis in BP’s Statistical Review of World Energy and the Energy Outlook. The Economics team helps inform decision making for BP’s board and executive team as well as for the Upstream, Downstream, Government Affairs, Trading, and Fuels/Marketing businesses.

Prior to joining BP in May 2019, Mr. Cohen was Barclays' Global Head of Commodities Research and was responsible for preparing and delivering differentiated research on commodities markets to Barclays’ wide range of corporate and institutional investor clients. He worked for ten years in government as an Economist with the US Department of Energy and the US Energy Information and as a senior member of the Oil Markets Division at the International Energy Agency in Paris. Prior to government service, Mr. Cohen worked on electricity market design for LECG (now Navigant) and as a trading desk analyst for American Electric Power. He graduated with a BSBA in Business Economics and a BA in Political Science from The Ohio State University and a Masters in International Economics from Johns Hopkins School of Advanced International Studies.
Andreas Goldthau
Professor, International Relations, Royal Holloway University of London

Dr. Andreas Goldthau is professor in international relations at Royal Holloway University of London where he also serves as the director of the Centre of International Public Policy, and associate with the Geopolitics of Energy Project at Harvard University’s Belfer Center for Science and International Affairs. Prior to joining Royal Holloway, Goldthau worked as professor at Central European University’s School of Public Policy, as adjunct professor at John Hopkins’ MSc program in energy policy and climate, and as a transatlantic postdoc fellow in international relations and security with the Paul Nitze School of Advanced International Studies at Johns Hopkins University, the RAND Corporation and the German Institute for International and Security Affairs.


Amy M. Jaffe
David M. Rubenstein Senior Fellow for Energy and the Environment and Director of the Program on Energy Security and Climate Change

Amy Myers Jaffe is the David M. Rubenstein senior fellow for energy and the environment and director of the program on Energy Security and Climate Change at the Council on Foreign Relations. A leading expert on global energy policy, geopolitical risk and energy and sustainability, Jaffe previously served as executive director for energy and sustainability at the University of California, Davis and senior advisor for energy and sustainability at Office of the Chief Investment Officer of the University of California, Regents. She was also formerly a global fellow at the Woodrow Wilson International Center for Scholars. Prior to joining the University of California, Davis, Jaffe served as founding director of the Energy Forum at Rice University’s James A. Baker III Institute for Public Policy and its Wallace S. Wilson fellow for energy studies. She has taught energy policy, business, and sustainability courses at Rice University, University of California, Davis, and Yale University.

Jaffe is widely published, including as co-author of Oil, Dollars, Debt and Crises: The Global Curse of Black Gold with Mahmoud El-Gamal and co-editor of Natural Gas and Geopolitics from 1970 to 2040. She is chair of the steering committee of the Women in Energy Initiative at Columbia University’s Center for Global Energy Policy. A frequent media commentator on energy and climate change, Jaffe is President-Elect of the U.S. Association for Energy Economics and a member of the carbon capture and sequestration task group of the U.S. National Petroleum Council. She formerly served as a member of the World Economic Forum’s (WEF) global future council on international security and chair of the Global Agenda Council on the Future of Oil and Gas, which published a study on implications of peak oil demand, at the WEF. Jaffe was awarded the Senior Fellow award from the United States Association for Energy Economics in 2015 for her career contributions to the organization and to the field of energy economics. Jaffe’s blog "Energy Realpolitik” delves into the underlying forces shaping global energy.
Sarah Ladislaw  
Director and Senior Fellow, Energy and National Security Program, CSIS

Sarah Ladislaw is senior vice president and director and senior fellow of the Energy and National Security Program, where she leads CSIS’s work in energy policy, market, and technology analysis. Ladislaw is an expert in U.S. energy policy, global oil and natural gas markets, and climate change. She has authored numerous publications on the geopolitics of energy, energy security and climate change, low-carbon pathways, and a wide variety of issues on U.S. energy policy, regulation, and market dynamics. Her regional energy work includes publications on Chinese, European, African, and Western Hemisphere energy issues. She has spearheaded new work at CSIS on climate change, the electricity sector, and energy technology development.

Ladislaw formerly worked in Office of the Americas in the Department of Energy’s Office of Policy and International Affairs, where she covered a range of economic, political, and energy issues in North America, the Andean region, and Brazil. While at the department, she also worked on comparative investment frameworks and trade issues, as well as biofuels development and use both in the Western Hemisphere and around the world. She also spent a short period of time working Statoil as their senior director for international affairs in the Washington office. Ladislaw is frequently invited to speak at public conferences, advise companies and policymakers, and testify before congress. She is a member of the National Renewable Energy Laboratory’s Strategic Analysis Technical Review Panel, the Strategic Advisory Council for Georgia Tech’s Strategic Energy Initiative, and a term member of the Council on Foreign Relations. She has taught graduate courses on energy security as an adjunct professor at the George Washington University and is a frequent guest lecturer at other universities. She also comments frequently in print, radio and television media outlets. Ladislaw received her bachelor’s degree in international affairs/East Asian studies and Japanese from the George Washington University and her master’s degree in international affairs/international security from the George Washington University as part of the Presidential Administrative Fellows Program.