The Energy-Water-Energy Nexus: Risks and Opportunities For the Private Sector

Speaker Bios

**Diana Bauer**  

Diana Bauer is the Director of Energy Systems Analysis and Integration within the Office of Energy Policy and Systems Analysis at the U.S. Department of Energy (DOE), where she is responsible for multidisciplinary systems analysis. She led the DOE team that published The Water-Energy Nexus: Challenges and Opportunities in 2014, and she co-chairs DOE’s crosscutting team addressing the water-energy nexus. Earlier, she led the team that drafted DOE’s 2010 and 2011 Critical Materials Strategy reports. Prior to joining DOE, she directed extramural sustainability research at the National Center for Environmental Research at the Office of Research and Development of the Environmental Protection Agency. Dr. Bauer has a PhD in Mechanical Engineering from the University of California at Berkeley and a BSE in Mechanical Engineering from Princeton University.

**Michael Hightower**  
*Distinguished Member, Technical Staff, Military and Energy Systems Analysis Department, Sandia National Laboratories*

Mr. Hightower is a Distinguished Member of the Technical Staff in the Military and Energy Systems Analysis Department at Sandia National Laboratories in Albuquerque, New Mexico. He is a civil and environmental engineer and has over 35 years of experience in research and development projects. His current efforts include research and evaluation of innovative environmental and energy technologies and the security and protection of critical water and energy infrastructures. He conducts research on the use of distributed and renewable energy technologies and distributed water and waste water systems to enhance sustainable economic development, global public health, and infrastructure resiliency and security. Since 2006 he has supported the US Department of Energy in developing a science and technology program for addressing energy and water interdependencies. Most recently he has supported the US Senate on energy water legislation considerations, supported the US National Science Foundation in conducting a national workshop to develop an energy and water research program plan, and assisted the US National Research Council in identifying key energy water challenges and needs.

Mike holds Bachelor’s and Master’s degrees in civil engineering from New Mexico State University. Mike has published over 120 technical papers and reports including articles in NATURE, three Reports to Congress on desalination, water and energy, and liquefied natural gas, and has authored chapters in two books, one on advanced desalination and one on energy and water challenges.
Dagmar Llewellyn  
*Hydrologist, Bureau of Reclamation, U.S. Department of the Interior*

Dagmar Llewellyn is a hydrologist, with an educational background in geosciences and civil engineering, and post-graduate studies in climate dynamics, paleoclimatology, river restoration, GIS, and water law and management. Since 2000, her work has focused on water-management and endangered-species issues in the Upper Rio Grande Basin. Her work has involved water supply and demand evaluation, groundwater/surface-water interaction, irrigation efficiency, habitat and hydrologic requirements of endangered species, accounting under the Rio Grande Compact, and Reclamation project operations.

After 25 years in environmental and water-resource consulting, her interest in working for the federal government was sparked by the passage of the SECURE Water Act, which assigned to the Bureau of Reclamation a west-wide evaluation of the potential hydrologic implications of climate change. Since 2010, she has worked Reclamation on programs authorized under the SECURE Water Act, as well as on Rio Grande water management and endangered species and environmental compliance issues.

Al Martinez-Fonts, Jr.  
*Vice President, U.S. Chamber of Commerce; Executive Vice President, U.S. Chamber of Commerce Foundation*

Alfonso “Al” Martinez-Fonts Jr. is a vice president at the U.S. Chamber of Commerce and the executive vice president of the U.S. Chamber of Commerce Foundation. Martinez-Fonts previously was a consultant to the U.S. Chamber as president of Alfonso Martinez-Fonts, LLC, a consulting firm specializing in homeland security and international issues. He was also affiliated with Adelphi Capital, LLC, and Command Consulting Group. Before that, Martinez-Fonts served as assistant secretary and special assistant to the secretary for the private sector at the Department of Homeland Security. He was charged with providing America’s private sector with a direct line of communication to the department. Martinez-Fonts worked directly with individual businesses and through trade associations and other non-governmental organizations to foster dialogue between the private sector and the department. He served under secretaries Ridge, Chertoff, and Napolitano.

Earlier in his career, Martinez-Fonts worked for 30 years at JP Morgan Chase and its predecessors, Chemical Bank and Texas Commerce Bank. He served as president of Texas Commerce Bank in San Antonio. In 2002, he retired as chairman and chief executive officer of JP Morgan Chase in El Paso. During his 30-year tenure in the banking industry, Martinez-Fonts worked in the metropolitan and international divisions. He lived and traveled extensively overseas, including managing Chemical Bank’s offices in Manila and Mexico City. He was regional manager, based in New York, of Chemical’s business in Argentina, Chile, Uruguay, Paraguay, and Bolivia. Martinez-Fonts served on many boards, including Project ARRIBA, ACCION International, and ACCION USA. He was a member of the Frito-Lay Hispanic/ Latino Advisory Board. He also served on the Fannie Mae Advisory Board and the American Bankers Association Communications Council. He was chairman of The Greater San Antonio Chamber of Commerce, The Greater El Paso Chamber Foundation, and president of The American Chamber of Commerce in Mexico City.

He was the 1995 recipient of The National Conference of Christians and Jews Humanitarian Award. Martinez-Fonts currently serves on the boards of the Safe America Foundation and Recall Infolink. Martinez-Fonts received his undergraduate degree in political science from Villanova University in 1971, where he serves on the Alumni Association Board. He received his M.B.A. in finance from Long Island University in 1974. Martinez-Fonts was born in Havana, Cuba, and is fluent in Spanish.
Matthew Swibel
*Director, Corporate Sustainability, Lockheed Martin*

Matthew Swibel leads Lockheed Martin’s award-winning sustainability program, reporting and stakeholder engagement. He reports to the corporate vice president – Ethics & Sustainability, and sits on the company’s Sustainability Working Group, which guides policy and performance.

As founding director of the Corporate Sustainability Office, Matt led the Corporation’s inaugural GRI-based Sustainability Report, its first formal stakeholder engagement sessions and core issues assessment, and the development of new 2015 goals. During his tenure the company has been added to list of 100 Best Corporate Citizens, the Dow Jones Sustainability World Index and as a sector leader on the MSCI Environmental, Social and Governance (ESG) index.

In his prior role, from 2008 to 2012, Matt was Director of Enterprise Communications, where he led a team supporting the principal executive for several corporate functions including the CFO and the Executive Office of the Chairman. In this role, he oversaw multiple aspects of communications including employee and supplier engagement, speechwriting, environmental, safety and health affairs, advertising and outreach to investors and financial/environmental media. Prior to joining Lockheed Martin, Matt spent almost a decade as a journalist, most recently as Associate Editor of Forbes, where he was recognized by the Overseas Press Club for his business reporting from abroad; co-edited the World Billionaires issue; and traveled with the U.S. Secretary of State. Prior to Forbes, he was a staff reporter at Washington Business Journal, where his coverage of marketing and web-based political fundraising each earned Maryland-DC-Delaware and Virginia Press Association awards.

Matt graduated cum laude from American University (DC) with degrees in Communications and Sociology and earned an MBA from the University of Maryland. He taught as an adjunct professional lecturer at American University’s School of Communications from 2005 to 2008.

He is an independent director of Cornerstone Capital Inc. and an advisory board member of the Cambridge University (UK) Centre for Risk Studies.

Becky L. Tomasek
*General Manager, Upstream Water, CH2M HILL*

Becky L. Tomasek is the Upstream Water General Manager for CH2M HILL’s Global Water Market. CH2M HILL is a global leader in consulting, design, design-build, operations, and program management. Tomasek joined the firm in December 2013 and has spent the past six years of her career focused on chemical and water use in the oil and gas industry.

Prior to joining CH2M HILL Tomasek served as the Vice President of Strategy, R&D, and Business Development for Swire Oilfield Services where she identified and analyzed produced water treatment technologies and led water reclamation field trials utilizing those technologies.

Becky spent twenty years with The Dow Chemical Company where she was a founding leadership team member of the Oil & Gas business group, serving first as the Finance Leader and then as the Global Strategic Marketing Director. In these roles she led the development of innovative chemicals to increase production, reduce costs, and minimize emissions for the oil and gas industry.

Prior to these roles, Tomasek served in a variety of production engineering, business finance, corporate auditing, and strategy roles within The Dow Chemical Company.
Tomasek has a bachelor’s degree in chemical engineering from Texas A&M University and an MBA from the University of Houston.

Hugh Welsh
President, DSM North America

Mr. Hugh C. Welsh is the President & General Counsel of DSM North America. Mr. Welsh currently serves on several DSM global and regional management teams and is responsible for legal, government affairs, corporate communications, financial and HR and other shared services, corporate partnerships and DSM’s sustainability, inclusion and diversity initiatives in the region North America. Before joining DSM, Hugh worked for the American Standard Companies McCarter & English LLP and others. Hugh currently serves on the Board of Directors of the American Chemistry Council, Partners in Food Solutions, the Safe America Foundation, Tri-State Diversity Council and the US Chamber of Commerce Foundation. He received his Bachelor’s Degree in Economics and History from the University of Massachusetts in 1990 and his Juris Doctorate in law from Seton Hall University School of Law in 1993.