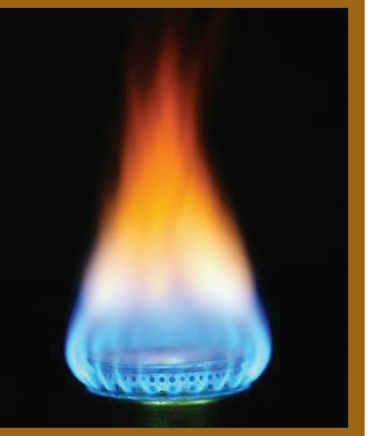


Utah Governor's Annual

ENERGY DEVELOPMENT SUMMIT

Salt Palace Convention Center

February 15, 2012

Office of Energy Development

They say change is in the wind.
It's also in solar, geothermal and natural gas.
Change has been a big part of our 100-year history as we have adapted to the growing needs of the homes, businesses and communities we serve. And as we celebrate our Centennial this year, there has never been a more exciting time in energy. New technologies are making renewable resources more viable and our customers have become stronger partners in the drive to use energy more efficiently. Change is inevitable. Which is why we will continue to embrace it and the power it creates.
ROCKY MOUNTAIN POWER
Let's turn the answers on.
1912–2012
100
Years
© 2012 Rocky Mountain Power

Utah Governor's Annual

ENERGY DEVELOPMENT SUMMIT

Salt Palace Convention Center

February 15, 2012

FOR MORE INFORMATION VISIT
www.energy.utah.gov

Office of Energy Development

State of Utah

Gary R. Herbert
Governor

Office of the Governor
Salt Lake City, Utah
84114-2220

Greg Bell
Lieutenant Governor

February 15, 2012

Dear Utah Governor's Energy Development Summit Participants,

It is my great pleasure to welcome you to the first annual Utah Governor's Energy Development Summit.

As a state, we recognize the tremendous advantages all Utahns enjoy from energy costs that are lower than nearly every other state in America. This is the result of a thriving energy industry here in Utah, and I recognize the efforts of everyone at this summit in making that strength a reality. This critical industry not only provides jobs and produces the energy Utah needs for current residents and businesses to sustain strong economic growth; it is the critical competitive edge essential to attract more business and jobs to our great state.

During my administration, I have identified energy as one of the four cornerstones for economic recovery and prosperity. To ensure energy is a strong component of Utah's growing economy, we unveiled a Ten-Year Strategic Energy Plan. The goals of that plan will only be achieved through the balanced use of fossil fuels, alternatives and renewable resources in a market-driven, cost effective and responsible way.

I am confident the Energy Summit will offer you tools to leverage your efforts and will be a valuable investment of your time. I challenge you to work together to strengthen Utah's successful energy industry and plan for the State's bright future. Together, we can keep Utah as the best state to do business and strengthen our position as an energy leader in the United States.

Sincerely,

Gary R. Herbert
Governor

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Office of the Governor

AMANDA SMITH
Energy Advisor

SAMANTHA MARY JULIAN
Director; Office of Energy Development

February 15, 2012

Dear Utah Governor's Energy Development Summit Participants,

As Energy Advisor to Governor Gary R. Herbert, it is my great pleasure to welcome you to the first annual Utah Governor's Energy Development Summit.

Governor Herbert's 10-Year Strategic Energy Plan encourages reliable, affordable, sustainable and clean energy spanning the entire resource spectrum. Our bright future as an energy leader in the United States depends on the responsible development of fossil fuels, renewable energy, energy efficiency and alternative energy resources. This summit is designed to promote knowledge and networking that will cultivate the business growth and expansion Utah will need to retain its energy security and independence.

This summit is organized by the Utah Office of Energy Development, whose mission is to provide leadership in the balanced development of all of Utah's energy resources. The Office of Energy Development is a small but important example of how important Energy is to Utah's economy. Its efforts, Utah's premier business friendly environment and dedication to supporting business are just three of the reasons that Utah has been named by Forbes Magazine as the Best State for Business two years in a row. The responsible development of energy in Utah through the execution of Governor Herbert's Energy Initiative will assure that this remains true for years to come.

Regardless of which side of the energy industry you may fall, we are confident that today's event will provide thoughtful discourse, ample networking opportunities and important updates on energy development across our great State.

Regards,

Amanda Smith
Governor's Energy Advisor

UTAH GOVERNOR'S ENERGY DEVELOPMENT SUMMIT

SPONSORS

TERAWATT TITLE SPONSOR

ROCKY MOUNTAIN POWER
Let's turn the answers on.

1912–2012 100 Years

TCF SPONSOR

QUESTAR

GIGAWATT SPONSORS

Bill Barrett Corporation

epic OIL EXTRACTORS | LLC

UINTAH PARTNERS

Utah Governor's Office of Economic Development
BUSINESS • TOURISM • FILM

MEGAWATT SPONSORS

NEWFIELD

Chevron

STATE ENERGY SECTOR PARTNERSHIP

State of Utah
School & Institutional Trust Lands Administration

RioTinto

Utah Business
THE MAGAZINE FOR DECISION MAKERS

ACI ARCH COAL, INC.

Anadarko Petroleum Corporation

Salt Lake Community College

MEDIAone OF UTAH

KILOWATT SPONSORS

Clean Energy Application Center

ARES

Cyro energy

Division of Facilities Construction & Management

firstwind. CLEAN ENERGY. MADE HERE.

Enel Green Power

STOEL RIVES LLP ATTORNEYS AT LAW

USTAR Turning innovation into industry.

REDleaf RESOURCES, INC.

Ballard Spahr LLP

HORIZON POWER

WJB W.J. BRADLEY

POWER SAVER PROGRAM

BlueCastleProject

TRANSWEST EXPRESS LLC

sutrec southwest utah renewable energy center

UtahState University

QEP Resources, Inc.

WASHAKIE RENEWABLE ENERGY

WATT SPONSORS

DESERET POWER ELECTRIC COOPERATIVE

enXco An EDF EN Company

INFINIA

SIEMENS

ENERGY commercialization center

epg environmental planning group

Utah Clean Cities Alternative Fuels

Johnson Controls INGENUITY WELCOME

GOALZERO POWER ANYWHERE

Vernal Winnelson COMPANY

UBEES Utah Building Energy Efficiency Strategies

MAGNUM Gas Storage

HUNT ELECTRIC, INC. 25th Anniversary

Parsons Behle & Latimer A Professional Law Corporation

IPA Intermountain Power Agency Energy for Today & Tomorrow

JBR creating solutions for today's environment

SWCA

Viresco Energy a synthetic fuel company

UTAH GOVERNOR'S ENERGY DEVELOPMENT SUMMIT

AGENDA

AGENDA – UTAH GOVERNOR'S ENERGY DEVELOPMENT SUMMIT 2012						
7:00 a.m.	*Main Hall*	Registration				
8:00 a.m.	*Main Hall*	Opening Session – Main Hall – Governor Gary R. Herbert				
9:00 a.m.	**"Hot Topics"**	**ROOM A** **Conventional Breakout:** Clean Air and Energy Development: Utah must have both!	**ROOM B** **Unconventional Breakout:** Nuclear Power in Utah	**ROOM C** **Renewables Breakout:** The Federal Solar Agenda in Utah: Exploring Contrasted Perspectives	**ROOM D** **Energy Efficiency Breakout:** Driving Home Value with Energy Usage Scoring	**ROOM E** **Energy Initiative Breakout:** Utah and the Military's Energy Security Agenda
10:00 a.m.	*Break*	Networking and Trade Show – Main Hall				
10:30 a.m.	**"Technology & Innovation"**	**ROOM A** **Conventional Breakout:** Technology and Innovation: The Nexus to Environmental Sustainability	**ROOM B** **Unconventional Breakout:** Oil Sands: How Utah Can Improve on the Alberta model	**ROOM C** **Renewables Breakout:** Innovations in Energy Storage: Unlocking the Potential for Renewables in Utah	**ROOM D** **Efficiency Breakout:** Energy Savings = Capital Gains for Industrial Users	**ROOM E** **Energy Initiative Breakout:** Research Universities: Utah's Secret Weapon for Economic Development
12:00 a.m.	*Main Hall*	Luncheon and Keynote Address: Dr. Arun Majumdar, Acting Undersecretary, Dept. of Energy – Main Hall				
1:30 p.m.	**"Jobs & Business Development"**	**ROOM A** **Conventional Breakout:** Oil, Gas and Coal: Utah's Competitive Advantage	**ROOM B** **Unconventional Breakout:** Oil Shale: Bringing Energy Security and Economic Development to Utah	**ROOM C** **Renewables Breakout:** Ensuring the Viability of Large-Scale Renewables After the Era of Stimulus	**ROOM D** **Efficiency Breakout:** High Value Strategies for Commercial Buildings	**ROOM E** **Energy Initiative Breakout:** Innovation Idol: Utah Energy Innovators in a Quick Pitch Contest
3:00 p.m.	*Break*	Networking and Trade Show – Main Hall				
3:30 p.m.	**"Responsible Development & Regulatory Policy"**	**ROOM A** **Conventional Breakout:** Utah's Public Lands: Open for Responsible Energy Development	**ROOM B** **Unconventional Breakout:** Uintah Basin Transmission Projects: Upgraders, Pipelines and Powerlines – The Keys to Faciliting Development	**ROOM C** **Renewables Breakout:** Putting Renewable Resources to Work for Utah's Rural Communities	**ROOM D** **Efficiency Breakout:** Maximizing Efficiency for Conventional Energy Development	**ROOM E** **Energy Initiative Breakout:** Alternative Transportation Fuels: Propelling Utah Forward
4:30 p.m.	*Room F*	Reception – Room F				

Office of Energy Development

NOTES

UTAH GOVERNOR'S ENERGY DEVELOPMENT SUMMIT

AGENDA

7:00 a.m. – 8:00 a.m.

Registration

8:00 a.m. – 8:05 a.m.

Kickoff

Samantha Mary Julian, Director
Office of Energy Development

8:05 a.m. – 8:15 a.m.

Opening Comments

Amanda Smith, Governor's Energy Advisor, Executive Director Department of Environmental Quality

8:15 a.m. – 8:25 a.m.

Title Sponsor Remarks

A. Richard Walje, President and CEO
Rocky Mountain Power

8:25 a.m. – 8:45 a.m.

Welcoming Address

Governor Gary R. Herbert

9:00 a.m. – 10:00 a.m.

Hot Topics

ROOM A

CONVENTIONAL BREAKOUT SESSION

Clean Air and Energy Development: Utah must have both!

Moderator: *Alan Matheson, Governor's Environmental Advsior*

Panelists: *Duane Zavadil, Bill Barrett Corp.*
Brock LeBaron, DEQ
Leonard Herr, BLM

Mitigating air quality problems in Utah is not only critical for human health and the environment, but it is also essential to those interested in the continued development of the state's energy resources. This session will provide an overview of the Uinta Basin Air Quality Monitoring Initiative and other collaborative efforts to understand the air quality issues in the basin.

ROOM B

UNCONVENTIONAL BREAKOUT SESSION

Nuclear Power in Utah

Moderator: *Amanda Smith, Governor's Energy Advisor, Executive Director Department of Environmental Quality*

Panelists: *Dr. Nils Diaz, Blue Castle Holdings*
Dr. Harold McFarlane, Idaho National Laboratory.

Governor Herbert's 10 Year Strategic Energy Plan recommends facilitating the dialogue regarding Utah's potential opportunity for nuclear power development. This panel focuses on beginning these discussions with an update from the Blue Castle Project describing their plans, and the impact of those plans on the greater Utah Energy Economy as well as input from Idaho National Laboratory outlining a general path forward for the US Nuclear industry.

ROOM C

RENEWABLES BREAKOUT SESSION

The Federal Solar Agenda in Utah: Exploring Contrasted Perspectives

Moderator: *Sarah Wright, Utah Clean Energy*

Panelists: *Shannon Stewart, BLM – Washington DC Office*
Jim Gazewood, BLM – Utah Office
Troy Gagliano, enXco.

This session will explore the Department of the Interior's recent Solar Energy Development PEIS, which was prepared with the aim of facilitating utility scale solar in high value solar areas in six Western states. The panel will discuss the potential value of such work for Utah's rural communities, and will question the appropriateness of federal activities thought to that fast track one form of energy development over others.

ROOM D

ENERGY EFFICIENCY BREAKOUT SESSION

Residential: Driving Home Value with Energy Usage Scoring

Moderator: *Kevin Emerson, Utah Clean Energy*

Panelists: *Warren Cook, Portland Energy Conservation Institute*
Bruce Hanson, Garbett

What do homeowners know about how their homes consume energy? What should they consider about a home's energy consumption as they look to purchase a home? Is there enough infrastructure and training in place to make this viable? This session will look at the new Home Energy Scoring tool and report that was created by the U.S. Department of Energy. It will examine the possibilities for home energy scoring in Utah and what it might mean should disclosure of energy usage be systematically incorporated into the home purchase process.

ROOM E

ENERGY INITIATIVE BREAKOUT SESSION

Utah and the Military's Energy Security Agenda

Moderator: *Darin Lowder, Ballard Spahr*

Panelists: *Doug Waters, Army Initiatives Task Force*
Mary Enges, Hill Air Force Base
Raymond Torres, Tooele Army Depot

This session will offer exciting news about the Department of Defense's energy security agenda, which is characterized by the aggressive adoption of renewable energy technologies at utility scales throughout the country. Panelists will provide insight into the rationale behind DoD's goals for renewable energy, and will describe various policy issues and other complexities associated with the development of Utah's vast military lands.

10:00 a.m. – 10:30 a.m.

Networking and Trade Show

MAIN HALL

10:30 a.m. – Noon

Technology and Innovation

ROOM A

CONVENTIONAL BREAKOUT SESSION

Technology and Innovation: Energy's Nexus to Environmental Sustainability

Moderator: *John Baza, Division of Oil, Gas & Mining*

Panelists: *Chris McGill, American Gas Association*
Dr. John McLennan, Energy and Geoscience Institute
Paul Wages, Anadarko
Ben Yamagata, Coal Utilization Research Council

Technology and innovation are key components of Governor Herbert's strategy to meeting Utah's future energy needs while ensuring minimized impacts. Is hydraulic fracturing safe? How is water being managed? This session will examine these and other technologies considered as potential nexuses of energy development and environmental sustainability.

ROOM B

UNCONVENTIONAL BREAKOUT SESSION

Oil Sands: How Utah Can Improve on the Alberta Model

Moderator: *Al Walker, USTAR*

Panelists: *Cameron Todd, US Oil Sands*
Ed Whittingham, Pembina Institute
Dr. Phil Smith, Institute for Clean and Secure Energy
Commissioner Mike McKee, Uintah County

Governor Herbert's 10 Year Strategic Energy Plan recommends augmenting Utah's fuel supply with nontraditional fuels. Utah's Oil Sands represent an enormous resource and have the potential to make both Utah and the United States more energy independent and secure. As Utah examines this resource, we look north to the thriving Albertan oil sands industry for lessons learned on responsible development.

ROOM C

RENEWABLES BREAKOUT SESSION

Innovations in Energy Storage: Unlocking the Potential for Renewables in Utah

Moderator: *Jennifer Saunders, Salt Lake Community College*

Panelists: *Dr. Ning Lu, Pacific Northwest National Laboratory*
Dennis Hansen, Rocky Mountain Power
Kim Johnson, Riverbank Power
Rob Webster, Magnum Gas Storage.

The session will explore how various emerging power storage technologies may fit into Utah's power grid and landscape, and how those technologies may be critical to the expansion of the role of renewables in our energy portfolio. Industry representatives will provide details on storage projects planned for Utah, and academics will speak to the electrical grid dynamics that make these projects critical.

ROOM D

ENERGY EFFICIENCY BREAKOUT SESSION

Industrial: Energy Savings = Capital Gains for Industrial Users

Moderator: *Kelly Francone, Utah Assoc. of Energy Users*

Panelists: *Michael Vaughn, Rio Tinto*
Lisa Romney, Rocky Mountain Power
Kirk Moushegian, Nexant

In this session we will hear from Rio Tinto on steps they have taken in their facilities to reduce their energy consumption. Companies that took part in the Utah Industrial Energy Efficiency Program will be recognized for their accomplishments. IEEP program administrators will chart the course for the future. Finally, a roundtable discussion will examine the possibilities for advancing industrial energy efficiency practices across all sectors of industry in Utah.

ROOM E

ENERGY INITIATIVE BREAKOUT SESSION

Research Universities: Utah's Secret Weapon for Economic Development

Session Chair: *Jeff Muhs, Energy Dynamics Lab*

Moderator: *Spencer P. Eccles, Governor's Office of Economic Development*

Panelists: *Mike Alder, Brigham Young University*
Dr. Jack Brittain, University of Utah
Rob Behunin, Utah State University

The session will explore how Utah's three research universities will drive innovation, economic development and job creation through Governor Herbert's new Research Triangle Initiative and ongoing USTAR programs. In this interactive session, panelists from the University of Utah, Utah State University, and Brigham Young University will provide an overview of applied research and commercialization activities and discuss ways to enhance and strengthen collaboration with industry partners through the Utah Research Triangle.

Noon – 12:30 p.m.

Lunch, Networking and Trade Show

12:30 p.m. – 12:35 p.m.

Luncheon Comments, Introduction

Samantha Mary Julian, Director,
Office of Energy Development

12:35 p.m. – 12:40 p.m.

TCF Sponsor Comments

Ronald W. Jibson, President and CEO
Questar Corporation

12:40 p.m. – 12:50 p.m.

Comments

Lieutenant Governor Greg Bell

NOTES

12:50 p.m. – 1:20 p.m.

Keynote Address

Dr. Arun Majumdar
Acting Under Secretary of Energy
Director of Advanced Research Projects Agency – Energy
U.S. Department of Energy

1:30 p.m. – 3:00 p.m.

Jobs and Business Development

ROOM A

CONVENTIONAL BREAKOUT SESSION

Oil, Gas and Coal: Utah's Competitive Advantage

Moderator: *Todd Bingham, Utah Mining Association*

Panelists: *Tom Chidsey, Utah Geological Survey*
Greg Schaefer, Arch Coal
Kimball Rasmussen, Deseret Power
Todd Savage, Savage Services
Tim Wigley, Western Energy Alliance

Utah has abundant conventional energy resources. Energy-associated companies in the state pay approximately $1.5 billion in combined wages annually. Taxes and royalties associated with energy development make a significant contribution to Utah's economy. This panel of experts will discuss how conventional energy helps ensure Utah maintains its status as the most competitive business environment in the United States.

ROOM B

UNCONVENTIONAL BREAKOUT SESSION

Oil Shale: Securing Utah's Energy Future

Moderator: *Dr. Jeremy Boak, Center for Oil Shale Technology and Research*

Panelists: *Rikko Hrenko, Enefit American Oil*
Dr. Laura Nelson, Red Leaf Resources
Senator Kevin Van Tassell, Utah Legislator
Robert Bayer, JBR Environmental Consultants

Governor Herbert's 10 Year Strategic Energy Plan recommends facilitating the expansion of responsible development of Utah's energy resources. Utah's Oil Shale is among the largest untapped sources of energy in the world; successful and responsible development will provide a local, reliable and economical source of crude oil and reduce our energy imports as a state and nation. This panel will showcase the most exciting Oil Shale projects in Utah and provide insight on their impact on Utah's energy security.

ROOM C

RENEWABLES BREAKOUT SESSION

Ensuring the Viability of Large-Scale Renewables After the Era of Stimulus

Moderator: *Julia Pettit, Stoel Rives*

Panelists: *Senator Mark Madsen, Utah Legislator*
David Post, ENEL Green NA
John Knight, Element Power
Adam Seibel, Army Energy Initiatives Task Force

This session will provide insight into how developers of utility scale renewable energy will continue to ensure project viability as government stimulus fades in coming months and years. Panelists will provide political, legal, and financial perspectives on the challenges and opportunities facing developers of renewable energy in Utah and throughout the region.

ROOM D

ENERGY EFFICIENCY BREAKOUT SESSION

Commercial: High Value Efficiency Strategies for Commercial Buildings

Moderator: *Brenda Scheer, University of Utah*

Panelists: *Kenner Kingston, Architectural Nexus*
Dave Alley, LDS Church Architecture, Engineering & Construction Division
Steve Bateson, Questar
Theddi Wright Chappell, Cushman & Wakefield

This session will examine the tools, practices, opportunities and investments that can be made in efficiency for new and existing buildings. Local and national experts will offer different perspectives on how a range of strategies can be utilized to optimize energy consumption and maximize cost reduction.

ROOM E

ENERGY INITIATIVE BREAKOUT SESSION

Innovation Idol: Utah Energy Innovators in a Quick Pitch Contest

Moderator: *Michael O'Malley, USTAR*

Competitors: *Steve Pruitt, ARES Transportation Technologies*
Robert Fulton, Turbine BioFuel
Christian Volmar, Utah State University
Brandon Lloyd, Solan LLC
Heng Ban, Utah State University
Dr. Glenn Preswitch, Metallosensors Inc.
Judge: *Robin Riggs, Governor's Energy Task Force*
Judge: *Doug Smoot, Governor's Energy Task Force*

What's the most exciting energy technology breakthrough in Utah today? You decide! Innovation Idol is a fast, fun quick pitch contest where the audience chooses the winner among six university and industry-based energy technologies. The contestants represent advances across the spectrum of traditional and alternative energy development. Contestants will have just five minutes of formal presentation and five minutes of Q&A to demonstrate their innovations, and persuade the panel of expert judges and audience members that their idea deserves the Innovation Idol title—as well as a $500 cash prize.

3:00 p.m. – 3:30 p.m.

Networking and Trade Show

MAIN HALL

3:30 p.m. – 4:30 p.m.

Responsible Development & Regulatory Policy

ROOM A

CONVENTIONAL BREAKOUT SESSION

Utah's Public Lands: Open for Responsible Energy Development

Moderator: *Representative Roger Barrus, Utah State Legislature*

Panelists: *Senator Mike Lee, Federal Legislator (live via video-conference)*
Jim Karpowitz, Division of Wildlife Resources
Kent Hoffman, BLM
Mike Pontiff, Newfield Exploration

Utah's public lands hold a large portion of its developable energy resources. This panel will explore how airsheds, wildlife, and water resources can be protected and sustained during energy resource development activities. Panelists will also discuss how industry and government are addressing conflicts on public lands in Utah.

ROOM B

UNCONVENTIONAL BREAKOUT SESSION

Upgraders, Pipelines & Powerlines: Uintah Basin Transmission Projects

Moderator: *Rich Halvey, Western Governors' Association*

Panelists: *Lori Creer, Questar*
Bret Hunter, Rocky Mountain Power
Todd Dana, Uintah Partners, LLC

Governor Herbert's 10 Year Strategic Energy Plan recommends considering alternatives to encourage transmission and pipeline construction in areas that promote economic development. Several exciting projects are being pursued which will unlock the clean, responsible development of Utah's energy resources and allow their transport to market. This session provides an overview of several of these projects and explains their impact on Utah's Energy Economy.

ROOM C

RENEWABLES BREAKOUT SESSION

Putting Renewable Resources to Work for Utah's Rural Communities

Moderator: *Ted Wilson, Former Governor's Energy Advisor, Governor's Energy Task Force*

Panelists: *Doug Hunter, Utah Associated Municipal Power Systems*
Michael Graham, Greysage
Peter Sullivan, First Wind
Chris Webb, City of Blanding.

This session will focus on how small communities and local municipal utilities in Utah are seeking a greater degree of energy independence by developing the variety of renewable resources available in their areas. Panelists will describe how Utahns are forming unique partnerships to capitalize on local resources such as micro-hydro, solar, wind, and biomass from municipal waste and agricultural byproducts.

ROOM D

ENERGY EFFICIENCY BREAKOUT SESSION

Combined Heat and Power: Benefits of Added Power Production and Emissions Reduction

Moderator: *Patti Case, Intermountain Clean Energy Application Center*

Panelists: *Neeharika Naik-Dhungel, Environmental Protection Agency*
Mike Clay, Solar Turbines
Mark Rouse, Capstone Turbine Corp.

Combined Heat and Power comes in a range of sizes and applications for capitalizing on waste heat that facilities produce. This session will feature an examination of a large-scale Combined Heat and Power facility, potential applications for CHP in the Uintah Basin and an examination of policy from around the nation that supports CHP development.

ROOM E

ENERGY INITIATIVE BREAKOUT SESSION

Alternative Transportation Fuels: Propelling Utah Forward

Moderator: *Glade Sowards, DEQ Division of Air Quality*

Panelists: *Alex Schroeder, WGA Colorado Governor's Office of Energy*
Robin Erickson, Utah Clean Cities Coalition
Curtis Mansfield, PacifiCorp
Jonathan Burke, Westport Innovations / Questar
Glade Sowers, DEQ Division of Air Quality

Utah's transportation sector is expanding into new and innovative technologies that provide an avenue for cheaper and cleaner fuels. The Alternative Transportation Fuels session will discuss these new and emerging technologies, existing infrastructure, and future development and implementation plans for the incorporation of these new fuel segments.

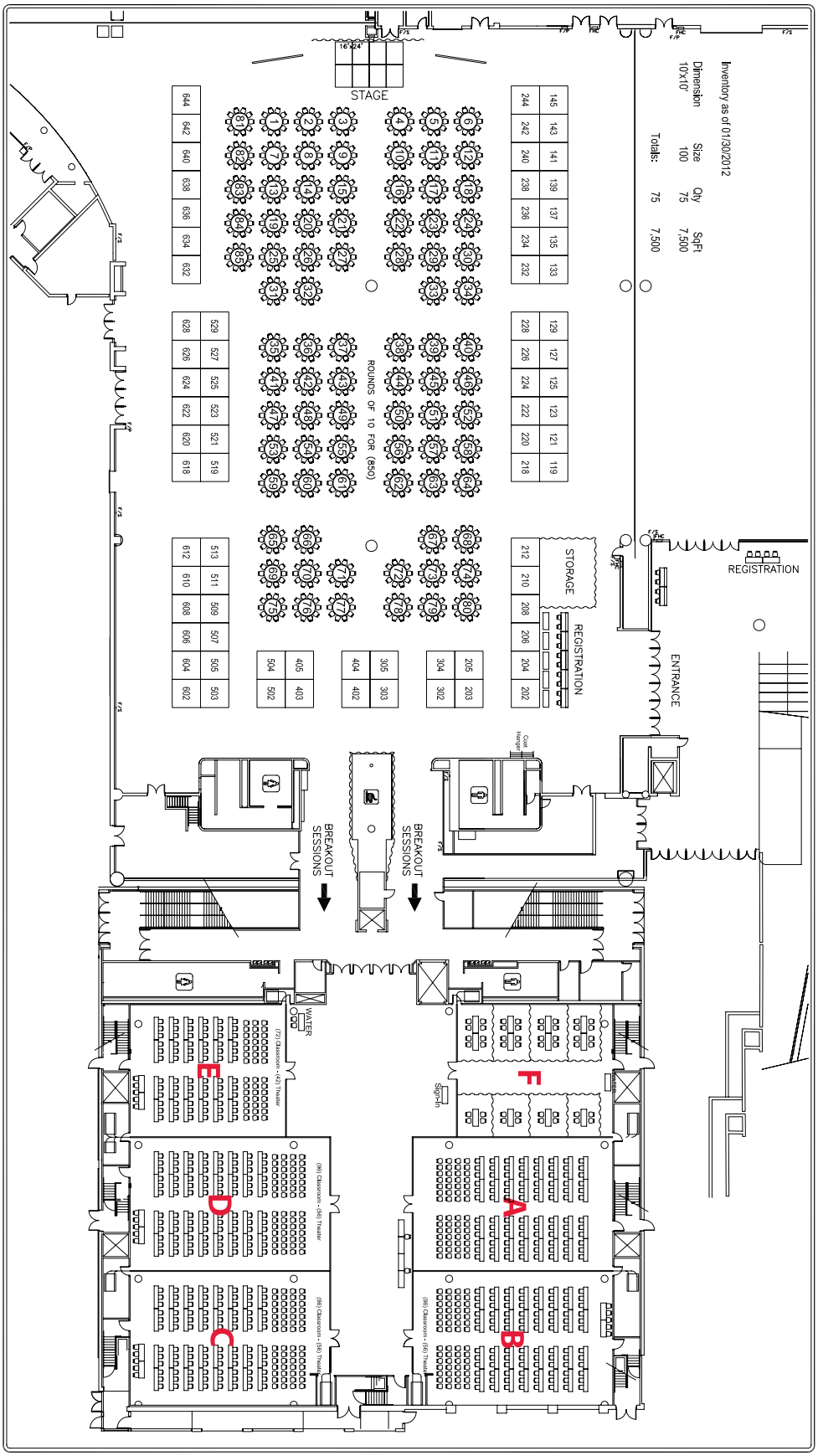
4:30 p.m. – 5:30 p.m.

Reception

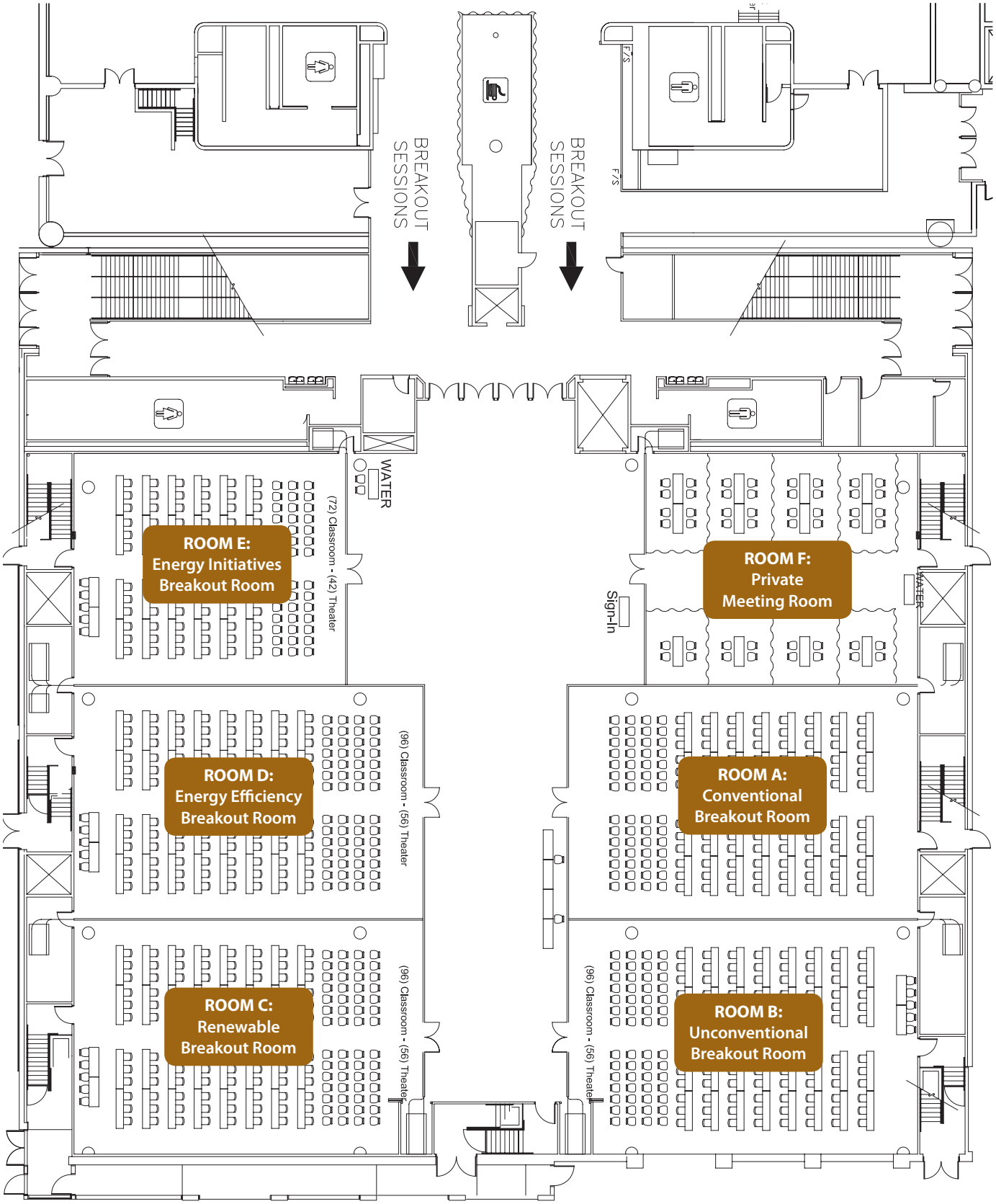
ROOM F

EVENT FLOOR MAPS

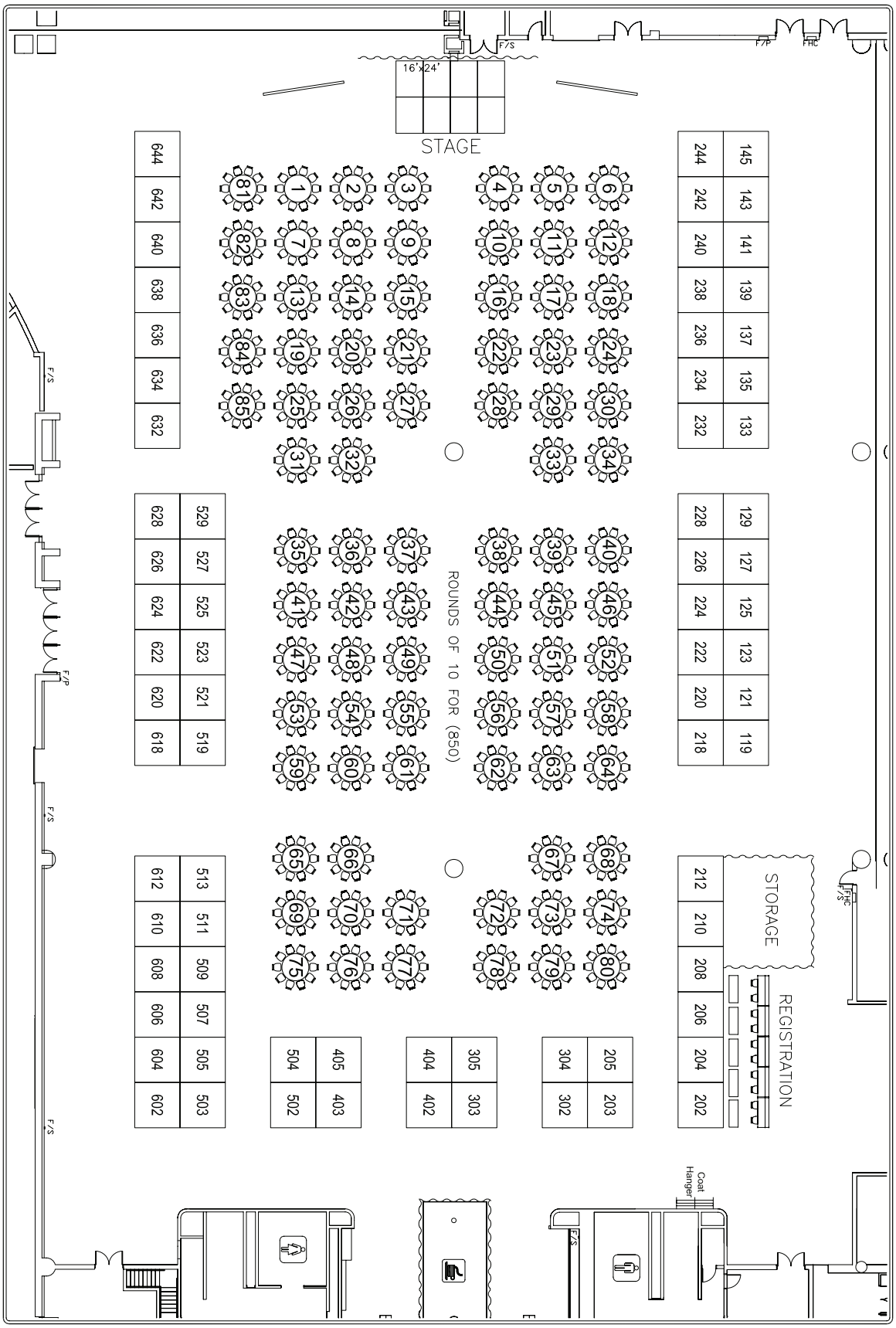
UTAH GOVERNOR'S ENERGY DEVELOPMENT SUMMIT



BREAKOUT SESSION MAP



BOOTH MAP


STAGE
16'x24'
ROUNDS OF 10 FOR (850)
REGISTRATION
STORAGE
Coat Hanger
F/S
F/P
FHC

EXHIBITOR LIST

UTAH GOVERNOR'S ENERGY DEVELOPMENT SUMMIT

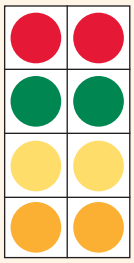
A-1 Daylighting, LLC. 139
Anadarko Petroleum Corporation 208
Arch Coal, Inc 405
ARES Transportation Technologies 519, 521
Ballard Spahr LLP 511
Bill Barrett Corp. 403
CB Richard Ellis 624
Chevron 513
Coldsweep, Inc.. 123
Creative Energies 135
Crum Electric Supply 125
Cryq Energy 507
Delcam 602
Deseret Power 240
Ecology and Environment, Inc. 626
Enefit American Oil 119
Enel Green Power North America, Inc. 204
Environmental Planning Group 632
EPIC Oil Extractors, LLC 205
First Wind 505
Gardner Engineering Alternative Energy Services . . . 121
Goal ZERO 234
Governor's Office of Economic Development. 304
Hatch Associates Consultants Inc. 618
Horizon Power Systems 206
Hunt Electric 228
Infinia 244
Intermountain Power Agency 527
JBR Environmental Consultants, Inc. 226
Johnson Controls, Inc. 529
Magnum Gas Storage. 638
MEP 127
Mountain West Small Business Finance 608
National Energy Foundation 610
Office of Energy Development 503
Parsons Behle & Latimer 525
Power Control Company 145
Questar. 203, 302
Red Leaf Resources 210
Rocky Mountain Power. 303, 402
Salt Lake Community College. 504
Siemens Industry, Inc.. 636
Sprung Instant Structures, Inc. 622
State of Utah School and Institutional
Trust Lands Administration 212
Stoel Rives LLP 222
Southwest Utah Renewable Energy Center 220
SWCA Environmental Consultants. 634
TransWest Express LLC 218
U.S. Bureau of Land Management 628
Utah Associated Municipal Power Systems 612
Uintah Gateway – A Uintah Partners
Development 305,404
Utah Science Technology and Research Initiative . . . 202
Utah Biomass Resources Group 137
Utah Clean Cities Coalition 236, 238
Utah Clean Energy. 620
Utah Dept of Workforce Services. 502
Utah Division of Oil, Gas and Mining 141
Utah Geological Survey 143
Utah State University 224
Utah State University Extension 604
Utah Technology Council 606
Viresco Energy 242
Washakie Renewable Energy 523
Winnelson 232

BREAKOUT BONUS CONTEST!

1. Visit Exhibits

2. Get Stickers

3. Enter to Win



Winning entries must have
At least:
2 x red stickers
2 x orange stickers
2 x green stickers
2 x yellow stickers

See back of Breakout Bonus card for complete instructions.

NOTES

SPEAKERS AND PRESENTERS

UTAH GOVERNOR'S ENERGY DEVELOPMENT SUMMIT

Governor Gary R. Herbert

Governor, State of Utah

Gary Richard Herbert is Utah's 17th Governor, taking the Oath of Office on Aug. 11, 2009. Governor Herbert was born in American Fork, Utah, and raised in Orem, Utah. After graduating from Orem High School, Mr. Herbert served a two-year mission for the Church of Jesus Christ of Latter-day Saints in the Eastern Atlantic States Mission.

While attending BYU, the Governor met and married Jeanette Snelson, from Springville, Utah. Shortly after their marriage, the Governor joined the Utah National Guard and served for six years as a staff sergeant working with target acquisition, artillery and ground survey.

After his military service, the Governor began a career in the real estate industry, founding Herbert & Associates Realtors, an Orem-based brokerage firm. He and Jeanette also began a child care service, The Kids Connection, which they operated for 23 years.

In 1990, the Governor was appointed to the Utah County Commission. Soon thereafter, he was later elected to the body, which he served for 14 years. During his time as county commissioner, he served as presidents of the Utah Association of Counties and the Utah Association of Realtors, and as a board member of the Provo Orem Chamber of Commerce and Utah Water Conservancy District. Prior to becoming governor, he served as Lieutenant Governor under Governor Jon M. Huntsman Jr. for nearly five years.

Governor Herbert has outlined his four cornerstones to strengthen Utah's economy as education, energy, jobs and the ability of the state to solve its own problems, like those in the area of healthcare.

Governor and Mrs. Herbert have six children and 13 grandchildren.

Dr. Arun Majumdar

Acting Under Secretary of Energy, U.S. Department of Energy

Dr. Arun Majumdar became the first Director of the Advanced Research Projects Agency—Energy (ARPA-E), the country's only agency devoted to transformational energy research and development, in October 2009. Dr. Majumdar also currently serves as Acting Under Secretary of Energy.

Prior to joining ARPA-E, Dr. Majumdar was the Associate Laboratory Director for Energy and Environment at Lawrence Berkeley National Laboratory and a Professor of Mechanical Engineering and Materials Science and Engineering at the University of California, Berkeley. His highly distinguished research career includes the science and engineering of energy conversion, transport, and storage ranging from molecular and nanoscale level to large energy systems. In 2005, Dr. Majumdar was elected a member of the National Academy of Engineering for this pioneering work.

At Berkeley Labs and UC Berkeley, Dr. Majumdar helped shape several strategic initiatives in the areas of energy efficiency, renewable energy, and energy storage. He also testified before Congress on how to reduce energy consumption in buildings. Dr. Majumdar has also served on the advisory committee of the National Science Foundation's engineering directorate, was a member of the advisory council to the materials sciences and engineering division of the Department of Energy's Basic Energy Sciences, and was an advisor on nanotechnology to the President's Council of Advisors on Science and Technology.

Additionally, Dr. Majumdar has served as an advisor to startup companies and venture capital firms in the Silicon Valley.

He received his bachelor's degree in Mechanical Engineering at the Indian Institute of Technology, Bombay in 1985 and his Ph.D. from the University of California, Berkeley in 1989.

Greg Bell

Lieutenant Governor

Greg Bell has served as the Lieutenant Governor of Utah since September 1, 2009. Previously he served in the Leadership of the Utah State Senate having been a state senator representing Utah's 22nd District from January, 2003 until becoming Lieutenant Governor.

Lieutenant Governor Bell was born and raised in Ogden, Utah. He graduated from Ogden High School, Weber State University and the S.J. Quinney College of Law at the University of Utah. He practiced law at the firms of Kirton & McConkie and later at Fabian & Clendenin specializing in real estate law and has had extensive experience with real estate development, land use and finance.

Lieutenant Governor Bell is a past mayor and city councilman of Farmington. He has been the Chair of Envision Utah, an internationally acclaimed collaborative land use and transportation planning organization

Lt. Governor Bell and his wife, JoLynn, currently reside in Fruit Heights, Utah. They are the parents of six children and 18 grandchildren.

© photo by Trenton Davis

Amanda Smith

Governor's Energy Advisor, Executive Director Department of Environmental Quality

Governor Gary Herbert has appointed Amanda to serve as his Energy Advisor in addition to serving as Executive Director of the Utah Department of Environmental Quality. Prior to this, Amanda was the Legislative Director and Rural Advisor to Governor Huntsman. In this capacity she worked on a broad array of natural resource, energy, water and economic development issues. Additionally, she worked closely with the State Legislature on Governor Huntsman's priority issues. Before joining Governor Huntsman's office, Amanda was the Government Relations Director for The Nature Conservancy of Utah.

Amanda Smith received her under-graduate degree in Political Science from the University of Utah and her Juris doctorate degree from Gonzaga University School of Law. She is licensed by the Utah State Bar. Ms. Smith has worked professionally on conservation issues regarding public lands, preservation of private lands, energy policy, water resources and community planning. She has served as a member of the Bureau of Land Management Resource Advisory Council and has also served as a member of the State Institutional Trust Lands Board of Trustees.

Amanda is married to Evan Dillon and they have two children; Miles age 14 and Madeline age 6. She enjoys running with her dog, skiing, biking and cooking.

Samantha Mary Julian

Director, Office of Energy Development

Samantha Mary Julian was appointed by the Governor's Energy Advisor to be the Director of the Office of Energy Development in 2011. Before that, she served as the Energy & Natural Resources Cluster Director for the Governor's Office of Economic Development (GOED). The vision for the Office of Energy Development is to serve as the primary resource for advancing energy development in Utah.

Ms. Julian is responsible for the promotion of Utah's State Energy Policy, coordinating with the Governor's Energy Advisor to implement the Governor's energy goals and objectives, seeking federal grants and participating in federal programs, assisting industry, and making administrative rules. She is a member of the Governor's Energy Task Force and the Energy Coordinating Council. Under Ms. Julian's leadership the State of Utah launched the first annual Renewable Energy Business Summit (REBS). Ms. Julian has assisted in a number of key energy initiatives such as Governor Herbert's 10-Year Strategic Energy Plan.

Prior to joining GOED, Ms. Julian served as a Business Development Manager for the Economic Development Corporation of Utah (EDCUtah). In this capacity, she recruited companies to Utah and assisted companies to relocate or expand here.

Ms. Julian received her MBA from Westminster College and B.S. from the University of Utah in Political Science with a certificate in International Relations. She enjoys time reading and camping with her husband and two dogs.

A. Richard Walje

President and Chief Executive Officer, Rocky Mountain Power, PacifiCorp

A. Richard Walje is president and chief executive officer of Rocky Mountain Power at PacifiCorp. He was appointed to this position in March 2006. Walje has executive management responsibility for the company's strategy, operations, community relations, regulatory affairs and customer service in Utah, Idaho and Wyoming.

Walje has worked in the electric utility industry since 1972, starting as a journeyman lineman. As an electrical engineer, he worked for General Electric's power engineering business and focused on high-voltage equipment applications. During that time he was a member of IEEE's Power Engineering Society. Walje joined Utah Power & Light in 1984 as a substation design and applications engineer.

With PacifiCorp, he has held senior management positions in transmission and distribution network operations, community relations, customer services and information technology. In 2000, Walje was named ScottishPower's chief information officer.

Walje currently serves on the Wyoming Business Council Board of Directors, the University of Utah's Business School National Advisory Committee, the University of Wyoming Art Museum Advisory Board, the Utah Sports Commission Board of Directors, and is Chairman of the Economic Development Corporation of Utah. He is Chairman of the PacifiCorp/Rocky Mountain Power Foundation Board of Directors.

Walje received a Bachelor of Science degree in electrical engineering in 1984 and a Masters of Business Administration degree in 1991, both from the University of Utah. He is a member of the Tau Beta Pi and Eta Kappa Nu honor societies and was recognized as an outstanding alumnus of the University of Utah's electrical and computer engineering school in 2008.

Ronald W. Jibson

President and CEO, Questar Corporation

Ronald W. Jibson is President and CEO of Questar Corporation. Prior to his current assignment, Ron was President of Questar Gas Company and was responsible for distribution of natural gas services to about 900,000 customers in Utah, southern Idaho and southwestern Wyoming. Ron has held the positions of Executive Vice President, Vice President of Operations, General Manager of Operations, Operations Manager and Director of Engineering. He has been with Questar Corporation for the past 31 years where he started as a design engineer.

Ron graduated from Utah State University with a B.S. degree in Civil Engineering and later received a Masters of Business Administration degree from Westminster College. He is a licensed Professional Engineer in the State of Utah.

Ron's industry involvement includes being a member of the board of directors of the American Gas Association, Western Energy Institute and Gas Technology Institute. His involvement with Utah State University includes serving as Chair of the Board of Trustees. Locally, he serves on the United Way of Salt Lake board of directors. He also serves on the Board of Economic Development Corporation. Ron served as past chair of Utah Shakespearean Festival board of governors, and as past chair of the Junior Achievement of Utah board of directors.

Ron and his wife, Janet, are the parents of three sons. His hobbies include many outdoor activities including golf, fly fishing, hunting and spending time with his family at their cabin in the mountains.

Mike Alder

Director of the Office of Technology Transfer, BYU

Mike Alder is Director of the Office Technology Transfer, for Brigham Young University, Provo, Utah. He is also the Chairman of WestCAMP, Inc. and National Centers of Excellence. He recently drafted the Utah State Science and Technology Plan as a consultant to Utah's research universities. Overall Mr. Alder has over 35 years of experience in leading technology based start up companies. In 1989 he was asked by Governor Bangerter to head the Office of Technology Development for the State of Utah, which he did for 5 years. In 1973 he founded NPI, a plant biotechnology company in Salt Lake City, Utah and served as President, COO and Vice Chairman of that company for 15 years as it grew to over 700 employees.

Dave Alley

Section Manager, Architecture, Engineering, and Construction Division, The Church of Jesus Christ of Latter-day Saints

Dave Alley leads the Process Development, Training, and Systems Support section. He and his team define, design, and implement tools to enable the Church's worldwide design-build effort and to prepare for future construction growth.

Prior to joining the Church Physical Facilities Department, Dave was Principal and Chief Marketing Officer for the Durrant Group, an Architecture and Engineering firm with offices throughout the US and was Director of Customer Experience at Autodesk, the world's leading design software and digital content company. He also enjoyed a successful 21-year career with the US Air Force retiring in 2000.

Dave is a Registered Architect, is nationally accredited with the National Council of Architectural Registration Boards, and is a LEED Accredited Professional. He graduated with honors in Civil Engineering from the University of Wyoming and holds a Master of Architecture from the Ohio State University.

Besides design and construction, Dave's other passions include family, skiing, and biking. He is a certified instructor with the Professional Ski Instructors of America. His bride is the lovely Eva Poljanec of Jackson, Wyoming and they have four incredible children; Julie, John, Luke, and Anna.

Representative Roger E. Barrus

House District 18

Representative Barrus graduated from the College of Engineering at Utah State University in 1974 in new degree program that would lead to a career in the fledgling field, at that time, of Environmental Engineering and Occupational Health and Safety. He has since become a prominent member of those disciplines in the State and in the energy industry. He retired from his professional career in 2005.

Representative Barrus was elected to the Utah House of Representatives in 2000. He has served on the Natural Resources, Agriculture and Environment Committee since being elected and has chaired that Committee since 2005. His primary emphasis while serving as Chairman has been to develop Utah's energy policy and to assure that our State's vast portfolio of energy resources, including those on public lands, all have the opportunity to be responsibly developed to meet the energy needs of our state and nation. He co-chaired the work group in 2004/2005 that created the framework for Utah's energy policy, then sponsored HB 46 in 2006 that put our State's energy policy into statute.

In addition to his legislative responsibilities, Representative Barrus has served as Chairman of the Environment Committee for the National Conference of State Legislatures (NCSL) and currently as a member of NCSL's National Energy Supply Taskforce.

He sponsored a bill last year that created Utah's Office of Energy Development and is sponsoring a bill this year that defines the authority, funding and organization of that office. It is one of the Governor's priority bills in the 2012.

Steven R. Bateson

Director, Energy Efficiency, Questar

Mr. Steven R. Bateson currently serves as Director, Energy Efficiency for Questar Gas Company. Mr. Bateson has the responsibility of managing the ThermWise energy efficiency activities in the Company's Utah and Wyoming service territories.

He has been involved with regulatory affairs for the majority of his career. He was an active participant in the Company's efforts to obtain approval for the Conservation Enabling Tariff (decoupling). Mr. Bateson has provided expert testimony in a number of regulatory cases in the areas of Cost of Service and Rate Design. Mr. Bateson worked in the energy marketing field during a 10 years hiatus from Questar Gas Company.

He has a B.S. degree in Geography and a Masters of Engineering Administration degree, both from the University of Utah. Steve is a native of Utah and enjoys spending time outdoors any season of the year.

Robert J. Bayer

President and Managing Principal, JBR Environmental Consultants, Inc.

Mr. Bayer is a founder, shareholder, and President of JBR Environmental Consultants, Inc., with more than 38 years of experience in the mining and environmental industries. He has served in his current capacity or as a principal in the firm since its founding in 1985. His environmental industry experience includes the following: management of multimedia permitting projects for coal, ferrous, and non-ferrous metallic and non-metallic mining operations, as well as for industrial facilities; managing and conducting environmental investigations; and management of environmental due diligence and audit projects. In addition, he is currently involved in permitting for both oil shale and oil sands projects on the Colorado Plateau. His due diligence experience includes: mine and mills; roasters, smelters, and refineries; oil and gas fields, gathering systems, and natural gas plants; and land disturbed and affected by abandoned mines and related facilities. Mr. Bayer has B.S. and M.S. degrees in geology from Marietta College and the University of Tennessee, respectively, and worked in the mining industry as well as with a regulatory agency prior to his co-founding JBR. He served on the Utah Board of Oil Gas and Mining for two 4-year terms ending in 2009, is a past chair of the Utah Section of the Society for Mining, Metallurgy and Exploration (SME), a past chairman of the Utah Mining Association's Environment Committee, and is active in community affairs.

John Baza

Director, Utah Division of Oil, Gas, and Mining

Mr. John Baza is the Director of the Utah Division of Oil, Gas and Mining, having been appointed to that position in May 2005. He holds BS and MS degrees in petroleum engineering from Stanford University, and his work experience includes engineering positions with major and independent petroleum companies including Phillips Petroleum Co., Amoco Production Co., and Flying J Oil and Gas Inc. Mr. Baza has spent over 20 years with the Utah Division of Oil, Gas and Mining. Now as the Director of DOGM, he administers the Division's efforts in the areas of petroleum, coal mining, and mineral mining, along with abandoned mine reclamation.

Robert T. Behunin

Vice President for Commercialization and Regional Development, USU

Since 2008, Robert T Behunin, Vice President for Commercialization and Regional Development at Utah State University, has cultivated $6M of investment into technology commercialization at USU, played a central role in bringing together the team and technology for Purestream, a company that cleans wasterwater at well sites, and has helped to spin-out other USU companies. At present, Behunin participates in a variety of state and regional activities including Governor Herbert's Energy Task Force, Governor Herbert's Economic Development Council, the Utah Technology Council, Ashley Regional Medical Center, as well as the Utah State University Research Foundation.

Todd R. Bingham

President, Utah Mining Association

Todd R. Bingham, joined the Utah Mining Association (UMA) as President in May of 2009. He is responsible for all state, local and national governmental relations for the nearly 100-year-old mining organization. Prior to joining the Mining Association he served as the Vice President of Public Policy for the Utah Farm Bureau Federation from 2004 to 2009. He has been a registered lobbyist in the state of Utah for more than 15 years, representing business and industry in the areas of public policy.

Dr. Jeremy Boak

Director, COSTAR

Jeremy Boak is the Director of the Center for Oil Shale Technology and Research (COSTAR) at the Colorado School of Mines, and served as the Chair of the 26th, 27th, 28th, and 29th Oil Shale Symposia, held at Mines in 2006-2009, and Co-Chair of the 30th and 31st Oil Shale Symposia. About 300 people each year from twenty countries around the globe attend the Oil Shale Symposium. COSTAR is sponsored by Total and ExxonMobil, and conducts research on the geological, geophysical and geochemical properties of oil shale, which could potentially add 800 billion barrels of oil to U.S. oil reserves from the Green River Formation in Colorado, Utah, and Wyoming. He is also a co-director of the recently formed Center for Advanced Petroleum Systems Analysis and Research (CAPSAR), which conducts multidisciplinary, industry-directed research on petroleum systems such as the Bakken and Niobrara Formations. Dr. Boak is also a non-executive member of the Board of San Leon Energy, an oil and gas company located in Dublin, Ireland.

Dr. Jack Brittain

Vice President of Technology Venture Development, UU

Jack Brittain is the University of Utah's Vice President of Technology Venture Development. His research on strategic change in dynamic environments was recognized by the Academy of Management with two outstanding paper awards. Professor Brittain is the recipient of five teaching awards, including the University of Texas Chancellor's Council Outstanding Professor Award. In 2005 he received the Best of State Award in Education for the David Eccles School's innovative entrepreneurship and nonprofit consulting programs and in 2008 was named the first recipient of the Pierre Lassonde Presidential Chair in Entrepreneurship by the University of Utah. He serves on the boards of Junior Achievement, the Governor's Office of Economic Development, the University Venture Fund, the Lassonde New Venture Development Center, the Sorenson Innovation Center, and the University of Utah Research Foundation and represents the University on the Utah Science, Technology, and Research Governing Authority Board.

Patti Case, P.E.

Vice President ETC Group, Director Intermountain Region Clean Energy Application Center

Patti Case has been Vice President of ETC Group. since its start up in 1988. The company's mission is to improve the energy efficiency of commercial and industrial businesses and reduce the impact of energy use on the environment through engineering, analysis, education, and advocacy.

Patti has a MS in Mechanical Engineering and BS degrees in Chemistry and Biology. She is a registered PE in Utah and California. Before quitting her day job and going into business with her brother Mark Case (President of ETC) she did combustion research and development and industrial process engineering for 10 years. She now leads ETC Group's industrial practice. She has served on the South West Energy Efficiency Project's board of directors since 2002. She has been the Director of the Intermountain Combined Heat and Power Application Center (now the Clean Energy Center) since 2003.

Theddi Wright Chappell

Senior Managing Director and National Practice Leader, Cushman & Wakefield

Theddi Wright Chappell, CRE, MAI, FRICS, AAPI, LEED AP, is a Senior Managing Director and the National Practice Leader of the Green Advisory Practice within Cushman & Wakefield's Valuation & Advisory group. She is a national speaker and educator on the implications of green strategies on asset value and serves as the Ambassador of Sustainable Initiatives for the Appraisal Institute. She is a Director of the Green Building Finance Consortium and was an organizer of and presenter at the international Vancouver Valuation Summits I and II in Vancouver, BC. Prior to joining C&W, she served as the CEO of Sustainable Values, Inc. in Portland, Oregon, where she specialized in market, feasibility and investment analysis, particularly related to valuation and financing of new, existing, and urban redevelopment projects, and the identification and quantification of the benefits of sustainable development.

Thomas C. Chidsey

Petroleum Section Chief Utah Geological Survey, Salt Lake City, Utah

Tom Chidsey is the Petroleum Section Chief for the Utah Geological Survey (UGS). His responsibilities comprise managing the petroleum program and conducting research in Utah's petroleum geology. A native of the Washington, D.C. metropolitan area, Tom received his BS and MS degrees in geology from Brigham Young University. During his 35-year career, Tom has worked as a production geologist for Exxon in South Texas and an exploration geologist in the Rocky Mountains for Celsius Energy Company (Questar Corp.) before joining the UGS in 1989. He has served as Rocky Mountain Section President of the American Association of Petroleum Geologists (AAPG), President of the Utah Geological Association, and General Chairman for the 2003 AAPG Annual Convention in Salt Lake City. He has wide interest in geology and has numerous publications on Utah petroleum geology, carbon dioxide sequestration, and the general geology of Utah's parks.

Warren Cook

Senior Engineering Manager, Portland Energy Conservation Inc.

Warren Cook is a Sr. Engineering Manager for PECI in Portland, OR, technical lead on the Utah Home Performance program. He has been in the residential energy efficiency field since 1983, from retrofit contracting to conducting energy audits to program design implementation and oversight. He has worked for a number of utilities and consultants in the Pacific Northwest. . Mr. Cook is a member of the technical team that created the Energy Performance Score in Oregon, Wisconsin and Utah. He is an ASHRAE associate and currently pursuing a Master's of Science in Green Building.

Lori W. Creer

Director of Business Development, Questar Pipeline Company

Lori Creer is the Director of Business Development for Questar Pipeline Company, a subsidiary of Questar Corporation based in Salt Lake City. Questar Pipeline is an interstate natural gas pipeline company providing transportation and underground storage services in Utah, Wyoming and Colorado with deliveries to pipeline systems serving markets in the West and Midwest including Questar Gas the local distribution company serving natural gas utility customers in Utah, southwest Wyoming and southern Idaho. During her 23 year career at Questar Lori has also held positions with both the transmission pipeline company and the local distribution company in Engineering, Gas Supply, Measurement, Nominations and is a member of the Questar Women's Network steering committee. Lori received a Bachelors of Science in Mechanical Engineering from Utah State University.

Todd Dana

Chairman and CEO, Uintah Resources, Inc.

Todd Dana is Chairman and CEO of Uintah Resources, Inc. and oversees all aspects of the Uintah Gateway Project, a master planned industrial upgrader project located in Uintah County, Utah. Prior to Uintah, Mr. Dana was the Chairman and COO of Red Leaf Resources, Inc., a company founded by Mr. Dana to develop his invention of the EcoShale In-Capsule Process, an environmental technology for reducing emissions and water use while producing premium unconventional fuels from oil shale, coal, biomass and lignite. Mr. Dana's holding company, Red Leaf Manager, LLC was the largest shareholder of Red Leaf Resources prior to being acquired by a third party in December of 2010. In 2009, Mr. Dana formed Uintah Resources, Inc. to develop the major upgrading and refining complex known as the Uintah Gateway Project. On behalf of the project, Mr. Dana has negotiated and entered into agreements for water rights, key rights of way, and for nearly 19,500 contiguous acres of land for the project site. Additionally, Mr. Dana has successfully attracted key supply, refining, engineering, banking, marketing, private equity and EPC contractors to the Uintah Gateway Project. The Phase I Uintah Gateway Project is estimated to cost approximately $1.4 billion and will create hundreds of long term jobs in the Uintah Basin. Mr. Dana and his wife live in Park City, Utah.

Dr. Nils Diaz:

Chief Strategic Officer, Blue Castle Holdings

Dr. Nils Diaz is the former Chairman of the U.S. Nuclear Regulatory Commission (NRC). Dr. Diaz was designated Chairman of the NRC by President Bush in 2003 and he served as such until his retirement from government service in 2006. As Chairman of the NRC, Dr. Diaz served as the principal executive officer of and the official spokesman for the NRC, and had ultimate authority for all NRC functions pertaining to an emergency involving an NRC license; he was directly responsible for all high level interactions with the U.S. Executive Branch and the Congress, as well as international relationships and the policy development under the NRC charter. Prior to the NRC, Dr. Diaz held various leadership positions throughout the nuclear, defense, and research fields; both within the United States and overseas. Dr. Diaz is internationally recognized for his broad expertise and contributions to nuclear sciences, reactor systems and fuels, to the regulation of nuclear facilities and radioactive materials, and to nuclear policy analysis and development. He has published extensively, and is recognized worldwide for his statesmanship on nuclear affairs.

Neeharika Dhungel

Environmental Protection Agency

Ms. Naik-Dhungel is a Program Manager in the US EPA's CHP Partnership Program.

She is a policy analyst and scientist with a background in Energy Management and Policy and Theoretical Nuclear Physics. She has over fifteen years of diverse experience that lends to her engagement on the wide range of issues faced by the CHP industry in project development, policies and regulations.

Her work in the energy sector has been focused on energy efficiency, environmental compliance, policy analysis, and technology assessment. Prior to EPA, she worked in the private sector, with municipalities and Fortune 100 companies primarily, in the energy, chemicals, and pulp and paper sectors.

Spencer P. Eccles

Executive Director, Governor's Office of Economic Development

Spencer Peterson Eccles has strong ties to Utah's urban and rural communities as well as international markets. He is currently the Executive Director of the Utah Governor's Office of Economic Development which oversees all business, tourism and film development for the State, including international trade.

He was formerly affiliated with the Salt Lake City office of Wells Capital Management (Wells Fargo Bank). Most recently, he has been involved with web-based software and materials technology companies in the U.S. and abroad.

In 1997, the Salt Lake Organizing Committee for the 2002 Olympic Winter Games tapped Eccles to manage the development of its Snow Basin venue and oversee the premier Olympic downhill events as well as all of the alpine Paralympic competitions.

Eccles' involvement with Utah's non-profit community includes his past chairmanship of the Salt Lake Chamber's International Committee and service on its Board of Governors and Executive Committee.

Eccles received his MBA from BYU's Marriott School of Management and his BA in history from the University of Utah.

Kevin Emerson

Senior Policy & Regulatory Associate, Utah Clean Energy

Kevin is Utah Clean Energy's lead for programs, policies, and regulatory activities that advance energy efficiency in Utah. He works with diverse partners to remove institutional barriers to increased energy efficiency, including increasing utility energy efficiency incentives, advocating for improved energy efficiency in Utah's buildings, and supporting the development of Utah's clean energy workforce. Kevin holds degrees from the University of Utah and the University of Edinburgh.

Mary A. Enges

Strategic Energy Planner for the Enhanced Use Lease Program Management Office at Hill Air Force Base

Mary A. Enges, Esq., serves as Strategic Energy Planner for the Enhanced Use Lease Program Management Office, Ogden Air Logistics Center, Hill Air Force Base, Utah. The Center provides worldwide logistics management, engineering, supply, contracting and depot maintenance for a wide variety of aircraft and munitions-related platforms. Based on USAF Energy Strategy, Mary creates operational plans for developing sustainable energy resources in order to achieve energy security for Hill AFB.

Robin Erickson

Executive Director, Utah Clean Cities Coalition

Robin Erickson has been affiliated with the Utah Clean Cities Coalition for the last 17 years, and currently serves as its Executive Director. Utah Clean Cities is a nonprofit, Department of Energy sponsored coalition that promotes reduced petroleum use in the transportation sector through the use of alternative fuels and alternative fuel vehicles. Its mission is energy independence, economic and environmental security for Utah. In the past, the coalition has secured large grants for its stakeholders that have allowed partners to increase the number alternative fuel stations, to put several hundred alternative fuel vehicles on the road, and to create hundreds of new jobs. The coalition also actively engages the public through several education outreach campaigns. Our most successful, the third annual Turn Your Key Be Idle Free Month, was endorsed by Governor Herbert and 41 Mayors in 2011.

Kelly Francone

Consultant, Utah Association of Energy Users

Kelly Francone is a consultant with Energy Strategies, a private energy consulting firm in Salt Lake City. She joined Energy Strategies in 2005. She is the Executive Director of the Utah Association of Energy Users (UAE), providing administrative, legislative and regulatory support for Utah's largest consortium of industrial customers. Her work entails researching, analyzing and assessing the technical and financial aspects of various energy users, as well as determining the impact of regulatory actions on customers rates. She also coordinates one of the largest annual energy conferences in Utah in the spring of each year. For other clients all over the United States, Kelly provides energy market, and economic research and analysis and assessment on energy users, as well as understanding the transmission development in the west and implications for RPS requirements and resources development.

Kelly received a Bachelors of Science degree at the University of Utah in Communications.

Troy Gagliano

Renewable Energy Project Director, enXco

Troy Gagliano has been with enXco since 2007 and has worked in the renewable industry for 12 years with a focus on project development and energy policy. He has successfully permitted utility-scale wind farms and most recently developed two solar PV projects in Yamhill County Oregon, one of which is the largest ground mount system in the Pacific Northwest. Before joining enXco he spent the previous 7 years working in energy policy at the federal, state and local levels. He has an M.A. in International Public Policy from the University of Denver.

Carl Galbraith

Director, Business Development

Carl Galbraith is Questar Gas's Business Development Director. He is responsible for the company's Natural Gas Vehicle (NGV) program and Economic Development. In his 33-year career with Questar Gas, he has managed various work assignments related to marketing, consumer services, regulatory and government affairs, economic development, and NGV technology and transportation. Nationally, he serves

on the Natural Gas Vehicle America board of directors, and also serves as co-chair of the Drive Natural Gas Initiative, which is developing a process to build a national network of NGV fueling stations. Locally, he serves on the Utah Clean Cities board and chairs the legislative committee. He is a past member of the Utah Governor's Motor Carrier Advisory Committee, past chair of the Greater Salt Lake American Red Cross, and also past chair of the agency's Mountain West Region. Carl is a graduate of Utah State University with a degree in business administration; he also completed gas rate fundamentals and advanced courses at the University of Wisconsin and University of Maryland.

James Gazewood

BLM Renewable Energy Program Coordinator, Utah State Office

James Gazewood is the Renewable Energy Program Coordinator, Bureau of Land Management (BLM) Utah State Office, Salt Lake City, UT. Jim provides technical support for wind, solar, geothermal, and biomass energy project planning, permitting, and development activities.

Mike Graham

Managing Partner, Greysage LLC

- Member of Governor Herbert's 10-Year Strategic Energy Task Force
- Current Partner in Sanpete Valley Clean Energy—developer of clean energy power projects
- Involved in Bio-mass power projects in Brazil
- CEO of $600 million global division and served on Board of Directors of World's largest advertising agency—J. Walter Thompson ($6 Billion in revenues)
- CEO of two advertising agencies
- Started three businesses in the US and Brazil
- Former Chief-of-Staff for Governor of Utah (for 5 years)
- Written numerous published articles on internet and marketing and served on Board of Directors of several start-up companies.

Rich Halvey

Energy Program Director, Western Governors' Association

Rich Halvey is the Energy Program Director at the Western Governors' Association. He has managed a number of large, regional, stakeholder-centered projects for the Association, including the Clean and Diversified Energy Initiative process to create incentives to increase the amount of new and traditional forms of clean energy and energy efficiency in the West, the Western Interconnection Renewable Energy Zones project to identify the richest, most commercially developable renewable energy zones, and the Regional Transmission Expansion Planning Project to develop long term transmission plans for the West. Mr. Halvey has also worked extensively over the last ten years with the governments of Mexico and Canada on a number of environmental and energy projects. He is recognized as an expert on Western energy policy and has testified on regional energy and transmission issues in front of state legislative committees and committees of the United States Senate and House of Representatives. The WGA, which is headquartered in Denver, Colorado, represents the governors of 19 Western states and three U.S.-flag, Pacific islands. Mr. Halvey came to the Association in 1996 with a broad background in air quality management and public finance. Mr. Halvey has published numerous papers and articles on various domestic and international energy, environmental, policy, and economic topics. Mr. Halvey did his undergraduate work in Economics and Geography at the University of Buffalo and his Masters work in Geography and Urban Planning at the University of Colorado.

Dennis Hansen

Principal Electrical Engineer, Rocky Mountain Power

Dennis Hansen is a principal electrical engineer with PacifiCorp / Rocky Mountain Power, based in Salt Lake City. He has been with the company for 36 years. During this time he has focused on power quality and reliability, and designed systems for protective relaying, generators, and wide-area synchrophasor measurement systems. Presently he is the company's technical representative on energy storage technologies, especially the electromechanical battery demonstration project in concert with EMB Energy, Lawrence Livermore National Labs and other industrial partners.

Leonard E Herr

BLM Air Resource Specialist, Utah State Office

Over 25 years of air quality management experience in local, state, and federal government agencies and the private sector. During this time have worked in Utah, Idaho, California, and Minnesota, and participated in the development of numerous airshed management plans and pollution control efforts. BS in Natural Resources from Humboldt State University in California.

Rikki Hrenko

CEO, Enefit American Oil

Rikki Hrenko is the CEO of Enefit American Oil. EAO is a subsidiary of Eesti Energia AS, where Rikki worked since 2007, previously as an International Projects Director in their Business Development Department. She was responsible for all environmental planning and management of EE's oil shale projects in Jordan and managed the acquisition of the US assets now owned by EAO in Utah. Rikki was also the Chair of the International Oil Shale Symposium in Tallinn in 2009, the largest oil shale conference held in Europe. Rikki previously worked as an environmental policy expert for Eesti Energia. She has a Masters of Science degree in environmental policy and management from Carnegie Mellon University. During her undergraduate time at Miami University she was a Hughes Fellow and published researcher working on invasive plant species.

Bret P. Hunter

Customer & Community Manager, Rocky Mountain Power

Bret Hunter is a customer & community manager at Rocky Mountain Power. He has been with the company since 2009. His responsibilities are for both municipal and industrial customers from Utah County to the Uintah Basin.

Hunter worked 25 years before joining Rocky Mountain Power in energy and environmental solutions with companies that included Honeywell, Chevron and Siemens. He serves on several board of directors including the Boys and Girls Club of Utah County.

Hunter earned a bachelor's degree in Business Administration.

Douglas O. Hunter

General Manager
Utah Associated Municipal Power Systems

Douglas Hunter, General Manager of Utah Associated Municipal Power Systems or UAMPS, is a 30 plus year veteran of the electric utility industry. UAMPS is a joint action agency, organized in 1980 to plan, finance and operate electric power projects for its members. Its members include 51 municipals throughout Utah, Arizona California, Idaho, Nevada, New Mexico, Oregon and Wyoming. Mr. Hunter believes that public power systems are powered by two main principles; first, to provide economically priced and reliable energy, and second to provide the consumer a voice thus allowing a community decision-making process. Mr. Hunter holds a Bachelors degree in biochemistry from the University of California and a Masters degree in business administration from Utah State University.

Kim Johnson

Executive Vice President of Business Development, Riverbank Power

Ms. Johnson is Executive Vice President of Business Development for Riverbank. She is responsible for business development, strategic partnerships, and contract origination including power sales, ancillary services and REC agreements as well as transmission and interconnection agreements. She has over 30 years of energy marketing, trading, transmission, storage and management experience. She as served in senior executive positions at Tyr Energy, KCP&L, Shell North America, Catex Vitol and Diamond Shamrock and has built and managed teams responsible for over 4,000 MW of generation and the optimization of approximately 40 Bcf of gas storage.

Jim Karpowitz

Director, Utah Division of Wildlife Resources

Jim Karpowitz, was appointed as the Director of the Utah Division of Wildlife Resources in April 2005. When he became the director he decided to clearly outline the mission and goals for the agency (listed below). The Division has made progress toward each, which translates into positive impacts to the quality of life Utahns enjoy and increased hunting and fishing opportunities across the state. Karpowitz attributes the Division's success to its great employees and strong, enduring partnerships.

Jim began his career with the Division as a biologist over three decades ago. He served as Wildlife Manager in the Southeastern Region for 15 years before becoming the State Big Game Program Coordinator. He is highly recognized for his work to restore bighorn sheep in the state. He has earned a bachelors and masters degree in wildlife and range resources from Brigham Young University. Karpowitz is an avid fisherman and hunter, and enjoys bird watching.

Kenner Kingston

Senior Principal, Director of Sustainability
Architectural Nexus

Kenner Kingston is an architect and partner at Architectural Nexus, a Salt Lake City firm with a practice reaching throughout the West. Kenner was an early adopter of the USGBC's LEED Rating System. He is Director of Sustainability at Nexus and is responsible to initiate research about, spearheading education for, and ensuring implementation of sustainable practices within the firm.

John Knight

Development Director, Southwest and Rocky Mountains

John has 8 years of experience in renewable energy development throughout North America and is currently responsible for the development of wind and solar projects throughout the Rocky Mountains and the southwest for Element Power. John comes to Element Power from Westwood Professional Services where he oversaw the development of the real estate division for the company. He was responsible for the management of a team that would site and acquire renewable energy projects for multiple clients throughout North America. John came to Westwood through the sale of his company, Knight Land Services. John received his BS in Finance and Environmental Science from the University of Wyoming and his Graduate Certificate in Real Estate Development from Portland State University.

Brock LeBaron

Utah Division of Air Quality
Deputy Director

Brock is the Deputy Director for the Division of Air Quality with primary responsibly for coordinating air issues in the rural areas of Utah. He is currently focused on wintertime ozone issues in the Uintah Basin where a multi-agency study is being planned for this winter. Brockhas a graduate degree in Meteorology from Utah State University.

Brock serves as a state representative on the Western States Air Resource Council (WESTAR), a board member of the Western Regional Air Partnership (WRAP), and has been a member of the Air and Waste Management Association since 1990. He was actively involved with the Governor's Quality Growth Commission and the ENVISION Utah process.

Senator Mike Lee

United States Senator

Elected in 2010 as Utah's 16th Senator, Mike Lee has spent his career defending the basic liberties of Americans and Utahns as a tireless advocate for our founding constitutional principles. Lee graduated from Brigham Young University with a Bachelor of Science in Political Science, and served as BYU's Student Body President in his senior year. He graduated from BYU's Law School in 1997 and went on to serve as law clerk to Judge Dee Benson of the U.S. District Court for the District of Utah, and then with future Supreme Court Justice Judge Samuel A. Alito, Jr. on the U.S. Court of Appeals for the Third Circuit Court.

Lee is a member of the Judiciary Committee, and serves as ranking Member of the Antitrust, Competition Policy and Consumer Rights Subcommittee protecting business competition and personal freedom. He also oversees issues critical to Utah as the top Republican on the Water and Power Subcommittee of the Energy and Natural Resources Committee.

Darin Lowder

Associate Attorney, Ballard Spahr

Darin Lowder is an attorney at Ballard Spahr where he focuses his practice on energy, project finance, and related real estate matters. Mr. Lowder has worked with utilities, energy project developers, tax equity investors, engineering and construction firms, project site owners, and power purchasers on a variety of renewable-energy and fossil-fuel power projects. Mr. Lowder is experienced with such project technologies as solar photovoltaic systems, onshore and offshore wind development, biomass and biofuel projects, coal-fired generation, next-generation nuclear power, and power derived from coalbed methane. Beginning in 2008, Mr. Lowder was heavily involved in the planning, financial structuring and bond issuance for the recently closed Salt Palace rooftop solar project.

Senator Mark B. Madsen

Senate District 13

Senator Mark B. Madsen has been serving in the legislature for 7 years. He represents Senate District 13, which includes roughly 80% of the land in Utah County, a fifth of its population and the eastern part of Tooele County. He's happily married to Erin Madsen; they have five children. By profession, Senator Madsen is a developer and attorney. He chairs the Senate Judiciary, Law Enforcement, and Criminal Justice Committee; he has also chaired the Utah International Trade Commission since its creation in 2006. Before moving to Utah in 2000 Senator Madsen lived and worked in Washington, D.C. where his focus was primarily defense and foreign policy.

Curtis Mansfield

Managing Director, T&D Support Services – PacifiCorp

Mansfield was appointed to the position of managing director, transmission & distribution support services at PacifiCorp in June 2004. In this capacity he oversees PacifiCorp's vegetation management, transportation, street lighting, rubber goods testing and distribution equipment maintenance centers (DEMC) programs for Rocky Mountain and Pacific Power.

Additionally, he is responsible for the logistics, disaster and risk management, scheduling & compliance organization, pole test and treat along with the facility inspector programs for the Rocky Mountain Power business unit..

Mansfield joined PacifiCorp in 1981, working up through the business units, ranging from meter reading, journeyman lineman, operations manager, customer service director, distribution dispatch director, and managing director of major projects. As managing director of major projects Mansfield oversaw and managed the construction requirements for PacifiCorp's Quantum Leap project, a $203 million, three-year Wasatch Front investment program. He has also served our company as the 2002 Salt Lake City Winter Olympic Command & Control Center project manager.

Curt currently serves on the board of directors of NeighborWorks Salt Lake City. NeigborWorks is a non-profit organization that creates opportunities through youth and economic development in partnership with residents, government, and businesses to build and sustain neighbourhoods of choice.

Alan Matheson

Governor's Environmental Advisor

Alan Matheson is Governor Herbert's Senior Environmental Advisor. He previously served as Executive Director of Envision Utah, Founding Director of the Utah Water Project, Partner in a Phoenix law firm where he practiced water law, and Senior Attorney and Environmental Policy Advisor for Arizona's largest electric utility. Alan holds a B.A. from Stanford University and a J.D. from the UCLA School of Law.

Ted McAleer

Executive Director, USTAR

Ted McAleer is currently the Executive Director of USTAR. Prior to USTAR, McAleer was the Director of Business Development for The University of Utah's Technology Venture Development organization. Ted has 20 years of experience in technology innovation; business development; and product, services and operations management in both start-up and mature corporations. He has been Chief Operating Officer for Teleoptic Digital Imaging, LLC and the Sr. Director of Implementation services at Campus Pipeline, Inc. He has also worked for SunGard SCT, Procter and Gamble, PepsiCo. and the US Army.

Dr. Harold F. McFarlane

Interim Associate Laboratory Director, Idaho National Laboratory, Technical Director, Generation-IV International Forum

Dr. McFarlane's principal responsibility is overseeing Idaho National

Laboratory's nuclear energy research and development portfolio. He

also represents INL in international nuclear energy cooperation, including serving as the Technical Director of the Generation-IV International Forum. Dr. McFarlane's experience includes numerous technical leadership positions with responsibility for developing advanced systems for nuclear power plants, the nuclear fuel cycle, and space nuclear power for science and exploration. He recently completed a one-year appointment in Washington, DC as the senior technical advisor to the Assistant Secretary for Nuclear Energy in the Department of Energy. In that role he coordinated the DOE national laboratories' technical support role following the Fukushima nuclear accident. He has a PhD in engineering science from the California Institute of Technology, a bachelor's degree in physics from the University of Texas, and master's degree in business administration from the University of Chicago. Dr. McFarlane is a past President and a Fellow of the American Nuclear Society. He is also the immediate past Chairman of the International Nuclear Energy Academy.

Christopher B. McGill

Managing Director Policy Analysis American Gas Association

Mr. McGill is the Managing Director Policy Analysis at the American Gas Association (AGA), which is headquartered in Washington, D.C. AGA is a national trade association providing services and advocacy for more than 200 local natural gas utility members. Mr. McGill's work is in the assessment of future supplies of natural gas, natural gas production, unconventional gas operations and completion technologies, underground storage, key pipeline transportation issues, winter heating season planning and other related topics in the gas industry. He is an active spokesperson on many natural gas supply topics, representing local gas utility points of view to industry, regulators, legislators and the public. Mr. McGill

previously worked as an exploration geologist before joining AGA. He holds a Bachelor of Science degree in Geology from Madison College in Harrisonburg, Virginia (1975) and a M.B.A. from Old Dominion University in Norfolk, Virginia (1988). Mr. McGill is a member of the American Association of Petroleum Geologists.

Michael J McKee

Commissioner, Uintah County

- Currently serving 10th year as Uintah County Commissioner
- 2010 Utah Association of Counties Elected Official of the Year
- 2010 Utah County Commissioner of the Year
- National Association of Public Lands Committee
- Utah State University Uintah Basin Regional Campus Director's Award 2006

Currently serving on the following State boards:

- Community Impact Board
- Constitutional Defense Council
- Governor's Balanced Resource Council

Leader on Public Land's and Energy issues.

Has given testimony before Congressional committees on several occasions.

Proponent of responsible energy development.

Actively involved in Uintah Basin Air Quality Study, Sage Grouse management, Updated EIS for Oil Shale and Oil Sands, Resource Management Plans etc.

Dr. John McLennan

Senior Research Scientist at the Energy & Geoscience Institute, University of Utah

Since October 2009, Dr. John McLennan has been an Associate Professor in the Department of Chemical Engineering at the University of Utah. He has been a Senior Research Scientist at the Energy & Geoscience Institute and a Research Professor in the Department of Chemical Engineering at the University of Utah, since January 2008. He has a Ph.D. in Civil Engineering from the University of Toronto, in 1980. He has more than thirty years of experience in geomechanics with petroleum service and technology companies.

Kirk Moushegian

Commercial & Industrial Sector Manager, Nextant

Kirk Moushegian, Commercial & Industrial (C&I) Sector Manager in Nexant's Demand Management unit, provides technical counsulting services to commercial and industrial clients, municipalities and investor owned utilities. His experience is in project engineering/management of Demand Side Management (DSM) Programs and commercial building mechnical systems. Kirk received his Masters in Business Administration and Mechanical Engineering degrees from the University of Utah.

Jeff Muhs

Director, Utah Research Triangle Initiative

Jeff Muhs is Director of the Utah Research Triangle Initiative and Strategy & Business Development at Utah State University's Energy Dynamics Laboratory (EDL). Jeff came to the USU system in 2007 as a Utah Science Technology and Research (USTAR) strategic hire. From 2009 – 2011, he helped launch, direct, and grow EDL into one of the states premiere energy R&D organizations. Mr. Muhs spent 18 years at the USDOE's Oak Ridge National Laboratory where he was named "Engineer/Scientist of the Year" and "Science Communicator of the Year" in 1997 and 2004, respectively. In 2005, Jeff served as an energy and science policy advisor in the U.S. Senate where he drafted several provisions included in the Energy Policy Act of 2005 and the America COMPETES Act. Mr. Muhs is the author of fourteen patents and received the prestigious R&D 100 Award in 2006. Jeff has testified before the U.S. Senate Energy & Water Appropriations Committee and is widely-known as a leader and champion of transformational energy systems.

Dr. Laura Nelson

Vice President, Red Leaf Resources

Dr. Nelson is the former chair of the U.S. Unconventional Fuels Task Force and Energy Advisor to Utah Governor Jon Huntsman. Dr. Nelson has worked extensively on energy policy matters, including those related to emerging technologies and cross-cutting environmental issues. Dr. Nelson has considerable knowledge of energy markets and the regulatory and political environment for energy development.

Julia Pettit

Associate Attorney, Stoel Rives

Julia Pettit is an attorney at Stoel Rives, LLP and practices in the firm's Corporate group. Julia focuses her practice in the area of energy project finance and development and M&A. Julia's energy practice also includes advising on and/or negotiating core agreements relating to energy projects, including site lease agreements; power purchase agreements; consulting agreements; joint venture agreements; EPC/O&M agreements; and supply/offtake agreements.

David J.A. Post

Head of Business Development – Region West

Mr. Post joined Enel Green Power in North America (EGPNA) in January 2011 as Head of Business Development in the West with a specific focus on growing EGPNA's presence across different technologies (geothermal, wind, hydro and solar). Prior to joining EGPNA, Mr. Post was the deputy director of business development and strategy for Endesa in Latin America and in Europe, and occupied several board positions. Mr. Post has an extensive experience in merger and acquisitions as well as in financial restructuring. Prior to joining Endesa, Mr. Post was a Senior Associate at McKinsey & Company. Mr. Post holds an MBA from Columbia Business School (with Sigma Bea Gamma award) and a Doctorandus degree from the Erasmus Universiteit Rotterdam (with special honors).

Kimball Rasmussen

President and CEO, Deseret Power

Kimball Rasmussen is President and CEO of Deseret Power based in South Jordan, Utah. Deseret operates the coal-fired Bonanza Power Plant near Vernal, Utah and serves over 60,000 customers. Kimball has experience working in senior or CEO positions for all three power supplier business models that include municipalities, cooperatives and investor-owned power utilities. Kimball launched his career graduating with an Electrical Engineering bachelor's degree and a MBA degree from the Brigham Young University in 1986.

Lisa Romney

Project Manager, Rocky Mountain Power

As a Project Manager for Rocky Mountain Power, Lisa works directly with commercial and industrial customers to identify, develop, and implement energy efficiency projects in Utah. She has been professionally engaged in energy efficiency for more than a decade through previous positions as a business manager for Chevron Energy Solutions and the Environmental Advisor to Salt Lake City Mayor Rocky Anderson. Lisa has a B.S. in Environmental Studies from Utah State University and a Master's Degree from the Harvard Graduate School of Design.

Marc Rouse

Regional Sales Manager, Capstone Turbine Corp.

Marc Rouse is a Regional Sales Manager for Capstone Turbine Corporation.

After earning a Bachelor's degree in Electrical Engineering from Rice University Marc began his career in the Oil and Gas and Energy industries.

Previous employers include Solar Turbines Inc. and Dresser-Rand Co. Marc has gas turbine (30KW to multi-MW), control systems and Oil and Gas experience, he has worked in both engineering and sales capacities.

Brenda Case Scheer

Dean of the College of Architecture + Planning, University of Utah

Brenda Case Scheer is an architect and planner who is currently dean of the College of Architecture + Planning at the University of Utah. Within the community Dean Scheer has championed urban design excellence, along with increased attention to sustainable cities, and sustainable and well-designed buildings. Directly because of her efforts, President Barack Obama recently named the University of Utah as a partner in his Better Buildings Challenge, which asks partners to reduce their energy use by 20% by 2020. She has envisioned the 1970 architecture school building as the largest net zero renovation in the US. In addition to being a showcase project proposed for the Better Buildings Challenge, the project is also supported through partnerships with the Department of Energy and the National Renewable Energy Laboratory. The project is a living laboratory -- invigorated by the participation of alumni, students and faculty.

Todd Savage

Executive Vice President, Savage Services

Having worked with Savage since 1979, Todd has literally grown up with the company. His experience includes operations management, business development in the coal and power generation industries and project development from creation through implementation on many projects.

Todd's insight and creativity in developing innovative solutions for challenging materials management, transportation issues and facility operations has been integral in shaping the philosophy and business model of Savage.

Todd earned a degree in Business Management from the University of Phoenix.

Adam Seibel

Senior Consultant, Booz Allen Hamilton

Mr. Adam Seibel works for Booz Allen Hamilton as a Senior Consultant and serves as Mr. Doug Waters direct execution support on the Energy Initiatives Task Force (EITF) and advisor on Army matters. He joins Booz Allen after serving 11 years on Active Duty with the United States Army. Adam is a graduate of Providence College with a BA in Political Science, and has a MA in Organizational Management from the University of Phoenix Jacksonville, Florida Campus and he holds an active Secret Clearance.

Greg Schaefer

Vice President External Affairs, Arch Coal, Inc.

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.

Dr. Philip J. Smith

Director, Institute for Clean and Secure Energy

Professor Philip J. Smith is the director of the Institute for Clean and Secure Energy (ICSE), a multidisciplinary research program for understanding the technical, policy and environmental issues for clean fossil fuel energy production and utilization. Dr. Smith is also a professor of Chemical Engineering at the University of Utah. Dr. Smith is a native Albertan who has spent the last two decades researching, analyzing and working with fossil fuels in Utah. Oil sands and their potential development have been studied extensively by Dr. Smith and ICSE. For this reason, Dr. Smith is one of the most quoted and referenced experts on oil sands in the Utah Academic community.

Glade Sowards

Environmental Scientist, Division of Air Quality

Glade Sowards is an Environmental Scientist with the Utah Division of Air Quality where he focuses on mobile source emissions and energy issues. Glade was a lead staffer for former Governor Huntsman's Blue Ribbon Advisory Council on Climate Change and related initiatives. Previously, he served as the State Energy Program manager and as head of the Utah Energy Office data and analysis team. Before coming to work for the State of Utah in 1998, Glade conducted a nationwide economic study on transportation infrastructure for the USDA Forest Service Forest Products Laboratory. Glade holds a BA in Economics and Environmental Studies from Grinnell College and an MS in Forestry from Michigan Technological University.

Melisa Stark

Workforce Development Grants Specialist, Department of Workforce Services

Melisa Stark is a Workforce Development Grants Specialist at the Utah Department of Workforce Services. She co-manages the State Energy Sector Partnership grant and the National Emergency Grant for ATK Launch Systems. She participates in other energy related economic and workforce development initiatives. She also supports initiatives to encourage women to work in non-traditional fields.

Shannon Stewart

Solar Energy Program Lead, BLM

Shannon Stewart is the BLM's Solar Energy Program Lead in the National Renewable Energy Coordination Office located in Washington DC. She is the project manager for the Programmatic Environmental Impact Statement (EIS) for Solar Energy Development in Six Southwestern States. Shannon has also participated in the BLM's Geothermal Programmatic EIS, the Arizona Restoration Design Energy Program EIS, and numerous other policy efforts that support renewable energy development on public lands.

Pete Sullivan

Director of Development, First Wind

Pete Sullivan is a Director at First Wind, where he leads project development in the Southwest. Pete recently led the development of the Milford II project (102 MW), which achieved commercial operations in 2011. Pete has been with First Wind since 2008 and, prior to his current role, he served as Development Coordinator and Board Liaison. Before coming to First Wind, Pete worked at GE, where he held roles in strategic planning as well as GE's ecomagination initiative. Pete served on the Midwest Governors Association Climate Change Task Force as well as the Minnesota Climate Change Advisory Group. Pete has an MA from the University of Chicago and a BA from Boston College.

Cameron Todd

CEO US Oil Sands

Cameron Todd has been CEO of US Oil Sands since April 2011. Previously Mr. Todd worked as Sr. VP, Operations, Refining and Marketing with Connacher Oil and Gas, a leading integrated Canadian independent oil sands development and production company.

Mr. Todd has worked in Canada, Argentina and Texas for various companies (Chauvco, Pioneer Natural and Amoco Canada Petroleum). He has over 30 years' experience in all facets of the domestic and international oil and gas industry, is the author of a number of papers, and a member of various professional societies. Mr. Todd graduated from the University of Calgary with a B.Sc. in Mechanical Engineering (1980).

Ray Torres

Business Development Specialist, Tooele Army Depot

Ray Torres is a graduate of University of Maryland, BS Business Management. Currently working at Tooele Army Depot, specializing in Public Private Partnerships with the US Army. He formerly worked in Europe developing retail markets and alternative energy programs.

Senator Kevin Van Tassell

Senate District 26

Senator Kevin Van Tassell represents Utah's 26th District including Daggett, Duchesne, Summit, Uintah and Wasatch Counties. Senator Van Tassell began with the Utah State Legislature in November 2006 and is an awarded Banker with a long and distinguished career at Zion's Bank. Senator Van Tassell has long played an important role in Utah's Energy Economy, traveling across the globe to identify and research important energy companies for Utah. Senator Van Tassell attended Brigham Young University and graduated from the American Banker's Commercial Lending School.

Michael Vaughan

Principal Advisor – Energy Programs at Rio Tinto

As Principal Advisor—Energy Programs, Michael is accountable for defining and implementing energy improvement initiatives across the areas of power generation, transport and process energy efficiency. Michael has worked for Rio Tinto for seven years; his previous role included developing renewable energy supply options for the company's remote mining operations in Australia.

Paul Wages

Production Engineering Manager, Anadarko

Paul Wages has 30 years of experience in the energy industry, primarily in upstream oil & gas. He is the Production Engineering Manager for Anadarko Petroleum Corporation's Greater Natural Buttes gas field in northeastern Utah, which is currently producing 500 MMCFD of natural gas and approximately 35,000 barrel of water per day. Prior to this, Paul managed coal-bed methane operations for the company in the Powder River Basin of Wyoming. That asset has averaged 400,000 barrels of water per day for the last four years. Paul began his career with Champlin Petroleum Company (later Union Pacific Resources) in Rock Springs, Wyoming and had the opportunity to work in the Pineview Field outside Coalville, Utah in the late '70s. He has lived and worked in Utah, Montana, Wyoming, Colorado and Texas.

Mr. Wages has a B. Sci. Petroleum Engineering degree from Montana Tech (Butte, MT) and an MBA from Texas Christian University (Fort Worth, TX). He is a registered professional engineer and 35-year member of the Society of Petroleum Engineers.

Alan Walker

Director of Technology Research, USTAR

Al Walker is the Director of Technology Outreach for USTAR at the Energy & Geosciences Institute, the University of Utah. He is responsible for commercial development of USTAR energy initiatives in traditional and renewable energy technologies at the U of U and USU. Al grew up in the Catskill Mountains, has a BS from West Point in Weapon System Engineering and an MBA from Rensselaer Polytechnic Institute. After ten years in the Army, he worked for General Electric, Amoco, and Questar in energy production engineering and management prior to USTAR. Al is married to Victoria (Vickey) from Orem. Vickey is a commercial agent for CB Richard Ellis and specializes in investment grade properties. Al and Vickey live in North Salt Lake and they have two children Angela and Alec and two grandchildren.

Douglas Waters

Director of Project Execution Teams, Army Energy Initiatives Task Force

Mr. Douglas Waters is the Director, Project Execution Teams for the Energy Initiatives Task Force. In his present role Mr. Waters Is responsible for a portfolio of renewable and alternative energy projects that are executed under the Army's Public Private Authorities.

Previously, he was the Renewable Energy Portfolio Manager for the Office of the Assistant Chief of Staff for Installation Management (OACSIM), where he wrote implementing guidance and advised on renewable energy projects and programs. Mr. Waters started working this position 1 June 2010.

Mr. Waters is a Registered Professional Engineer in 3 states, a Certified Energy Manager and Renewable Energy Professional from the Association of Energy Engineers, a member of the Defense Acquisition Work Force and holds Defense Acquisition University Level III Certification as an Acquisition Professional in Systems Planning, Research, Development and Engineering. He also holds a Bachelors Degree in Civil Engineering from the University of Delaware and a Masters in Management, Minor in Environmental Management from Webster University.

Chris D. Webb

City Manager, Blanding UT

Chris, a BYU Graduate, is currently serving as the Blanding City Manager. He has been with the City for 15 years managing all aspects of City business, assets, and city utilities including Municipal Power & Natural Gas Companies. Chris came to the City from Phoenix leaving a position as a Vice President with KOLL Commercial Real Estate Management & Development where he had been for 8 years.

Robert Webster,

Chief Operating Officer, Magnum Gas Storage, LLC

Robert Webster is the Chief Operating Officer for Magnum Gas Storage, LLC. Mr. Webster is the former President of PacifiCorp Energy and has over 25 years of experience in the energy industry. He holds a BS in Environmental Science, MS in Geology, and an MBA.

Tim Wigley

President, Western Energy Alliance

Tim Wigley is the president of the Denver-based Western Energy Alliance.

For the past nine years, Tim served as the Executive Vice President of PAC/WEST, an Oregon-based government / public affairs firm where he focused his practice on resource clients and issues including forest management, mining, energy and cement manufacturing.

Tim also served as the president of the Oregon Forest Industries Council from 1998-2002.

Ted Wilson

Director of Government Affairs, Talisker, and former Mayor of Salt Lake City, Former Governor's Energy Advisor, Governor's Energy Task Force

Ted Wilson is the former Mayor of Salt Lake City and former director of the University of Utah's Hinckley Institute of Politics. As Senior Advisor to Governor Herbert, he led the energy task force team in writing the Governor's Ten Year Energy plan. He currently works for Talisker Corp. as governmental affairs director.

Ed Whittingham

Executive Director, Pembina Institute

Ed Whittingham is the Executive Director of the Pembina Institute, Canada's leading energy and environment research organization. Pembina aims to advance sustainable energy solutions through research, advocacy and consulting, through 55 staff in seven offices across Canada working on a $5 million annual budget. Ed holds an International MBA from York University's Schulich School of Business, where he specialized in corporate sustainability and international business. An avid outdoorsman who enjoys hiking, paddling, hunting, backcountry skiing and both playing and coaching hockey, Ed, his wife Yuka, and children Beck and Alice live happily in Banff.

Sarah Wright

Executive Director, Utah Clean Energy

As founder and director of Utah Clean Energy, Sarah has a proven record of accomplishment in the advancement of renewable energy and energy efficiency within the state of Utah. Sarah has effectively fostered diverse partnerships with state agencies, municipal governments, industry, agricultural groups, and community groups to advance both environmentally and economically beneficial clean energy solutions. Prior to founding Utah Clean Energy Sarah worked for 15 years as an occupational health and environmental consultant serving industries across Utah and the West. She has a BS in Geology from Bradley University and a Master of Science in Public Health from the University of Utah.

Duane J. Zavadil

Senior Vice President, Bill Barrett Corporation

Mr. Zavadil is the Senior Vice President for Government and Regulatory Affairs for Bill Barrett Corporation. Duane joined Bill Barrett Corporation in July of 2002. From 1994 until 2002, Mr. Zavadil served as the Environmental, Health and Safety Manager with Barrett Resources and its successor in Denver, The Williams Companies. Mr. Zavadil was employed as an environmental consultant from 1984 through 1994, providing engineering, environmental and regulatory services for industry and large infrastructure projects. He holds a degree in Geology and a Masters Degree in Engineering Geology from Colorado State University.

NOTES

QUESTAR®

Headquartered in Salt Lake City, Questar Corporation is a natural gas-focused energy company with core operations in the Rockies. Our subsidiaries produce, transport, store and distribute clean, abundant and affordable American natural gas.

"If you conserve, you can save."

ThermWise.com

QUESTAR GAS — provides natural gas to nearly 900,000 Utah homes and businesses.

QUESTAR PIPELINE — transports and stores natural gas throughout the Rockies.

WEXPRO — develops and produces natural gas for Questar Gas customers.

Questar.com

Utah Governor's Annual

ENERGY DEVELOPMENT SUMMIT

2012

Utah Governor's Office of Economic Development
BUSINESS • TOURISM • FILM

Office of Energy Development

www.energy.utah.gov