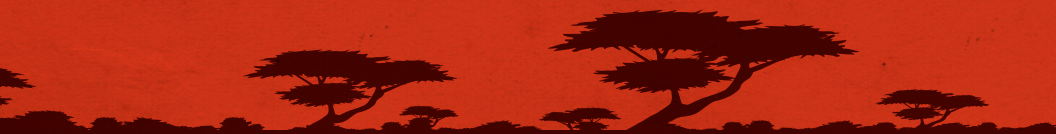




ENERGY AFRICA



NOVEMBER 8 + 9, 2012

WWW.ENERGYAFRICACONFERENCE.COM

Welcome to Colorado and the 2012 Energy Africa Conference. Colorado is home to some of the nation's most forward looking clean energy policies, a multitude of renewable energy implementations as well as local and national research organizations; and for all practical purposes, Colorado is the capital of the unconventional natural gas industry. Renewables and natural gas are complementary, bedrock components of a practical and sustainable clean energy strategy and Colorado is leading the dissemination of sustainable energy practices around the world.

Access to affordable and cleaner energy is essential to accelerating economic development of countries in Africa and enhancing the living standards of their citizens. The synergy between renewable energy technologies and the unexploited extensive natural gas resources promises a cost effective, environmentally friendly and sustainable approach for Africa to meet its energy needs. Renewable energy technologies such as biogas, hydropower and solar are especially well suited for providing energy that is essential for cooking, lighting, heating and communications in vast rural areas where there is largely no viable energy infrastructure in place today. In urban population centers, natural gas fired electric power generation in combination with larger scale applications of renewable energy technologies such as wind, hydropower, solar, and waste-to-energy could reliably supply industrial and urban energy requirements, serving as a model for the rest of the world.

This conference brings together private, public, non-government organizations and academicians to encourage and support the work needed to evolve domestic markets for natural gas and renewable energy sources. It is a venue for collaboration and dialogue to foster and inspire local and international entrepreneurs to initiate and expand investment in and the use of renewable energy and natural gas in the context of prevailing business conditions. Discussion of natural gas in parallel with renewable energy builds a broader understanding of how these sources are genuinely complementary and together, offer immediate and longer term opportunities for environmentally responsible energy growth and increased prosperity.

We want to express our appreciation to the Colorado School of Mines and its President, Dr. M. W. Scoggins for their hospitality and for allowing us to hold the

conference at such a prestigious institution. We hope to expand and continue this partnership in the future.

We would also like to thank our sponsors for their generous support, which without, this conference would not be possible. As former Colorado Governor, Bill Ritter, Jr., and now Director of the Center for New Energy Economy at Colorado State University, once declared, "Africa can emerge only when it secures energy."

- Energy Africa Committee



"We want to welcome the 'Energy Africa' conference to Colorado. The spirit of collaboration and innovation thrives here. We hope that same spirit spreads through attendees and speakers as they work together to create opportunities for sustainable development across Africa."

- Gov. John Hickenlooper

DAY 1 – NOVEMBER 8, 2012

REGISTRATION & BREAKFAST: [7:30-8:15]

WELCOME: [8:15-8:30]

Dr. M.W. Scoggins, President, Colorado School of Mines

REMARKS FROM THE OFFICE OF THE GOVERNOR: [8:30-8:35]

Jamie Van Leeuwen, Deputy Chief of Staff

INTRODUCTION: [8:35-8:45]

Don McClure, Fred Julander and Luka Powanga

INTRODUCTORY KEYNOTE: [8:45-9:30]

What are the Challenges and Opportunities Facing the Continent Regarding Energy Development?

The introductory keynote will set the stage for where energy trends are moving in Africa. Dr. Stoner will provide an overview of how energy is currently being used within the continent, the merits of various energy systems for population centers and rural areas, their economic effects and the possibility for a cleaner and sustainable future. Colonel Simbakalia will discuss specific examples of energy opportunities in Tanzania, including development and integration of domestic natural gas and renewable resources into the market and associated infrastructure needs and challenges.

SPEAKERS:

Dr. Robert Stoner, Associate Director, MIT Energy Initiative

Colonel (Retired) Joseph Leon Simbakalia, Regional Commissioner of Mtwara, Tanzania

SESSION I: OPPORTUNITIES FOR CREATING A SYNERGY BETWEEN NATURAL GAS AND RENEWABLES [9:30-10:30]

As both gas and renewable projects increase in the coming years, they can support economic development and growth in an expanding worldwide low-carbon economy. Natural gas power facilities can be scaled and combined with renewable

power systems to supplement each other during intermittent load times and to meet electricity needs during high demand periods. This panel will look at the opportunities that range from various generation options and the successful integrations of natural gas and renewables in other places across the world.

SPEAKERS:

Mike Ming, Secretary of Energy, Oklahoma

Melanie Kenderdine, Executive Director, MIT Energy Initiative

MODERATOR:

Dr. Robert Stoner, Associate Director, MIT Energy Initiative

BREAK [10:30-10:45]

SESSION II: THE STATUS AND OUTLOOK FOR LARGE SCALE RENEWABLE ENERGY IN AFRICA [10:45-12:15]

Large-scale wind and solar power plants in Africa have the potential to provide economic supplies of clean power, especially in comparison to very high cost diesel electric generation used in many areas. This panel will review utility scale renewable projects and opportunities in Africa, and the challenges of establishing the infrastructure needed to support these projects.

SPEAKERS:

Dr. Morgan Bazilian, Deputy Director, Joint Institute for Energy Analysis

Brandon Owens, Manager, Strategic Analysis & Scenario Planning, GE Energy

Dan Murphy, Senior Operations Officer, Africa Energy Group, World Bank

Dr. Rhonda Jordan, Ph.D., Engineering Systems Division, MIT

Amy Rose, Master's Student, Technology and Policy Program, MIT

MODERATOR:

Mark Safty, Partner and Chair, Energy & Infrastructure, Holland & Hart LLP

BREAK FOR LUNCH [12:15-12:30]

LUNCH: LEVERAGING THE NARRATIVE: STRATEGIES FOR BRIDGING CULTURES THROUGH COMMUNICATION [12:30-1:30]

One of the greatest barriers faced when working between cultures is communication. This is something greater than language; it is rooted in the way we construct stories and see our world. These are our cultural

narratives. By understanding and leveraging cultural narratives, we move closer to creating a deeper understanding of intent, of need and of desire. Using techniques pulled from marketing and filmmaking, Scott Kesterson, an Emmy Award Winning documentary filmmaker, combat videographer and consultant to Department of Defense, will discuss using visual media and cultural narratives to bridge language barriers and enhance communication and understanding. Ultimately, this approach leads to an increase in business opportunities and leverage in developing nations where technology is limited and land use is dictated by tribal traditions.

SPEAKER:

Scott Kesterson, Emmy Award Winning Combat Videographer and Filmmaker, Recognized Expert in Emerging Cultural Engagement and Bridging Strategies

MODERATOR:

Albus Brooks, Denver City Councilman, District 8

SESSION III: FOSSIL FUEL TRANSITIONS- NEW DEVELOPMENTS IN AFRICA'S NATURAL GAS SUPPLY [1:30-2:45]

Africa has the potential to become a world-class producer of natural gas. New and evolving exploration, drilling and completion technologies are leading to historic discoveries of natural gas on and offshore in Eastern and Western Africa. Resource assessments are demonstrating remarkable amounts of undiscovered, technically recoverable natural gas within the continent's geological basins. This panel will provide an overview of the continent's natural gas resource potential while also looking at how exploration and infrastructure can be accommodated to produce the resource.

SPEAKERS:

Dr. Phillip H. (Pete) Stark, Vice President, Industry Relations, IHS CERA

Michael Brownfield, Central Region, Rocky Mountain Area, United States Geological Survey

A. Scott Moore, Vice President, Marketing, Anadarko Petroleum Corporation

MODERATORS:

James Emme, Executive Vice President, North America for Endeavour International Corporation

Fred Julander, President, Julander Energy Company, Inc.

BREAK [2:45-3:00]

SESSION IV: CONCESSION STRUCTURES FOR DOMESTIC MARKET DEVELOPMENT [3:00-4:30]

As commercial opportunities to develop Africa's natural gas supplies expand, the need to establish a viable business structure for these projects is fundamental to successful development, particularly for domestic markets. Concession terms that encourage natural gas project investments are evolving while companies and governments continue to try and work through these challenges on a project-by-project basis. This panel will discuss insights and experiences from countries and companies working to balance the establishment of large-scale export markets while laying the foundation for development and expansion of domestic markets. The panel will also address the effectiveness of economic and legal policies that can foster the successful integration of business practices to support the energy industry.

SPEAKERS:

Dr. Christian Oboh, Managing Director and Chief Executive Officer, Niger Delta Development Commission

Likeleli Seitlheko, Ph. D Student, Baker Institute Graduate Fellow, Rice University
Colonel (Retired) Joseph Leon Simbakalia, Regional Commissioner of Mtwara, Tanzania

MODERATORS:

James Emme, Executive Vice President, North America for Endeavour International

David Posner, President and CEO, EnVent Energy

NETWORKING RECEPTION [4:30-6:30]

Day 2 – November 9, 2012

NETWORKING BREAKFAST [7:30-8:00]

OPENING REMARKS: [8:00-8:15]

Bill Ritter, Former Governor of Colorado, Director, Center for the New Energy Economy, Colorado State University

INTRODUCTION: [8:15-8:30]

Chibuike Rotimi Amaechi, Governor, Rivers State, Nigeria

KEYNOTE SPEAKER 1: [8:30-9:15]

More than a billion people in the world have no access to electricity to meet basic needs. Conventional models for providing universal access to electricity are cost prohibitive and slow. Jigar Shah, widely acclaimed and successful entrepreneur, describes how a different path and strategy not dependent on the grid and centralized generation can be more effective. Applying similar innovations in market structure and delivery that transformed the domestic solar industry, he outlines a global private and public partnership, leading to transformative business opportunities and power for the world's poorest populations.

SPEAKER: Jigar Shah, Partner, Inerjys Ventures

SESSION I: DISTRIBUTED RENEWABLE PROJECTS: BUSINESS OPPORTUNITIES [9:15-10:30]

Smaller-scale renewable energy markets and projects are expanding in the vast regions where no electric power grids exist and truly making a difference in the life of people throughout rural areas of the continent. Solar photovoltaic applications are proving to be a viable source of small-scale power for critical lighting and communication needs. Bio digesters are also emerging as a cost effective approach for gas cooking. Continued developments for new ways to produce energy for populations who have not had access to electricity and have had to depend on charcoal and wood burning for fuel are evolving. This panel will review business projects and strategic opportunities in Africa that

are making a significant impact on supplying basic energy needs in rural areas.

SPEAKERS:

Ravi Malhotra, Founder and Chief Executive Officer, iCast

Morgan DeFoort, CSU Global Innovation Center

Dr. Rhonda Jordan, Ph.D., Engineering Systems Division, MIT

Kahwa Douoguih, Managing Partner, Constelor Group

MODERATOR:

Heidi VanGenderen, Director of Public Engagement at U.S. Department of Energy, Office of the Secretary

BREAK [10:30-10:45]

SESSION II: CAPACITY BUILDING AND TRAINING [10:45-12:00]

As exploration and production expands and renewable energy projects grow, the need for effective capacity to support energy development will intensify. Partnerships between industry, local businesses and communities along with strategic government relationship are essential to cultivate the necessary economic, political and educational training programs. Understanding cultural intelligence and contextual knowledge about these communities and organizations will increase the success of any future programs and operations. This panel will discuss how to engage the local labor force, educational institutions and businesses in energy projects and how to foster training through private and public partnerships by looking at successful models and models that have fallen short.

SPEAKERS:

Colonel (Retired) Joseph Leon Simbakalia, Regional Commissioner of Mtwara, Tanzania

Lakshman Guruswamy, Nicholas Doman Professor of International Environmental Law, University of Colorado at Boulder

Ryan Shepherd, Chief Operating Officer, TIFIE

Sunit Patel, Executive Vice President and Chief Financial Officer, Level 3 Communications

MODERATOR:

Bruce Hutton, Dean Emeritus, Daniels College of Business, University of Denver

LUNCH SESSION: THE WATER ENERGY NEXUS: AFRICA'S CHALLENGE – SPONSORED BY MWH GLOBAL [12:15-1:15]

Using the business as usual model, water and electricity are critical and mutually dependent resources as large volumes of water are required to generate electricity and the water infrastructure requires large amounts of electricity. Managing the two resources in tandem is critical to maintaining reliable and sustainable supplies of both electricity and water. MWH Global is a world leader in water infrastructure development and management. MWH Global will discuss water issues in relation to energy development and how energy expansion in Africa must evolve in the context or management of water supplies.

SPEAKERS:

Todd Loar, Supervising Geological Engineer, MWH Global

Robyn McGuckin, Director of Clean Energy and Sustainability, MWH Global

MODERATOR:

Dr. Luka Powanga, Professor, Regis University

SESSION III: APPLICATIONS OF MICRO GRIDS TO THE AFRICAN ENVIRONMENT [1:15-2:30]

In an increasing effort to access more reliable and affordable electricity, this panel will highlight some of the conversation surrounding micro grid technology. This discussion will examine how small off-grid micro grids could be used in areas that are unlikely to have access to urban and industrial scale electric grids but can support power requirements, exceeding those most effectively serviced by dedicated point of use technologies.

The panel will address how micro grids have been tested in other small and remote areas similar to various African settings and what needs to be done to make them a viable option.

SPEAKERS:

Yoav Palatnik, Co-Founder and Managing Director, EcoPower Africa

Robert S. Butt Jr., P.E. Senior Engineer, Grid & Dispatchable Power Group, National Renewable Energy Laboratory, Deployment and Market Transformation Section

Dr. Nathan Johnson, Postdoctoral Fellow, HOMER Energy

MODERATORS:

David Posner, President and CEO, EnVent Energy

Ravi Malhotra, Founder and Chief Executive Officer, iCast

**SESSION IV: A RETROSPECTIVE FROM SOCIAL ENTERPRISE IN AFRICA
[2:30-3:45]**

This panel will revisit and expand on the session 'Case Studies in Natural Gas and Renewable Energy' from last year's conference. Last year, case studies were presented by executives who use a social enterprise model to execute their projects, delivering products and services for a 'fee' or 'cost' to the recipients versus donating them. This year some of those panelists return and new panelists join to provide additional insights on their businesses, and discuss new developments for the products and services they provide. The focus will be on lessons learned in establishing and growing their businesses in Africa.

SPEAKERS:

Sam Weaver, President and Chief Executive Office, Cool Energy, Inc.

Evan Husney, Lead Counsel, Nokero

Ron Bills, CEO and Chairman, EnviroFit

Sarah Skinner, Project, ALSTOM Hydro

MODERATOR:

Ravi Malhotra, Founder and Chief Executive Officer, iCast

CLOSING REMARKS [3:45 – 4:00]



**Bill Ritter Jr., Former Governor of Colorado,
Director, Center for the New Energy Economy,
Colorado State University**

Bill Ritter Jr. is currently the Director of the Center for the New Energy Economy (CNEE) at Colorado State University. The Center started February 1, 2011 with Ritter as the founding Director. In addition to the Director, the Center employs an Assistant Director, three Senior Policy Advisors, and an Executive Assistant. The Center works directly with governors, legislators, regulators, planners, policymakers, and other decision makers, providing technical assistance to help them create the policies and practices that will facilitate America's transition to a clean-energy economy. Ritter is a member of the Board of the Directors of the Energy Foundation; and also a Senior Fellow and member of the Board of Directors of the Advanced Energy Economy Institute.

Ritter was elected as Colorado's 41st governor in 2006. Ritter led Colorado forward by bringing people together to tackle some of our state's biggest challenges. During his 4-year term, Ritter established Colorado as a national and international leader in clean energy by building a New Energy Economy. As a result of that work, Colorado created thousands of new jobs and established hundreds of new companies. Ritter also enacted an aggressive business-development and job-creation agenda that was focused on knowledge-based industries of the future, such as energy, aerospace, biosciences, information technology and tourism.

Ritter served as Denver's District Attorney from 1993 to January 2005. He earned his bachelor's degree in political science from Colorado State University (1978) and his law degree from the University of Colorado (1981).



Ritter is married to Jeannie, and before serving as District Attorney, he and Jeannie operated a food distribution and nutrition center in Zambia.

Jigar Shah, Partner, Inerjys Ventures

Jigar Shah is an entrepreneur and visionary committed

to leveraging the next economy by solving the challenging issues of our time. Shah has recognized this as “The Impact Economy.”

Today, he is a partner at Inerjys Ventures. He works closely with some of the world’s leading influencers and guides policy makers around the globe on key issues to implement profitable solutions to climate change that will unlock \$5 trillion into the impact economy by 2020.

His first foray in realizing his vision was the founding of SunEdison in 2003; today the world’s leading solar services company. SunEdison, through Shah’s perseverance and vision, simplified solar as a service through the implementation of the power purchase agreement (PPA) business model. That model changed the status quo, allowing organizations to purchase solar energy services under long-term predictably priced contracts and avoid the significant capital costs of ownership and operation of solar energy systems. The SunEdison business model is a recognized catalyst that turned solar PV into a multi-billion dollar industry worldwide.

From 2009 to March 2012, Shah served as the first CEO of the Carbon War Room, the global organization founded by Richard Branson and Virgin Unite to harness the power of entrepreneurship to unlock the potential of proven climate change solution technologies to be deployed at scale. During Shah’s tenure he was a trailblazer in helping build the organization into one of global importance.

Prior to launching SunEdison and his tenure as Carbon War Room CEO, Shah managed mergers & acquisitions, corporate strategy, and sales efforts for BP Solar, specializing in national commercial accounts. He also worked as a contractor for the Department of Energy on alternative vehicles and fuel cell programs.

Shah holds a BS in Mechanical Engineering from the University of Illinois, Champaign-Urbana, and an MBA from The University of Maryland. Besides the Carbon War Room, he also sits on the boards of the SolarNexus, KMR Infrastructure, Prometheus Institute and Greenpeace USA.



Dr. M. W. Scoggins, President, Colorado School of Mines

Dr. M. W. Scoggins was appointed the Colorado School of Mines' 16th president in 2006. He also serves as a Research Professor in the Department of Petroleum Engineering. Prior to coming to Mines, Dr. Scoggins had over 34 years of experience in the global oil and gas business with Mobil and ExxonMobil.

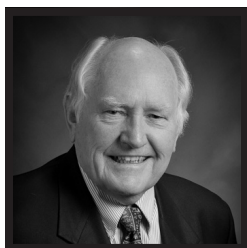
Dr. Scoggins received his undergraduate education at the University of Tulsa, where he was in the Petroleum Engineering honors program and was a member of Tau Beta Pi. He received his Master's degree in Petroleum Engineering from the University of Oklahoma, and returned to the University of Tulsa for his Ph.D. in Petroleum Engineering.

Dr. Scoggins began his career with Mobil in 1970 and had assignments throughout the United States, as well as in The Hague, Jakarta, Indonesia and London. He was President of International E & P and Global Exploration and a member of the Executive Committee of Mobil Oil prior to its merger with Exxon in late 1999. Following the merger, he served as Executive Vice President of ExxonMobil Production Company until his retirement in 2004.

Dr. Scoggins was elected to the University of Tulsa Board of Trustees in 2005 and served on the executive committee; the finance, investment and audit committee; and the faculty and curriculum committee until accepting the presidency at Mines. Dr. Scoggins was inducted into the College of Engineering's Hall of Fame in 1998.

Dr. Scoggins serves on the Board of Directors for QEP, a natural gas and oil exploration and production company; Venoco, Inc., an independent energy company engaged in the acquisition and development of oil and natural gas properties in California and Texas; Cobalt International Energy, an independent oil exploration and production company focusing on deep water Gulf of Mexico and offshore west Africa; and Laredo Petroleum, an independent

energy company focused on the exploration, development and acquisition of oil and natural gas properties in the Permian and Mid-Continent regions of the U.S. In addition, he is a member of the National Advisory Council of the United States Department of Energy's National Renewable Energy Laboratory.



Dr. Phillip H. (Pete) Stark, Vice President, Industry Relations, IHS CERA

Pete Stark is Vice President of Industry Relations for IHS CERA in Englewood, Colorado. Prior to joining IHS in 1969, Dr. Stark was an exploration geologist for Mobil Oil. Dr. Stark has authored papers on E&P databases, hydrocarbon shows, horizontal drilling, US natural gas, global oil and gas resource, global E&P trends, giant fields, and unconventional O&G plays. He serves on the boards of the AAPG International Pavilion and the Western Energy Alliance.

He also serves on the AAPG Corporate Advisory Board and Resources Committee. Previously, he was Chairman of the Board of Visitors for the University of Wisconsin Department of Geology and Geophysics. Dr. Stark holds a B.Sc. in geology from the University of Oklahoma and M.Sc. and Ph.D. degrees from the University of Wisconsin. The University of Wisconsin Department of Geology and Geophysics honored Dr. Stark's contributions to the University and profession with a Distinguished Alumni Award.



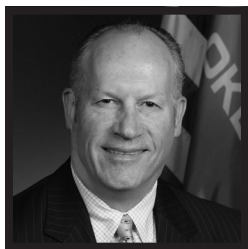
Michael Brownfield, Emeritus Scientist, US Geological Survey

Michael Brownfield is an Emeritus Scientist with the U.S. Geological Survey (USGS) in Denver, CO. During his 37 years with the USGS, he has conducted research in oil and gas assessments, coal geology, geochemistry, and sedimentology, and utilized data from other studies involving the petrographical, mineralogical, and geological analysis of to publish more than 150 reports and presentations. His research has been both domestic and

foreign: regional stratigraphic and detailed mapping studies of coal-bearing sequences (Cretaceous and Tertiary) in northwest Colorado supported the Colorado Plateau Coal Assessment (2000).

Over the past 25 years, he has been involved in USGS programs designed to provide technical assistance to countries in defining and developing their resources: assessed the coal and peat resources of Mauritania (1986); traveled to Bulgaria to train their coal experts on the development of a coal-quality data base (1992); participated in the assessment the coal resources of Armenia, and served as a consultant to Armenia geologists on the subject of coal exploration and resource assessment (1996-1999).

Currently, he is still working with the World Petroleum Resource Project as the Regional Coordinator for Sub-Saharan Africa (Region 7) and as the assessment geologist for the Pacific Northwest on the National Oil and Gas Assessment Project (NOGA). He has conducted assessments of undiscovered oil and gas in Total Petroleum Systems in provinces located in Sub-Saharan Africa including the Chad and Sud rift basins, the west Africa coastal provinces of Senegal, Gulf of Guinea, Niger Delta, West African Coastal, West-Central Coastal, and Orange River Coastal, Offshore South Africa, and the Mozambique and Morondave Provinces of east Africa (1996-Present). He has published the conventional and unconventional oil and gas resource assessments of both eastern and western Oregon and Washington as part of the NOGA Project.



C. Michael Ming, Secretary of Energy, Oklahoma

C. Michael Ming currently serves as the Oklahoma Secretary of Energy, appointed by Governor Mary Fallin in January, 2011. He formerly served as the President of the Research Partnership to Secure Energy for America (RPSEA) and as an independent natural gas producer as a Managing Member and principal of K. Stewart Energy Group and K. Stewart Petroleum Corp. He holds a BS degree with distinction in Petroleum Engineering and an MS degree in Engineering Management, both from Stanford University, and is a Registered Professional Engineer in Oklahoma.

Mr. Ming is an emeritus member and past Chairman of the Petroleum Investments Committee at Stanford University, is actively involved in the University's earth science and energy programs, and co-sponsored the MAP/ Ming Visiting Professorship on Energy and the Environment. He also currently serves on advisory boards at the University of Texas, Tulsa University, and MAP. He formerly served on the MIT Future of Natural Gas Study, the Oklahoma Clean Energy Independence Commission, as an adjunct professor in Energy Management at the University of Oklahoma, and as an oil & gas strategic planning advisor to the Department of Energy.



Col. (Retd) Joseph Leon Simbakalia, Regional Commissioner, Mtwara, Tanzania

Col. (Retd) Joseph Leon Simbakalia is currently the Regional Commissioner of Mtwara. He has previously held various senior positions in the defense forces, as well as the public sector.

Colonel Simbakalia worked as a professional engineer before he developed a keen interest in finance and economic development while working on the planning, development and financial structuring of major infrastructure and energy projects. He was a regular Army Officer of the Tanzania Peoples' Defence Forces (TPDF), before he studied and graduated from Carleton University as a Mechanical Engineer. He holds a diploma from the Canadian Forces School of Military Engineering and a Masters Degree in Engineering with his thesis focused on "The Batch Manufacture of a Purpose-Designed Compression Ignition Engine", which was completed at the National University of Ireland where he specialized in manufacturing methods.

He has more than 15 years of hands-on experience in manufacturing innovation and technology transfer. He studied foundation courses in economics and political science at the undergraduate level, and has attended various executive training programs covering fields such as innovation, policy, infrastructure development, energy, and economic development.

Colonel Simbakalia has attended various national and international conferences, workshops and seminars as a both a speaker and a presenter, including the SADC World Economic Forum, SMART Partnership for Commonwealth Association, and the East African Power Industry Conference. He is a Certified Director by the Commonwealth Association for Good Corporate Governance.



Fred Julander, President, Julander Energy

Fred has over 39 years of experience in energy and natural resources as an independent operator. He has been a leader in the oil and gas community pushing for responsible exploration and development and for recognition that natural gas has a bright future as a natural compliment to renewable energy and efficiency. Fred is a member of the National Petroleum Council, past President of the Colorado Oil & Gas Association, founding Chairman of COGA's Rocky Mountain Natural Gas Strategy Conference and Chairman of the Natural Gas Committee of COGA. Fred is also the recipient of the 2007 Distinguished Public Service Award presented by the Rocky Mountain Association of Geologists.

In 2009 Mr. Julander was selected to the Independent Petroleum Association of Mountain States Rocky Mountain Oil & Gas Hall of Fame. Mr. Julander earned a BA degree from the University of New Mexico and a JD degree from the University of Iowa Law School. He is a graduate of the University of Denver's Executive MBA program.



Dr. Robert Stoner, Associate Director of the MIT Energy Initiative Executive Director of the MIT-Tsinghua-Cambridge Low Carbon Energy University Alliance, Massachusetts Institute of Technology

After earning his Ph.D. in condensed matter physics at Brown University in 1992, Dr. Stoner joined the Microprocessor Development Group at Intel Corporation. In 1995, he formed Cooper Mountain Corporation,

which developed the first commercial instruments to incorporate ultrafast-pulsed lasers. These instruments, based on the picosecond ultrasonic method, which he co-invented, are now extensively used to characterize computer chips during production. He subsequently founded Vinestone Corporation, a UK-based peer-to-peer database and workflow software developer. Dr. Stoner later held a number of senior executive positions and served as Chairman of the Technical Advisory Board at Zygo Corporation, a developer of precision optical systems and instruments for the global consumer electronics, aerospace and semiconductor industries.

Dr. Stoner received a Bachelor of Science degree in Engineering Physics from Queen's University, Canada. He was a National Science and Engineering Research Council of Canada Scholar, and holds US patents in the fields of semiconductor devices, optical measurement and imaging systems, optical devices, network computing, and acoustics. His current technical interests include high resolution imaging techniques, distributed computing, and energy distribution and storage technology and policy for developing countries.



Dr. Bruce Hutton, Dean Emeritus and Professor of Marketing, Daniel's College of Business, University of Denver

Bruce Hutton is the Dean Emeritus and Piccinati Professor in Teaching Innovation. He is the Daniels College of Business leader in sustainable development education for graduate and corporate programs. He has received numerous local, regional and national honors for his contributions in business education, applied market research and community service. In 2005, his body of work in the areas of corporate citizenship and sustainability were included in the Faculty Pioneer Featured Collection in CasePlace.org of the Aspen Institute Business and Society Program.

Hutton was the co-author of a proposal to enhance MBA programs, subsequently funded with an \$11 million dollar matching gift to the University of Denver. A significant component of this program deals with issues of values and social

responsibility, including environmental ethics and sustainable development. His areas of expertise are in marketing research, corporate social responsibility and the application of consumer behavior principles to issues of public policy, particularly related to the environment and nonprofit organizations.

He is an advisor and consultant to national and international organizations including federal/state/local governments, manufacturing, professional services and nonprofit institutions including Newmont Mining Corporation, Aspen Ski Company, U.S. Department of Energy, Frontier Airlines, Coors Brewing Company, National Renewable Energy Lab, AARP, IBM, First Data/Western Union, National Jewish Medical & Research Center, Southern Ute Indian Tribe, Alliance to Save Energy, Consumer and Corporate Affairs Canada, Golden Gate Bridge Transportation District, Peoples Bank of China, Iowa Energy Policy Council, Illinois Energy and Natural Resources, Oak Ridge National Laboratories, U.S. Department of Energy, National Park Service, U.S. Forest Service, Business for Social Responsibility and others. Presentations have included the Abu Dhabi Global Environmental Data Initiative in 2002, which was awarded status as a United Nations Type II Partnership Initiative to implement over the next five years.

He also participated in the Skoll International Conference on Social Entrepreneurship, Oxford University, Oxford, England, 2007. When working with the media, Hutton can address national and international sustainability initiatives, corporate social responsibility, public policy and the environment.



Don McClure, Vice President, Government & Stakeholder Relations & Legal, EnCana Oil and Gas (USA) Inc.

Don McClure joined EnCana Oil & Gas (USA) Inc. in October 2002. Don was with PanCanadian Energy prior to the merger of PanCanadian Energy and Alberta Energy in April 2002, forming EnCana. Don has been in the oil and gas industry for more than 30 years, since his graduation from Northwestern Oklahoma State University with a Bachelor of Science degree in accounting.

Don is a licensed CPA and CMA and also has an MBA from Southern Methodist University in Dallas, Texas.

Don started his career with Atlantic Richfield, holding various positions of increasing responsibility focused primarily on controllership responsibilities. Don also worked with Vastar Resources, Inc., a carve-out IPO from Atlantic Richfield and Columbia Energy Services, Inc. Don is a member of the American Institute of CPAs, Institute of Management Accountants, Financial Executives Institute and the API Upstream Committee. Don serves as a Board Member for the University of Colorado at Denver, the Colorado Oil & Gas Association (COGA), the Independent Petroleum Association of Mountain States (IPAMS) and Junior Achievement. He participated in Governor Ritter's Jobs Cabinet.



**A. Scott Moore, Vice President of Marketing,
Anadarko Petroleum Corporation**

Scott Moore is Vice President of Marketing for Anadarko Petroleum Corporation. Anadarko is one of the largest independent oil and natural gas exploration and production companies in the world and a leading domestic producer. Mr. Moore has management responsibility for Anadarko's U.S. and international marketing of natural gas, crude oil, natural gas liquids, and liquefied natural gas as well as commodity derivatives and market fundamentals. He has been employed in the natural gas industry for 27 years with experience in marketing, trading, logistics, commodity derivatives, economics, risk management, commercial litigation, project finance and engineering. Mr. Moore served as assistant chair of the coordinating subcommittee for the National Petroleum Council's Prudent Development study for the U.S. Secretary of Energy. He is a board member of the Natural Gas Supply Association and participant in the government affairs and technical committees of America's Natural Gas Alliance. He is the current chairman of the board of directors of the Colorado Oil and Gas Association.

Mr. Moore holds a B.S. in Chemical Engineering with honors from the University of Colorado (1984) and an M.S. in Mineral Economics from the Colorado School of Mines (1988).



Brandon Owens, Manager, Strategic Analysis & Scenario Planning, GE Energy

Brandon Owens is a specialist in renewable energy strategy, market forecasting and analytics. He is currently the manager of strategic analysis and scenario planning at GE Energy. Prior to joining GE Energy, Owens was a director of research at Cambridge Energy Research Associates.

Owens holds a master's in Mineral Economics from the Colorado School of Mines, USA, and a BA in Mathematics and Economics from the University of Colorado at Boulder, USA.



Todd Loar, Supervising Geological Engineer, MWH Global

Mr. Loar is a geological engineer with experience in the hydropower, mining and water supply sectors. He completed a masters of engineer in geological engineering at the Colorado School of Mines and has professional consulting experience on a variety of projects involving geologic, geotechnical and foundation engineering for dams, tunnels and other civil structures.

During his time with MWH, he has worked on a variety of engineering analysis and design projects including the Tekeze Dam in Ethiopia. Additionally, his experience includes work on other hydropower and pumped storage projects including Hurricane Cliffs, Mokelumne, Swan Lake, Parker Knoll, Eagle Mountain, Phantom Canyon, Mona, Ruskin Dam, Cushman Dam No. 2 and Yards Creek Pumped Storage Facility.

As part of his graduate thesis, Mr. Loar studied the geotechnical and geological investigation of water supply structures in Eritrea and has participated in field investigations for the Keren water supply systems involving an 80 meter high embankment, sand filtration system and distribution pipeline for the

city of Keren. While in graduate school, Mr. Loar worked for the U.S. Bureau of Reclamation and worked on the Keswick Dam, Parker Dam, Hungry Horse Dam and Gibson Dam.



Dan Murphy, Senior Operations Officer, Africa Energy Group, World Bank

Dan Murphy has over 15 years of professional experience working on development issues in Africa, with the past decade spent at the World Bank. In his current role, he leads the team supervising the Lom Pangar Hydropower and Kribi Gas Power Projects in

Cameroon, both of which are currently under construction.

In addition, Mr. Murphy manages Lighting Africa, a joint program with the International Finance Corporation that seeks to offer modern, affordable lighting and improved energy access to communities in sub-Saharan Africa, largely through the use of solar technology. He is also helping the Bank's Africa Energy Group to identify prospective grid-scale renewable investments. Mr. Murphy holds a BA from Bates College and an MA from the Johns Hopkins School of Advanced International Studies.



Melanie A. Kenderdine, Executive Director, MIT Energy Initiative

Melanie A. Kenderdine joined the MIT Energy Initiative in March, 2007. She is a member of a three-person management team of this large and growing program, designed to help meet the world's energy challenges

through research, education and outreach. In this capacity, she was a member of the research team for MIT's Future of Natural Gas Study and is the rapporteur, report author and editor for the MITEI Symposium Series reports which include Retrofitting Existing Coal Plants for Carbon Capture and Sequestration, Electrification of the Transportation System and the Impacts of Intermittent Generation on Baseload Power Plant Operations.

Before joining MITEL, she served as the Vice President of Washington Operations for the Gas Technology Institute and from 1993 to 2001, Kenderdine served in several key posts at the U.S. Department of Energy (DOE) as an appointee of President Bill Clinton. Her last position at DOE was Director of the Office of Policy. Concurrently, Kenderdine served as the Senior Policy Advisor to the U.S. Secretary of DOE for oil, gas, coal and nuclear issues. She was the primary architect of the exchange of Strategic Petroleum Reserve oil in 2000, managed DOE's response to the Japan nuclear accident, helped manage the federal response to the California electricity crisis, and oversaw the establishment of the Home Heating Oil Reserve in the northeastern US. Prior to joining DOE, she worked as chief of staff and as legislative director for New Mexico Congressman Bill Richardson, who was later named US Secretary of Energy.



Dr. Morgan Bazilian, Deputy Director, Joint Institute for Strategic Energy Analysis

Morgan Bazilian is the Deputy Director of the Joint Institute for Strategic Energy Analysis (JISEA). The Institute conducts leading-edge interdisciplinary research and provides objective and credible data, tools, and analysis to guide global energy investment and policy decisions. The institutional partners are the National Renewable Energy Laboratory (NREL), the Massachusetts Institute of Technology (MIT), Stanford University, the University of Colorado-Boulder (CU), the Colorado School of Mines (CSM), and Colorado State University (CSU). He is also a Senior Research Fellow at the Global Green Growth Institute.

Previously, Morgan was the Special Advisor to the Director-General of UNIDO on international energy policy. In this role he was deeply engaged with the design and implementation of the United Nations Sustainable Energy for All initiative, and managed UN-Energy. UN-Energy is the UN's interagency mechanism on all energy issues.

Prior to his time in the United Nations, he held a political appointment as Chief of Cabinet for the Minister of Energy in Ireland, after directing the clean energy division of Ireland's national energy authority for several years.

Morgan has been the lead climate change negotiator for the European Union on low-carbon technology, and a member of the UNFCCC's Expert Group on Technology Transfer (EGTT). He has been a national representative to various International Energy Agency governing bodies and executive committees, as well as to the EU's energy research and development programs.



Robert S. Butt, P.E., Senior Engineer, Grid & Dispatchable Power Group, NREL, Deployment and Market Transformation Section

Bob Butt supports the assessment and deployment of renewable technologies into electric power systems at NREL through site assessments, software simulations, development of options/cost analyses, and formal reports. Bob has nearly 30 years of experience in medium- and low-voltage power distribution, including planning & studies, design, construction, testing, and commissioning of electrical infrastructure and buildings. He has an M.S. and B.S. in Electrical Engineering from the University of Arizona and is a registered professional engineer in eight states.



Rt. Hon. Chibuike Rotimi Amaechi, Governor, Rivers State, Nigeria

Rt. Hon. Chibuike Rotimi Amaechi is the Governor of Rivers State. In 1988, he joined the services of Pamo Clinics and Hospital, owned by the former Executive Governor of Rivers State, His Excellency, Sir Dr. Peter Odili, where he worked as Public Relations officer until 1992 when he joined partisan politics emerging as the Secretary of the National Republican Convention in Ikwerre Local Government Area.

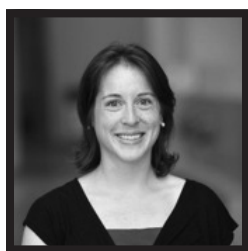
From 1992 -1994, he was Special Assistant to the Deputy Governor of Rivers State and also a member of the Board of Directors of West Africa Glass Industry as well as Risonpalm Nigeria Limited.

On resumption of political activities in 1996, he joined the Democratic Party of Nigeria (DPN) emerging as the State Secretary of the Party's Caretaker Committee. He held this position until the political development was halted following the death of General Abacha.

In 1999, General Abdulsalam Abubakar made true his promise of handing over power to an elected civilian government. The young but astute politician was at the forefront of the horse-trading, which finally gave birth to the Peoples Democratic Party (PDP) offering himself for election as State Legislator.

Chibuike Rotimi Amaechi was a unanimous choice amongst the elected legislators for the position of Speaker of the Rivers State House of Assembly in June 1999. During his tenure as Speaker, Rivers State House of Assembly was the most productive Legislative House in Nigeria, garnering the Nigerian Union of Journalists (Assembly Correspondents) award of Excellence in June 2000.

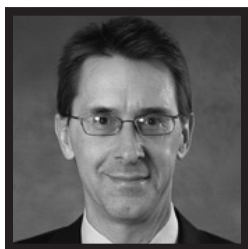
In November 2000, Amaechi became the Chairman, Conference of Speakers of State Assemblies, a position he held for two terms because of the trust and confidence his fellow Speakers had in him. As Chairman, Conference of Speakers, Rt. Hon. Amaechi in August 2003.



Amy Rose, S.M. Candidate, MIT Technology and Policy Program

Amy Rose is pursuing a master's degree from MIT's Technology and Policy Program. Amy is currently researching renewable energy integration in developing countries, focusing on large-scale solar power in Kenya. She holds bachelors degrees in Aerospace Engineering and Space Physics from Embry-Riddle Aeronautical University.

Amy served as a Peace Corps volunteer in Burkina Faso where she taught in taught science and English and opened the first computer lab in her village. Her Peace Corps experience inspired her graduate studies on sustainable development, renewable energy, and expanding access to electricity.



Mark D. Safty, Partner and Chair, Energy & Infrastructure, Holland & Hart LLP

For more than 30 years, energy companies operating on five continents have turned to Mr. Safty for virtually every type of development and financing transaction. In transactions ranging from \$2 million to more than \$2 billion, clients trust his extensive experience developing and financing energy projects. Mr. Safty provides the counsel clients need to clear regulatory, financial, and operational hurdles so they can keep pace with industry changes and demands.

Since the 1980s, Mr. Safty has served as lead counsel in the development, acquisition, financing, and refinancing of dozens of power generation facilities across the spectrum of energy technologies. Since the late 1990s, Mr. Safty has focused his practice on development, construction, financing and M&A activity in the renewable energy industry. His earlier years of experience as general counsel and COO of a bank holding company, and his time as outside director and chairman of the board of a \$2.5 billion financial institution, help him understand his clients' interests from the business side of any matter.

As a complement to his energy practice and an additional service to his clients, Mr. Safty handles general corporate and transactional matters. He advises multinational clients on the sale and acquisition of mining and oil and gas properties, and has helped them successfully complete corporate reorganizations including spin-off transactions and mergers. His clients span industries including mining, manufacturing, power generation, health care, education, transportation and water and waste treatment, among others.

Mr. Safty currently serves as the practice group leader for Holland & Hart's Energy & Infrastructure Group, and served from 1994-2001 as the chair of the firm's Business Department. He is listed in The Best Lawyers in America for project finance law. Mr. Safty is an adjunct professor at the University of Denver's Sturm College of Law, where he teaches Renewable Energy Development

and Regulation and Finance, and he is a frequent speaker at national and international conferences on renewable energy topics.



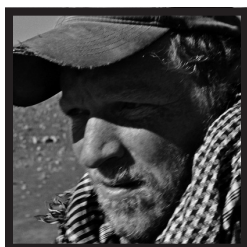
Albus Brooks, Denver City Council, District 8

Albus Brooks is formerly the director of the Issachar Center for Urban Leadership, which develops leaders for 4 years of their academic career through service, study and spirituality. Through a partnership which Albus Brooks helped organize with Mile High Ministries and the Living Legacy Foundation, Issachar apprentices earn a full-ride college scholarship and an opportunity to reach their potential.

In 2010, Albus Brooks took time away from Issachar to help then-Mayor John Hickenlooper become Colorado's governor. He served as Hickenlooper's Outreach and Political Director and managed the campaign's field and constituency outreach operations, ensuring that every Coloradan's voice was heard and learning from one of Denver's great leaders before returning to Issachar.

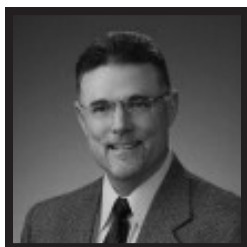
Albus Brooks' work at Issachar stems from a desire and commitment he has to make a difference in the lives of our youth. After graduating from college with a B.A. in Religious Studies, Albus Brooks realized a deep need for transforming the lives of kids in the district, Albus Brooks developed Young Life's first organizational chapter in North East Denver and served there for eight years.

But it is District 8 where Albus Brooks feels most at home. He lives in Cole with his wife Debi Brooks and their three young children, Makai, Kenya and Kaya. Now, as the Councilman for Denver's most diverse district, Albus Brooks is called to connect diverse communities and to fully represent all of the residents of District 8. With a focused vision for a better district, Albus Brooks is determined to bring positive change. His office will be working closely with a District 8 non-profit, Engage 8, in an effort to engage, mobilize, and empower the residents of the district. With a genuine heart for the City of Denver and a love for its residents, Albus Brooks is a servant leader dedicated to making Denver a better place.



Scott Kesterson, Emmy Award Winning Combat Videographer and Filmmaker, Recognized Expert in Emerging Cultural Engagement

Scott Kesterson is an Emmy award winning combat videographer and filmmaker, and a recognized expert in emerging cultural engagement and bridging strategies. Kesterson has spent over 3 1/2 years in Afghanistan working at the village level with friendly and malign actors to bridge cultural difference and foster understanding. He has worked privately, with various US government agencies and non-governmental organizations leveraging his experience in visual and social media. He has pioneered work for the Department of Defense in the area of visual education and engagement programming for rural villages in Afghanistan, developed workflows and methodologies for solo video operations in remote third world environments, and advised senior leaders in the use of visual media to develop and build supportive local communities in challenging operational areas. Kesterson's feature length independent film, *Bards of War*, will be released in late 2012.



Jim Emme, Executive Vice President, North America, Endeavour International Corporation

Jim Emme is Executive Vice President, North America for Endeavour International Corporation. Endeavour International has exploration and production activities in the UK North Sea and onshore US where Jim oversees the Company's shale gas and tight oil projects. Jim has over 32 years experience in the oil and gas industry where he has worked in various senior management roles, including 23 years with Anadarko Petroleum. Jim has extensive exploration experience in both domestic and international arenas, including Algeria, North Africa, onshore US, offshore Gulf of Mexico, Canada and Alaska. Jim received a Masters of Geology in 1981 from Colorado School of Mines where he continues to serve on the Visiting Committee and Enhancement Committee for the Department of Geology and Geological Engineering. Jim's family covers the energy spectrum, his wife Kathy is a

research associate at CSM supporting Dr. Steve Sonnenberg's shale research consortia, his son Chris teaches outdoor/environmental education and his son David is a Vestas wind turbine technician in Kansas.



Likeleli Seithleko, Graduate Fellow, Energy Policy Studies and Energy Economics, Baker Institute

Likeleli Seithleko is a Baker Institute graduate fellow pursuing a Ph.D. in energy policy studies and energy economics. Seithleko's research currently focuses on the economics of shale gas and OPEC investment cycles. Seithleko received a Bachelor of Arts in economics from Princeton University and has served as a research associate at the Baker Institute.

While at Princeton, Seithleko worked as a research assistant on the States of Emergency project, designed to create a database for the study of political instability and human rights, and as a research intern for the Shanduka Group of South Africa. Seithleko, who grew up in the outskirts of Maseru, Lesotho, has made a strong contribution to the Baker Institute's survey and analysis work on the link between energy and poverty in southern Africa and Morocco, as well as to the institute's study on the geopolitics of natural gas.



Dr. Christian Oboh, Managing Director and Chief Executive Officer, Niger Delta Development Commission

Dr. Christian Azubuike Oboh, fondly called Chris, attended the Rivers State University of Science and Technology (RSUST), Nkpolu, Port Harcourt where he obtained a BSc. in Food Science and Technology (1990). While lecturing in RSUST, Chris studied and obtained MPhil in Food Engineering (1997) and a PhD. in Environmental Management (2003) from the same University.

Chris later joined the Nigerian Agip Oil Company Ltd. (NAOC) in 2003 where he rose to a managerial cadre. While in NAOC, he in partnership with the

International Institute of Tropical Agriculture (IITA) developed and introduced a high yielding cassava variety for farmers of NAOOC host communities and taught them how to use modern methods of farming which eventually enabled them record unprecedented harvests. He also served in Public Affairs Division as Head, Public Affairs Services before moving to a managerial position in Manpower Development of Human Resources Division of NAOOC.

Having co-ordinated Public Affairs Division activities involving NAOOC meetings with host communities to reach agreement on MOU, preparation, monitoring and implementation of MOU, representation of NAOOC at OPTS / NDDC Working Level Committees and tracking of community projects to ensure compliance with signed MOU, Chris has a firsthand knowledge and understanding of the nature of the challenges faced by the oil producing communities in the Niger Delta Region.

Chris is a Member of Nigerian Institute of Food Science and Technology and Associate Member, Chartered Institute of Personnel and Development. He has several scholarly papers to his credit and has attended numerous workshops and short Management/Business courses in Nigeria, UK, US and other parts of the world and has over the years carved a niche as a turnaround expert and builder of winning teams. Chris is an Elder of the Redeemed Christian Church and happily married.



David Posner, President, EnVent Energy

David M. Posner founded EnVent Energy LLC in 2000. EnVent's primary business is negotiating gathering, processing, transportation and marketing arrangements for natural gas producers, and related strategic initiatives. Posner previously led the marketing function and midstream operations for Santa Fe Snyder, Snyder and Ladd, is a past Chairman of COGA, and has over 30 years of experience in energy marketing, project development, and management. EnVent is also involved the development of waste heat power projects on gas pipelines and at processing plants, and the interface between new energy technologies

including renewable sources and natural gas. Posner is a graduate of Brown University and received his Masters degree in Mineral Economics from the Colorado School of Mines.



Morgan DeFoort, Co-Director, Global Innovation Center, Colorado State University

Morgan received his B.A in Physics from Hastings College and his PhD in Mechanical Engineering from Colorado State University. Morgan has worked in varied energy applications including exhaust after-treatment for natural gas pipeline engines, advanced ignition systems for distributed energy resource applications, bio-fuels and bio-energy research, and energy for sustainable development. He serves on the Board of Directors for the Rocky Mountain Sustainable Living Association and on Technical Advisory Boards for EnviroFit International, a non-profit start-up company dedicated to developing and disseminating clean engine technology in Asia and InteGrid Test and Development Laboratory, a lab co-founded by CSU and Spirae Inc., a Colorado based company specializing in infrastructure for distributed and renewable energy.



Dr. Rhonda Jordan, Ph.D., Engineering Systems Division, MIT

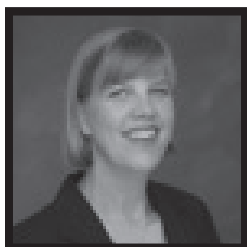
Originally from the Washington, DC metropolitan area, Rhonda studied electrical engineering and obtained her bachelors and masters degrees from Columbia University. Rhonda then decided to enter MIT's Engineering Systems Division and recently received her PhD, researching power system development in developing countries. In 2008, Rhonda worked for the United Nations Environment Programme on rural electrification in East Africa, developing business models for off-grid electrification. With regulatory knowledge and experience, technical ability and the strong desire to improve access to modern energy in a sustainable manner, Rhonda is one of the founding members of EGG-energy, Inc.



Dr. Kahwa Douoguih, Managing Partner, Keme, Africa

Dr. Kahwa Douoguih, is a Managing Partner of Keme Africa, a Pan African investment company, where she heads the firm's natural resource initiatives on the Continent. Kahwa plays a key role in global strategy and business development, driving Keme's objective to harness Africa's abundant natural and human resources to develop a vibrant, self-sustaining private sector.

Kahwa has worked as a mineral economist and commodity market research consultant at Inco (Vale). She has a broad scope of international experience in Africa and the Americas in the areas of economics, development and finance at both public and private sector institutions including the Africa Finance Corporation and the IMF. Kahwa holds a PhD in Economics from the University of Maryland, a MS in Mineral Economics from Colorado School of Mines and a BA from Stanford University.



Heidi VanGnderen, Director, Office of Public Engagement, U.S. Department of Energy, Office of the Secretary

Heidi VanGnderen is the Director of the Office of Public Engagement in the Office of the Secretary at the U.S. Department of Energy. As such, Ms. VanGnderen oversees efforts to effectively build the narrative supporting a clean energy economy, convey the Administration's considerable energy accomplishments and plans going forward; reinforce the "all of the above" strategy and strategic message framework; and help create the space for a robust clean energy policy discussion and agenda going forward through coordinated engagement. Prior to her current post, she served as Director of National and Regional Outreach for the American Council on Renewable Energy (ACORE) where she was part of the policy team. Prior to ACORE, she served as a Senior Energy Advisor for the Worldwatch Institute.

A Colorado native, Heidi previously served as Colorado's first gubernatorial climate advisor where she oversaw creation of the state's first Climate Action Plan. She was a core team member in passage of Amendment 37, Colorado's citizen initiated renewable energy standard.

She has worked on energy and climate issues in the non-profit, public, academic and private sectors as an organizer, writer, researcher, and public speaker for the whole of her professional career. She completed a Chevening Fellowship on Finance and Investment in a Low-Carbon Economy in Edinburgh and London in 2009 and is a graduate of Carleton College.



Ryan Shepherd, Chief Operating Officer, TIFIE Humanitarian

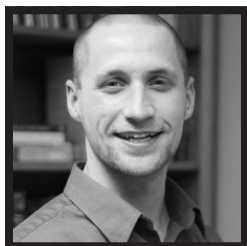
As the Chief Operating Officer of TIFIE Humanitarian—an organization whose mission is in its name, Teaching Individuals and Families Independence through Enterprise—Ryan Shepherd is working one-on-one in guiding and training his employees on how to run a profitable business, eventually without him.

TIFIE is a Utah-based international organization that is pioneering a new approach to charitable efforts in Africa and the South Pacific. TIFIE has established thriving agricultural development farms, medical initiatives, business entities, and successful distribution, transportation and construction services in the Democratic Republic of the Congo and Western Samoa.

Shepherd oversees strategic planning for humanitarian initiatives and sustainable funding of projects, including sourcing and purchasing resale goods, equipment, and machinery in Europe and Asia. Shepherd, who honed his entrepreneurial skills in four start-up businesses prior to completing his MBA, originally planned to work for a NGO, but was impatient with the lack of sustainable measures and creativity.

Recognizing he had a "knack" for business and a personality in taking new found business's to the next level, he spent two years as a marketing and sales director

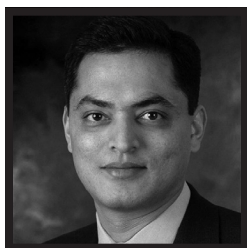
for an education curriculum company and helped increase sales from \$120K a year to \$2.5 million and a liquidity event. As marketing and sales director for a start-up mortgage company, he oversaw marketing and sales throughout the Western United States that closed an average of \$60,000,000 loans a month. For six years, Shepherd owned and was a managing partner in a family recreation business, overseeing daily management as well as developing international sales and distribution channels.



Dr. Nathan Johnson, Postdoctoral Fellow, HOMER Energy

Nathan describes energy flow in society and how it is influenced by dynamic human, natural, and technical systems. He combines field research, laboratory research, and computational modeling to develop decision-making tools that support the design of sustainable products and services around the world. These tools are primarily applied in the assessment and design of micro-grid power systems and heat systems. Linking concept to construction, Johnson's work provides new depth to understanding complex energy systems and applying that understanding to sustainable design. Johnson has two years of research and development experience in eight foreign countries, and has working experience in corporate and academic environments.

Johnson is currently a Postdoctoral Fellow with the Nation Science Foundation (NSF) and the American Society of Engineering Education (ASEE). His research in micro-grid power system modeling and decision-making is being completed at HOMER Energy LLC. Johnson received his bachelors in Mechanical Engineering, master's in Mechanical Engineering, master's in International Development, and Ph.D. in Mechanical Engineering from Iowa State University.



Sunit Patel, Executive Vice President and Chief Financial Officer, Level 3 Communications

Sunit Patel is Executive Vice President and Chief

Financial Officer for Level 3 Communications. He joined the company in 2003 and was named CFO in May of that year.

Mr. Patel was formerly CFO and a co-founder of Looking Glass Networks Inc., a facilities-based provider of metropolitan telecommunication transport services. Prior to co-founding Looking Glass, Mr. Patel was treasurer of MCI WorldCom from 1997 to 2000. From 1994 to 1997, he was treasurer of MFS Communications, Inc., a competitive local exchange carrier acquired by WorldCom.



Robyn L. McGuckin, PMP, CEM, Director, Clean Energy and Sustainability, MHW Global

Ms. McGuckin has managed energy sector programs in developing countries with a specific focus on overcoming issues that prevent adequate power provision. She has led renewable energy projects in the

Middle East and South Asia assessing the feasibility, project design and delivery of biomass energy, on-shore wind, solar PV, and micro-hydro. In addition, she has led post-disaster power sector and infrastructure reconstruction in Iraq, Lebanon and Indonesia. Her work has been highlighted by IEEE, NPR, the Washington Post, BBC, Fortune Magazine, and in several current affairs books. Ms. McGuckin has a BS in Biological Systems Engineering and an MS in Biological Engineering. She has lived and worked in the U.S., South Asia, the Middle East, Europe, and Africa.



Yoav Palatnik, Co-Founder and Managing Director, EcoPower Africa

Yoav Palatnik is the Managing Director of EcoPower Africa. EcoPower Africa is engaged in developing small-scale, biomass-fueled, distributed power generation projects in Liberia, Kenya, Cameroon and others.

Before starting EcoPower Africa, Mr. Palatnik was the Director of Sales and Marketing at All Power Labs. APL develops and manufactures compact biomass gasifiers that are integrated with conventional generators. He left this position

to focus on projects in Africa, which he identified as a major emerging market for distributed biomass-fueled power generation.

Prior to working at All Power Labs, Mr. Palatnik was a Senior Project Developer for Energy Concepts, P.C., in New York City. Energy Concepts is an engineering firm that specializes in the design, construction and commissioning of small to medium (0.5-10MW) gas-fired CHP (co- and tri-generation) distributed generation power plants. During his tenure, Mr. Palatnik was instrumental in developing four marquee projects in Manhattan and NJ.



Evan Husney, General Counsel, Nokero

Evan Husney is the Nokero General Counsel and is also responsible for business development, large orders and the Nokero Dealer Network. Mr. Husney has worked in the legal field, both in large firms and as in-house counsel to growing businesses for 14 years. Mr.

Husney's legal practice has focused on general corporate matters, including contract preparation, negotiation and review, mergers and acquisitions, equity and debt financings, joint ventures and other strategic transactions, entity formation, corporate governance, and other general corporate matters. Mr. Husney earned his J.D./M.B.A. from the University of Colorado at Boulder and a Bachelor of Science degree from Emory University.



Ron Bills, Chairman and CEO, Envirofit

Ron is a visionary leader with the fundamental idea of creating scalable and sustainable social enterprises at the base of the economic pyramid that are focused on energy & pollution reduction and health & economic improvement. He believes

it is a basic duty of free enterprise to deliver high quality, durable and aspirational products to emerging consumer markets at the lowest possible cost – while at the same time energizing local economies and developing local entrepreneurs. Actualization of this vision will provide

the potential to significantly impact the world's deadliest health and energy related problems.

Since 2004, Ron has led Envirofit by combining his business acumen from the consumer durables industry with visionary thinking in the area of social enterprise. A global leader in the field of technology development and social entrepreneurship, Ron has extensive, worldwide business and P&L experience across private, public, and start-up business environments. His ability to move cutting edge, industry-defining technology from the drawing board to the forefront of the global marketplace has garnered Envirofit a variety of accolades in the areas of product design and technology innovation.

Prior to Envirofit, Ron was president and CEO of Segway and previously led several worldwide business units for Polaris Industries, Yamaha Motor Corporations and Bombardier. His career began as an engineer with Martin Marietta Aerospace.



Sam Weaver, Co-Founder, President and CEO, Cool Energy, Inc.

Sam Weaver is Co-Founder, President and CEO of Cool Energy, Inc., a power conversion equipment company located in Boulder, Colorado. The main applications of Cool Energy's products are waste heat recovery, solar power, and biomass power, and the scale of the equipment is intended for on-site and remote power generation. Sam serves on the Boards of the Colorado Solar Energy Industries Association, and the Colorado Clean Energy Development Agency, and is a member of the City of Boulder Planning Board. Sam is actively involved in the Colorado technology, environmental and business communities, and has previously co-founded one other Colorado-based company. Sam holds a B.S. degree in engineering and applied science from the California Institute of Technology and is an inventor named on fourteen issued U.S. patents.



Sarah Skinner, Project Planner, ALSTOM Hydro

Sarah Skinner is a Project Planner at ALSTOM Hydro. ALSTOM is a leading global provider of energy equipment, present in all energy sectors in 70 countries with over 90,000 employees. Its Hydro division accounts for over 25% of the world's hydro facilities. ALSTOM's presence on the African continent is particularly strong in South Africa where, among other things, ALSTOM partners with PlaNet Finance Southern Africa in the Micro Energy Alliance Program, a three-year project that will establish a self-sustaining micro-franchise organization specializing in the retail and installation of energy efficient solutions in townships.

Prior to joining ALSTOM, Sarah worked for the United States Antarctic Program and deployed to Antarctica for two years to work on a handful of environmental research projects. Most of her experience lies in project planning, budgeting, and execution. She holds a BS in Planning and Development from Arizona State University and an MS in Environmental Policy and Management from the University of Denver.



Ravi Malhotra, Founder and Chairman, iCAST(International Center for Appropriate and Sustainable Technology)

Mr. Malhotra started working on community development shortly after receiving a B. Tech in Engineering from the Indian Institute of Technology, New Delhi, India. He later received an MS in Engineering and an MBA from the University of Texas. In the past 20 years, Mr. Malhotra has accumulated experience helping small entrepreneurial firms manage their growth. He has also developed and disseminated numerous sustainable technologies internationally and created financially viable enterprises globally. Mr. Malhotra is the founder of five social enterprises and received the Entrepreneur of the Year award in 2009 from the City of Lakewood, CO. He was a member of the Western Governor Association's Solar and Bio-

energy Task Force and is a frequent guest speaker at various universities across Colorado.



Dr. Luka Powanga, Professor, Regis University

Dr. Luka Powanga is a professor in the School of Management at Regis University and the Executive Director of the Global Commerce Forum. He is also the Managing Editor of the Journal of Global Commerce Research and the Journal of Current Research in Global Business. He is currently the US correspondent for CargoNews Asia, a trade magazine based in Hong Kong.

He holds a BSC degree in Metallurgy and Mineral Processing, a Masters and a PhD in Mineral Economics from Colorado School of Mines with a minor in Finance from the Graduate School at Denver University. He also holds a Masters degree in Computer Information Technology and Graduate Level Certificate in Object Oriented Programming from Regis University. His industry and academic experience spans over thirty years at middle and senior management levels. He consults in mining and international business management. He worked in the mining and telecommunications industry at middle and senior management level within and outside the United States. He taught at Colorado School of Mines before transitioning to Regis University. He has written a textbook in economics published by McGraw-Hill.



Jamie Van Leeuwen, Jamie Van Leeuwen, Deputy Chief of Staff, Governor's Office, State of Colorado

Jamie Van Leeuwen currently serves as the Deputy Chief of Staff for Governor Hickenlooper after two years as Senior Advisor and Director of Community Partnerships. Leading up to the Hickenlooper administration, he worked as the Policy Director and served on the transition team for the Hickenlooper for Colorado gubernatorial campaign. He is also the founder and Executive Director of the Global Livingston Institute, a non-

governmental organization in East Africa designed to engage students and community leaders to develop innovative solutions to poverty and is a Senior Research Fellow with the Buechner Institute at the University of Colorado Denver School of Public Affairs.



Lakshman Guruswamy, Nicholas Doman Professor of International Environmental Law, University of Colorado at Boulder

Lakshman Guruswamy, the Nicholas Doman Professor of International Environmental Law at the University of Colorado at Boulder, was born in Sri Lanka, and is a recognized expert in International Environmental and Energy Law. Lakshman teaches International Environmental Law and Energy Justice at CU. He is also the Director of the Center for Energy & Environment Security (CEES) of the University of Colorado. This is an interdisciplinary Center that seeks to find practical renewable energy solutions for the energy deficits confronting the globe, and pursues environmental justice for peoples of the developing world. He is widely published in international energy and environmental law in legal and scientific journals, and his present scholarship is focused on access to energy for the Other Third of the world. Prior to joining the University of Colorado, he taught in Sri Lanka, the UK, and the Universities of Iowa and Arizona. Guruswamy, is a frequent speaker at scholarly meetings around the country and the world. He is the author of: *International Environmental Law in a Nutshell* (4d ed. 2011), and the co-author of: *International Environmental Law and World Order* (2nd. 1999), *Biological Diversity: Converging Strategies* (1998), *Arms Control and the Environment* (2001), and other books. He has also authored numerous scholarly articles published in law reviews as well as peer reviewed journals.

Committee Chairs:

Conference Chairman; Fred Julander
Conference Co-Vice Chairmen, Dr. Luka Powanga, David Posner,
Dr. Robert Stoner

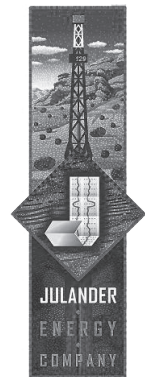
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