





Energy Finance 2017 Agenda

March 13-15, 2017

The Institute for Energy Economics and Financial Analysis and Columbia Law School welcome you to Energy Finance 2017, which brings together environmental advocates and attorneys from around the world.

Registration begins at 11:30am Monday, March 13, and is in the lobby of Jerome Greene Hall (JGH) Columbia Law School, 435 W 116th St. (corner of Amsterdam Ave), New York, NY 10025 (<u>map</u>). Please note lunch is not provided on Monday. The conference will begin at 1:00pm in JGH 106 (overflow in JGH 103 & 104).

Luggage can be dropped off at JGH 102a on Monday and Tuesday only. On Wednesday, coat check will be available to store your luggage near JGH 106.

Event reading materials and other event logistics can be found at this link <u>http://ieefa.org/energyfinance2017/</u> or by scanning the QR code.



Information Regarding New York CLE Credits

Columbia Law School has been certified by the New York State Continuing Legal Education (CLE) Board as an Accredited Provider of CLE programs. Under New York State CLE regulations, this live transitional and non-transitional CLE Program will provide 14 credit hours that can be applied toward the Areas of Professional Practice requirement. CLE credit is awarded only to New York attorneys for full attendance of the Program in its entirety. Attorneys attending only part of a Program are not eligible for partial credit for it, although they are most welcome to attend it. Attendance is determined by an attorney's sign-in and sign-out, as shown in the Conference registers. On sign-out, attorneys should also submit their completed Evaluation Form, provided at the Conference. Please note the NYS Certificates of Attendance will be sent to the email address as it appears in the register unless otherwise noted there.

Special thanks to Earthjustice for help in preparing materials for CLE panels.

Hotel Beacon

The Conference hotel is <u>Hotel Beacon</u> located at 2130 Broadway, New York, NY 10023. Allow 30 minutes door-to-door to take the subway from the hotel to the conference venue.

Subway directions from Hotel Beacon: Head south on Broadway toward W 72th St. Take the uptown 1 trainlocal- at Broadway and 72 St towards "Van Cortlandt Park - 242 St." In 6 stops, get off at "116 St - Columbia University". Head northeast on Broadway toward W 116th St. Turn right at Columbia University W 116th St. Columbia Law School, Jerome Green Hall will be on the left on the corner of Amsterdam Ave and 116 St. <u>Map</u> <u>from hotel</u> to conference. Subway information and rates can be found at <u>http://web.mta.info/metrocard/</u>

IEEFA would like to thank the foundations who have provided support for this event, including the Moxie Foundation, Park Foundation, Heinz Endowments, Growald Family Fund, and Rockefeller Brothers Fund.

Monday March 13, 2017

Registration - 11:30 to 1:00pm, entrance of Jerome Greene Hall (JGH)

Welcome, JGH 106, 1:00-1:15 (Overflow room JGH 103)

Michael Gerrard, Columbia University Law School Sandy Buchanan, IEEFA

Plenary 1 – Fossil Fuel Divestment, JGH 106, 1:15pm-2:30pm (Overflow room JGH 103)

This panel will describe recent developments and trends in fossil fuel divestment.

Bob Litterman, Kepos Capital Tom Sanzillo, IEEFA Moderator: Ellen Dorsey, Wallace Global Fund

Plenary 2- *How Campaigners Use Financial Analysis*, JGH 106, 2:45pm-4:10pm (Overflow room JGH 104)

This panel will include case studies from New York, Puerto Rico and Bangladesh showcasing how campaigners have used financial analysis in campaigns involving utilities, coal mines and coal-fired power plants. Campaigners will explain how financial analyses have been used to attract new constituencies and media attention to campaigns.

Rebecca Newberry, Clean Air Coalition of Western New York David Ortiz, El Puente Sharif Jamil, Waterkeepers Bangladesh Moderator: Sandy Buchanan, IEEFA

Plenary 3 - CLE eligible – Facts, Opportunities and Action: The climate movement looks forward, JGH 106, 4:15pm-6:00pm, (Overflow room JGH 104)

Organizers from different sectors of the climate movement will provide perspectives on directions for the movement, both domestically and internationally, for the next four years.

Jane Kleeb, Bold Nebraska Bruce Nilles, Sierra Club Tom "Smitty" Smith, Public Citizen Ashish Fernandes, Greenpeace Moderator: Larry Shapiro, Rockefeller Family Fund

Reception - lobby of JGH, 6:00pm to 7:00pm

TUESDAY March 14, 2017

Breakfast: 8:30

Concurrent panels throughout the day

Panel 4- China's Energy Future, JGH 106, 9:00am - 10:15am

This panel will discuss the outlook for the coal and renewable energy industries in China and the impacts of China's coal demand on the global coal buildout.

Lo Sze Ping, WWF China Michelle Chan, Friends of the Earth Lauri Myllyvirta, Greenpeace Moderator: Tim Buckley, IEEFA

Panel 5- U.S. and Global Natural Gas Demand, JGH 103, 9:00am - 10:15am

Panelists will discuss trends in U.S. and international demand for natural gas and LNG.

Tony Yuen, Citigroup Bruce Robertson, IEEFA Moderator: Cathy Kunkel, IEEFA

Panel 6 – India's Energy Future, JGH 106, 10:30am-11:45am

Panelists will discuss the markets for coal and renewable energy in India. Vandana Gombar, Bloomberg New Energy Finance Gireesh Shrimali, Climate Policy Initiative Joe Athialy, CENFA Moderator: Tim Buckley, IEEFA

Panel 7 – Oil market trends and forecasts, JGH 103, 10:30am – 11:45am

Panelists will discuss oil price trends and the geopolitical impact of low oil prices.

Steve LeVine, Quartz Charlie Kronick, Greenpeace UK Greg Muttitt, Oil Change International Moderator: Tom Sanzillo, IEEFA

Lunch 2nd floor, Lenfest Café, 11:50am to 12:40pm

Lunch Side Meeting – Fossil Fuel Project Tracker, JGH 103 12:00pm - 12:35pm

CoalSwarm is developing the Global Fossil Projects Tracker to provide a resource for information on coal export terminals, LNG terminals, major oil & gas pipelines, major offshore and Arctic drilling platforms, and other very large extreme energy projects. Like the Global Coal Plant Tracker, the new tracker will use footnoted wiki pages as building blocks. The purpose of the meeting is to answer questions and share ideas among anyone interested in this tool.

Panel 8 - CLE eligible - Outlook on U.S. Utilities, JGH 106, 12:45pm - 2:00pm

This panel will overview recent trends and developments in the U.S. utility sector with a focus on how these developments impact utility credit ratings.

Shannon Fisk, Earthjustice Nick Steckler, Bloomberg New Energy Finance Jim Hempstead, Moody's Moderator: Shannon Fisk, Earthjustice

Panel 9 – Wet gas economics and infrastructure, JGH 103, 12:45pm -2:00 pm

This panel will provide an overview of the economics of wet gas and how it is used in the petrochemical industry. The panel will discuss the future outlook for wet gas prices and infrastructure development.

Nick Fowler, REXtac, LLC

Moderator: Deborah Goldberg, Earthjustice

Training – Wind project finance, JGH 304, 12:45-2:00pm

This training will explain the economics of wind and offshore wind and describe how such projects are financed. This training is open to anyone interested. 304 is on the 3rd floor.

12:45-2:00 Jérôme Guillet, Green Giraffe

Panel 10 - CLE eligible – *Risks for U.S. coal plants in the next 4 years: market forces and regulatory developments*, JGH 106, 2:05pm - 3:20pm

Panelists will discuss the rollback of environmental regulations impacting coal-fired electricity generation, as well as the market forces that are weakening the competitiveness of coal in deregulated markets.

Eric Schaeffer, Environmental Integrity Project David Schlissel, IEEFA Moderator: Mary Anne Hitt, Sierra Club

Panel 11- CLE eligible – Are natural gas pipelines being overbuilt?, JGH 103, 2:05pm - 3:20pm.

Panelists will discuss the buildout of natural gas pipelines from the Marcellus/Utica region and the industry and regulatory dynamics that facilitate overbuilding of pipelines. The panel will examine the controversy over natural gas pipeline construction into New England.

Cathy Kunkel, IEEFA Christophe Courchesne, Massachusetts Attorney General's Office Moderator: Carrie LaSeur, Baumstark Braaten Law Partners

Panel 12- CLE eligible – Overcoming obstacles to renewables, JGH 106, 3:45pm-5:00pm

Panelists will discuss obstacles to integrating renewable energy into the grid and how those obstacles are being overcome.

Warren Lasher, ERCOT Karl Rábago, Pace Energy and Climate Center Moderator: Anna Sommer, Sommer Energy

Panel 13 - CLE eligible – Renewable energy and debt in Puerto Rico, JGH 103, 3:45pm-5:00pm

Panelists will discuss challenges facing Puerto Rico's electrical system, which is burdened by excessively high levels of debt and historic over-reliance on fossil fuels. Lessons can be drawn from Puerto Rico's experience for other public power entities and other island power systems.

Ruth Santiago, El Puente / Comité Diálogo Ambiental / LCAN Tom Sanzillo, IEEFA Tomás Torres, Instituto de Competitividad y Sostenibilidad Económica

Moderator: Tom Sanzillo, IEEFA

Panel 14 - CLE eligible - Coal mine reclamation, JGH 106, 5:05pm-6:20pm

This panel will discuss current issues in U.S. coal mining reclamation.

Joe Pizarchik, former Director of Office of Surface Mining Reclamation and Enforcement Dan Cohn, Western Organization of Resource Councils Moderator: John Smillie Western Organization of Resource Councils

Panel 15- The role of state banks and international financial institutions in coal development in Indonesia and Kosovo, JGH 103, 5:05pm-6:20pm

This panel will provide an overview of coal industry expansion in Indonesia and Kosovo, with a particular focus on the role of state banks and international financial institutions (including the Japanese Development Bank and the World Bank)

Yulanda Chung, IEEFA Visar Azemi, KOSID Moderator: Simon Nicholas, IEEFA

Wednesday March 15, 2017

Breakfast 8:30am

Concurrent panels 9:00am-10:15am

Panel 16 – *Responses to high penetration of renewable energy in Europe, JGH 106,* 9:00am-10:15am Panelists will address the political responses in parts of Europe that have achieved high penetrations of renewable energy.

Gerard Wynn, IEEFA Tom Murley, HG Capital Moderator: Sara Ahmed

Panel 17 - CLE eligible – Challenging demand for new natural gas pipelines, JGH 103, 9:00am-10:15am This panel will address different strategies that are being used to challenge the demand for

new natural gas pipelines.

Diana Csank, Sierra Club Jonathan Peress, Environmental Defense Fund Moderator: David Wooley, Keyes Fox & Wiedman

Concurrent panels 10:30am - 11:45am

Panel 18 - CLE eligible - Coal bankruptcies, JGH 106, 10:30am - 11:45am

Panelists will discuss the various bankruptcies of major coal producers and the prospects for companies moving forward as they emerge from bankruptcy.

Sheldon Stone, Amherst Partners LLC Margrethe Kearney, Environmental Law and Policy Center Moderator: Sarah Brennan, Robertson Foundation

Panel 19 – Energy and Water, JGH 103, 10:30am - 11:45am

Panelists will discuss the impact of energy infrastructure projects on water resources in the U.S. and India.

Jenni Monet, journalist Donna Lisenby, Waterkeeper Alliance Srinivas Krishnaswamy, Vasudha Foundation Moderator: Tonya Bonitatibus, Savannah Riverkeeper

Lunch, 2nd floor, Lenfest Café, 11:50am to 12:40am

Side Meeting – Using Divestment to Fight the New-Build Pipeline of Coal Projects, JGH 103

12:00pm - 12:35pm Open to all that are interested. Bring your lunch and learn. Heffa Schücking, Urgewald Concurrent panels 12:45pm -2:00pm

Panel 20 - CLE eligible – State of the U.S. electric utility industry, JGH 106, 12:45pm -2:00pm

This panel will provide an overview of the finances of U.S. investor-owned electric utilities, largely from an equity analyst perspective.

David Schlissel, IEEFA Julien Dumoulin-Smith, UBS Investment Research Moderator: David Schlissel, IEEFA

Panel 21 – Just Transition: examples from the U.S. and Europe, JGH103, 12:45pm-2:00pm

This panel will discuss different approaches to "just transition" for communities facing coal mine and coal plant closures in the U.S. and Europe.

Sanjeev Kumar, Change Partnership Richard Lipsitz, Western New York Area Labor Federation Heidi Binko, Just Transition Fund Moderator: Suzanne Mattei, New York Trial Lawyers Association

Plenary 22 – *Disruptive Energy Futures*, JGH 106, 2:15pm - 2:35pm (overflow into JGH 104) This plenary will overview global opportunities for energy efficiency and other disruptive energy technologies.

Amory Lovins, Rocky Mountain Institute

Plenary 23 – *Building Bridges with Investors and Renewable Energy Developers,* JGH 106, 2:45pm-4:00pm (overflow into JGH 104)

Panelists will discuss trends and opportunities for building bridges between investors and renewable energy developers.

Philip Ripman, Storebrand Asset Management Jérôme Guillet, Green Giraffe Moderator: Yulanda Chung, IEEFA

Speakers Energy Finance 2017

Sara Ahmed, Energy Finance Analyst, IEEFA

Energy Finance Analyst Sara Jane Ahmed is a former investment advisor specializing in originating and structuring energy opportunities in emerging markets. She has worked for the World Resources Institute and Grameen Bank. Ahmed focuses on the energy sector dynamics in the Philippines, a nation at a crossroads in decision-making for how it will provide cost effective electricity to its residents.

Joe Athialy, Executive Director, Centre for Financial Accountability

Joe Athialy is the Executive Director of Centre for Financial Accountability, India. Earlier, he was the Asia Director of Bank Information Center, a watchdog of World Bank Group. He has experience working with Amnesty International as a campaigner and have been a grassroots activist with the antidam movement – Narmada Bachao Andolan (Save Narmada Movement). He holds a degree in journalism. He is passionate about photography.

Visar Azemi, Executive Director, Balkan Green Foundation

Visar Azemi is the Executive Director for the Balkan Green Foundation and Coordinator of the Kosovo Civil Society Consortium for Sustainable Development (KOSID). Previously, Mr. Azemi served as the representative and lecturer for the University of Maryland University College (UMUC).

He has over ten years of professional experience in the non-profit sector, with extensive knowledge in partnership development, strategic planning, program management and marketing.

His prior work also includes management work with the Central Texas College, International Organization for Migration and KBR.

Mr. Azemi holds a graduate degree in electrical engineering from the University of Pristina, a second Bachelor's degree in Management Studies, and a Master's degree in International Financial Management from University of Maryland University College.

Heidi Binko, Executive Director, Just Transition Fund

Heidi Binko is the Executive Director of the Just Transition Fund, a philanthropic initiative that helps coal-impacted communities make the transition to a clean, new energy economy. Created by Heidi and her partner Sandra Mikush (Appalachia Funders Network/Mary Reynolds Babcock Foundation), the initiative was launched in April 2015 and is currently housed at the Rockefeller Family Fund (RFF).

Prior to joining the Just Transition Fund full-time in January 2017, Heidi served as associate director of Special Climate Initiatives at RFF. In that capacity, she worked closely with key foundations, organizations and thought leaders working at the nexus of climate and coal since joining RFF in October 2008. Before RFF, Heidi was the executive director of the WestWind Foundation, a family foundation based in Virginia. She also previously served as co-chair of the board of directors of the Environmental Grantmakers Association (EGA) and co-chair of the Climate and Energy Funders Group, a project of the Consultative Group on Biological Diversity. Prior to her work in the field of environmental philanthropy, Heidi held positions with The Nature Conservancy and the Land Trust Alliance. She holds degrees from the University of Notre Dame and the Yale School of Forestry and Environmental Studies.

Tonya Bonitatibus, Executive Director, Savannah Riverkeeper

Tonya Bonitatibus serves as the Riverkeeper/ Executive Director for Savannah Riverkeeper watching over the health and vibrancy of the Savannah River in South Carolina and Georgia.. She has served the organization for over 9 years helping guide it through many successful challenges to water quality including a recent Savannah Harbor Settlement bringing over \$40 million in restoration, preservation, and scientific studies to the Savannah River basin.

In 2014 she was elected to serve on Waterkeeper Alliance's Waterkeeper Council. She currently serves as the Chairman of the Issues and Advocacy Committee, as a member of the International Committee, and Mentorship Program. She also serves on the Leadership Committee for Georgia Water Coalition, SC Basin Advisory Council and Lower Savannah River Alliance.

Tonya recently received the JAG Young Leaders Alumni Award from Georgia Regents University where she received a BA in Business Marketing. She often voices the need for water advocates to understand and maneuver in the financial realm to enact significant changes in their watersheds.

Sarah Brennan, Program Officer, Robertson Foundation

Sarah Brennan is a program officer at the Robertson Foundation, which supports market-based approaches to climate-change and conservation policy. She is a past associate director of the Earth Institute at Columbia University, and serves on the board of directors of IEEFA.

Sandy Buchanan, Executive Director, IEEFA

IEEFA Executive Director Sandy Buchanan has worked on a variety of energy issues involving coal, nuclear, utilities, renewables, and energy efficiency since the 1980s. She served as executive director of Ohio Citizen Action for 20 years before joining IEEFA in 2013.

Tim Buckley, Director of Energy Finance Studies, Australasia, IEEFA

Director of Energy Finance Studies, Australasia, Tim Buckley has 25 years of financial markets experience, specializing in equity valuation, including as a top-rated analyst and as co-founder and managing director of Arkx Investment Management.

Michelle Chan, Vice President of Programs, Friends of the Earth

Michelle Chan is the Vice President of Programs at Friends of the Earth. Previously, she led the Economic Policy team at FOE, which works to reform international trade rules, get money out of politics, green U.S. tax and budget policy, and promote sustainable finance policies at public and private financial institutions. She is the founder of BankTrack, and currently is the Vice President of the Board of Amazon Watch. She has served on the boards of Ceres, the Council for Responsible Public Investment, the Rose Foundation for Communities and the Environment; and was a member of the Dow Jones Sustainability Index Advisory Committee. In 2002 she received the Social Investment Forum's Service Award for outstanding contributions to the field of socially responsible investing. She graduated from the Division of Honors with degrees in Economics, Development Studies, and Geography from the University of California at Los Angeles.

Yulanda Chung, Energy Finance Consultant, IEEFA

Energy Finance Consultant Yulanda Chung, former head of Standard Chartered's sustainable finance team in London and Singapore, where she was responsible for the bank's governance procedures on sustainable lending and investments and for advising on environmental and social issues on deals. Before joining the bank, she was an equity analyst for the mining and building materials sectors at Sustainable Asset Management (now RobecoSAM) in Zurich and was responsible for the sectors' selection for the Dow Jones Sustainability Index.

Dan Cohn, Regional Organizer, Western Organization of Resource Councils

A New York native, Dan moved to Montana to work on coal mining, leasing, and export issues for WORC in 2014.

Greg Conrad, Executive Director, Interstate Mining Compact Commission

Greg Conrad is Executive Director of the Interstate Mining Compact Commission (IMCC), a multi-state governmental organization representing 26 mineral producing states. Greg has served in his position since 1988 and is responsible for overseeing several issues of importance to the states in the legislative and regulatory affairs arenas including mining and reclamation, mine placement of coal combustion products, financial assurance, identification and restoration of abandoned mine lands, mine safety and health, and various environmental issues associated with mineral production such as surface and ground water quality and quantity. Prior to joining IMCC, Greg served for nine years as senior counsel with the American Mining Congress, which is now part of the National Mining Association. While with AMC, Greg had primary staff responsibility for several coal related issues including transportation, leasing, research and development initiatives, and surface mining and reclamation. Greg has spoken and presented papers at a variety of meetings and conferences hosted by such organizations as the Eastern Mineral Law Foundation, the National Academy of Science, the Conference of Government Mining Attorneys, the American Association of State Geologists, the Colorado School of Mines, the Office of Surface Mining, the National Association of Abandoned Mine Land Programs, the National Mining Association, the Environmental Law Institute and various state government groups. He has written extensively on mining issues for professional journals and magazines. Greg graduated from Michigan State University with a degree in business administration and later from the University of Detroit/Mercy School of Law where he was an associate editor of the law review.

Christophe Courchesne, Chief, Environmental Protection Division, Office of Massachusetts Attorney General Maura Healey

Christophe Courchesne is the Chief of the Environmental Protection Division at the Office of Massachusetts Attorney General Maura Healey, where he oversees civil environmental enforcement, other affirmative litigation to protect the environment, and defensive cases. Before this role, Christophe was a senior attorney at the Conservation Law Foundation's New Hampshire office and practiced environmental, energy, and land use law with Goodwin Procter LLP in Boston. Christophe graduated from Harvard Law and UMass Amherst.

Diana Csank, Staff Attorney, Environmental Law Program, Sirerra Club

Diana joined the Sierra Club's Washington DC Office in 2013 to promote clean energy and equitable environmental safeguards, focusing on Eastern states. Before this, she served as an attorney for the

Council on Environmental Quality. Diana holds degrees from Stanford and Tulane University Law School. Mostly she spends her spare time outdoors with friends and gratitude.

Ellen Dorsey, Executive Director, Wallace Global Fund

Ellen Dorsey is Executive Director of the Wallace Global Fund, a private foundation focused on progressive social change in the fields of environment, democracy, human rights and corporate accountability. Under her leadership, the Fund is recognized for creative philanthropic strategies and mission-related investing, including its early convening, funding and leadership in the global fossil fuel divestment movement. Dorsey was awarded the 2016 inaugural Nelson Mandela - Graca Machel Brave Philanthropy Award for launching Divest-Invest Philanthropy, a coalition of over 140 foundations committed to aligning investments and grants to address the climate crises and accelerate the clean energy transition. Dr. Dorsey came to Wallace Global Fund from a series of academic, philanthropic and non-profit leadership positions in the human rights and environmental fields, including serving as Executive Director at the Rachel Carson Institute, launching the Human Rights and Environment program at Amnesty International, and serving as senior program officer in the Heinz Endowment's Environment Program. Additionally, she has served on the board of numerous non-profit organizations promoting human rights and sustainable development, including Greenpeace USA, the Global Initiative for Economic, Social and Cultural Rights, the United States Human Rights Network, and chair of the board of Amnesty International USA. Dorsey holds a doctorate in political science from the University of Pittsburgh. She was a Fulbright Research Fellow in South Africa during that country's historic transformation. She served on the faculty of several Universities, teaching human rights and environmental sustainability. She has written extensively on effective strategies of non-governmental organizations and social movements. Dorsey is co-author, with Paul J. Nelson, of New Rights Advocacy: Changing Strategies of Development and Human Rights NGOs, Georgetown University Press, 2008.

Julien Dumoulin-Smith, Executive Director – Equity Research, Electric Utilities & IPPs Group, UBS Securities

Julien Dumoulin-Smith, CFA, is Executive Director - Equity Research for the Electric Utilities & IPPs Group, UBS Securities, LLC, primarily focusing on the Diversified Utilities and IPPs. Julien has followed a broad spectrum of the space, including both regulated and competitive utilities, ranking #2 among Utilities analysts in the Institutional Investor magazine survey for 2014. He was ranked a Rising Star in 2010-12 by the same publication, as well as #1 among Hedge Fund managers for the three years running from 2012-14. He was placed on FT's StarMine rankings as both #1 Stock-Picker for IPPs in and #3 Stock-Picker for the entire Utility Sector in The Wall Street Journal's Best on the Street rankings for 2011, alongside numerous StarMine distinctions on earnings accuracy, including the multi-utility category in 2014. Julien earned his BS in Applied Math and MBA at Columbia University. He is also a CFA charterholder.

Ashish Fernandes, Senior Campaigner, Greenpeace India

Ashish Fernandes is a senior campaigner with Greenpeace India, where he has worked for nearly a decade on the environmental and financial risks posed by India's coal sector. Prior to Greenpeace, he worked with India's leading wildlife magazine, Sanctuary Asia.

Shannon Fisk, Managing Attorney, Coal Program, Earthjustice

As managing attorney for the Coal Program, Shannon Fisk leads Earthjustice in pushing the nation to become less dependent on its aging coal fleet, stopping uneconomic investments in dirty power plants, and making way for untapped renewable energy resources and innovation in energy efficiency.

Since joining Earthjustice in 2012, Fisk has ramped up the organization's litigation and advocacy on coal issues in the Midwest, the heart of the U.S. coal industry. He joined Earthjustice after more than 10 years of litigating against coal-fired power plants and on other environmental issues at the Natural Resources Defense Council and the Environmental Law and Policy Center.

Fisk has been a tireless advocate for environmental and public health interests before public utility commissions, state environmental agencies, and courts in proceedings that will determine the Midwest's energy future. His litigation has secured several coal-plant retirement commitments across the region and beyond, including halting American Electric Power's proposed \$940 million retrofit of the Big Sandy coal plant in Kentucky, which the company is now planning to retire in 2015.

Fisk graduated from the University of Michigan and received his law degree cum laude from Harvard Law School.

Nick Fowler, CEO, REXtac LLC

Nick Fowler is the founder and owner for 35 years of a small, propylene based petrochemical company headquartered and operating in the oil fields of West Texas. Graduate engineer (Rice University) and MBA (UT Odessa).

Vandana Gombar, Editor, Bloomberg New Energy Finance

Vandana Gombar is an editor at Bloomberg New Energy Finance, tracking renewable energy policies globally. She previously led the energy team at the Business Standard newspaper in India.

Jérôme Guillet, Paris Managing Director, Green Giraffe

Dr Guillet is the Paris Managing Director of Green Giraffe, a firm of renewable energy financial advisors. A banker for all his career, Jérôme has close to 20 years of experience in energy project finance, initially in the oil&gas sector with Crédit Lyonnais, and since 2002 in the renewable energy sector, with Dexia and then within Green Giraffe.

Jérôme has focused on offshore wind since 2004: he led the negotiations for the financing of all the early offshore wind projects to have obtained non-recourse debt in 2006-2009, and has been involved in some way in most of the offshore wind projects that have closed debt transactions to date.

James Hempstead, Associate Managing Director, Moody's

Jim Hempstead is an Associate Managing Director in Moody's Global Project & Infrastructure Finance Group where he helps manage the North American Utilities Team. Jim also acts as a rating chair across all segments of the Global Infrastructure and Project Finance franchise, is a member of the infrastructure Finance Franchise Committee and a member of the Global Infrastructure Focus Editorial Board. In addition, Jim is the lead analyst on a portfolio of US-based electric and natural gas utility companies and unregulated power companies. Jim joined Moody's in December 2002. Prior to joining Moody's, Jim spent time as an investment banker with Merrill Lynch & Co., working in the Global Energy & Power Group, providing financial and advisory services to electric, natural gas distribution, interstate pipeline, energy merchant, water and energy technology companies. Prior to joining Merrill Lynch, Jim worked with Salomon Smith Barney Corporate Finance, working in their Global Energy & Power Group.

Jim graduated with a B.S.B.A. from Villanova University and an M.B.A. from Fordham University. From 2011 - 2013, Jim served as the Director of Emergency Management for his hometown in New Jersey, and is a registered EMT for his local, volunteer first aid squad. Jim is a member of the Wall Street Utility Group and became a Trustee with the Society of Utility and Regulatory Financial Analysts (SURFA) in 2012. In 2014, Jim joined the Advisory Council for the Electric Power Research Institute (EPRI).

Mary Anne Hitt, Director, Sierra Club Beyond Coal Campaign

Mary Anne Hitt is director of the Sierra Club's Beyond Coal Campaign, which is working to eliminate coal pollution, stop climate disruption, and repower the nation with clean energy. The campaign has been recognized as one of the most successful environmental campaigns in the movement's history – Mother Jones described it as "a grassroots rebellion [that] is winning the biggest victory yet on climate change." In 2015 she was named as one of the POLITICO50, POLITICO's list of the "thinkers, doers, and visionaries transforming American politics."

Sharif Jamil, Buriganga Riverkeeper

Sharif Jamil is the Buriganga Riverkeeper who is an internationally recognized leader and activist in the global environmental movement. For more than a decade he has organized civic action for environmental justice in Bangladesh through his involvement in the country's largest civil society initiative, Bangladesh Poribesh Andolon (BAPA). As a member and Joint Secretary of BAPA, Sharif Jamil has worked to save the country's rivers, wetlands, forests and urban green spaces, and to protect the rights of indigenous groups whose livelihoods depend on environmental preservation in Bangladesh.

Sharif Jamil has consulted closely with the Waterkeeper Alliance starting in 2009 through attendance at regional and global meetings and conferences. In 2014, he was elected as the International Regional Representative in the Waterkeeper Council. He has networked with local community leaders along the Buriganga River, and met with civil society leaders and policymakers in Bangladesh.

In 2007 Sharif Jamil was awarded by Both ENDS with a Joke Waller Hunter Fellowship as a prospective leader on environmental movement among the developing countries in the world. With what he has learned, he trains others and sets up programs in other areas to engage more people in saving the natural water resources of Bangladesh. He has been serving also as the Coordinator of Waterkeepers Bangladesh since June 2015.

Margrethe Kearney, Staff Attorney, Environmental Law & Policy Center

Margrethe Kearney is a Staff Attorney working in ELPC's Grand Rapids, Michigan office. Ms. Kearney was previously a Counsel at the Latham & Watkins firm in the Environment, Land & Resources Department, focusing on environmental enforcement, environmental litigation and advising on environmental aspects of corporate and finance transactions. She represented clients on cases involving the Clean Air Act, Clean Water Act, CERCLA and valuation of environmental claims in bankruptcy proceedings. Before law school, she worked as an associate research economist at the Federal Reserve Bank of Chicago. Margrethe is currently a member of the ABA Section of Environment, Energy and Resources Book Publishing Board and previously served as the Chair of the

Chicago Bar Association's Environmental Law Committee, Secretary of the Board of Directors of the Rotary Club of Chicago and Vice President of the Board of Directors of the Domestic Violence Legal Clinic.

Jane Kleeb, Founder, Bold Alliance

Jane is an experienced grassroots organizer, political strategist and nonprofit entrepreneur. In 2010, Jane Kleeb founded Bold Nebraska organizing a group of farmers and ranchers that call themselves "Pipeline Fighters." Protecting the land and water touched a deep nerve with Nebraskans whose family roots are tied to the pioneers and homesteaders that built the state of rich prairie and was at-risk with the Keystone XL tarsands pipeline. In 2016, Jane expanded Bold into a national network called the Bold Alliance which has state offices in Nebraska, Iowa, Oklahoma and Louisiana. The Bold Alliance works nationally on ending eminent domain for private gain and ensuring landowners are at the table during the clean energy transition. Jane lives in rural Nebraska with her husband Scott and three daughters.

Srinivas Krishnaswamy, CEO, Vasudha Foundation

Srinivas Krishnaswamy, an economist by training, has over a decade of experience working on the issues of economic reforms, sustainable development and the environment.

He set up Vasudha Foundation in January 2010, with an aim to promote environment -friendly, socially just and sustainable models of development by focusing on alternative technologies and lifestyle solutions. The foundation is currently working on a wide range of projects around renewable energy, energy efficiency and policy related campaigns, and lobbies both at the national and international level, while promoting green and alternative technologies at the grassroots level creating the crucial link between energy and poverty alleviation.

Charlie Kronick, Senior Climate Adviser, Greenpeace UK

Charlie Kronick is Senior Climate Adviser at Greenpeace UK. He has worked in the fields of environment and development as an activist, campaigner, thinker and writer for more than 20 years. He has focused for most of the last decade on issues related to energy and climate change, and recently on the risks to capital markets from investment in high carbon infrastructure.

Sanjeev Kumar, Founder & CEO, Change Partnership

Sanjeev Kumar founded Change Partnership, a thought-leadership and activist organisation focused on solving the politics of climate change in 2013. Change Partnership focuses on effective design and implementation of carbon pricing, managing transitions to sustainability and clean technology development. He is the lead author of the book "The new social contract: A just transition." He has been proactively involved in European climate change and energy policy for over 10 years with expertise in carbon markets with particular emphasis on the EU Emissions Trading System (EU ETS). He was a Senior Associate of E3G between 2010-2014 and previously led the EU ETS reform campaign for WWF from 2007.

Prior to moving to Brussels, Sanjeev was Business Development Manger for the Energy Institute in the UK where he was responsible for designing professional qualifications, training courses, technical committees and mentoring schemes. He worked for the Crown Estate from 1995-1999 responsible for land owned by Her Majesty the Queen in central London.

He read History at Queen Mary University and Energy, technology and economics at City University both in London.

Cathy Kunkel, Energy Analyst, IEEFA

Energy Analyst Cathy Kunkel is an independent consultant with Kunkel Energy Research. She has testified before regulatory bodies and was a senior research associate at Lawrence Berkeley National Laboratory. She has undergraduate and master's degrees in physics.

Carrie La Seur, Attorney

Carrie is an environmental lawyer and writer from Billings, Montana. She is a graduate of Yale Law, Oxford, and Bryn Mawr, a Rhodes Scholar, and founder of Plains Justice, which helped launch the Keystone XL campaign and successfully opposed several new coal plants. Her writing has appeared in Daily Beast; Des Moines Register; Eyes on the International Criminal Court; Grist; The Guardian; Harvard Law and Policy Review; High Country News; Huffington Post; Iowa Farmer Today; Kenyon Review Online; Mother Jones; Oil, Gas, and Energy Law; Salon; and Yale Journal of International Law. Her first novel isThe Home Place (William Morrow 2014). Forthcoming are a short story in the collection Montana Noir and a second novel from William Morrow. She serves on the board of directors of IEEFA.

Warren Lasher, Senior Director of System Planning, ERCOT

As Senior Director of System Planning for the Electric Reliability Council of Texas, Inc. (ERCOT), Mr. Lasher is responsible for transmission planning, load forecasting and resource adequacy analyses for the ERCOT interconnection. Mr. Lasher has been at ERCOT for over twelve years; before this he was employed by the Southern Company in Birmingham, Alabama, where he worked in the Engineering and the Planning organizations. Mr. Lasher has a Bachelors degree in Mathematics and graduate degrees in Environmental Management and Computer Science.

Steve LeVine, Washington Correspondent, Quartz

Steve LeVine is Washington Correspondent for Quartz, the mobile-first startup launched in 2012 by Atlantic Media. He writes about the geopolitics of energy and technology. Steve is also a Future Tense Fellow at the New America Foundation and an adjunct professor at Georgetown University, where he teaches energy security in the graduate-level Security Studies Program.

Previously, Steve was a foreign correspondent for eighteen years in the former Soviet Union, Pakistan and the Philippines, running a bureau for The Wall Street Journal, and before that writing for The New York Times, the Financial Times and Newsweek.

The Powerhouse is Steve's third book. In 2007, Random House published The Oil and the Glory, which chronicled the struggle for fortune and power on the Caspian Sea. BusinessWeek magazine selected it as a Top 10 book for the year. In 2008, Random House published Putin's Labyrinth, a profile of Russia through the life and death of a half-dozen Russians. Both books are on numerous university reading lists.

Richard Lipsitz, President, Western New York Area Labor Federation

Richard Lipsitz is the President of the Western New York Area Labor Federation. He is a 34-year veteran of the labor movement. During his career, he has worked for the International Brotherhood of Teamsters and Service Employees International Union, spending most of his time bargaining and servicing labor agreements. Richard was also the Director of the Buffalo Labor Studies Program for the WNY Region of the Cornell ILR.

As part of his labor work, Richard has been both an active member and board member of the Coalition of Economic Justice. Along with engaging in the issues of social and economic justice, he has had a particular interest in high road economic strategies to achieve a positive, progressive economic future for WNY. Throughout the years, Richard has participated in numerous legislative and political labor campaigns.

Donna Lisenby, Clean and Safe Energy Campaign Manager, Waterkeeper

Donna Lisenby is the Clean and Safe Energy Campaign Manager from Boone, North Carolina. Donna spent 16 years as a Riverkeeper advocating for the protection, preservation and restoration of waterways in four states-NC, SC, TN and KY. She has played a key role in bringing litigation against coal mining companies, coal-fired power plants, changing the Carolina's inter-basin transfer laws and was the first environmental advocate to report and blow the whistle on leaking coal ash ponds across the state of North Carolina. She is the recipient 14 awards for her work to engage citizens and reduce industrial, sewage and sediment pollution. She appeared in the film Walmart, the High Cost of Low Price where she exposed the retailers appalling failure to protect the environment and the National Geographic mini-documentary Clean Coal: Water Pollution at the Light Switch produced by Alexandra Cousteau as part of the Expedition Blue Planet series. She was named an environmental hero in a video by the University of NC School of Journalism in 2009. She has a Bachelor of Science degree from Clemson University and two beautiful grandchildren who motivate her work to ensure a healthy environment for future generations.

Bob Litterman, Founding Partner, Kepos Capital

Robert Litterman is chairman of the Risk Committee and a founding partner of Kepos Capital, a systematic global macro firm. He retired in 2009 from a 23-year career at Goldman, Sachs & Co., where he served in research, risk management, investments and thought leadership roles. While at Goldman Sachs, he spent six years as an external advisor to the Singapore GIC Board Investment and Risk Committees. He co-developed the Black-Litterman Global Asset Allocation Model with the late Fischer Black, and headed the firm-wide risk function and the Quantitative Investment Strategies Group in the Asset Management division. Before moving to Goldman Sachs in 1986, he taught at MIT and worked at the Federal Reserve Bank of Minneapolis. Litterman was one of the original inductees into Risk Magazine's Risk Management Hall of Fame and named the 2013 Risk Manager of the Year by the Global Association of Risk Professionals. In 2012, he was the inaugural recipient of the S. Donald Sussman Fellowship at MIT's Sloan School of Management. In 2008, he received the Nicholas Molodovsky Award from the CFA Institute as well as the International Association of Financial Engineers (IAFE) Financial Engineer of the Year award. Litterman currently serves on the boards of World Wildlife Fund, the Commonfund, Options Clearing Corporation, Resources For the Future, Robert Wood Johnson Foundation, and the Sloan Foundation. He earned a PhD in economics from the University of Minnesota. He and his wife Mary live in New Jersey.

Sze Ping Lo, CEO, World Wildlife Fund China

Sze Ping is an environmentalist in China with rich experience directing both international and local NGOs. He is now CEO of WWF China, and elected member of the Network Executive Team of WWF global network. He has taken leadership and governance roles in Greenpeace China, Friends of Nature, Society of Entrepreneurs and Ecology (SEE), China Youth Climate Action Network (CYCAN), Global Call for Climate Action (GCCA) and has founded two NGOs Forward Works and Greenovation Hub. He has also served advisory roles for 350.org, UNEP, Sustainable Development Council of the Hong Kong Government, and the World Economic Forum. His contribution to the environment movement was widely recognized, and was awarded as "Asian of the Year" (Channel News Asia, 2006), "Leaders Promoting Internationalization of Chinese Business" (Global Entrepreneur Magazine, 2006), "Young Leaders of Our Time" (Southern People's Weekly, 2009), "Ten Outstanding Young Persons of Hong Kong" (Junior Chamber International, 2010), "SEE-TNC Eco-award" (Society of Entrepreneurs and Ecology and The Nature Conservancy, 2011), "Green Leader" (Southern Weekend, 2011), "Ten Outstanding Leaders of Advocacy" (Southern Weekend Publishing Group, 2012), "Young Global Leader" (World Economic Forum, 2012).Sze Ping graduated from Chinese University of Hong Kong in Government and Public Administration and holds an EMBA in the Hong Kong University of Science and Technology. He has also studied Peace and Conflict Studies in UC Berkeley. He has taken Fellow positions in the New School University (New York) and City University of Hong Kong.

Amory Lovins, Cofounder, Rocky Mountain Institute

Physicist Amory Lovins, FRSA, is cofounder and Chief Scientist of Rocky Mountain Institute; energy advisor to major firms and governments in 65+ countries for 40+ years; author of 31 books and 600 papers; and an integrative designer of superefficient buildings, factories, and vehicles. He has received the Blue Planet, Volvo, Zayed, Onassis, Nissan, Shingo, and Mitchell Prizes, the MacArthur and Ashoka Fellowships, the Happold, Benjamin Franklin, and Spencer Hutchens Medals, 12 honorary doctorates, and the Heinz, Lindbergh, Right Livelihood ("alternative Nobel"), National Design, and World Technology Awards. In 2016, the President of Germany awarded him the Officer's Cross of the Order of Merit (Bundesverdienstkreuz 1. Klasse). A Harvard and Oxford dropout, former Oxford don, honorary US architect, and Swedish engineering academician, he has taught at ten universities, most recently Stanford's Engineering School and the Naval Postgraduate School (but only on topics he's never studied, so as to retain beginner's mind). He is a member of the U.S. National Petroleum Council and an advisor to the U.S. Chief of Naval Operations. Time has named him one of the world's 100 most influential people, and Foreign Policy, one of the 100 top global thinkers. His latest books include Natural Capitalism (1999, www.natcap.org), Small Is Profitable (2002, www.smallisprofitable.org), Winning the Oil Endgame (2004, www.oilendgame.com), The Essential Amory Lovins (2011), and Reinventing Fire (2011, www.reinventingfire.com). His main recent efforts include supporting RMI's collaborative synthesis, for China's National Development and Reform Commission, of an ambitious efficiency-and-renewables trajectory to inform the 13th Five Year Plan, and exploring how to make integrative design the new normal, so investments to energy efficiency can yield expanding rather than diminishing returns.

Suzanne Mattei, general Counsel, NYS Trial Lawyers Association

Suzanne Mattei is general Counsel to the NYS Trial Lawyers Association and a former regional director for the New York StateDepartment of Environmental Conservation. She has 30 years of experience in public interest law and policy. She serves on the board of directors of IEEFA. IEEFA.

Jenni Monet, Journalist

Jenni Monet is an independent journalist currently embedded at Standing Rock where thousands gathered in resistance to the Dakota Access pipeline project. She is a contributor to the Center for Investigative Reporting, PBS NewsHour, Indian Country Today and Yes! Magazine. Jenni is an alum of the Columbia Graduate School of Journalism and host of the podcast Still Here: Modern Stories of Resilience, Indigenously Told.

Tom Murley, Two Lights Energy Advisors

Tom Murley is one of the most visible faces in European and global renewable energy investing and is a leading advocate for increased institutional investment in energy projects and infrastructure. He has participated in the financing and acquisition of over \$10 billion in energy projects. Tom's 25 years of leadership and experience covers the entire range of infrastructure and renewable energy investment; from raising capital for infrastructure investment funds, originating and executing equity and debt investments in renewable and conventional energy projects, managing and selling operating renewable energy portfolios, to advising European governments on renewable energy and infrastructure policies to maximize private sector investment. Tom holds degrees from Northwestern University and Fordham University School of Law where he as a member of The Law Review. He is a qualified lawyer, admitted to the Massachusetts and New York Bars. Before joining HgCapital he was a Managing Director of Ares / EIF Group and an Investment Partner at Allianz Capital Partners. He was General Counsel of Alternative Energy Inc., a Bangor, Maine based biomass project developer and operator, and spent 8 years in private legal practice in Boston and New York.

Greg Muttitt, Senior Campaign Adviser, Oil Change International

Greg Muttitt has worked on fossil fuels and climate change since 1997. He joined Oil Change International as Senior Campaign Adviser in October 2014, and works on the shape of the needed energy transition, and on Canada's tar sands. He is author of 'Forecasting Failure: Why Investors Should Treat Oil Company Energy Forecasts with Caution', <u>'The Sky's Limit: Why the Paris Climate Goals Require a Managed Decline of Fossil Fuel Extraction'</u> and the <u>Integrated North American</u> <u>Pipeline model</u>. Prior to joining OCI, he was climate team leader at Greenpeace International, and climate campaign manager at Greenpeace India. In 2006/7, together with Iraqi colleagues, he led the successful campaign to stop an oil privatization law in Iraq – a Bush administration priority. His book <u>Fuel on the Fire – Oil and Politics in Occupied Iraq</u> was published by Random House in 2011 and The New Press in 2012. He has previously also worked in leadership roles at War on Want, Platform, and Corporate Watch. He lives in London.

Lauri Myllyvirta, Senior Global Campaigner, Greenpeace

Lauri has worked for the past five years as an energy analyst covering coal consumption and air pollution issues across Asia. Currently based out of Beijing, his research covers China's coal consumption and CO2 trends, sources of air pollution as well as the overcapacity situation in coal-fired power and steel industry. Lauri has also published studies on the health impacts of coal-fired power generation in Southeast, South and East Asia, Europe, Turkey and South Africa. He has degrees in economics from Helsinki University and in environmental science from University of Jyvaskyla.

Rebecca Newberry, Executive Director, Clean Air Coalition of Western New York

Rebecca Newberry is the Executive Director of Clean Air and has worked on campaigns resulting in a 92% reduction of the carcinogen benzene, in the air in Tonawanda, and the just transition of the Huntley Coal site.

Bruce Nilles, Senior Director, Beyond Coal Campaign, Sierra Club

Bruce joined the Sierra Club in 2002. He currently directs the Sierra Club's Beyond Coal Campaign. This campaign is working to move the United States beyond coal before 2030 and to ensure the massive U.S. coal reserves stay underground and out of world markets. For the past decade Bruce has led the effort to build the Sierra Club's Beyond Coal Campaign into the largest campaign in the organization's 120-year history. This nationwide campaign in collaboration with more than 100 allied organizations has to date defeated 189 proposed coal plants, and secured the retirement of 230 existing coal plants.

Bruce previously worked as a staff attorney for Earthjustice fighting for clean air in California's Central Valley and during the Clinton Administration as Counsel to the Assistant Attorney General for the Justice Department's Environment Division. Bruce holds an undergraduate and a law degree from the University of Wisconsin.

David Ortiz, Director, El Puento: Enlace Latino de Acción Climática

David Ortiz is Director of El Puente: Enlace Latino de Acción Climática in Puerto Rico. David leads a group of members who implement educational and mobilization activities on the impacts of climate change and shift the island to renewable energy.

Jonathan Peress, Air Policy Director, Environmental Defense Fund

As Air Policy Director for Natural Gas, Jonathan manages EDF's policy and advocacy pertaining to local gas distribution utilities and interstate pipelines. The focus is to advance energy market structures that provide for safe, economically efficient and environmentally beneficial natural gas infrastructure. Prior to joining EDF Jonathan served at the Conservation Law Foundation as VP and Director of the Clean Energy and Climate Change Program. Before CLF, Jonathan practiced law representing gas and electric utilities at Dewey & LeBoeuf. He also worked at NRG Energy where he was the Director of Environmental Services. Jonathan is on the Board of Directors of the North American Energy Standards Board, and previously chaired the Air Quality Committee of the American Bar Association. He is an attorney admitted to practice in New York and New Hampshire.

Joseph Pizarchik, former Director, U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE)

Prior to joining OSMRE, Mr. Pizarchik served more than 17 years with the Pennsylvania Department of Environmental Protection (PADEP), rising to Assistant Director in the Bureau of Regulatory Counsel before his appointment as Director of the Bureau of Mining and Reclamation. While at PADEP, he coauthored Pennsylvania's environmental Good Samaritan Act, helped develop Pennsylvania's program for volunteers to clean up abandoned coal refuse sites and provided key legal support in the development of Pennsylvania's program for mine operators to establish trust funds to meet their financial obligation to perpetually treat the discharges caused by their mining. Mr. Pizarchik is also credited with helping clear the way for the sale of private mining property to the Families of Flight 93 to enable the construction of the memorial.

Mr. Pizarchik began his public service working as legal counsel with the Pennsylvania Department of Transportation, dealing with contracts, mass transit, aviation, contractor qualifications, and minority business enterprises. Mr. Pizarchik earned a B.A. from the Pennsylvania State University and a law degree from the University of Arkansas at Little Rock School of Law. In 2010 he was named a Penn State Alumni Fellow and in 2011 he was named Distinguished Alumnus of Penn State Altoona.

Karl Rábago, Executive Director, Pace Energy and Climate Center

Karl R. Rábago is the Executive Director of the Pace Energy and Climate Center, at the Pace Law School in White Plains, NY. Rábago has 26 years experience in energy and climate policy markets. Rábago serves as Chair of the Board of the Center for Resource Solutions, a San Francisco-based non-governmental organization that works to advance voluntary clean energy markets. He also sits on the Board of the Interstate Renewable Energy Council (IREC).

His past positions include Commissioner, Texas Public Utility Commission; Deputy Assistant Secretary at the US Department of Energy; Vice President of Distributed Energy Services at Austin Energy; Director of Regulatory Affairs for the AES Corporation and AES Wind; and Managing Director & Principal of the Rocky Mountain Institute. A graduate of Texas A&M University with a Bachelor of Business Administration degree in Business Management, Karl is an attorney (University of Texas Law School, J.D. with Honors) with post-doctorate degrees in environmental (LL.M., Pace University School of Law) and military law (LL.M., US Army Judge Advocate General's School).

Philip Ripman, Senior Analyst/Portfolio Manager, Storebrand Asset Management

After finishing a masters degree between Edinburgh and Tianjin, Philip joined Storebrand in 2006. He has been working with the Energy and Utility sectors for close to 10 years, and has been focusing on the intersection of politics, business and sustainability. He has held several positions within the company, ranging from analyst to corporate CSR and currently portfolio manager for the funds TrippelSmart and Global Topp 100. The funds just ended their most successful year, both over 5% ahead of their indexes on the year.

Bruce Robertson, Investment Analyst, IEEFA

Investment Analyst Bruce Robertson has been a fund manager and professional investor for over 32 years. He has worked with Perpetual Trustees, UBS, Nippon Life Insurance and BT and is an active participant in the national debate on energy issues in Australia.

Ruth Santiago, lawyer, Ruth Santiago Law Office

Ruth Santiago is a resident of Salinas in southeastern Puerto Rico where she has provided legal representation to community, environmental, fishers and other groups and organizations for thirty years, some of which is documented in a book tiitled, ""Kicking Off The Bootstraps: Environment, Development, and Community Power in Puerto Rico." Ruth has taught on a part-time basis at the University of Puerto Rico.

Ms. Santiago earned degrees from Lehigh University and Columbia Law School and published an article entitled, Imminent and substantial endangerment to human health and the environment from use of coal ash as fill material at construction sites in Puerto Rico: A case study, Procedia - Social and

Behavioral Sciences 37 (2012) 389 – 396, 1877-0428 © 2012 Published by Elsevier Ltd., doi:10.1016/j.sbspro.2012.03.304.

Tom Sanzillo, Director of Finance, IEEFA

IEEFA Director of Finance Tom Sanzillo has 30 years of experience in public and private finance, including as a first deputy comptroller of New York State, where he held oversight over a \$156 billion pension fund and \$200 billion in municipal bond programs.

Eric Schaeffer, Executive Director, Environmental Integrity Project

Eric has served as Executive Director since he co-founded the organization in 2002. Previously, Eric served as director of EPA's Office of Civil Enforcement from 1997 to 2002, where he received a Presidential Rank Award, as well as the John Marshall award from the Justice Department for his leadership in negotiating an industry-wide cleanup of petroleum refineries. Eric's career at EPA began in 1990, and included an appointment as special assistant to the Deputy Administrator. Prior to his service at EPA, Eric worked as an environmental attorney for two and a half years at Morgan, Lewis & Bockius, and spent six years on Capitol Hill working for various members of Congress. Eric received his law degree from Georgetown University, and his B.A. from Vanderbilt University. He serves on the board of directors of IEEFA.

David Schlissel, Director of Resource Planning Analysis, IEEFA

David Schlissel, director of resource planning analysis for IEEFA, has been a regulatory attorney and a consultant on electric utility rate and resource planning issues since 1974. He has testified as an expert witness before regulatory commissions in more than 35 states and before the U.S. Federal Energy Regulatory Commission and Nuclear Regulatory Commission. He also has testified as an expert witness in state and federal court proceedings concerning electric utilities. His clients have included state regulatory commissions in Arkansas, Kansas, Arizona, New Mexico and California. He has also consulted for publicly owned utilities, state governments and attorneys general, state consumer advocates, city governments, and national and local environmental organizations.

Schlissel has undergraduate and graduate engineering degrees from the Massachusetts Institute of Technology and Stanford University. He has a Juris Doctor degree from Stanford University School of Law.

Larry Shapiro, Associate Director, Rockefeller Family Fund

Larry Shapiro is associate director for program development at the Rockefeller Family Fund (RFF). Larry joined RFF in 2000. Prior to RFF, he directed the New York Public Interest Research Group's (NYPIRG) environmental programs from 1988 through 1999. Among his successes in that capacity were campaigns to prevent construction of the Brooklyn Navy Yard incinerator; force the shut-down of Fresh Kills, the largest landfill in the world; and urge New York Governor George Pataki to order promulgation of what at the time were the toughest power plant emission standards in the country. Larry co-founded the Environmental Integrity Project (EIP). Larry was a founder of RFF's Power Plant Finance Project, the predecessor organization to the Institute for Energy Economics and Financial Analysis and serves as president of the board of the Institute.

Gireesh Shrimali, Director of India Program, Climate Policy Initiative

Gireesh Shrimali is the Director of CPI's India program, and a Fellow at the Steyer-Taylor Center for Energy Policy and Finance at Stanford University. Previously, he taught at the Middlebury Institute of International Studies at Monterey and at the Indian School of Business (ISB) at Hyderabad, where he helped found the CPI-ISB Energy and Environment Program in collaboration with CPI.

His current research focus is on renewable energy policy and finance in developing countries – in particular, on analytical frameworks for the identification of effective policies as well as on instruments for the provision of low-cost, long-term capital. His previous work has included topics such as analysis of India's solar policies, the impact of federal and state policies on the development and deployment of renewable energy in the U.S., and business models for off-grid energy in developing countries.

He holds a PhD from Stanford University, an MS from the University of Minnesota, Minneapolis, and a BTech from the Indian Institute of Technology, New Delhi.

John Smillie, Executive Director, Western Organization of Resource Councils

John is a graduate of Stanford University. He was an organizer and research coordinator for the Northern Plains Resource Council from 1979 to 1984, and served as campaign director for WORC from 1984 to 2015.

Tom "Smitty" Smith, director, Public Citizen's Texas Office

Tom "Smitty" Smith served as the director of Public Citizen's Texas office since 1985. He has testified more than 1,000 times on energy and other issues before the Texas Legislature and Congress. His primary goal is to combat global warming.

His proudest accomplishments have been: the passage of the Texas Renewable Portfolio standards, which have led to more than 10,000 megawatts of wind power being installed in Texas; the creation of the Texas Emissions Reduction program, which has cleaned up dirty diesel engines in Texas; passage of laws encouraging Texans to use energy more efficiently; and the blocking of 12 new coal plants in Texas.

He has won more than a dozen awards for his advocacy work, including the 2009 Heinz Award for "his work as one of the most effective renewable energy advocates in Texas."

Before coming to Public Citizen, Smith served as the food bank development coordinator for Second Harvest Food, developing food banks across a 10-state region in the southern United States. He became addicted to Texas politics when served as a legislative aide to a state Rep. Al Price from 1982 to 1985. He was the first director of the Houston Food Bank, served as director of the southwest regional office of the Community Nutrition Institute, and was a legal assistant with Texas Rural Legal Aid and later with Prairie State Legal Services.

Smith received a Bachelor of Arts from Valparaiso University in Valparaiso, Ind., in 1974. He became a Texan by choice shortly thereafter.

Anna Sommer, President, Sommer Energy

Anna Sommer is president of Sommer Energy, a utility-regulation consulting firm.

Nick Steckler, Analyst, Bloomberg New Energy Finance

Based in New York, Nicholas Steckler is an analyst with Bloomberg New Energy Finance covering US power markets. Nicholas received an MSc in Sustainable Energy Futures from Imperial College London and a BSc in Electrical Engineering and Large Scale Power Systems from the University of Washington. Nicholas's past experience includes research in the Transmission and Grid Integration Group at the National Renewable Energy Laboratory.

Sheldon Stone, Partner, Amherst Partners

Mr. Stone is a recognized expert at providing financial and strategic solutions in the area of corporate revitalization to companies in the automotive, building materials, construction, manufacturing, real estate and retail industries. He represents debtors, creditors and other parties-in-interest and has extensive experience in vendor and customer negotiations, accommodation agreements, debt restructurings and recapitalizations. Mr. Stone provides assistance in the planning and execution of sell-side processes and the disposition and liquidation of underperforming assets. He has served as an interim Chief Executive Officer, Chief Restructuring Officer and Court-appointed Receiver.

Prior to joining Amherst Partners Mr. Stone was a Partner with The Pillar Group LLC, a provider of restructuring and turnaround services to middle market companies, where he advocated the merger with Amherst Partners in 2005. Previously he was a Manager of Consulting Services with Plante & Moran PLLC, providing strategic planning and turnaround and performance improvement services. Before that Mr. Stone held positions of increasing responsibility with DFS Galleria, culminating as General Manager of the Hawaii division. Mr. Stone started his career as a consultant with Booz, Allen, and Hamilton providing strategic planning services.

Mr. Stone earned his Bachelor's degree in Business Administration with an emphasis in finance, Bachelor's degree in psychology, and Master of Arts degree in Organizational Behavior from Western Michigan University, and attended the McDonough School of Business at Georgetown University.

Tomás Torres, Coordinator, Institute of Competitiveness and Economic Sustainability

Tomás J. Torres Placa MPL, PE, LPP, is a licensed engineer with over 25 years of experience, and licensed professional planner. He graduated with honors from engineering at the University of Puerto Rico, Mayaguez Campus. He also has a Master's Degree in Planning from the University of Puerto Rico, Rio Piedras Campus. Torres Placa has experience in government and private sector as well as non-profit organizations. During his career he has worked in the Electric Power Authority, in the pharmaceutical and high-tech industry, construction, housing development and as a consultant. Mr. Torres was a member of the Puerto Rico Planning Board; has lectured in Puerto Rico and abroad, highlighting energy and planning issues; and is an active member of the Institute of Engineers and Surveyors of Puerto Rico and the Puerto Rican Planning Society. He currently serves as Project Director in the Aireko Foundation, as Coordinator of the Institute of Competitiveness and Economic Sustainability (ICSE-PR) and chairs the Energy Committee at the Puerto Rico Manufacturers Association.

David Wooley, Of Counsel, Keyes, Fox & Weidman LLP

David Wooley is Of Counsel at Keyes, Fox & Weidman LLP in Oakland CA. He has over 30 years experience with electric power regulation and Clean Air Act implementation. He served as an Assistant Attorney General in NY, taught energy and environmental law.

He is an expert in energy and environmental law, having served as counsel to state government, a renewable trade association, private industry, and non-profit organizations. He represents clients before state electric utility commissions, federal courts, and federal and state environmental and energy agencies.

David has served as an assistant state attorney general, environmental and energy law professor, private foundation executive, non-profit executive director, trade association project director and registered lobbyist. He is admitted to practice law in NY, NJ, PA and WV, numerous federal courts and the U.S. Supreme Court.

Gerard Wynn, Energy Finance Consultant, IEEFA

Energy Finance Consultant Gerard Wynn is a U.K.-based 10-year veteran of energy and economics reporting at the Thomson Reuters News Agency and has authored numerous papers on energy issues ranging from solar power in Great Britain to coal-burning in China and India. He blogs at EnergyandCarbon.com

Anthony Yuen, Global Energy Strategist, Citigroup

Anthony Yuen, Ph.D., is global energy strategist and also leads global macro and quantitative research within the commodities strategy group at Citigroup. He conducts research on oil, gas, power, coal, renewables and emissions, and has published on the US shale revolution, gas and oil exports, nuclear in Japan, peak coal in China, Russia-China gas and climate issues, among others. He was a reviewer of IEA's World Energy Outlook and has advised the US Energy Information Administration. Before Citi, he worked at McKinsey & Company and Constellation Energy's global commodities group, one of the largest physical/financial trading operations in North America. He previously held research and teaching positions at the University of Pennsylvania and was a faculty member of Columbia University. He received his undergraduate and graduate engineering degrees (electrical/computer/photonics) from the University of Toronto and his Ph.D. in economics from the University of Pennsylvania. He is a member of the Society of Petroleum Engineers.