



## Energy Finance 2019

June 17-19, 2019

Columbia Law School, 435 West 116th Street, New York, NY 10025

The Institute for Energy Economics and Financial Analysis (IEEFA) and Columbia Law School welcome you to Energy Finance 2019, which brings together environmental advocates and attorneys from around the world.

Registration begins at 11:00 AM Monday, June 17 in the lobby of Jerome Greene Hall (JGH), Columbia Law School, 435 West 116th Street (corner of Amsterdam Ave.), New York, NY 10025.

The conference will begin at 1:00 PM in the **Altschul Auditorium of the School of International and Public Affairs (SIPA)**, which can be entered through JGH. Please note that lunch is not provided on Monday.

If you have to bring your luggage with you, there will be space available to store it during the conference on Monday (until 7:00 PM) and Wednesday (until 1:30 PM) only. Go to the Registration Desk for information.

**Event reading materials, CLE readings and other event logistics can be found at this link:**

<http://ieefa.org/energyfinance2019/>

### 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 non-transitional CLE Program will provide 1.5 credit hours that can be applied toward the Areas of Professional Practice requirement. This CLE credit is awarded only to New York attorneys for full attendance of the Program in its entirety. Attorneys attending only part of the program are not eligible for partial credit. Attendance is determined by an attorney's sign-in and sign-out, as shown in the Conference registers. On final 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 helping to prepare the materials for CLE panels.

In partnership with Common Ground Compost, the Marketplace, Columbia Law School, Rescuing Leftover Cuisine and Avid Waste Systems, we are proud to make this year's conference a Zero Waste event (or as close to it as we can get!) Please help us by composting all food scraps and all dishware provided by our caterer, and by following directions on the signs found on the compost and recycling bins.

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

## Energy Finance 2019 Agenda

### Monday, June 17, 2019

<b>11:00 AM - 1:00 PM: Registration in the Jerome Green Hall (JGH) Lobby</b>
<b>1:00 - 1:15 PM</b>
<b>All Monday Panels are in the Altschul Auditorium, School of International and Public Affairs (SIPA)</b>
<b>Welcome</b> Michael Gerrard, Columbia Law School and Sandy Buchanan, IEEFA
<b>1:15 - 2:30 PM</b>
<b>Panel 1: World Electricity Markets Overview Plenary</b> Tim Buckley, IEEFA Laurel Ostfield, Asian Infrastructure Investment Bank (AIIB) Kimiko Hirata, Kiko Network Moderator: Vibhuti Garg, IEEFA  Panelists will discuss the trends in the global transition in the electricity market, with particular emphasis on shifts taking place in three of the biggest markets globally—India, China and Japan—both domestically and in terms of outbound investment flows.
<b>2:30 - 2:50 PM: Break</b>
<b>2:50 - 4:15 PM</b>
<b>Panel 2: World Oil and Gas Markets Overview Plenary</b> Bruce Robertson, IEEFA Tom Sanzillo, IEEFA Moderator: Tzaporah Berman, Stand.earth, Global Gas and Oil Network (GGON)  This panel will focus on global trends in oil and gas markets. It will look at the strengths of the fossil fuel sector and the dilemmas facing company management during a time of change. How is the industry strategically responding to the current state of the markets? The industry's dilemmas can serve as the basis for policy discussions and opportunities for activist responses.
<b>4:15 - 4:30 PM: Break</b>
<b>4:30 - 6:10 PM</b>
<b>Panel 3: Energy Transition Campaigns Around the World Plenary</b> Nicole Horseherder, To Nizhoni Ani Kuba Goglewski, Foundation "Development YES- Open-Pit Mines NO" (DY-OPMN) Adhityani (Dhitri) Putri, Yayasan Indonesia CeraH Omar Elmawi, deCOALonize Campaign Moderator: Suzanne Mattei, Lookout Hill Public Policy Associates, IEEFA Board  Across the globe, community and environmental advocates are leading effective campaigns to protect their communities from the harmful effects of fossil fuels and to support development of cleaner and more affordable sources of electricity generation. Speakers from organizations based in the Navajo Nation (U.S.), Poland, Indonesia and Kenya will share highlights and insights from their work to prevent the building of new coal-fired plants and mines; close highly polluting facilities; and promote solar and wind power.
<b>6:15 - 7:15 PM: Reception in Lenfest Café, JGH 2<sup>nd</sup> floor</b>

## Tuesday, June 18, 2019

**8:30 - 9:00 AM: Breakfast in Lenfest Café, JGH 2<sup>nd</sup> floor**

**9:00 - 10:15 AM**

<b>U.S. TRACK</b> <b>Altschul Auditorium, SIPA</b>	<b>INTERNATIONAL TRACK</b> <b>JGH Room 102A</b>	<b>OIL AND GAS TRACK</b> <b>JGH Room 103</b>
<p><b>Panel 4: U.S. Utilities Financial Outlook</b>  Jim Hempstead, Moody's  Julien Dumoulin-Smith, Bank of America Merrill Lynch (BAML)  Moderator: Liz Stanton, Applied Economics Clinic</p> <p>Panelists will provide an overview of recent trends and developments in the U.S. Utility sector, with an emphasis on investments in fossil-fired generators and renewable resources.</p>	<p><b>Panel 5: Stopping the Coal Plant Pipeline</b>  Christine Shearer, Global Energy Monitor  Simon Nicholas, IEEFA  Heffa Schücking, urgewald  Moderator: Jesse Burton, University of Cape Town; E3G</p> <p>The panel will provide an updated status of the global coal-fired power plant fleet including additions, retirements and development plans. The major plant developers will be outlined as well as strategies being employed to persuade an increasing number of financial institutions to turn away from supporting new coal plant development. A case study focused on Pakistan will highlight how renewable energy is now on the rise in a country planning a large coal plant roll-out.</p>	<p><b>Panel 6: How Does the Oil and Gas Industry Expand and Contract at the Same Time?</b>  Kathy Hipple, IEEFA  Clark Williams-Derry, Sightline Institute  Lorne Stockman, Oil Change International  Moderator: Sergio Knaebel, Sandler Foundation</p> <p>The U.S. is now the largest producer of oil and gas in the world. This panel will examine the phenomenon of how physical oil and gas production is increasing while financial returns diminish. Panelists will explore the business models for fracking and recent industry financial performance, including how technological advances, low prices and over-leverage are affecting the industry's outlook.</p>

**10:15 - 10:45 AM: Break**

**10:45 AM - 12:00 PM**

<p><b>Panel 7: The Battle Over Coal Bailouts at the State and Federal Level (CLE)</b>  Tyler Comings, Applied Economics Clinic  Kim Smaczniak, Earthjustice  Derf Johnson, Montana Environmental Information Center (MEIC)  Moderator: Shannon Fisk, Earthjustice</p>	<p><b>Panel 8: Asset Managers and Energy Transition— Leaders or Laggards?</b>  Diana Best, The Sunrise Project  Aniket Shah, UN Sustainable Development Solutions Network  Moderator: Melissa Brown, IEEFA</p> <p>The asset management industry has so far underperformed on climate change. What do we</p>	<p><b>Panel 9: Understanding the Petrochemical Industry (CLE)</b>  Nick Fowler, REXtac  Carroll Muffett, Center for International Environmental Law  Adrienne Bloch, Earthjustice  Moderator: Tom Sanzillo, IEEFA</p>
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<p>This panel will examine recent trends and developments in the U.S., both at the state and federal level, where regulatory measures and new laws have been proposed to keep uncompetitive coal-fired power plants open through public subsidies or assessments on utility ratepayers. The panel will examine the legal, policy and technical arguments regarding such bailout efforts, and the reliability and resilience claims being made to attempt to justify bailing out coal. Panelists Kim Smaczniak and Derf Johnson and Moderator Shannon Fisk are attorneys in good standing.</p> <p><b>Information Regarding New York CLE Credits:</b> 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 non-transitional CLE Program will provide 1.5 credit hours that can be applied toward the Areas of Professional Practice requirement. This CLE credit is awarded only to New York attorneys for full attendance of the Program in its entirety. Attorneys attending only part of the program are not eligible for partial credit. Attendance is determined by an attorney's sign-in and sign-out, as shown in the Conference registers. On final 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.</p>	<p>need to understand about how the asset management industry works and how climate leadership can be recognized and rewarded faster?</p>	<p>The panel will explore the ways in which the oil and gas industry provides the materials to feed the growth of the petrochemical industry, along with areas in which legal and campaign intervention can affect decisions being made by communities and companies. Types of legal intervention that will be discussed include challenges to environmental permits required to build new facilities, along with actions that have been taken in court and at the regulatory level to prevent the building of new pipelines that can provide feedstock materials to the petrochemical industry. Panelists Carroll Muffett and Adrienne Bloch are attorneys in good standing.</p> <p><b>Information Regarding New York CLE Credits:</b> 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 non-transitional CLE Program will provide 1.5 credit hours that can be applied toward the Areas of Professional Practice requirement. This CLE credit is awarded only to New York attorneys for full attendance of the Program in its entirety. Attorneys attending only part of the program are not eligible for partial credit. Attendance is determined by an attorney's sign-in and sign-out, as shown in the Conference registers. On final 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.</p>
<p align="center"><b>12:00 - 2:00 PM: Lunch in Lenfest Café, JGH 2<sup>nd</sup> floor</b></p> <p align="center"><b>Optional Lunch Session: Fighting Gas Plants Discussion, with David Schlissel, IEEFA</b> <b>JGH Room 304</b> (Please pick up your lunch and bring it with you.)</p>		

2:00 - 3:15 PM		
U.S. TRACK Altschul Auditorium, SIPA	INTERNATIONAL TRACK JGH Room 102A	OIL AND GAS TRACK JGH Room 103
<p><b>Panel 10: Labor, Natural Gas and Renewable Energy: Lessons from Puerto Rico</b>  Angel Figueroa Jaramillo, UTIER  Ingrid Vila Biaggi, CAMBIO  Ruth Santiago, Environmental Attorney  Moderator: Cathy Kunkel, IEEFA</p> <p>Since Hurricane Maria, there has been much discussion of transforming Puerto Rico's electrical system to a much more decentralized, renewable energy-based system that can be a model for other island nations and U.S. states. At the same time, there is an ongoing push for new imported natural gas infrastructure. In this panel, Puerto Rico labor and community leaders will talk about their work together to create an electrical system that is just, affordable and environmentally sustainable.</p>	<p><b>Panel 11: Perspectives from South East Asia</b>  Elrika Hamdi, IEEFA  Sara Jane Ahmed, IEEFA  Joojin Kim, Solutions for Our Climate  Melissa Brown, IEEFA  Moderator: Lidy Nacpil, Asian Peoples Movement on Debt and Development (APMDD)</p> <p>Since 2000, coal-fired power capacity has tripled in South East Asia and is now fueling a growing share of the region's power consumption. While the region faces the imminent threat of coal-fired infrastructure lock-in, not all "coal growth" power markets are the same. This panel explores differences emerging across South East Asia, where economic growth and strong energy demand have placed considerable stress on the region's energy infrastructure and, thus, on ambitions to increase energy access while reducing fossil fuels and carbon emissions.</p>	<p><b>Panel 12: Transportation Gamechangers—Electric Vehicles and Decarbonizing Aviation and Shipping</b>  Cécile Toubeau, Transport &amp; Environment  Tom Smith, Texas Electric Transportation Resource Alliance  Todd Paglia, Stand.earth  Moderator: Dan Bakal, Ceres</p> <p>The world is dependent on fossil fuels for transportation, and while alternatives are advancing, they now command only a small share of the market. Panelists will outline trends in the production, sales and use of electric vehicles, and efforts to build both the human and physical infrastructure to support them. They will also discuss trends in the aviation and shipping industries, focusing on how creative organizing is addressing the issue of reducing carbon emissions.</p>
3:15 - 3:30 PM: Break		
3:30 - 4:45 PM		
COMBINED U.S. AND INTERNATIONAL TRACK Altschul Auditorium, SIPA		OIL AND GAS TRACK JGH Room 103
<p><b>Panel 13: A Gamechanging Technology—Storage Plus Solar</b>  Jonathan Adelman, Xcel  Angelina Galiteva, California ISO  Bernt Bremdal, Smart Innovation Norway  Moderator: Gerard Wynn, IEEFA</p> <p>As an energy transition drives coal off the grid, this panel discusses how batteries and electric</p>		<p><b>Panel 14: Focus on the Permian Basin (CLE)</b>  Sarah Brennan, IEEFA Board  Michael Lazarus, Stockholm Environment Institute (SEI) US Center  J.D. Newsom, Big Bend Conservation Alliance  Presenter/Moderator: Ilan Levin, Environmental Integrity Project</p>

vehicles, and other technologies and market reforms, can bring forward a zero-carbon electricity future.	This panel will examine the financial and energy dynamics that led to the U.S. becoming the largest producer of crude oil in the world in 2018, surpassing both Russia and Saudi Arabia. The Permian Basin—an area of West Texas and New Mexico where oil majors including Exxon Mobil, Chevron, Royal Dutch Shell and BP have major interests—is the epicenter of the oil boom. The panel will address the types of legal and regulatory challenges being presented to the buildout in the Permian Basin, including federal and state environmental permitting and the Big Bend Conservation Alliance’s petitioning for court review of Federal Energy Regulatory Commission decisions regarding the Trans-Pecos Pipeline. Presenter/Moderator Ilan Levin is an attorney in good standing.
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**5:00 - 6:00 PM**

<b>U.S. TRACK</b> <b>Altschul Auditorium, SIPA</b>	<b>INTERNATIONAL TRACK</b> <b>JGH Room 102A</b>	<b>OIL AND GAS TRACK</b> <b>JGH Room 103</b>
<b>Panel 15: Practical Strategies for Closing Coal Plants and Replacing Them with Renewable Energy</b> Sonia Aggarwal, Energy Innovations Luis Reyes Jr., Kit Carson Electric Coop Anna Sommer, Energy Futures Group (EFG) Moderator: Jennifer Washburn, Citizens Action Coalition of Indiana	<b>Panel 16: Influencing Banks and International Financial Institutions</b> Alison Kirsch, Rainforest Action Network (RAN) Julien Vincent, Market Forces Lucie Pinson, The Sunrise Project, Unfriend Coal Campaign Moderator: Tim Buckley, IEEFA	<b>Panel 17: Canadian Campaigns on the Oil and Gas industry</b> Nathan Lemphers, Oil Change International Kathy Hipple, IEEFA Jen Lash, Sisu Institute Gillian McEachern, GGON Moderator: Tzaporah Berman, Stand.earth, GGON

As the transition to clean electricity gains pace nationally, utilities large and small are finding innovative ways to take advantage of market-supported opportunities to move away from coal-fired generation. Panelists from California, Indiana and New Mexico discuss the implications.	This panel will discuss progress on global banks and insurers exiting thermal coal and coal fired power plants, plus the risks of greenwash and the need for far more aggressive policies covering all fossil fuels if the Paris Agreement is to actually be achieved. While progress is being made, this needs to accelerate rapidly if it is to be effective in shifting global capital. As we enter June 2019, 113 globally material financial institutions now have formal thermal coal restriction policies in place.	This panel will examine the broad picture of Canada's oil and gas industry and citizen efforts to find alternatives to fossil fuel development. The discussion will center on challenges to pipelines, oil sands mines and other extraction efforts being brought by environmental, tribal and community groups.
<p align="center"><b>6:05 - 6:30 PM in JGH Room 304</b></p> <p align="center"><b>Optional Information Session on Bloomberg Philanthropies Beyond Carbon Initiative (U.S-focused)</b></p> <p align="center">Leaders of the recently-announced Beyond Carbon Initiative will outline the program and be available for a question and answer session.</p>		

### Wednesday, June 19, 2019

<b>8:30 - 9:00 AM: Breakfast in Lenfest Café, JGH 2<sup>nd</sup> floor</b> <b>All Wednesday sessions are in JGH.</b>		
9:00 - 10:15 AM	9:00 - 11:30 AM	
<b>U.S. TRACK</b> <b>JGH Room 104/106</b>	<b>INTERNATIONAL TRACK</b> <b>JGH Room 102A</b>	<b>OIL AND GAS TRACK</b> <b>JGH Room 103</b>
<p><b>Panel 18: Using Securitization as a Strategy to Retire Coal Plants: Pros and Cons</b></p> <p>Uday Varadarajan, Rocky Mountain Institute (RMI)</p> <p>Steve Pomerance, Former Boulder City Councilmember</p> <p>Jeremy Richardson, Union of Concerned Scientists</p> <p>Moderator: Mary Anne Hitt, Sierra Club</p> <p>This panel will discuss the potential benefits and risks associated with the use of securitization as a tool for accelerating fossil plant retirements.</p>	<p><b>Roundtable: China's Influence On Global Energy Issues</b></p> <p>Ghee Peh, IEEFA</p> <p>Irem Kok-Kalayci, European Climate Foundation</p> <p>Matt Gray, Carbon Tracker Initiative</p> <p>Yiting Wang, World Wildlife Fund (WWF)</p> <p>Marilyn Waite, William and Flora Hewlett Foundation</p> <p>Moderator: Melissa Brown, IEEFA</p> <p>This roundtable will explore some of the most important research themes related to China's outsized influence on global energy markets. The focus will be on a range of internal and external</p>	<p><b>Panel 19: Oil and Gas Campaigns Across the Globe</b></p> <p>Martin Norman, Greenpeace</p> <p>Matt Krogh, Stand.earth</p> <p>Kevin Koenig, Amazon Watch</p> <p>Melinda Janki, International Legal Consultant</p> <p>Tomás Torres, Puerto Rico Institute for Competitiveness and Sustainable Economy (ICSE-PR)</p> <p>María Marta Di Paola, FARN</p> <p>Moderator: Tom Kruse, Rockefeller Brothers Fund</p>

<b>10:15 - 10:30 AM: Break</b>	environmental finance issues in China, including trajectories for both coal and renewable energy.	This panel will delve into the organizing approaches being used in opposition to fossil fuel investment and in favor of alternative investments in a wide variety of geographies, cultures and political systems. Presenters from Ecuador, Argentina, Guyana, Norway, the mainland U.S. and Puerto Rico will provide information and insights into the campaigns they are working on—including the key issues at stake, how financial and economic information is being used, and the potential for success.
<b>10:30 - 11:30 AM</b>		
<b>Panel 20: Local Economic Benefits of Renewable Energy</b> A team of MBA students from the Bard College NYC Lab program has worked with IEEFA over the past year to collect concrete data on the local economic impacts of wind and solar projects, including effects on the tax base and employment. The Bard team will present their findings based on in-depth research in Ohio and North Carolina, including recommendations for how to most effectively advocate for investment in renewable energy projects and engage with various energy stakeholders at the state and local level. Featuring Brett Landau, Brian Liechti, Carolyn Pincus and Daniel Wojciechowski from the Bard MBA NYCLab.  Moderator: Seth Feaster, IEEFA		
<b>11:30 - 11:45 AM: Break</b>		
<b>11:45 AM - 1:00 PM</b> <b>JGH Room 104/106</b>		
<b>Panel 21- Where Divestment Campaigns Are Now Plenary</b> Bill McKibben, 350.org, Author Clara Vondrich, Divest Invest John Hepburn, The Sunrise Project Moderator: Kathy Hipple, IEEFA  The closing plenary will examine the goals, successes and setbacks of the divestment movement, in the context of the fossil fuel sector’s political interests and the central policy issues at stake globally. The panelists will drill down on various campaign strategies to place pressure on institutional investors to reform, divest and reinvest in new energy projects.		
<b>Conference Closes</b>		



## Energy Finance 2019 Panelist and Moderator Biographies

(in alphabetical order)

### **Jonathan Adelman**

Jonathan Adelman serves as Area Vice President, Strategic Resource & Business Planning at Xcel Energy. In this role, he is responsible for providing leadership for the development of long-term generation planning and strategic business plans for Xcel Energy's operating utilities. He is responsible for coordinating the overall resource planning process, including meeting all long-term generation capacity needs. Adelman has over 15 years of experience in a variety of business areas at Xcel Energy, including Commercial Operations, Finance, Human Resources, Marketing, and Resource Planning. He assumed his current position in December 2015.

Prior to joining Xcel Energy, Adelman worked in public accounting both domestically and abroad. Adelman graduated from Washington and Lee University in May 1997, receiving a Bachelor of Science degree in Accounting with Special Attainments in Commerce.

### **Sonia Aggarwal**

Sonia Aggarwal is the Vice President of Energy Innovation, where she leads the firm's Power Sector Transformation and Energy Policy Solutions programs. In 2012, Aggarwal spearheaded the creation of America's Power Plan (APP), Energy Innovation's platform for innovative thinking on policy solutions for clean, reliable, and affordable electric power in the United States. APP produces and curates expert information for decision-makers—utility regulators, governors' staffs, power system operators, and many more—providing tailored advice on how to lead and support the transition to a decarbonized power system.

For Energy Policy Solutions, Aggarwal leads EI's work identifying and designing the top energy policies to reduce emissions in the largest-emitting countries around the world. The program uses the Energy Policy Simulator, a computer model developed in-house, to quantify the cost and emissions impacts various combinations of climate and energy policies have within a region.

Before Energy Innovation, Aggarwal managed global research at ClimateWorks Foundation, worked on the McKinsey carbon abatement cost curves, advised the International Energy Agency's "Accelerating Technology Transitions" project, advised clean energy companies on technology and financial communications and worked in accident prevention design engineering at a nuclear power plant. Aggarwal holds a B.S. from Haverford College in astronomy and physics, and an M.S. from Stanford University in engineering, focused on energy.

### **Sara Jane Ahmed**

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 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.

### **Dan Bakal**

Ceres Senior Director of Electric Power Dan Bakal joined the organization in 2000, and has helped launch and accelerate the electric power sector's efforts to address the risks and opportunities associated with climate change. Bakal oversees Ceres' electric power sector research, shareholder engagement, and furthers the understanding of environmental risks, with a particular focus on climate risk. He works to

convene Ceres Investor Network and Ceres Coalition members, to engage in dialogues with electric power companies, which often involve a comprehensive review of policies, performance, and disclosure practices.

Since 2002, Bakal has helped Ceres publish numerous reports, including 11 editions of *Benchmarking Air Emissions of the 100 Largest Electric Generators*; *Practicing Risk-Aware Electricity Regulation*; *Pathway to a 21st Century Electric Utility*; and *Benchmarking Utility Clean Energy Deployment*. The reports provide analysis of issues and trends facing the sector.

Bakal's work has been cited extensively in the media, including the Wall Street Journal, the New York Times, the Financial Times, Fortune, Pensions and Investments, BusinessWeek, the Boston Globe, and he has appeared on CNN Headline News, and CNBC's Closing Bell and Power Lunch.

Prior to Ceres, Bakal worked as a research associate at Rocky Mountain Institute in Snowmass, CO. He holds a bachelor's degree from the University of Pennsylvania.

### **Bard College NYCLab**

In Bard College's experiential NYCLab course, MBA students complete a yearlong professional consultancy in the first year of their business program. Over two semesters, MBA students work with corporate, governmental, and nonprofit organizations to solve sustainability-related business problems. Bard MBA students Brett Landau, Brian Liehti, Carolyn Pincus and Daniel Wojciechowski join us from the NYCLab.

### **Tzeporah Berman**

Tzeporah Berman BA, MES, LLD (honoris causa) has been designing environmental campaigns and working on environmental policy in Canada and beyond for over twenty years. She is an Adjunct Professor of York University Faculty of Environmental Studies and works as a strategic advisor to a number of First Nations, environmental organizations and philanthropic foundations on climate and energy issues. She is the former co-director of Greenpeace International's Global Climate and Energy Program and Co-founder of ForestEthics.

In 2015, Berman was appointed to the British Columbia Climate Leadership Team tasked with making policy recommendations to meet BC legislated climate targets. In 2016, Berman was appointed by Premier Rachel Notley to Co-Chair the Oilsands Advisory Working Group which created consensus recommendations on regulations to implement Alberta's first climate plan.

Berman was one of the creators and lead negotiators of the Great Bear Rainforest agreement and the Canadian Boreal Forest Initiative. Her work has contributed to the protection of over 40 million hectares of old growth forests. More recently Berman helped to design Greenpeace International's Arctic campaign, the Volkswagen campaign in Europe and the Clean Our Cloud campaign that led to Apple and Facebook becoming international leaders in using renewable energy for their data centers.

For the last six years Berman was a network coordinator, fund advisor and strategic consultant for philanthropic foundations, environmental organizations and First Nations on pipelines and tarsands.

Her first book, *This Crazy Time: Living Our Environmental Challenge* was published by Knopf Canada. Berman re-joined Stand.earth as International Program Director in May 2018.

### **Diana Best**

Sunrise Project Finance Campaigner Diana Best has over a decade of organising and campaigning experience. Before joining the Sunrise Project team, Best worked with Greenpeace USA to reform federal

fossil fuel leasing policies, stop critical new fossil fuel infrastructure projects like export terminals and pipelines, and engage global financial institutions to restrict lending to new oil projects.

Best works with a coalition of institutions and partner organizations to move Blackrock's more than \$6 trillion business away from climate and forest destroying investments.

She is a graduate of Vassar College and lives in Denver, Colorado.

### **Adrienne Bloch**

As Senior Fossil Fuels Attorney at Earthjustice, Adrienne Bloch leads strategy and litigates to advance the organization's work to keep fossil fuels in the ground. Prior to joining Earthjustice, Bloch was Senior Staff Attorney at Communities for a Better Environment, where she worked on behalf of low-income communities and communities of color to prevent and stop pollution and build green, healthy and ecological communities and environments. Among her accomplishments, Bloch played a leading role in blocking Chevron's proposed refinery expansion project to process low-quality crude at its Richmond California refinery, securing the nation's first refinery flare control rule, tightening emissions trading provisions in Southern California, and stopping a new proposed power plant in the process. She also helped to secure California's truck idling law and diesel policies for goods movement. A champion for environmental justice, she also has a passion for climate justice and has worked as a consultant for numerous California and national organizations to support efforts to achieve climate equity. Bloch is a graduate of Oberlin College and University of California Hastings College of the Law.

Bloch is an attorney in good standing (State of admission: California).

### **Bernt Bremdal**

Senior Advisor of Energy Solutions with Smart Innovation Norway, Professor Bernt Bremdal has more than 25 years of experience in decision support and information/knowledge management, and more than 10 years of academic research and innovation. He holds a PhD from NTNU in applied artificial intelligence and a M.Sc. in mechanical engineering.

Bremdal has extensive experience within management and project leadership, as well as product development. He is a specialist within knowledge and information management, process reengineering and performance optimization.

Bremdal's technical expertise comprises search, information extraction, AI, computational linguistics, web applications and operation research.

### **Sarah Brennan**

Sarah Brennan is a consultant working on climate and energy policy, ocean conservation and philanthropic strategy. She has served as a program officer at the Robertson Foundation and as an associate director of the Earth Institute at Columbia University. Brennan serves as an IEEFA board member.

### **Melissa Brown**

IEEFA Energy Finance Consultant Melissa Brown, a former securities analyst at JP Morgan and Citigroup, has played a leading role in various Asian investment organizations focused on mainstream and sustainable investment strategies for public and private equity investors over the past 25 years.

**Tim Buckley**

Tim Buckley, IEEFA's director of energy finance research, Australasia, has 25 years of financial market experience covering the Australian, Asian and global equity markets from both a buy and sell side perspective. Buckley was a top-rated equity research analyst and has covered most sectors of the Australian economy. For many years, Buckley was a managing director, head of equity research at Citigroup, as well as co-managing director of Arkx Investment Management P/L, a global listed clean energy investment company that was jointly owned by management and Westpac Banking Group.

**Jesse Burton**

Jesse Burton is a researcher in the Energy Systems, Economics, and Policy group at the University of Cape Town and a senior associate at E3G. She holds an MSc in Energy Studies from the University of Cape Town, South Africa.

Her research focuses on the South African coal and electricity sectors. Some of her recent research has quantified fossil fuel subsidies for South Africa and the politics of their support; the cost and greenhouse gas implications of future coal investments; the costs and risks of stranded assets in the South African energy sector; and the economics of coal-fired power and coal mining. She led the South African Coal Transitions research project, which examined the effects of mitigation policies consistent with South Africa's NDC and 2oC on the coal sector, and she is currently undertaking research on coal phase-out that builds on the Coal Transitions analysis.

Burton is currently involved in research examining the political economy of the South African coal sector and a just transition for South Africa, fossil fuel financial flows and an alternative electricity plan for South Africa.

Burton undertakes multidisciplinary research that combines quantitative assessments of the energy sector and the implications of this on policy for the sector. She has wide ranging expertise on coal and electricity markets and energy policy in South Africa.

**Tyler Comings**

Tyler Comings is a Senior Researcher at the Applied Economics Clinic. He has 12 years of experience in economic research and consulting. He focuses on energy system planning (including integrated resource plans), costs of regulatory compliance, wholesale electricity markets, utility finance, and economic impact analyses. He has provided testimony on these topics in the District of Columbia, Hawaii, Indiana, Kentucky, Ohio, Oklahoma, Maryland, New Jersey and Nova Scotia. He has also conducted many economic impact studies using IMPLAN and REMI.

Comings has provided expertise for many public-interest clients including state consumer advocates, state energy offices, environmental advocates, federal agencies, and utility commissions. Recently, he estimated the economic impact of a higher renewable portfolio standard in Massachusetts (for the Northeast Clean Energy Council) and testified on the economics of a large-scale transmission and generation project (for the Nova Scotia Utility and Review Board). He also works on utility finance, including examining the utilities' rate of return (i.e. cost of capital). In 2017, he became a Certified Rate of Return Analyst (CRRA), as designated by the Society of Utility and Regulatory Financial Analysts (SURFA).

Comings was previously employed at Synapse Energy Economics, where he provided expert testimony and reports on coal plant economics and utility system planning. Prior to that, he performed research on consumer finance and behavioral economics at Ideas42 and conducted economic impact and benefit-cost

analysis of energy and transportation investments at EDR Group. He has a MA in Economics from Tufts University and a BA in Mathematics and Economics from Boston University.

#### **María Marta Di Paola**

María Marta Di Paola is Research Director for FARN (Fundación Ambiente y Recursos Naturales). She holds a Masters in International Economic Relations and a degree in Economics and Agricultural Administration from the University of Buenos Aires (UBA). Di Paola is an Assistant Professor in the Department of Administration of the Faculty of Agronomy at UBA, and she has also worked in the private sector.

#### **Julien Dumoulin-Smith**

Julien Dumoulin-Smith is a managing director in Americas Equity Research at Bank of America Merrill Lynch (BAML), covering US Power, Utilities, and Alternative Energy, based in New York. Previously, he was an executive director at UBS in a similar role. Dumoulin-Smith was ranked #2 in the Institutional Investor All-America Research Poll for 2018 & 2017 and #1 for 2016. He has also been ranked #1 in Alternative Energy in the Institutional Investor All-America Research Poll for 2018, 2017, & 2016. He was previously named Up and Comer on the same lists and received the top designation for 2012-15 among hedge fund managers on II's Alpha list, a recut version of the II poll for Utilities. Dumoulin-Smith has a BS in applied math and an MBA both from Columbia University. He is a CAIA Charterholder.

#### **Omar Elmawi**

Omar Elmawi is a lawyer with an interest in environmental and community rights, who provides free advice on public interest issues around natural resource rights, climate change and renewable energy. Elmawi currently coordinates the deCOALonize campaign in Kenya, which strives toward a country that's 100% renewable energy sufficient and to end any interest in coal mining or plants.

#### **Seth Feaster**

IEEFA Data Analyst Seth Feaster has 25 years of experience creating visual presentations of complex data at the New York Times and more recently at the Federal Reserve Bank of New York. Feaster specializes in working with financial and energy data.

#### **Shannon Fisk**

As managing attorney for Earthjustice's Coal Program, Shannon Fisk leads the organization 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. He is an attorney in good standing (State of admission: Illinois).

**Nick Fowler**

Nick Fowler has been founder and owner of REXtac, a small propylene based petrochemical company headquartered and operating in the oil fields of West Texas, for 35 years. Fowler received his Masters of Civil Engineering from Rice University and his MBA from the University of Texas, Odessa.

**Angelina M. Galiteva**

Angelina M. Galiteva is the Founder and Board Chair of Renewables 100 Policy Institute, an organization dedicated to accelerating global transition to 100% renewable energy. Since 2011, Galiteva was appointed and serves as the Vice Chair of the California Independent Systems Operator Board (CAISO), one of the largest transmission operators in the World. Galiteva also serves as Chairperson of the World Council for Renewable Energy (WCRE) and is a Founding Board Member of the Global Clean Energy Desalination Alliance.

Galiteva is an expert in strategic issues related to renewable energy, the environment, new technologies, optimizing system efficiency and overall sustainable policy programs for public and private entities. As such she is frequently sent as a US State Department representative expert on renewable energy and grid issues. In addition, Galiteva is founder and principal of NEOptions, Inc., a renewable energy product development firm. Previously, Galiteva was the Executive Director of Strategic Planning for the Los Angeles Department of Water and Power (LADWP), overseeing the utility's renewable energy program, she also worked at the New York Power Authority. Galiteva is an attorney with a JD Degree and Master's in International and Energy Law.

**Vibhuti Garg**

Vibhuti Garg, an IEEFA energy economist, has advised private and public sector clients on commercial and market entry strategies, investment diligence on power projects and the impact of power sector performance on state finances. She also works on international energy governance, energy transition, energy access, reallocation of fossil fuel subsidy expenditure to clean energy, energy pricing and tariff reforms. In addition to India, she has worked in Nepal, Bangladesh, Vietnam and in the Caucasus.

**Kuba Gogolewski**

Kuba Gogolewski has a MSc in Economics from the Warsaw School of Economics in Poland. Before joining Foundation "Development YES - Open-Pit Mines NO" in January 2016 he worked for 5 years as an anti-coal campaigner and project coordinator with CEE Bankwatch Network in Poland and Belgium. Currently he coordinates and runs the insurance, banks and institutional investors campaign in Poland as well as building a resilient organisation and coordinating anti-lignite work in Poland. Gogolewski worked as a researcher for Greenpeace Poland and cooperated closely with Greenpeace India in 2009 and 2010. During and after his studies he spent long periods abroad, among others in Spain, Mexico and India and more recently in Belgium and Germany.

**Matt Gray**

Carbon Tracker Senior Analyst Matt Gray is a carbon and energy expert with experience in Europe and Australasia, and leads Carbon Tracker's work on power and utilities. He authored Carbon Tracker's *Chasing the Dragon* and *Carbon Supply Cost Curves* reports. Gray was previously an analyst at Jefferies, an American investment bank, where he was the head of European carbon and power research. More recently, Gray was a consultant analyst at the International Energy Agency and has also worked on emissions trading at Credit Suisse and energy efficiency at the UK's Department of Energy and Climate Change. He has a Bachelor of Applied Science from the University of Otago and a Master of Science from the University of Manchester where he was awarded a Rotary Foundation Ambassadorial Scholarship.

**Elrika Hamdi**

IEEFA Energy Finance Analyst Elrika Hamdi has worked on renewable energy, rural electrification and energy efficiency in Indonesia's financial sector, including at PT Imaji Life Technology, Winrock International and the Frankfurt School of Finance and Management.

**Jim Hempstead**

Jim Hempstead is a Managing Director in Moody's Global Project & Infrastructure Finance Group, where he helps manage the North American Regulated Utility and Power Team. Hempstead 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 2017, Hempstead joined Moody's Global ESG Working Group and is managing the firm's Green Bond Initiatives. He joined Moody's in December 2002.

Prior to joining Moody's, Hempstead 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, Hempstead worked with Salomon Smith Barney Corporate Finance, working in their Global Energy & Power Group.

Hempstead graduated with a B.S.B.A. from Villanova University and an M.B.A. from Fordham University. From 2011-2013, he 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. Hempstead 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, Hempstead joined the Advisory Council for the Electric Power Research Institute (EPRI).

**John Hepburn**

John Hepburn is the founder and Executive Director of The Sunrise Project. Prior to founding The Sunrise Project in 2012, Hepburn spent ten years working in senior positions with Greenpeace Australia Pacific, where he performed a wide variety of roles, including managing the climate and energy campaign, the genetic engineering campaign, and the outreach and mobilisation department. Prior to working for Greenpeace, Hepburn co-founded several non-profit recycling businesses and worked on a wide variety of environmental campaigns at a grassroots level. Hepburn holds degrees in Manufacturing Systems Engineering and Business Management from the Queensland University of Technology and before becoming an activist worked for several years as an engineer making components for the oil, gas, coal and nuclear industries.

**Kathy Hipple**

A financial analyst at IEEFA, Kathy Hipple teaches the finance sequence at Bard's MBA in Sustainability and is the founding partner of Noosphere Marketing. Hipple has written extensively about sustainable, responsible and impact finance and investing. As vice president at Merrill Lynch for 10 years, she placed fixed income securities with international institutional clients, and advised international life insurance companies and pension funds. She later founded Ambassador Media, a local search firm in New York City, and served as its CEO. She has served on several boards, including the national Local Search Association and Bennington County's Meals on Wheels.

**Kimiko Hirata**

Dr. Kimiko Hirata is an International Director of Kiko (Climate) Network, a non-profit network organization in Japan. She leads work on international and national climate and energy policy and has conducted various research and advocacy work since she joined Kiko Network in 1998. After the Fukushima nuclear accident in

2011, she co-authored a book titled *Toward Nuclear-Free and Climate Change-Free Society*, which analyses several NGOs' low carbon energy scenarios. Most recently, Hirata leads a coal project team in the organization to fight against domestic coal expansion and international coal finance. She has engaged with UNFCCC (United Nations Framework Convention on Climate Change) process since COP3 in 1997. As part of global NGO network, she also serves as a chair of CAN-Japan and as a board member of Climate Action Network International. She earned a Ph.D degree in social science from Waseda University.

### **Mary Anne Hitt**

Mary Anne Hitt directs the Sierra Club's Beyond Coal Campaign, which has been recognized as one of the most successful environmental campaigns in history. Working with hundreds of partners, the campaign has secured retirement of over half of US coal plants and is working to power the nation with 100% clean energy by 2030. Hitt was listed in 2015 as one of the POLITICO 50 and has made numerous media appearances. She lives in West Virginia with her family.

### **Nicole Horseherder**

Nicole Horseherder is the Director of To Nizhoni Ani (TNA). The mission of TNA is to preserve and protect the water resources of Black Mesa, the Navajo Nation, Arizona. The protection of water sources, namely the protection of the Navajo Aquifer from mining impacts has been the primary work of TNA. This has led to efforts to transition local coal-fired power plants and coal mines on the Navajo Nation. Currently, TNA is involved in securing transition funds for shuttered coal plants and training Navajo members in solar installation.

### **Sharif Jamil**

Buriganga Riverkeeper Sharif Jamil 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 involvement in the country's largest civil society initiative, Bangladesh Poribesh Andolon (BAPA). As a member and Joint Secretary of BAPA, 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.

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, Jamil was awarded by Both ENDS with a Joke Waller Hunter Fellowship as a prospective leader in the environmental movement in developing countries. 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.

### **Melinda Janki**

Melinda Janki is an international legal consultant who is currently legal counsel on a case challenging the Government of Guyana and ExxonMobil's subsidiary and its partners over proposed oil production in Guyana. She has drafted legislation in Guyana to protect the environment including constitutional rights to inter-generational equity and a healthy environment. She is a graduate of London and Oxford Universities and was admitted to practice in England. She has worked in the City of London and for BP.



**Angel Figueroa Jaramillo**

Angel Figueroa Jaramillo is president of UTIER, the Union of Electrical and Irrigation Industry Workers, which organizes workers of the Puerto Rico Electric Power Authority. He has also been a trustee of the Board of Trustees of the PREPA Pension System since 2015. He has been part of various multi-sectoral efforts in Puerto Rico and internationally including la Mesa de Dialogo Energético and Queremos Sol.

**Derf Johnson**

Derf Johnson has served as the clean water program director for the Montana Environmental Information Center (MEIC) since 2010. In this role, Johnson is a policy advocate, attorney, and lobbyist, and works primarily on coal, oil and gas development, and hard rock mining.

Johnson grew up in Montana's Gallatin Valley. He received his Juris Doctor from the University of Montana School of Law, and his bachelor of arts in environmental studies and anthropology from the University of Montana. During law school, Johnson worked in the land use planning clinic and served as a staff member for the Public Lands and Resources Law Review. He has a certificate in Natural Resources Conflict Resolution from the Center for Natural Resources and Environmental Policy, and he is a member of the Montana Bar Association (MBA) and the MBA section on Natural Resources, Energy, and the Environment. Johnson has volunteered and worked previously with Montana Conservation Voters and the Montana Public Interest Research Group. Prior to joining MEIC, Johnson worked as a statewide outreach coordinator for I-164, the successful statewide ballot initiative addressing predatory payday lending. He also lobbied during the 2007 session on consumer issues and voter access.

Johnson is an attorney in good standing (State of admission: Montana).

**Joojin Kim**

Joojin Kim is Managing Director and Founder of Solutions for Our Climate (SFOC), a Seoul based environmental group focusing on preventing new coal power plants both within Korea and internationally, phasing out coal power within Korea and promoting renewable energy. Kim has over ten years of experience with the international climate change regime, including experience serving as member of the delegation of the Republic of Korea to the 2009 United Nations Climate Change Conference, held in Copenhagen. He also served as Legal Advisor to the Presidential Committee on Green Growth of the Republic of Korea, and frequently advised the Korean Government on greenhouse gas and renewable energy-related matters. He also briefly worked for the Environmental Defense Fund (EDF).

Before founding SFOC, he was an attorney at Kim & Chang, Korea's largest law firm. Kim received his LL.M. from Georgetown University Law Center and master's degree and bachelor's degree from Seoul National University.

**Alison Kirsch**

The Rainforest Action Network's Climate & Energy Lead Researcher Alison Kirsch came to the RAN after graduating from Brown University with academic and activist experience in climate and energy policy. She provides up-to-date research and administrative support for the Climate and Energy team's campaigns.

**Sergio Knaebel**

Sergio Knaebel works with a small group of colleagues at the Sandler Foundation to identify leaders and organizations with promise to have the greatest impact on pressing societal challenges, from inequality to human rights, corruption and the environment. In the environmental area, he has focused on climate change and coal, clean energy, marine conservation and the conservation of coastal land in Baja California. Prior to the Sandler Foundation, Knaebel was at the Packard Foundation, where he was Program Officer for

the Gulf of California program. Knaebel has a Masters in Conservation Biology and Ecosystem Management from the University of Michigan School of Natural Resources and a BS in Human Biology from Stanford University. He is Vice-Chair of the Board of the Biodiversity Funders Group. Knaebel and his wife Aneema founded the Golden Oak Montessori School.

### **Kevin Koenig**

Kevin Koenig is the Climate and Energy Director for Amazon Watch. He is a leading expert on resource and rights conflicts in the western Amazon Basin, having worked for over two decades with indigenous peoples in the defense of their territories and rights throughout the region's rainforests. From the frontlines to the corporate boardroom, Koenig has collaborated with indigenous peoples in challenging the extractive industry, government development policies, finance for mega-infrastructure projects and demand-side U.S. oil consumption, winning important victories and setting legal precedents. He has also worked to advance climate solutions, working for Ecuador's Ministry of Foreign Affairs in launching the historic Yasuni-ITT proposal that sought to leave almost 920 million barrels of crude permanently in the ground.

### **Irem Kok-Kalayci**

Irem Kok-Kalayci is a research consultant with experience in energy finance and electric vehicles. She is currently working as a consultant for strategic communication network at the European Climate Foundation. She was previously a researcher for Oxford's Sustainable Finance Programme and the RethinkX's future of transport project. She holds a PhD in geography and environment from the University of Oxford.

### **Matt Krogh**

At Stand.earth, Matt Krogh directs the extreme oil campaign, focused on keeping fossil fuels in the ground by preventing new extraction, transportation and refining of hydrocarbons. Working closely with impacted communities, Stand.earth's extreme oil campaign operates at the intersection of community organizing, public policy and creative resistance. Krogh has an MS in geography (GIS and remote sensing) and BS degree in environmental science and education from Huxley College of the Environment in Bellingham, Washington, USA, where he resides. His active work in environmental activism dates back to the 1990 Mount Everest Earth Day International Peace Climb, and has continued through writing, fossil fuel activism and clean water protection efforts.

### **Tom Kruse**

Tom Kruse is program director for the global challenges portion of the Democratic Practice program of the Rockefeller Brothers Fund. He joined the Fund in June 2008 to manage the development and direction of the global governance grantmaking, including the formation of the program objectives, strategies and initiatives.

Prior to joining the Fund, Kruse served as an advisor to the Bolivian government on trade and investment policy, the continuation of trade preference programs and debt relief. In that capacity, Kruse worked closely with the Bolivian government and its diplomatic missions, members of the Bolivian business community, international financial institutions and several RBF grantees that provide technical assistance to developing country governments.

His career in Bolivia began in 1994 when he served as director of the School for International Training's programs in Bolivia, and as a consultant on geographic information systems for the Center of Population Studies. Kruse later led research teams on labor conditions in formal and informal sector shoe and apparel industries, and co-founded a labor education project that organized and carried out courses of study linked to organizing drives. Subsequently, he served as program director at a prominent research and policy

advocacy organization that served as the Bolivia chapter of the Social Watch global network, where he introduced and consolidated macroeconomic analysis on the fiscal limits of poverty reduction spending; and contributed to the consolidation of citizens and social organization coalitions on debt and development finance, and fair trade and investment. Kruse holds a Master of Regional Planning from Cornell University and a Bachelor of Architecture from the University of Arizona.

### **Cathy Kunkel**

IEEFA Energy Analyst Cathy Kunkel is an independent West Virginia-based consultant focusing on energy efficiency and utility regulation. She has testified on multiple occasions before the West Virginia Public Service Commission for the nonprofit coalition Energy Efficient West Virginia. She has done graduate work for the Energy and Resources Group at the University of California-Berkeley and is a former senior research associate at Lawrence Berkeley National Laboratory. Kunkel has an undergraduate degree in physics from Princeton University and a graduate degree in physics from Cambridge University.

### **Jen Lash**

Jen Lash has designed environmental campaigns in Canada for over 25 years. Currently, by providing strategic and communications support to climate and energy campaigns across Canada, she is helping build and coordinate a national movement calling on all governments to take real climate action. Lash has been involved in campaigns to stop several pipelines, cap production in the tar sands, implement the Pan Canadian Framework on Clean Growth and Climate Change and to develop new environmental laws. Lash also advises foundations and donors the most effective ways to support climate action in Canada.

Lash has served as the Executive Director of Sisu Institute and Living Oceans Society and holds a Bachelor of Arts in Public Policy and Administration.

### **Michael Lazarus**

Michael Lazarus is a senior scientist and director of the Stockholm Environment Institute's U.S. Center. Lazarus's research addresses climate change mitigation policy at local, national and international levels. His current work ranges from carbon market design to the integration of national energy and climate policies. He designed and co-leads the SEI Initiative on fossil fuels and climate change.

Lazarus has over 25 years of professional experience in energy and environmental analysis and capacity-building. He has worked throughout North America, Africa, Asia, Latin America and Europe with support from government agencies, development banks, foundations, utilities and non-profit groups.

### **Nathan Lemphers**

Nathan Lemphers is a Senior Campaigner at Oil Change International, where he works with the Energy Futures and Transitions Program to accelerate the transformation to a zero-carbon economy.

Lemphers has worked on environmental policy issues for over fifteen years. More recently, he worked on oil and pipeline policy with the Pembina Institute, a Canadian energy and environmental policy think tank. Lemphers holds a M.C.P. degree from the Massachusetts Institute of Technology and a B.Sc. from the University of Alberta. He is currently a Ph.D. Candidate at the University of Toronto, where his research compares the climate politics of Australia, Canada and Norway.

### **Ilan Levin**

Ilan Levin joined the Environmental Integrity Project (EIP) in 2004, after practicing environmental law with a firm where he litigated water issues on behalf of landowners and conservation groups. He previously played a key role in developing and drafting Texas anti-pollution laws.

Levin received his law degree from University of Texas and his B.A. from University of Texas at Austin, and is an attorney in good standing (State of admission: Texas).

#### **Suzanne Mattei**

IEEFA Board Vice President Suzanne Mattei is a public interest policy consultant and a former regional director for the New York State Department of Environmental Conservation. She has 30 years of experience in public interest law and policy.

#### **Gillian McEachern**

Gillian McEachern is the director of the Global Gas and Oil Network (GGON). Prior to joining GGON, McEachern was the Executive Director of Policy in the Office of the Premier in Ontario, Canada, where she led the implementation of cap and trade and a strong climate change plan, and oversaw the broader policy agenda for the province. McEachern has more than 15 years of experience on climate change and environmental issues, and has held leadership positions in several environmental NGOs.

#### **Bill McKibben**

Bill McKibben is an author and environmentalist who in 2014 was awarded the Right Livelihood Prize, sometimes called the 'alternative Nobel.' His 1989 book *The End of Nature* is regarded as the first book for a general audience about climate change, and has since appeared in 24 languages. He has gone on to write a dozen more books. McKibben is a founder of 350.org, the first planet-wide, grassroots climate change movement, which has organized twenty thousand rallies around the world in every country save North Korea, spearheaded the resistance to the Keystone Pipeline and launched the fast-growing fossil fuel divestment movement.

The Schumann Distinguished Scholar in Environmental Studies at Middlebury College and a fellow of the American Academy of Arts and Sciences, he was the 2013 winner of the Gandhi Prize and the Thomas Merton Prize, and holds honorary degrees from 18 colleges and universities. Foreign Policy named him to their inaugural list of the world's 100 most important global thinkers, and the Boston Globe said he was "probably America's most important environmentalist."

A former staff writer for the New Yorker, he writes frequently for a wide variety of publications around the world, including the New York Review of Books, National Geographic and Rolling Stone.

#### **Vikas Mehta**

Vikas Mehta is a founding Executive Board member of the SED Fund. As Executive Director, Mehta manages new portfolio and capacity development, and global strategic initiatives for the SED fund. Previously, Mehta spent 17 years in impact investment and programme management with international nonprofits in Asia and Africa, working across clean energy, agriculture, microfinance and ICT initiatives.

He holds a Master's degree in International Business from the Fletcher School at Tufts University, and a Bachelor's degree in Commerce from Delhi University, India.

#### **Carroll Muffett**

Carroll Muffett is President of the Center for International Environmental Law (CIEL), a nonprofit organization that uses the power of law to protect the environment, promote human rights, and ensure a just and sustainable society. He is a recognized expert on international environmental law and a leader in the emerging fields of climate litigation and climate-related financial and legal risks. Muffett is lead researcher on CIEL's *Smoke and Fumes* investigation into the deep history of oil industry engagement on climate science. He is co-author of CIEL's *Fueling Plastics* series, which examines the linkages between fossil

fuels and the global plastics crisis. And he is lead researcher and co-author of *Fuel to the Fire*, which examines the role of the fossil fuel industry in geoengineering.

Muffett is a member of the Commission on Environmental Law of the International Union for Conservation of Nature (IUCN) and serves on the Board of Trustees for the Climate Accountability Institute. He is an attorney in good standing (State of admission: Washington, D.C.)

#### **Lidy Nacpil**

Lidy Nacpil is an activist working on economic, environmental, social and gender justice issues in national, regional and global campaigns. She is the co-coordinator of the Asia Peoples' Movement on Debt and Development, co-coordinator of the Global Campaign to Demand Climate Justice, and member of the global Coordinating Committee of the Global Alliance on Tax Justice. She also serves as the convenor of the Philippine Movement for Climate Justice and vice president of the Freedom from Debt Coalition.

#### **J.D. Newsom**

J.D. Newsom is the Executive Director of the Big Bend Conservation Alliance. He has over a decade of experience in all aspects of nonprofit management and demonstrated success in leading company growth, strategic planning and implementation, streamlining processes, grant writing, leadership, and creating innovative programming. Newsom's exceptional leadership skills, keen eye for analyzing business performance, and ability to implement new processes is a great asset to the Big Bend Conservation Alliance's mission to conserve the living heritage and unique natural and cultural resources of the greater Big Bend region of Texas.

Most recently, J.D. served as the Chief Operations Officer at Boys & Girls Clubs of Greater Tarrant County, where he was instrumental in developing and executing initiatives to improve operations and bottom line performance. He led a team of 170 program staff and increased the reach of the organization by securing new streams funding to create cutting-edge service delivery models. J.D. also served as the Vice President of Operations and Finance for Refugee Services of Texas where he led the organization through tremendous growth, doubling the size of the organization and managing a budget of \$13 million.

J.D. holds a Bachelor of Arts degree from The University of Texas at Austin and a Masters in International Law from the Instituto Tecnológico y de Estudios Superiores de Monterrey, México.

#### **Simon Nicholas**

Simon Nicholas is a research analyst with IEEFA in Australia. Simon holds an honours degree from Imperial College, London and is a fellow of the Institute of Chartered Accountants of England and Wales. He has 16 years' experience working within the finance sector in both London and Sydney at ABN Amro, Macquarie Bank and Commonwealth Bank of Australia.

#### **Martin Norman**

Martin Norman joined Greenpeace in 2003 and is currently leading the Nordic sustainable finance campaign work. He started out working on several campaign issues related to Norway and Iceland. Since 2006, his main focus has been related to climate and energy.

In 2007, when the Norwegian part (67%) state-owned oil company Equinor (formerly Statoil) bought into Canadian tar sands, institutional investors were identified by Greenpeace as key targets for influencing both the company and the Norwegian government. With the help of smart campaigning and alliance building, Norman was instrumental in building the campaign that stopped Equinor from investing further in tar sands and eventually sold all out in 2016.

From 2013, Norman was key in building the Norwegian coal divestment alliance and developing the work that led to the Norwegian Oil Fund setting a new global standard for coal divestment with its 30% criteria in 2015. Greenpeace Norway also commissioned the Norwegian oil and gas overexposure report that laid the basis for the decision behind the current drive to sell the oil and gas assets in the Oil Fund.

In addition to leading the Nordic Sustainable Finance work, Norman is working to spread Nordic sustainable finance thinking globally.

### **Laurel Ostfield**

Head of Communications Department at the Asian Infrastructure Investment Bank (AIIB), Laurel Ostfield is responsible for overseeing AIIB's global brand and communications strategy, which includes media relations, civil society engagement, internal communications, sponsorship and digital communications.

She is also accountable for the bank's commitment to transparency through its information disclosure policy. Prior to joining AIIB, Ostfield led the communications team at Capital One Canada, covering external communications, internal communications and corporate social responsibility. She has also held various communications roles in the Province of Ontario's Ministry of Health where she was the Press Secretary to the Minister of Health and Manager of Legislative Affairs.

Ostfield has a B.A. from McGill University.

### **Todd Paglia**

As Executive Director of Stand.earth, Todd Paglia can be credited with transforming the paper policies of multi-billion-dollar Fortune 500 companies, including Staples, Office Depot, Williams-Sonoma, Dell, Victoria's Secret, 3M and many more. Under Paglia's leadership, Stand.earth has saved more than 65 million acres of endangered forests. In addition, recycled pulp mills have seen major companies requesting more sustainable fiber as a result of Stand's campaigns.

Paglia has publicly challenged some of the largest companies in the world to become environmental leaders on the Today Show, NPR's Marketplace as well in stories in the Wall Street Journal, The New York Times, Time Magazine, Business Week and many other publications. In March 2007, he was a featured speaker at San Francisco's Commonwealth Club, the nation's oldest and largest public affairs forum.

Before joining Stand.earth, Paglia was an attorney for Ralph Nader, focusing on consumer protection issues such as environmental purchasing by governmental agencies to spur alternative markets, enforcement of antitrust laws, corporate welfare issues and corporate accountability. He received his Bachelor of Arts from Binghamton University, SUNY, his J.D. from the New England School of Law and his LL.M. from George Washington University, National Law Center, in Environmental Law and Policy.

### **Ghee Peh**

Ghee Peh is an IEEFA energy finance analyst based in Hong Kong. He worked in investment research from 1995-19, most recently at Jefferies. Peh was Regional Commodity Analyst at BNP Paribas 2014-16 where he covered China and Indonesia coal, cement and metal companies, and was Regional Commodity Head Analyst at UBS from 2006-14 where he covered China coal and metal companies. He has worked on 18 Asian IPOs in the commodity sector, and speaks five languages including Mandarin and Indonesia.

### **Lucie Pinson**

Hungry to fight for environmental and social justice since her time as a political science student at universities in France and South Africa, Lucie Pinson joined Friends of the Earth France in 2013 as a

campaigner focusing on the French export credit agency and private financial institutions. Since then, she has developed a strong track record of convincing French private banks and insurers to adopt sector-wide policies cutting their support of coal and other extreme fossil fuels. She also worked to push the French government to cut its export support to French corporations for coal projects abroad. Pinson is passionate about the role of finance in ecological transition and its impact on social inequalities and works closely with grassroots communities and the finance industry alike.

Pinson recently joined the Sunrise Project as a Senior Campaigner, in order to scale up her contribution in the fight against climate change.

### **Steve Pomerance**

Steve Pomerance is a former city council member in Boulder, Colorado and a current op-ed writer for the Boulder Daily Camera, with a decades-long interest and involvement in renewable energy issues.

### **Adhityani Putri**

Adhityani (Dhriti) Putri is currently the Executive Director at Yayasan Indonesia CERAH (formerly known as CERA- Centre for Energy Research Asia), a policy research and strategic communications hub on clean energy and sustainability in Indonesia.

She was formerly a policy analyst at the Jakarta office of Climate Policy Initiative (CPI) and, prior to that, she was working for the joint secretariat for the Climate Change Institute and Energy Change Institute at the Australian National University (ANU) in Canberra.

Putri has a diverse professional background, ranging from environmental journalism to development management to research in public policy, with a focus on climate change, sustainable energy and energy efficiency.

She holds a Bachelor degree in International Relations from Universitas Indonesia and a Masters degree in Climate Change Economics and Policy from Crawford School of Public Policy, the Australian National University, Canberra.

### **Luis A. Reyes Jr.**

Luis A. Reyes, Jr., began his employment at Kit Carson Electric Cooperative, Inc. (KCEC) in 1983 as System Engineer and was selected as Chief Executive Officer in 1993. KCEC began constructing a Solar Deployment Plan in 2017. KCEC's goal is to be able to build to approximately 100% of KCEC's daily electrical energy needs by 2022 by utilizing solar electric generation capacity in approximately 1 MW facilities located in various locations around KCEC's service territory. In 2019, solar projects will include storage.

On August 16, 2010 Kit Carson Electric was awarded American Recovery and Reinvestment (ARRA) stimulus funding to build approximately 3,000 square miles of high-speed fiber in Northern New Mexico. Currently KCI offers residential and commercial high-speed internet.

### **Jeremy Richardson**

Jeremy Richardson is a senior energy analyst in the Climate and Energy program at the Union of Concerned Scientists, conducting analytical work on the Environmental Protection Agency's carbon regulations, and working in other areas of energy research. He is continuing research on economic diversification in his native West Virginia that he began while in his previous position as the program's Kendall Science Fellow.

Dr. Richardson's Kendall work examined the economic impacts of projected future coal production on the state's economy, and looked at the potential of other sectors for creating jobs; his research found strong support for economic diversification. During a two-day forum held in Charleston, West Virginia, Dr. Richardson shared these results with local leaders as they discussed their long-term visions for the state.

Before joining UCS, Dr. Richardson was a senior analyst at New West Technologies. Prior to that, he served as senior fellow for science policy at the Pew Center on Global Climate Change. He was also a science and technology fellow at the American Association for the Advancement of Science, where he analyzed the potential for energy efficiency and renewable energy in the U.S. He served as a postdoctoral fellow at the NASA Goddard Space Flight Center, studying the atmospheres of planets around other stars. He received his Ph.D. and M.S. in physics from the University of Colorado Boulder and earned a B.S. in physics from West Virginia University.

Dr. Richardson has been quoted widely, including by the Associated Press, The Charleston Gazette, Los Angeles Times, and The New York Times, and has appeared on MSNBC's Melissa Harris-Perry.

### **Bruce Robertson**

IEEFA Investment Analyst Bruce Robertson has been an investment analyst, fund manager and professional investor for over 32 years. He has worked for major domestic and international institutions, including Perpetual Trustees, UBS, Nippon Life Insurance and BT. Robertson became involved in energy issues when Transgrid, the transmission provider in New South Wales (NSW) Australia, proposed to build a transmission line down the Manning Valley. Through his analysis of the economics of the project, he exposed the over investment in grid infrastructure in Australia. It spawned a government enquiry that found that the line was unnecessary. The line was cancelled, the first time this had occurred in Australian history.

Robertson is an active participant in the national debate on energy issues in Australia and has been invited to present to a number of government enquiries into the electricity and gas industries.

### **Ruth Santiago**

Ruth Santiago is a resident of the municipality of Salinas in southeastern Puerto Rico where she has worked with community and environmental groups, fisher's associations and other organizations for over thirty years on projects ranging from a community newspaper, children's services, a community school, and ecotourism projects to a rooftop solar energy pilot project. Santiago has been involved in the establishment of broad alliances to prevent water pollution from landfills, power plant emissions and discharges and coal combustion residual waste and to promote solar communities and energy democracy. In addition to litigation in courts and administrative agencies, Santiago has organized and promoted environmental education projects, advised community groups and the Jobos Bay National Estuarine Research Reserve on watershed protection and land use issues. Most recently, Santiago has worked on cases related to energy projects and integrated resource plans.

### **Tom Sanzillo**

Tom Sanzillo, director of finance for IEEFA, is the author of several studies on coal plants, rate impacts, credit analyses, and public and private financial structures for the coal industry. He has testified as an expert witness, taught energy-industry finance training sessions and is frequently quoted by the media. Sanzillo has 17 years of experience with the City and the State of New York in various senior financial and policy management positions. He is a former first deputy comptroller for the State of New York, where he oversaw the finances of 1,300 units of local government, the annual management of 44,000 government contracts, and over \$200 billion in state and local municipal bond programs along with a \$156 billion pension fund.



**David Schlissel**

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.

**Heffa Schücking**

Heffa Schücking is founder and director of the German environment and human rights organization *urgewald*, whose focus is monitoring the activities of European companies and banks abroad. Schücking has designed many inspirational and successful advocacy campaigns and was the first German to win the Goldman Environment Prize. Her organization played a key role in initiating the coal divestment actions of some of the world's largest investors such as the Norwegian Government Pension Fund and Allianz.

**Aniket Shah**

Aniket Shah is a practitioner in the space of sustainable finance, whose career has bridged the public and private sectors. Shah is the Head of Sustainable Investing at OppenheimerFunds, a leading global asset manager, where he is responsible for working with portfolio managers and investment product specialists to further integrate sustainable investing practices across all aspects of the firm's business activities.

From 2014-2017, Shah served as the Program Leader of the Financing for Sustainable Development Initiative at the UN Sustainable Development Solutions Network (SDSN). In this role, Shah advised national governments, global financial institutions (public and private) and non-profit organizations on how to finance the sustainable development agenda. Shah also played a leading role at the recently formed Sustainable Development Goal (SDG) Center for Africa, where he will lead the Center's work on Sustainable Finance in Africa.

From 2011-2014, Shah worked as an investment professional and strategist at Investec Asset Management, an international investment management firm based in South Africa and the United Kingdom. In addition, Shah was a lead investment analyst for the Emerging Market Multi-Asset product, a fund-of-funds for global emerging market asset allocation. From 2009-2011, Shah worked at The Earth Institute at Columbia University where he served as a Program Manager and Special Assistant to the Director. There, Shah managed the International Policy Advisory Group (IPAG), a collaborative engagement with the Asian Development Bank advising the G20 on global economic policy.

Shah is an honors graduate of Yale University and is currently pursuing his doctorate at Oxford University in Economic Geography, focusing on sustainable finance at the Smith School of Enterprise and the Environment.

**Kashish Shah**

IEEFA Research Associate Kashish Shah has a master's degree in economics from the University of Sydney and an engineering degree from NMIMS University in Mumbai. He has worked in the Global Analytics Division of the Royal Bank of Scotland with a focus on regulatory policies. Shah has research experiences in

India's public sector in his work for a member of Indian Parliament and a University of Sydney-based research group.

### **Christine Shearer**

Christine Shearer came to Global Energy Monitor with a background in interdisciplinary climate change and energy research. She previously worked as a postdoctoral scholar in Earth System Science at the University of California in Irvine, as a research fellow at the National Center for Ecological Analysis and Synthesis and as a reporter for the Center for Investigative Reporting. Her writing has appeared in science and media publications including *Nature*, *Environmental Research Letters*, *National Geographic* and *The New York Times*, and she is author of *Kivalina: A Climate Change Story* (Haymarket Books, 2011). She received her PhD in Sociology from the University of California at Santa Barbara.

### **Kim Smaczniak**

Kim Smaczniak is the Managing Attorney of Earthjustice's Clean Energy Program. Based in Washington, D.C., she leads Earthjustice's work to accelerate the transition to 100% clean energy and ensure everyone benefits from a thriving clean energy economy. Previously, as a Staff Attorney on the organization's Clean Energy team, she shaped legal strategies to ensure a fair playing field for clean energy in federally-regulated electricity markets.

Under the Obama Administration, Smaczniak served as lead mitigation negotiator for the U.S. Department of State climate negotiations team, shaping strategies to ensure rapid implementation of the Paris Agreement and deepen U.S. engagement in support of climate mitigation. Prior to joining the State Department, Smaczniak served as counsel at the Senate Environment and Public Works Committee, providing legal advice and supporting federal oversight relating to a variety of environmental laws, and as a Trial Attorney with the United States Department of Justice (DOJ) Environmental and Natural Resource Division. At the U.S. Department of Justice, Smaczniak had a diverse practice litigating on behalf of federal agencies under federal environmental laws, including defending the Environmental Protection Agency's greenhouse gas rules in the D.C. Circuit. She was nominated for her work at the Department of Justice for the John Marshall Award, DOJ's highest awards offered to attorneys.

Outside of Earthjustice, Smaczniak teaches (law school courses and an undergraduate seminar), volunteers with the American Bar Association, and enjoys researching and writing about the importance of environmental rule of law.

Smaczniak is an attorney in good standing (State of admission: Washington, D.C.)

### **Tom Smith**

Tom "Smitty" Smith is currently the executive Director of the Texas Electric Transportation Alliance (TxETRA), an Alliance of vehicle manufacturers, dealers, utilities, environmentalists and consumer groups, that are working together to develop and promote the policies needed to electrify the Texas transportation system.

### **Anna Sommer**

Anna Sommer is a principal of Energy Futures Group in Hinesburg, Vermont. She has more than 15 years' experience working on a wide variety of energy planning related issues. Her primary focus is on all aspects of integrated resource planning (IRP), including capacity expansion and production costing simulation, scenario and sensitivity construction, modeling of supply and demand side resources, and review and critique of forecast inputs such as fuel prices, wholesale market prices, load forecasts, etc. Additionally, she has experience with various aspects of DSM planning including construction of avoided costs and connecting IRPs to subsequent DSM plans. Sommer is trained to run the Strategist and EnCompass models

and has reviewed modeling performed using numerous models including AURORA, Capacity Expansion Model, Plexos, PROSYM, PROMOD and System Optimizer. She has provided expert testimony in front of utility commissions in Indiana, Minnesota, New Mexico, North Carolina, Puerto Rico and South Dakota.

### **Liz Stanton**

Dr. Elizabeth A. Stanton is the founder and director of the Applied Economics Clinic. She has worked for more than 18 years as an environmental economist, and has authored more than 160 reports, policy studies, white papers, journal articles and book chapters on topics related to energy, the economy, the environment and equity. She has submitted expert testimony and comments in Minnesota, Louisiana, Indiana, Illinois, Vermont, New Hampshire, Massachusetts and several federal dockets. Her recent work includes testimony and comments on IRP and efficiency plans, alternatives to fossil fuel infrastructure, proposed pipelines, energy storage, state climate plans and the equitable implementation of a new green economy.

In her previous position as a principal economist at Synapse Energy Economics, Dr. Stanton led studies examining environmental regulation, cost-benefit analyses, and the economics of energy efficiency and renewable energy. Prior to joining Synapse, Dr. Stanton was a senior economist with the Stockholm Environment Institute's (SEI's) Climate Economics Group, where she was responsible for leading the organization's work on the Consumption-Based Emissions Inventory (CBEI) model and on water issues and climate change in the western U.S.

Dr. Stanton's articles have been published in *Ecological Economics*, *Renewable Climate Change*, *Environmental and Resource Economics*, *Environmental Science & Technology* and other journals. She has also published books, including *Climate Change and Global Equity* (Anthem Press, 2014) and *Climate Economics: The State of the Art* (Routledge, 2013), co-written with her Synapse colleague, Dr. Frank Ackerman.

She earned her Ph.D. in economics at the University of Massachusetts-Amherst, and has taught economics at Tufts University, the University of Massachusetts-Amherst, and the College of New Rochelle, among others.

### **Lorne Stockman**

Lorne Stockman is a Senior Research Analyst at Oil Change International, where he researches and analyzes developments in the North American oil industry. He has worked on oil campaigns as campaigner, campaign coordinator, researcher and author for over fifteen years. Prior to joining Oil Change International on staff, he worked as a consultant with Greenpeace UK, Platform and Oil Change as researcher and author of numerous reports and briefings studying investor risk in tar sands and other marginal oil sources.

He has extensive research and campaign experience, including analysis and publications on climate change and energy; the political economy of oil; transitions in energy markets, energy security and financial risk; human rights; social justice; and the political economy of development and trade issues. Stockman is the author of *The Next Gulf: London, Washington and Oil Conflict in Nigeria* with Andrew Rowell and James Marriott. He holds a Master's Degree from King's College London.

### **Tomás J. Torres**

Executive Director of the Puerto Rico Institute for a Competitive and Sustainable Economy (ICSE-PR), Mr. Torres-Placa is an experienced licensed engineer with over 30 years of experience, and a 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. He has experience in government and private sector as well as non-profit organizations. During his career he has worked in the Puerto Rico Electric Power Authority; in the pharmaceutical and high-tech industry and as a consultant.

Mr. Torres-Placa participated in the three main initiatives that helped craft the new Puerto Rico energy policy, including the development in conjunction with Rocky Mountain Institute of the Public Collaborative for Puerto Rico's Energy Transformation, and active participation on the Puerto Rico Senate Advisory Committee and the Southern States Energy Board Blue Ribbon Task Force. He is former member of the Puerto Rico Planning Board; has lectured in Puerto Rico and abroad, highlighting energy and planning issues; and chaired for two years the Energy Committee at the Puerto Rico Manufacturers Association.

### **Cécile Toubreau**

Cécile Toubreau has been with Transport & Environment since February 2012. Before joining, she worked as a consultant dealing with clients in the transport, energy and trade sectors at Cambre Associates, a public affairs agency in Brussels.

Half Belgian and half British, Toubreau speaks both English and French fluently. She went to school in Brussels, and moved to London to study graphic design at Central Saint Martins followed by design theory at Goldsmiths. After moving back to Brussels, she studied European law and economics at the Vrije Universiteit Brussel. At Transport & Environment, Toubreau was first part of the vehicle team and then set up the better trade and regulation team, which she ran for four years. Now, as Network and Fundraising Director, she coordinates T&E's national offices across Europe, helping to strengthen advocacy at national level in close coordination with the organization's member network.

### **Johannes Urpelainen**

Johannes Urpelainen is the Director and Prince Sultan bin Abdulaziz Professor of Energy, Resources and Environment at Johns Hopkins SAIS and the Founding Director of the Initiative for Sustainable Energy Policy (ISEP). He received his PhD in Political Science from the University of Michigan in 2009 and spent the next eight years at Columbia University.

Urpelainen is the award-winning author of four books and over a hundred refereed articles on environmental politics, energy policy and global governance. He teaches action-oriented classes on energy and environmental policy to equip the next generation of global leaders with deep knowledge, advanced analytical skills—and a passion for transformational social change. As one of the world's top energy policy experts, Urpelainen frequently advises governments, international organizations and the private sector on energy and environment.

As the Founding Director of ISEP, Urpelainen is responsible for the vision, strategy and general management of the initiative. His work under ISEP offers pragmatic but effective approaches to providing the world's population with affordable and abundant energy at minimal environmental impact.

### **Uday Varadarajan**

Uday Varadarajan focuses on how to use cutting-edge data and financial, policy and regulatory analysis to help drive a just transition to clean energy.

Before joining the Rocky Mountain Institute (RMI), Varadarajan was a Principal at CPI Energy Finance, managing their San Francisco team. At CPI, he led the development of innovative financial, regulatory and policy data analytics and tools that are helping consumers, utilities and communities in states across the US (including New York, Colorado, Missouri, Minnesota, Utah and South Carolina) realize the benefits from a

just and equitable transition from uneconomic dirty resources to clean energy. Prior to moving to the Bay Area, he served as a program examiner in the U.S. White House Office of Management and Budget (OMB), where oversaw the budget for U.S. Department of Energy (DOE) energy efficiency and renewable energy programs and the cost assessment and approval of the first \$8 billion in DOE loans to automakers, including loans to Tesla and Nissan to build electric vehicles. Before joining OMB, he was a AAAS Science and Technology Policy Fellow at the Department of Energy and then on detail to the staff of the U.S. House of Representatives, Appropriations Committee. He came to DC after completing a postdoctoral fellowship in theoretical physics in the Weinberg Theory Group at the University of Texas at Austin.

### **Ingrid Vila Biaggi**

Ingrid M. Vila Biaggi is a licensed professional engineer and co-founder of CAMBIO, a non-profit organization based in Puerto Rico that promotes sustainable, responsible actions related to solid waste management, energy, water resource optimization, climate change, environmental protection, governance and fiscal matters. Mrs. Vila Biaggi actively supports environmental justice communities, including those defending against a waste incinerator proposed for Arecibo and those suffering from coal ash disposal consequences in Peñuelas. She serves as Urban Water Ambassador for the revitalization of the Martín Peña Channel and neighboring communities in San Juan, and on the Advisory Council for the Puerto Rico Urban Resilience to Extremes Sustainability Research Network. Mrs. Vila Biaggi serves on the Board of Directors of Cumbre Social, an entity that groups labor union leaders and civil society to promote socially responsible public policy in Puerto Rico. Following Hurricane María, Mrs. Vila Biaggi has been actively engaged in policy development advising, speaking, and promoting resiliency and sustainability in recovery and reconstruction efforts.

Mrs. Vila Biaggi has a bachelor's degree in Civil and Environmental Engineering from Cornell University and a Master's Degree in Environmental Engineering, with a specialty in water resources from Stanford University. She has worked as a consultant in both the United States and Puerto Rico. Mrs. Vila Biaggi has also worked in the public sector, first serving as Advisor in Environmental Affairs, Planning and Housing, and Deputy Chief of Staff for Governor Sila María Calderón (2001-04) and as Chief of Staff for the Commonwealth of Puerto Rico under Governor Alejandro García Padilla (2013-2014). She led the Executive Branch effort that resulted in the enactment of Law 57 of 2014, Energy Transformation and Relief Act and the Executive Branch team in the first centralized collective bargaining negotiations with all unions from the central government culminating in a collective bargaining agreement for over 40,000 union workers guaranteeing rights and benefits in the context of the fiscal crisis. She led the development and drafting of the Puerto Rico Economic Recovery Agenda for 2014-18, which for the first time presents sustainability, public participation and social infrastructure as key elements of a government plan. Mrs. Vila Biaggi also served as Executive Branch liaison with Puerto Rico's White House Task Force and participated in negotiations with the United States Department of Justice leading to Puerto Rico's first civil rights police reform.

### **Julien Vincent**

Executive Director of Market Forces Julien Vincent has been an environmental campaigner and activist for over a decade. He was Climate and Energy Campaigner with Greenpeace Australia Pacific and Greenpeace International from 2006-2012, leaving in order to found Market Forces.

### **Clara Vondrich**

Clara Vondrich is the Director of Divest Invest, a campaign calling on investors to accelerate the clean energy transition by moving their money from the past to the future. The call to action is for investors to divest their portfolios from fossil fuels and invest at least five percent of their portfolios into climate solutions, such as renewable energy, cleantech, sustainable food and water systems, energy access and

more. Today, institutional investors managing assets of close to \$8 trillion have made some form of divestment commitment. The movement spans universities, sovereign wealth funds, cities, pension funds, insurance companies, health organizations, foundations, faith groups and individuals.

Vondrich previously served as Account Director for Climate & Energy at Fenton Communications, where she led client efforts on anti-fracking, defending climate science, and the clean energy transition. She sits on the Board of Directors of 2 Degrees Investing Initiative, a multi-stakeholder think tank working to align the financial sector with 2°C climate goals. An attorney by training, Vondrich served as Counsel to the President's Commission on the BP Deepwater Horizon Oil Spill, focusing on ecological restoration and environmental justice. Vondrich clerked on the U.S. Court of Appeals for the Tenth Circuit after graduating from the University of Virginia Law School in 2006.

### **Marilyn Waite**

Marilyn Waite is a Program Officer in Environment at the William and Flora Hewlett Foundation. Waite manages the foundation's grantmaking on climate and clean energy finance with the ambitious goal of addressing climate change by accelerating the transition to a climate-friendly economy. Her grantmaking mobilizes private capital investments in low-carbon and climate-friendly energy infrastructure and systems, seeking to redirect finance from high- to low-carbon activities and encourage wiser energy investments.

Waite has worked across four continents in venture investment, startups and low-carbon energy. She previously led the clean energy practice at Village Capital, where she sourced and performed due diligence for early-stage startups solving energy challenges and built a network of 1,000-plus clean tech entrepreneurs, investors, corporations and government stakeholders. As a senior research fellow at Project Drawdown, she modeled and forecasted energy solutions to climate change. Waite led several operational and research and development projects at AREVA in France, including performing technical and economic studies in the energy-water nexus and the nuclear energy cycle.

Author of *Sustainability at Work*, Waite serves on the board of directors for the Biomimicry Institute and lectures on sustainable business at the University of International Business and Economics in Beijing. She is an E2 1 Hotels Fellow, and as such, her work and writing highlights opportunities in women-led, green economy startups throughout the country.

She holds a bachelor's of science degree in civil and environmental engineering, magna cum laude, from Princeton University and a master's degree with distinction in engineering for sustainable development from the University of Cambridge.

### **Yiting Wang**

World Wildlife Fund Program Development Manager Yiting Wang works on developing multi-stakeholder initiatives on climate and energy, green finance and ocean conservation at WWF. Part of her responsibilities include working with WWF-China's Climate and Green Finance team to shift Chinese outbound investment in Asia from coal to "clean." She is also the board chair of China Youth Climate Action Network. She graduated from Mount Holyoke College and earned her master of environmental science from Yale School of Forestry and Environmental Studies with several journal publications on carbon finance, climate justice and international development in the field of social ecology.

### **Jennifer Washburn**

Jennifer Washburn, Counsel on Energy & Environment, is Citizens Action Coalition of Indiana's (CAC) first staff attorney and has been in that position for 7 years. She represents CAC and other nonprofits before the Indiana Utility Regulatory Commission, mainly in energy efficiency, power plant construction project, rate

case and other resource decision proceedings. She also teaches a seminar in Public Utility Regulation and Deregulation at Indiana University McKinney School of Law. Washburn grew up in Greenwood, Indiana, and majored in Spanish and Elementary Education at Hanover College. She then spent a year in Spain and returned home to receive her Juris Doctor from I.U. McKinney.

#### **Clark Williams-Derry**

Clark Williams-Derry, Director of Energy Finance for Sightline Institute, researches U.S. and global energy markets, particularly in the Western U.S. and Canada. Williams-Derry's recent research has covered the finances of the Dakota Access Pipeline and the proposed Trans Mountain pipeline expansion; liquefied natural gas projects in British Columbia; "self-bonding" for coal mine reclamation; West Coast coal export projects; greenhouse gas accounting for coal export projects; coal industry bankruptcies and the interactions between federal coal leasing policy and coal exports.

#### **Gerard Wynn**

Gerard Wynn is an energy finance consultant at IEEFA with two decades of experience as an analyst, editor and writer working in the fields of energy and the environment. For a decade, Wynn worked as a reporter and columnist covering energy and climate change at Reuters News Agency. More recently, he has authored research papers on topics including the economics of solar power in Britain, shale gas in the United States and coal power in Europe, China and India. Wynn has worked alongside a range of think-tanks, NGOs and corporate clients. He started his career in land use economics, graduating with a PhD in agricultural economics from Aberdeen University. He blogs at [EnergyandCarbon.com](http://EnergyandCarbon.com).