

Something New Under the Sun



Competition & Consumer Protection Issues in Solar Energy

SPEAKER BIOS

Vikram Aggarwal is the founder and chief executive of EnergySage, a Department of Energy SunShot awardee and the industry's leading online solar marketplace. EnergySage helps consumers comparison-shop multiple quotes from pre-screened solar installers for solar energy system installations and financing options. He founded EnergySage after more than 15 years of experience with Fidelity Investments, where he specialized in private equity investing, growth strategy, marketing and new business development. Mr. Aggarwal holds an MBA from the D'Amore-McKim School of Business at Northeastern University, and is a CFA Charterholder. His thought leadership on solar industry innovation has appeared in Forbes, Scientific American, Bloomberg, Consumer Reports, Kiplinger and Money magazine.

Shannon Baker-Branstetter has served as policy counsel for Consumers Union's Washington, D.C. Office since 2009, where she handles clean energy and climate change policy, toxics regulatory reform, and safe drinking water issues. Ms. Baker-Branstetter earned a BA from Yale University, a master's in public policy from the University of California, Los Angeles, and a JD from Georgetown University Law Center. She served as the Esther Peterson Fellow at Consumers Union in 2007-2008. Her prior employers include the Government Accountability Office and the Department of Labor. Ms. Baker-Branstetter is a member of the California and District of Columbia Bar Associations.

Severin Borenstein is the E.T. Grether Professor of Business Administration and Public Policy at the Haas School of Business, University of California, Berkeley, and a research associate of the Energy Institute at Haas. He is also director emeritus of the University of California Energy Institute (1994-2014) and the Energy Institute at Haas (2009-2014). He received his AB from UC Berkeley and PhD in economics from MIT. Professor Borenstein's research focuses on business competition, strategy, and regulation. He has published extensively on the airline industry, the oil and gasoline industries, and electricity markets. His current research projects include the economics of renewable energy, economic policies for reducing greenhouse gases, alternative models of retail electricity pricing, and competitive dynamics in the airline industry. Professor Borenstein is also a research associate of the National Bureau of Economic Research in Cambridge, MA. He served on the Board of Governors of the California Power Exchange from 1997 to 2003. During 1999-2000, he was a member of the California Attorney General's Gasoline Price Task Force. In 2012-2013, he served on the Emissions Market Assessment Committee. In 2014, he was appointed to the California Energy Commission's Petroleum Market Advisory Committee, which he has chaired since 2015.

Ellen Connelly is an attorney advisor in the Office of Policy Planning at the Federal Trade Commission. She was previously an attorney in the Health Care Division of the FTC's Bureau of Competition. Additionally, she has extensive experience providing antitrust counseling and training to international antitrust authorities, primarily in Latin America. Prior to joining the Commission in 2001, Ms. Connelly was an associate at Pillsbury Winthrop Shaw Pittman LLP in New York City. She received her JD from Harvard Law School and a BS, summa cum laude, from Georgetown University. She also holds an MA from The George Washington University's Elliott School of International Affairs.

James Critchfield currently directs the U.S. Environmental Protection Agency's Green Power Partnership, a voluntary program that supports organizational procurement of green power as a way to reduce the environmental impacts associated with conventional electricity use. Prior to joining EPA, Mr. Critchfield worked in California for a leading solar energy system design and build firm. He is also the current Chair of ASTM's E44.25 Subcommittee on Heat Metering. His education includes a bachelor of science degree from the University of California at Berkeley, as well as a master of business administration from the Thunderbird School of Global Management.

Tanuj Deora is the executive vice president and chief strategy officer of the Smart Electric Power Alliance, formerly known as the Solar Electric Power Association, a 501(c)3 research and education non-profit. He joined SEPA in January 2015 and leads the research, advisory, and communications teams. His previous experience includes wind energy project development, strategy consulting, and financial analysis for over a decade of experience in renewable energy, after starting his career as an engineer in the chemical industry. Mr. Deora served in the cabinet of Governor John Hickenlooper as director of the Colorado Energy Office, and earlier served as a Peace Corps volunteer in Jamaica working on community and environmental health projects. Mr. Deora has also served as an advisor to the Rational Middle Energy Series. Mr. Deora co-founded the Colorado Renewable Energy Conservation Collaborative, and served on the board of Renewable Energy New England. He holds a degree in mechanical engineering from the University of Texas at Austin and an MBA from Harvard Business School.

Jade Alice Eaton is a trial attorney at the U.S. Department of Justice Antitrust Division where she has worked on investigations of mergers and acquisitions of energy assets including those culminating in consent decrees in *U.S. v. Enova Corp.* and *U.S. v. Exelon*. Ms. Eaton has also led civil non-merger matters including *U.S. v. Rochester Gas and Electric*, *U.S. v. KeySpan*, and *U.S. v. Morgan Stanley*. Ms. Eaton has worked extensively both here and abroad on regulation and competition in natural gas and electricity. She was a contributor to the Electric Energy Market Competition Task Force Report submitted to Congress pursuant to EAct 2005. In 2007 and 2011, Ms. Eaton received the Antitrust Division Award of Distinction. She was also awarded the 2008-2009 Victor Kramer Fellowship, which allowed her to study energy and competition law and policy at the University of Chicago. Ms. Eaton graduated from Bryn Mawr College and the Columbus School of Law at Catholic University.

Mark S. Hegedus is a litigation attorney in the Office of the General Counsel at the Federal Trade Commission. His work includes appellate litigation involving antitrust and consumer protection issues, subpoena enforcement, and counseling on document management and e-discovery. He also serves on the FTC's Diversity Council and helps to organize the agency's annual LGBT Pride Month. Prior to

joining the FTC in 2008, Mr. Hegedus was a partner with Spiegel & McDiarmid in Washington, DC, where his practice included representing consumer-owned utilities before the Federal Energy Regulatory Commission. He also worked in the Transportation, Energy and Agriculture Section of the Department of Justice's Antitrust Division from 1998 to 2002. Mark received his JD from New York University School of Law and his BA from the University of Michigan.

John C. Hilke serves as an economic consultant to the Federal Trade Commission in connection with the Commission's electricity competition advocacy program, which he helped establish in 1993-1994. Over the years, he has drafted roughly 100 FTC and FTC staff comments to state commissions, the U.S. Department of Energy, and the Federal Energy Regulatory Commission. From 1978 to 2005, Dr. Hilke was a staff economist in the FTC's Bureau of Economics, where he also participated in antitrust case investigations, did economic research, and provided expert testimony. Recently, Dr. Hilke returned to the FTC staff part-time for an advisory mission to the Anti-Monopoly Committee of Ukraine. He holds a PhD and an MA from Cornell University in economics and public policy and a BA in economics from Swarthmore College.

Jonathan Hill is an attorney in the Office of the General Counsel at the Federal Trade Commission, where he focuses primarily on information and privacy law. Mr. Hill joined the FTC in 2014 from the U.S. Food and Drug Administration, and held prior positions at the Department of Health and Human Services, and in private practice. He earned his JD from the University of Pittsburgh and a BA in Sociology from the University of Virginia.

Shennan Kavanagh is the deputy chief of the Consumer Protection Division at the Massachusetts Attorney General's Office where she oversees a variety of matters affecting consumers including scams and business closures. She is actively engaged in work relating to student loans, auto finance, mortgages and debt collection. Prior to joining the MA AGO, Ms. Kavanagh litigated consumer class actions nationally for a dozen years and was a partner and co-founder of Klein Kavanagh Costello, LLP, a boutique consumer class action firm in Boston. She is a regular speaker on consumer law and a contributing author to the National Consumer Law Center's treatise on Consumer Class Actions. Before her law career, Ms. Kavanagh served as a Peace Corps volunteer teaching ESL in Guinea, West Africa. She is a graduate of the University of Vermont and Suffolk University Law School.

Thomas P. Kimbis is the interim president of the Solar Energy Industries Association (SEIA). In addition to serving as interim president, Mr. Kimbis leads the development of strategy to promote solar energy across the U.S. and provides legal services to SEIA as general counsel. Mr. Kimbis has been working in renewable energy since 2000, when he began supporting research, analysis, legislative, and planning efforts across all energy efficiency and renewable energy technologies for the U.S. Department of Energy (DOE). In 2005, he created the Market Transformation effort within the Solar Energy Technologies Program at DOE to help technologies cross the chasm from R&D to commercialization. He served as Director of Market Transformation through 2009, when he began service as Acting Program Manager, managing the entire \$170 million solar energy program of the United States. While at DOE, Mr. Kimbis was a founder of the Solar America Initiative. He led the creation of the Solar America Cities program, a DOE partnership with U.S. cities to develop innovative methods for the adoption of solar energy technologies. Mr. Kimbis served for six years as chairman of The Solar Foundation.

Marina Lao has been the director of the Office of Policy Planning at the Federal Trade Commission since February 2015. She is on leave from Seton Hall University School of Law, where she is a professor of law. Professor Lao joined the Seton Hall law faculty in 1994 after over a decade of practice experience in government and in the private sector. Her scholarly work focuses on various aspects of antitrust enforcement. She has provided invited testimony to the House Judiciary Committee, and presented at workshops sponsored by the FTC and the Antitrust Division of the U.S. Department of Justice. She was a member of the Advisory Board of the American Antitrust Institute, and was Chair of the Section of Antitrust and Economic Regulation of the Association of American Law Schools. In 2007, Professor Lao received a Fulbright Fellowship to the University of Munich and the Max Planck Institute for Intellectual Property, Competition and Tax Law in Munich, where she taught U.S. Antitrust Law. Professor Lao began her legal career with the U.S. Department of Justice, Antitrust Division, as a trial attorney under the Honors Program.

Robert M. Margolis is a group manager and senior energy analyst in the Washington, D.C. office of the National Renewable Energy Laboratory (NREL). Since joining NREL in 2003, he has served as the lead analyst for DOE's Solar Energy Technologies Office. In this role, he has helped to define and carry out a broad analytical agenda focused on examining the potential for and challenges related to wide-spread adoption of solar energy. His main research interests include energy technology and policy; research, development, and demonstration policy; and energy-economic-environmental modeling. Previously, he was a member of the research faculty at Carnegie Mellon University and a research fellow at Harvard University. Dr. Margolis holds a BS in electrical engineering from the University of Rochester, an MS in technology and policy from the Massachusetts Institute of Technology, and a PhD in science, technology, and environmental policy from Princeton University.

Philip D. Moeller is the senior vice president of energy delivery and chief customer solutions officer at the Edison Electric Institute (EEI). Prior to joining EEI in February 2016, Mr. Moeller served as a commissioner on the Federal Energy Regulatory Commission, ending his tenure as the second-longest-serving member of the Commission. In office from 2006 through 2015, Mr. Moeller ended his service as the only Senate-confirmed member of the federal government appointed by both President George W. Bush and President Barack Obama. Earlier in his career, Mr. Moeller headed the Washington, D.C., office of Alliant Energy Corporation. He also served as a senior legislative assistant for energy policy to U.S. Senator Slade Gorton (R-WA), and as the staff coordinator of the Washington State Senate Energy and Telecommunications Committee in Olympia, Washington. Mr. Moeller was born in Chicago and raised on a ranch near Spokane, Washington. He received a BA in Political Science in 1983 from Stanford University.

James F. Mongoven is the assistant director of the Office of Policy and Coordination in the Federal Trade Commission's Bureau of Competition. He has been with the Commission since 1984. Since then, he has served as an attorney advisor to Chairman Robert Pitofsky, in the Office of Congressional Relations, and on a number of merger litigation teams, including industrial products, cable television, and the Exxon/Mobil investigation. Dr. Mongoven has developed a specialty in energy matters. He serves as the Bureau's energy liaison with the Offices of Congressional Relations and Public Affairs, and with the Office of General Counsel, where he works closely with the associate general counsel for energy. In this capacity, he has participated in Congressional briefings, given speeches, and served on the task force that drafted the Market Manipulation Rule on Wholesale Petroleum. He has written

extensively on antitrust matters, including articles on pharmaceutical innovation, merger policy, and market manipulation in wholesale petroleum. Dr. Mongoven has a PhD in economics from the University of Notre Dame and a JD from Columbia University.

Derek W. Moore is an attorney advisor in the Office of Policy Planning at the Federal Trade Commission. Prior to that, he was an attorney advisor to FTC Commissioner Joshua D. Wright. Prior to joining the Commission, Mr. Moore was an associate in the antitrust practice group at Cadwalader, Wickersham & Taft LLP, in Washington, DC. Before joining Cadwalader, Mr. Moore served as a law clerk to the Honorable Douglas H. Ginsburg, Circuit Judge on the United States Court of Appeals for the D.C. Circuit, and the Honorable Claude M. Hilton, Senior District Judge on the United States District Court for the Eastern District of Virginia. Mr. Moore received his law degree from the University of Virginia School of Law, and a bachelor's degree in economics from the University of Virginia.

Allen Mosher is the vice president of policy analysis for the American Public Power Association, where he directs development of APPA's positions on federal regulatory policy issues. Mr. Mosher serves as an observer of the North American Electric Reliability Corporation (NERC) Board of Trustees and is past chair of the NERC Standards Committee. Mr. Mosher is the staff leader for APPA's Public Power Forward strategic initiative to help public power utilities anticipate and respond to new technologies and trends that are reshaping relationships between utilities and their customers. Before joining APPA in July 1998, Mr. Mosher was a policy analyst for the Federal Energy Regulatory Commission, where he participated in Commission electric restructuring policy development, including development of open-access transmission tariffs, electric utility merger conditions, and the Commission's rules for independent system operators. Mr. Mosher holds a master of public policy degree from the University of California at Berkeley and was a post-graduate fellow in the Berkeley Professional Studies Program in India where he studied the Indian electric power sector. He graduated with honors from the University of Kansas and is a member of Phi Beta Kappa.

Diana L. Moss became the president of the American Antitrust Institute in January 2015. An economist, Dr. Moss has developed and expanded AAI's advocacy channels and strategies, and strengthened communications with enforcers, Congress, other advocacy groups, and the media. Her work spans both antitrust and regulation, with industry expertise in electricity, petroleum, agriculture, airlines, telecommunications, and healthcare. Before joining AAI in 2001, Dr. Moss was at the Federal Energy Regulatory Commission, where she coordinated the agency's competition analysis for electricity mergers. From 1989 to 1994, she consulted in private practice in the areas of regulation and antitrust. Dr. Moss has spoken widely on various topics involving competition policy and enforcement, testified before Congress, appeared before state and federal regulatory commissions, and made numerous radio and television appearances. She is editor of *Network Access, Regulation and Antitrust* (2005). Dr. Moss is adjunct faculty in the Department of Economics at the University of Colorado at Boulder. She holds an MA degree from the University of Denver and a PhD from the Colorado School of Mines.

Hampton Newsome is an attorney with the Bureau of Consumer Protection at the Federal Trade Commission. His primary duties involve energy-related consumer labeling and green advertising claims. Before coming to the FTC, Mr. Newsome worked at the Nuclear Regulatory Commission where he specialized in environmental law and nuclear materials issues. He received his undergraduate degree from Duke University and his JD and master's degree in planning from the University of Virginia.

Ellen Nowak was first appointed to the Wisconsin Public Service Commission in July 2011 by Governor Scott Walker. She was reconfirmed for a new, six-year term beginning on March 1, 2013. Commissioner Nowak was named chairperson of the Public Service Commission of Wisconsin in March of 2015. She serves on the Executive Committee and the Board of Directors for the National Association of Regulatory Utility Commissioners (NARUC). Her duties at NARUC also include serving on the Committee on Energy Resources and the Environment and the Task Force on Environmental Regulation and Generation. Commissioner Nowak also serves on the Advisory Council to the Board of Directors for the Electric Power Research Institute, the Advisory Council for the Center for Public Utilities and the Advisory Committee for the Critical Consumers Issues Forum. Prior to her appointment, she served as the chief of staff to Waukesha County Executive Dan Vrakas. From 2002-2006, she served as legal counsel and subsequent chief of staff to the Speaker of the Wisconsin Assembly. From 1998-2002, Commissioner Nowak practiced business litigation at Mallery & Zimmerman SC in Milwaukee. Commissioner Nowak has a law degree from Marquette University and a bachelor of science from the University of Wisconsin–Milwaukee.

Ari Peskoe is the senior fellow in Electricity Law at the Harvard Environmental Policy Initiative, a non-partisan organization that provides legal analysis on a range of energy and environmental issues. Prior to joining the Policy Initiative, Mr. Peskoe was an attorney at a law firm in Washington, DC, where he litigated before the Federal Energy Regulatory Commission. He has written extensively about electricity regulation and recently wrote an article, published in the *Texas Journal of Oil, Gas, and Energy Law*, on the history and purpose of state regulation of utility rates and the implications for rooftop solar. He received his JD from Harvard Law School in 2011 and graduated from the University of Pennsylvania in 2003 with degrees in electrical engineering and business.

Nancy E. Pfund is founder and managing Partner of DBL Partners. She sponsors or sits on the board of directors of several companies, including SolarCity, Farmer's Business Network, Advanced Microgrid Solutions, Off-Grid Electric, Primus Power, The Muse, and, prior to their public offerings, Tesla Motors and Pandora. Ms. Pfund was recently featured in 2016 Fast Company's 100 Most Creative People in Business list; was featured #17 in the 2014 FORTUNE Inaugural World's Top 25 Eco-Innovators; is Chair of the Advisory Council of the Bill Lane Center for the American West at Stanford University; is a member of the Advisory Board of the Lawrence Berkeley National Laboratory and the UC Davis Center for Energy Efficiency, and is a Trustee of the National Geographic Society. She has been a lecturer in management at the Stanford Graduate School of Business and the Yale School of Management and is a C3E ambassador to the U.S. Clean Energy Education and Empowerment Program, led by the U.S. Department of Energy. Ms. Pfund received her BA and MA in anthropology from Stanford University, and her MBA from the Yale School of Management.

Karl R. Rábago is the executive director of the Pace Energy and Climate Center at the Elisabeth Haub School of Law, Pace University. Mr. Rábago serves as chair of the Board of the Center for Resource

Solutions, a San Francisco-based non-governmental organization that works to advance voluntary clean energy markets. He also sits on the Board of the Interstate Renewable Energy Council. Mr. Rábago is also co-director and principal investigator for the Northeast Solar Energy Market Coalition. His past positions include commissioner, Texas Public Utility Commission; deputy assistant secretary at the US Department of Energy; and vice president of Distributed Energy Services at Austin Energy. A graduate of Texas A&M University with a bachelor of business administration degree in business management, Mr. Rábago is an attorney (University of Texas Law School, JD with Honors) with post-doctorate degrees in environmental law (LLM, Pace University School of Law) and military law (LLM, US Army Judge Advocate General's School). A veteran of more than 12 years in the US Army, he served as an armored cavalry officer and member of the Judge Advocate General's Corps, and is Airborne and Ranger qualified.

Edith Ramirez was sworn in as a Commissioner of the Federal Trade Commission in April 2010 and became Chairwoman of the FTC in March 2013. At the FTC, Chairwoman Ramirez has focused on promoting competition and innovation in the technology and healthcare sectors, protecting consumers from deceptive and unfair practices, and safeguarding consumer privacy. Before joining the FTC, Chairwoman Ramirez was a partner in the Los Angeles office of Quinn Emanuel Urquhart & Sullivan, LLP, where she litigated complex business disputes, including intellectual property, antitrust, unfair competition, and advertising matters. She is a graduate of Harvard Law School, where she was an editor of the *Harvard Law Review*, and Harvard College.

Ann Rendahl is a Commissioner of the Washington State Utilities and Transportation Commission (UTC), appointed by Governor Jay Inslee in December 2014. She previously was the director of policy and legislation for the UTC. Prior to leading the UTC's Policy and Legislative Affairs Section, Commissioner Rendahl served as the director of the Administrative Law Division, as an administrative law judge for the UTC, and as an assistant attorney general representing the Utilities and Transportation Division. Commissioner Rendahl currently serves as the co-chair of the National Association of Regulatory Utility Commissioners (NARUC) Task Force on Transportation, leading a workgroup on railroad safety, and serves on NARUC's Committee on Electricity and Consumer Affairs. She is also the Chair of the Body of State Regulators for the California ISO's Energy Imbalance Market. Commissioner Rendahl is a graduate of Wellesley College and received a master's degree in public policy from the Graduate School of Public Policy at the University of California, Berkeley. She received her law degree from Hastings College of the Law, University of California, San Francisco.

Richard Schmalensee is the Howard W. Johnson Professor of Management and Economics Emeritus at the Massachusetts Institute of Technology (MIT) and served as the John C. Head III Dean of the MIT Sloan School of Management from 1998 through 2007. He was a member of the President's Council of Economic Advisers from 1989 through 1991 and served for 12 years as director of the MIT Center for Energy and Environmental Policy Research. His research has centered on industrial organization economics and its application to managerial and public policy issues, with particular emphasis on antitrust, regulatory, energy, and environmental policies. Professor Schmalensee is a fellow of the Econometric Society and the American Academy of Arts and Sciences. He was the 2012 Distinguished Fellow of the Industrial Organization Society. He has served on the Executive Committee of the American Economic Association and has been a director of the International Securities Exchange and

other corporations. He is currently a director of the International Data Group and the National Bureau of Economic Research, and chairman of the Board of Directors of Resources for the Future.

Patricia Schultheiss is an attorney advisor in the Office of Policy Planning at the Federal Trade Commission. Since she joined the FTC in 1980, she has served in many capacities, including as an advisor to the director of the Bureau of Consumer Protection and as an attorney advisor for antitrust to two commissioners. From 1987 to 1990, Ms. Schultheiss served as in-house counsel and director of policy for the American Pharmacists Association. Ms. Schultheiss received her BA with highest honors from The State University College of New York at Oneonta and her JD with high honors from Rutgers University School of Law-Newark, where she was editor-in-chief of the *Women's Rights Law Reporter*.

Richard Sedano is the director of the Regulatory Assistance Project's (RAP) U.S. programs. He advises state commissions and other decision-makers, often working with them in workshop settings, on energy efficiency, demand response, renewable energy, pricing, smart grid, transmission, and wholesale electric market issues. Prior to joining RAP in 2001, Mr. Sedano served as commissioner for nine years and held various engineering staff positions with the Vermont Department of Public Service. He also worked as an engineer in power generation for Philadelphia Electric Company. In November 2009, Mr. Sedano was awarded the National Association of Regulatory Utility Commissioners' Mary Kilmarx Award. In September 2011, the National Association of State Energy Officials (NASEO) presented him with an award for his service. Mr. Sedano served as chair of NASEO from 1998-2000. He is a member of the board of directors of Northeast Energy Efficiency Partnerships and co-chair of its Evaluation, Measurement, and Verification Forum. Mr. Sedano received his bachelor's in engineering from Brown University and his master's degree in engineering management from Drexel University.

John H. Seesel has been the FTC's associate general counsel for energy since December 2004. Mr. Seesel joined the Commission's staff in 1975 as an attorney in the Bureau of Competition. From 1977 through 1993, he occupied positions in Bureau of Competition management, including executive assistant to the bureau director and deputy assistant director of a merger litigation division. He then served as an attorney advisor to Commissioner Roscoe B. Starek, III, and to Commissioner Orson Swindle from 1993 to 2004. Mr. Seesel is a graduate of Harvard College and of the School of Law (Boalt Hall) at the University of California at Berkeley. He was a deputy attorney general for the State of California and a law clerk to the Chief Justice of California before joining the FTC staff.

Elaine Ulrich is a program manager at the Department of Energy where she leads the SunShot balance of systems/soft costs team. Her team works to reduce the non-hardware (soft costs) of solar, lower barriers to solar adoption, and foster market growth through support for state and local development and technical assistance programs; information and data assets; finance and business model development; workforce and training programs; and policy and regulatory analysis. A former American Physical Society/American Association for the Advancement of Science policy fellow, Dr. Ulrich has spent the past few years working on renewable energy. She previously held positions in the office of former U.S. Senator Ken Salazar, the U.S. House of Representatives Committee on Science and Technology, the Energy Department's Office of Strategic Planning and Analysis, and in the office of U.S. Representative Gabrielle Giffords, where she worked to build a comprehensive solar energy portfolio. Dr. Ulrich holds a BA in physics from Wellesley College and a PhD in optical science from the University of Arizona.

Michael Wara is an associate professor of law and Justin M. Roach, Jr. Faculty Scholar at Stanford Law School, a research fellow at the Program in Energy and Sustainable Development in Stanford's Freeman Spogli Institute for International Studies, a faculty fellow at the Steyer-Taylor Center for Energy Policy and Finance, and a center fellow at the Woods Institute for the Environment. Professor Wara is an expert on energy and environmental law and his research focuses on climate and electricity policy. Professor Wara's current scholarship lies at the intersection between environmental law, energy law, international relations, atmospheric science, and technology policy. Professor Wara, who received his JD from Stanford Law in 2006, was formerly a geochemist and climate scientist and has published work on the history of the El Niño/La Niña system and its response to changing climates, especially those warmer than today. The results of his scientific research have been published in premier scientific journals, including *Science* and *Nature*. Professor Wara joined Stanford Law in 2007 as a research fellow in environmental law and as a lecturer in law. Previously, he was an associate in Holland & Knight's Government Practice Group.

Jon Wellinghoff is the chief policy officer at SolarCity and oversees regulatory and legislative affairs on federal and state policy for the company. Mr. Wellinghoff was the longest-serving chairman of the Federal Energy Regulatory Commission (2009-2013), where he was known for his international expertise and thought leadership in energy policy, electric markets and the interface of disruptive energy systems with traditional utility structures. During this time, Mr. Wellinghoff worked to formulate new policies and rules to improve electric market efficiency and integrate new disruptive energy resources into wholesale energy markets. Prior to joining SolarCity, Mr. Wellinghoff served as a partner at the law firm Stoel Rives, where he provided knowledge and experience in energy law and the development of clean energy technology, consulting on energy policy with leaders in the U.S., China, Australia, and Europe. Mr. Wellinghoff holds a bachelor of science degree in mathematics from University of Nevada, a master of science degree in teaching mathematics from Howard University, and a Juris Doctor degree from Antioch School of Law.

Tim Woolf is the vice president of Synapse Energy Economics and has more than 30 years of experience analyzing technical and economic aspects of energy and environmental issues. Mr. Woolf's primary areas of focus include electricity industry regulation and planning, energy efficiency program design and policy analysis, technical and economic analyses of electricity systems, renewable resource technologies and policies, and clean air regulations and policies. Before returning to Synapse in 2011, he served four years as a commissioner at the Massachusetts Department of Public Utilities (2007-2011), where he oversaw a dramatic expansion of ratepayer-funded energy efficiency programs, the implementation of decoupled rates for electric and gas companies, the promulgation of net metering regulations, an assessment of smart grid pilot programs, and the review of long-term contracts for renewable energy. He also served as the president of the New England Conference of Public Utility Commissioners from 2009 to 2010. He is currently the lead technical advisor for the National Efficiency Screening Coalition, and he recently co-chaired a working group to prepare a study addressing the cost-effectiveness of demand response programs around the country on behalf of the U.S. Department of Energy and Federal Energy Regulatory Commission. Mr. Woolf holds an MBA from Boston University, a Diploma in Economics from the London School of Economics, and a BS in Mechanical Engineering and a BA in English from Tufts University.