

Biographies of Speakers and Moderators
2010 Endicott House Symposium
Policy Instruments for a New Economic Era:
Energy, Environmental, and Climate Change Challenges
August 23-25, 2010

Praveen Amar

Dr. Praveen Amar is the Director of Science and Policy at NESCAUM, a nonprofit association of state air pollution control agencies in the Northeast. His key area of expertise is to “translate” the implications of findings of science and developments in technology and environmental economics into workable and cost-effective policy options for the states in the Northeast. His current research includes two EPA STAR (Science to Achieve Results) grants with Georgia Institute of Technology and Massachusetts Institute of Technology on impacts of climate change on regional air quality and public health under alternative energy production and use scenarios, and a third STAR grant with Harvard University on investigating the role of uncertainty in public policy and regulatory decision-making. He has directed many NESCAUM projects on control of emissions of NO_x, SO₂, mercury and other hazardous air pollutants from the electricity and major industrial sectors in the U.S.

He has testified before the U.S. House and Senate on strategies to control fine particle and mercury emissions and associated public health benefits. He is currently serving on EPA’s Clean Air Scientific Advisory Committee (CASAC) review panel on secondary National Ambient Air Quality Standards (NAAQS) for SO₂ and NO_x. In 2009, he was appointed by the EPA Administrator, Ms. Lisa Jackson to serve on the EPA’s Board of Scientific Counselors (BOSC) Clean Air Committee that is charged to undertake external peer review of EPA’s overall research programs on ozone, fine particles, and hazardous air pollutants. In August 2010, he was appointed to serve as a member of the National Academy of Sciences-National Research Council’s *Board on Environmental Studies and Toxicology*. Before joining NESCAUM, Praveen worked for the California Air Resources Board for 15 years in various management positions in science, technology, and policy of air pollution. He received his Ph.D. in engineering from the University of California, Los Angeles (UCLA). He is licensed professional engineer in the State of California. He has coordinated, moderated, spoken at, or co-chaired each and every Endicott House Symposium since 1993.

George J. Antos

Dr. George J. Antos is currently the Director of the Catalysis and Biocatalysis Program in the Engineering Directorate at the National Science Foundation. This program funds a significant amount of fundamental research studies at U.S. universities each year. Many of the proposals submitted address the studies of biomass conversion to fuels and chemicals. George joined NSF in 2009 after a 33+ year career in industry with UOP LLC. This experience encompassed the research, development and commercialization of process, catalyst and material technologies for the petroleum refining and petrochemical industries. George has authored and co-authored over 160 US patents, and has developed

a large number of presentations and papers in the area. George is also an Adjunct Professor with the Chemical and Biological Engineering Department at the University of Wisconsin, Madison and is CEO of Catalyst Realizations, Inc., a consulting company. His education includes a B.S. in Chemistry from Iowa State University, and M.S. and Ph.D. degrees in Chemistry from Northwestern University.

Dallas Burtraw

Dallas Burtraw is Senior Fellow at Resources for the Future. His research includes the design of environmental regulation, the costs and benefits of environmental regulation, and the regulation of the electricity industry. Burtraw recently estimated the change in value of electricity generation companies, and the incidence of cost on households, of alternative approaches to implementing carbon dioxide (CO₂) emissions trading programs in the U.S. He has examined the cost-effectiveness of trading programs for nitrogen and sulfur dioxide, and of CO₂ emissions trading in the European Union (EU). He also has conducted integrated assessment modeling of nitrogen and sulfur dioxide emissions from the power sector including health and ecosystem effects and valuation. Burtraw holds a Ph.D. in economics and a master's degree in public policy from the University of Michigan and a bachelor's degree from the University of California, Davis.

Andrew Chu

Andrew Chu is Vice President, Marketing and Communications, at A123 Systems. In this role, he leads A123's corporate marketing organization. Since joining A123 in early 2003, he has served in multiple roles, including R&D, manufacturing support, applications engineering, program management, marketing and business development. More recently, he led the proposal team that resulted in a \$249M award from the U.S. Department of Energy to support the company's U.S. battery manufacturing. He has spent the last 15 years working on lithium ion batteries. Prior to joining A123 Systems, he was the Department Manager of the Energy Technologies Department at HRL (formerly Hughes Research Lab.) He holds a Ph.D. in Materials Science and Engineering from the University of Pennsylvania and two engineering Bachelor's degrees from the University of Michigan.

John M. Deutch

John Deutch is an Institute Professor at the Massachusetts Institute of Technology. Mr. Deutch has been a member of the MIT faculty since 1970, and has served as Chairman of the Department of Chemistry, Dean of Science, and Provost. Mr. Deutch has published over 160 technical publications in physical chemistry, as well as numerous publications on technology, energy, international security, and public policy issues.

John Deutch served as Director of Central Intelligence from May 1995-December 1996. From 1994-1995, he served as Deputy Secretary of Defense and served as Undersecretary of Defense for Acquisition and Technology from 1993-1994. John Deutch has also served as Director of Energy Research (1977-1979), Acting Assistant Secretary for Energy Technology (1979), and Undersecretary (1979-80) in the United States Department of Energy.

In addition, John Deutch has served on the President's Nuclear Safety Oversight Committee (1980-81); the President's Commission on Strategic Forces (1983); the White House Science Council (1985-89); the President's Intelligence Advisory Board (1990-93); the President's Commission on Aviation Safety and Security (1996); the President's Commission on Reducing and Protecting Government Secrecy (1996-1997); and as Chairman of the Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction (1998-99). He was a member of the President's Committee of Advisors on Science and Technology (1997-2001). He received the Aspen Strategy Group Leadership Award in 2004 and was the Phi Beta Kappa "Orator" at Harvard University, 2005. He is a member of the National Petroleum Council. In 2009 John Deutch received the MIT Gordon Y Billard award: "... for special service of outstanding merit performed for the Institute."

John Deutch serves as director for the following publicly held companies: Cheniere Energy, Citigroup, and Raytheon. He is a trustee of the Center for American Progress, the Museum of Fine Arts, Boston, Resources for the Future, and a life trustee the Urban Institute.

A. Denny Ellerman

Dr. Ellerman is an internationally recognized expert on energy and environmental economics with a particular focus on climate policy, emissions trading, and interactions with energy markets. He is part-time professor at the Robert Schumann Centre for Advanced Studies at the European University Institute in Florence, Italy, and is retired from MIT, where he was for many years executive director of the Center for Energy and Environmental Policy Research and of the Joint Program on the Science and Policy of Global Change. He is a co-author of the leading books on the US SO₂ and the EU CO₂ Allowance Trading Programs, *Markets for Clean Air: The US Acid Rain Program* and *Pricing Carbon: The European Emissions Trading Scheme*. He has a Ph.D. in political economy and government from Harvard University.

Tim Fagan

Mr. Fagan is Director of Public Policy at Public Service Enterprise Group. He is responsible for the identification and the development of corporate policy positions and the management of all corporate-wide policy plans. He joined PSEG in 1996 as the company was beginning to separate its utility operations from its other competitive services. Prior to his current role, he served as Director of Strategic Planning for the company. He has held a variety of other positions in the company, including marketing positions in its competitive energy service business and in its utility, PSE&G. Mr. Fagan earned a B.S. in Mechanical Engineering from Rutgers University and an MBA from New York University.

Richard Gibbs

Dr. Richard Gibbs developed both the New York State Automotive Emissions Laboratory and the NYS Bureau of Mobile Sources (BMS) regulatory programs in a thirty-five year career as a NYS-DEC Research Scientist. His experimental research studies focused on emissions of user- owned vehicles and his research group contributed fundamental

advances in the measurement of diesel particulate emissions and un-regulated emissions characterization. During his tenure as BMS Director, NYS adopted the California Low Emission Vehicle (LEV) program, implemented innovative technical measurement advances in the NYS Inspection/Maintenance program and coordinated implementation of diesel particulate filters on the entire fleet of about 4,500 MTA transit buses in New York City. As a member of EPA's *Mobile Sources Technical Advisory Committee* he co-authored recommendations for improved engine, vehicle and fuel testing capabilities at the EPA National Fuels and Vehicle Emissions Laboratory. He founded the NESCAUM Mobile Sources Committee and was member of CARB's International Diesel Retrofit Advisory Committee. Under NYS Senator Moynihan, he co-authored the environmental benefits in "*Benefits of Magnetically Levitated High-Speed Transportation for the United States*". Dr. Gibbs holds a B.Ch.E. from the University of Minnesota (1966) and Ph.D. in Chemical Engineering from Rensselaer Polytechnic Institute (1971), and is a licensed professional engineer in NYS. He is currently co-chair of the annual MIT-NESCAUM Endicott House Symposium Series, jointly organized by the MIT *Energy Initiative* and NESCAUM.

Daniel S. Greenbaum

Dan Greenbaum joined the Health Effects Institute as its President and Chief Executive Officer on March 1, 1994. In that role, Greenbaum leads HEI's efforts, supported jointly by U.S. EPA and industry, with additional funding from U.S. DOE, Federal Highway Administration, U.S. AID, the Asian Development Bank, and foundations, to provide public and private decision makers – in the U.S., Asia, Europe, and Latin America - with high quality, impartial, relevant and credible science about the health effects of air pollution to inform air quality decisions in the developed and developing world.

Greenbaum recently served on the U.S. National Research Council Committee on *The Hidden Costs of Energy*. He has been a member of the NRC *Board of Environmental Studies and Toxicology* and vice chair of its *Committee for Air Quality Management in the United States*. Greenbaum also chaired the EPA Blue Ribbon Panel on Oxygenates in Gasoline which issued the report *Achieving Clean Air and Clean Water* and EPA's Clean Diesel Independent Review Panel, which reviewed technology progress in implementing the 2007 Highway Diesel Rule.

Greenbaum has three decades of governmental and non-governmental experience in environmental health. Just prior to coming to HEI, he served as Commissioner of the Massachusetts Department of Environmental Protection from 1988 to 1994, where he was responsible for the Commonwealth's response to the Clean Air Act, as well as its award-winning efforts on pollution prevention, water pollution and solid and hazardous waste. Greenbaum holds Bachelor's and Master's degrees from MIT in City Planning.

Jason S. Grumet

Jason Grumet is Founder and President of the Bipartisan Policy Center. Throughout his career, Jason has worked at the intersection of policy and politics. In 2007, with the leadership of former U.S. Senate Majority Leaders Howard Baker, Tom Daschle, Bob Dole and George Mitchell, he founded the Bipartisan Policy Center (BPC) to develop and promote bipartisan solutions to the country's most difficult public policy challenges. Currently, the BPC conducts projects in the areas of energy and climate change, national and homeland security, health care, science and transportation policy. Since 2001, Jason has directed the National Commission on Energy Policy (NCEP). NCEP, now a project of the BPC, has released a number of significant studies and continues to actively advocate for its policy recommendations in Congress and with the Administration. Most recently, NCEP worked with Congress on key aspects of the Energy Independence and Security Act of 2007. Prior to joining the Commission, Jason worked for NESCAUM (Northeast States for Coordinated Air Use Management), a nonprofit association of air quality agencies in the Northeast.

Jason is a frequent witness at Congressional hearings and has made appearances on NBC News, CNN, MSNBC, The News Hour with Jim Lehrer, and National Public Radio. He has also been featured in the New York Times, Washington Post, Wall Street Journal, Financial Times, and Los Angeles Times, among other leading publications. In 2007 and 2008 Jason served, in a volunteer capacity, as Chair of the Energy and Environment Policy Group for the Obama for President campaign.

Jason received a Bachelor of Arts degree from Brown University and his Juris Doctorate from Harvard University. He lives with his wife, Stephanie, and their three children in Washington, D.C.

Lisa Heinzerling

Lisa Heinzerling is the Associate Administrator of the U.S. Environmental Protection Agency's Office of Policy, Economics, and Innovation. Prior to this, she was a member of the Presidential Transition Team for EPA, and served as Senior Climate Policy Counsel since January 21 of this year.

After finishing law school, where she served as editor-in-chief of the *University of Chicago Law Review*, Lisa clerked for Judge Richard A. Posner of the U.S. Court of Appeals for the Seventh Circuit and Justice William J. Brennan, Jr., of the U.S. Supreme Court. She was a Skadden Fellow at Business & Professional People for the Public Interest, in Chicago, and for three years practiced environmental law in the Massachusetts Attorney General's office. She served as a law professor at Georgetown since 1993. She has been a visiting professor at the Harvard and Yale law schools.

Her scholarship in environmental law has been published in, among other places, the *Yale Law Journal*, *Harvard Law Review*, *University of Chicago Law Review*, and *Georgetown Law Journal*. She is the author, with Frank Ackerman, of *Priceless: On Knowing the Price of Everything and the Value of Nothing* (The New Press 2004). She was the lead author of the winning briefs for petitioners in *Massachusetts v. EPA*, in which the Supreme Court held that the Clean Air Act gives EPA the authority to regulate greenhouse gases.

Peter M. Iwanowicz

Peter Iwanowicz is the Deputy Secretary for the Environment in the Office of New York State Governor David A. Paterson. Peter's responsibilities include representing the Governor on a range of environmental and natural resource policy matters.

Prior to this current post, Peter also served as the Assistant Secretary for the Environment and was the very first Director of the New York State Office of Climate Change which was created in 2007. Peter's responsibilities there included overseeing the state's involvement in the Regional Greenhouse Gas Initiative (RGGI), including serving as the chair of the RGGI Auction Committee. In addition, Peter was the New York State representative to the International Carbon Action Partnership.

Before joining state government, Peter served as Vice President for the American Lung Association of New York State, where he directed the association's advocacy efforts. Peter has also worked for the San Francisco-based Resource Renewal Institute promoting sustainability policies in New York State and also worked for Albany, New York based Environmental Advocates of New York (EA-NY).

Peter graduated from Siena College (Loudonville, New York) and he lives in Bethlehem, NY with his wife and two children.

Ellen Kurlansky

Ms. Kurlansky is a policy analyst in the U.S. Environmental Protection Agency's (EPA's) Office of Air and Radiation. She is responsible for policies related to the environmental impact of energy development and use including the electricity-generating industry. She has broad experience in environmental and energy policy gained from work at other EPA offices and at other government agencies, at non-profit organizations, and as a consultant. Ms. Kurlansky, who was a Peace Corps volunteer in Morocco, has a B.A. in Political Science from Syracuse University and an M.A. in Economics from George Washington University.

Dr. Arun Majumdar

Arun Majumdar became the first Director of the Advanced Research Projects Agency – Energy (ARPA-E), the country's only agency devoted to transformational energy research and development, in October 2009.

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

At Berkeley Labs and UC Berkeley, Majumdar helped shape several strategic initiatives in the areas of energy efficiency, renewable energy, and energy storage. He also testified before Congress on how to reduce energy consumption in buildings. Majumdar has also

served on the advisory committee of the National Science Foundation's engineering directorate, was a member of the advisory council to the materials sciences and engineering division of the Department of Energy's Basic Energy Sciences, and was an advisor on nanotechnology to the President's Council of Advisors on Science and Technology.

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

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

Sam Napolitano

Mr. Napolitano is the Director of the Clean Air Markets Division in EPA's Air Office. This group develops and runs air emission cap and trade programs that reduce sulfur dioxide and nitrogen oxides emissions from the electric power industry to protect public health, welfare, and the environment. The Division also serves as a focal point for the design, evaluation, and training of others on approaches to regional air emission reduction and other environmental trading programs (such as the control of greenhouse gases) under consideration by Congress, state and local governments, and foreign countries (e.g., China, Canada, and Chile). Mr. Napolitano has 33 years of experience working on pollution issues related to air, water, and waste; over 26 years of that experience has been at EPA. For the last 16 years at EPA, he has worked in the Office of Air and Radiation. Mr. Napolitano also spent two years as a Division Director in the Office of the Secretary of Defense developing environmental compliance policies for military installations worldwide, and five years as a Vice-President for the Risk Assessment and Economic Analysis Unit of ICF Incorporated.

Richard G. Newell

Dr. Richard G. Newell was sworn in on August 3, 2009 as the seventh Administrator of the U.S. Energy Information Administration.

As Administrator of EIA, Richard has overall responsibility for programs that collect, analyze, and disseminate independent and impartial energy information to promote sound policy-making, efficient markets, and public understanding of energy and its interaction with the economy and the environment. EIA provides a wide range of information and data products covering energy production, stocks, demand, imports, exports, and prices. EIA also prepares analyses and special reports on topics of current interest.

Richard is on leave from his position as the Gendell Associate Professor of Energy and Environmental Economics at Duke University's Nicholas School of the Environment. Previously he served as the Senior Economist for energy and environment on the President's Council of Economic Advisers. He also spent many years as a Senior Fellow at Resources for the Future (RFF), an independent, non-partisan environmental and resource economics research institution in Washington, DC. He has published widely on the economics of markets and policies for energy, the environment, and related

technologies, particularly alternatives for reducing greenhouse gas emissions and achieving other energy and environmental goals.

Prior to his confirmation, Richard was a Research Associate of the National Bureau of Economic Research, a University Fellow of RFF, and on several boards including the Journal of Environmental Economics and Management, the journal Energy Economics, the Association of Environmental and Resource Economists, and the Automotive X-Prize. He has served on several National Academy of Science expert committees related to energy, environment, and innovation.

Richard holds a Ph.D. from Harvard University in environmental and resource economics. He also holds a M.P.A. from Princeton University's Woodrow Wilson School of Public and International Affairs, and a B.S. in materials engineering and a B.A. in philosophy from Rutgers University.

Mary D. Nichols

Mary D. Nichols, JD, was appointed Chair of the California Air Resources Board in July 2007, a post she held previously under Gov. Edmund H. Brown Jr. from 1979 to 1983. At CARB she is responsible for implementing California's landmark greenhouse gas emissions legislation as well as setting air pollution standards for motor vehicles and fuels. After graduating from Cornell University and Yale Law School Ms. Nichols practiced environmental law in Los Angeles, bringing cases on behalf of environmental and public health organizations to enforce state and federal clean air legislation. President Clinton appointed her to head the Office of Air and Radiation at US EPA, where she was responsible for, among many other regulatory breakthroughs, the acid rain trading program and setting the first air quality standard for fine particles. She also served as California's Secretary for Natural Resources from 1999 to 2003. Prior to her return to the ARB, Ms. Nichols was Professor of Law and Director of the Institute of the Environment at UCLA.

Kenneth J. Ostrowski

Kenneth J. Ostrowski is a Director in McKinsey's Atlanta Office with over 26 years of consulting experience. Mr. Ostrowski is a leader in McKinsey's North America Electric Power and Natural Gas Practice. Over the course of his career, he has served electric power, natural gas, and industrial clients in aligning the strategic, organizational, regulatory, and operational elements necessary to succeed. Mr. Ostrowski co-authored two recent McKinsey reports "Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost" and "Unlocking Energy Efficiency in the U.S. Economy". Mr. Ostrowski also co-leads McKinsey's U.S. Utility roundtables on procurement, generation, and T&D, which assembles leading company executives to discuss key issues facing the industry in these areas.

Before joining McKinsey & Company, Mr. Ostrowski was an intern at the Congressional Budget Office, and completed the two-year Financial Management Program at General Electric Company. He received an M.B.A. in General Management with honors from Harvard Business School and a Bachelor's Degree in Finance, magna cum laude, from the University of Notre Dame.

Vickie Patton

Vickie Patton is the General Counsel at Environmental Defense Fund where she serves as the chief legal officer and manages the organization's national and regional clean air programs. Environmental Defense Fund is a national nonpartisan, nonprofit environmental advocacy organization representing over 700,000 members. From 1990 to 1998, Ms. Patton worked at the U.S. Environmental Protection Agency's Office of General Counsel in Washington, D.C. where she provided legal counsel on a variety of national air quality initiatives. Ms. Patton has participated in a number of major Clean Air Act cases and authored a variety of publications on the Clean Air Act. She earned her B.S. in Hydrology from the University of Arizona and her J.D. from the New York University School of Law. Vickie lives in Colorado with her husband Jim and their children Sandra and Grant.

Steve Przesmitzki

Steve Przesmitzki manages fuel and lubricant related research projects within the United States Department of Energy's Vehicle Technologies Program. He also closely works with DOE's Biomass Program on joint projects related to non-petroleum based fuels, such as intermediate ethanol fuel blends. Steve's responsibility is to support the development of energy policy and management of research programs as applied to fuels and lubricants in transportation.

Steve's prior work experience includes two years as a project manager for DOE's National Renewable Energy Laboratory and 14 years in vehicle powertrain design and development at Ford Motor Company. While at Ford, he spent significant time developing powertrains for flexible-fuel vehicles as well as developing on-board diagnostic systems.

Steve holds a PhD from the Massachusetts Institute of Technology, a MS from the University of Michigan, and a BS from Kettering University; all in Mechanical Engineering. He is also registered as a Professional Engineer.

Dan W. Reicher

Dan W. Reicher has over 25 years of experience in energy and environmental technology, policy, finance and law, including serving as Assistant Secretary of Energy for Energy Efficiency and Renewable Energy at the U.S. Department of Energy in the Clinton Administration. He recently was a member of President Obama's Transition Team where he focused on the energy portions of the stimulus package.

Mr. Reicher joined Google in 2007 where he serves as Director of Climate Change and Energy Initiatives focused on policy, investment, engineering and information to advance clean energy and confront climate change. Mr. Reicher is also a member of the National Academy of Sciences Board on Energy and Environmental Systems, co-chairman of the board of the American Council on Renewable Energy, and a member of the boards of the American Council for an Energy Efficient Economy, the Apollo Alliance, and the University of California Davis Energy Efficiency Center. Prior to his position at Google, Mr. Reicher served as President and Co-Founder of New Energy Capital Corp. and

Executive Vice President of Northern Power Systems. From 1997-2001, Mr. Reicher was Assistant Secretary of Energy for Energy Efficiency and Renewable Energy at the U.S. Department of Energy (DOE). As Assistant Secretary, he directed annually more than \$1 billion in investments in energy research, development and deployment related to renewable energy, distributed generation and energy efficiency. Prior to his position as DOE Assistant Secretary, Mr. Reicher was the Department's Chief of Staff (1996-97), Assistant Secretary of Energy for Policy (Acting) (1995-1996), and Deputy Chief of Staff and Counselor to the Secretary (1993-1995).

Prior to his roles at the Department of Energy and in the business community, Mr. Reicher was a senior attorney with the Natural Resources Defense Council and Assistant Attorney General for Environmental Protection in Massachusetts, a law clerk to a federal district court judge in Boston, a legal assistant in the Hazardous Waste Section of the U.S. Department of Justice, and a staff member of President Carter's Commission on the Accident at Three Mile Island. Mr. Reicher holds a B.A. in Biology from Dartmouth College and a J.D. from Stanford Law School. He also studied at Harvard's Kennedy School of Government and MIT. Mr. Reicher was a member of the first group on record to kayak the Yangtze River in China and a National Geographic sponsored expedition that was the first to navigate the entire 1888 mile Rio Grande.

Karl Simon

Mr. Simon is the Director of the Compliance and Innovative Strategies Division of the Office of Transportation and Air Quality at the U.S. Environmental Protection Agency. His role includes managing the certification, registration and compliance activities associated with all engines and fuels sold in the United States. Some of the major activities he has been extensively involved in are the 2004 Clean Nonroad Engine and Fuel Program, the National LEV program, the Tier 2 Gasoline and Clean Highway Diesel Programs, and the 1998 heavy-duty diesel engine enforcement case. He also works on international mobile source harmonization issues. Prior to his current position, he was the Assistant Director for the Office, worked in the mobile source recall branch at EPA, and the submarine construction and design division at Newport News Ship building and Dry Dock Company.

Mr. Simon holds a Bachelor of Science in Aerospace Engineering from the University of Notre Dame, a law degree from the George Mason University School of Law, and a Masters in Environmental Law from George Washington University.

Daniel Sperling

Daniel Sperling is Professor of Civil Engineering and Environmental Science and Policy, and founding Director of the Institute of Transportation Studies at the University of California, Davis. He also holds the transportation seat on the California Air Resources Board, where he plays a prominent role in designing and adopting climate policies for vehicles, fuels, and urban travel. Since 2009, he has been a keynote speaker at 30 universities and conferences, featured on the Jon Stewart Daily Show, NPR's Science Friday, Talk of the Nation, and Fresh Air, and published op-eds in the New York Times, Washington Post, and LA Times. He is author or editor of 200+ papers and reports and

12 books (including *Two Billion Cars*, Oxford University Press), has served on 13 National Academies committees, was selected as a National Associate of the National Academies, recently chaired the Future of Mobility committee of the (Davos) World Economic Forum, testified 7 times to the US Congress on alternative fuels and advanced vehicle technology, and was a lead author on the United Nations' Intergovernmental Panel on Climate Change, which shared the 2007 Nobel Peace Prize with former Vice President Al Gore.

Professor Sperling earned his Ph.D. in Transportation Engineering from the University of California, Berkeley (with minors in Economics and Energy & Resources) and his B.S. in Environmental Engineering and Urban Planning from Cornell University. Professor Sperling worked two years as an environmental planner for the US Environmental Protection Agency and two years as an urban planner in the Peace Corps in Honduras.

Gail E. Tverberg

Gail E. Tverberg is President of Tverberg Actuarial Services consulting firm and Editor of *The Oil Drum* (theoildrum.com), a web forum that discusses issues related to “Energy and Our Future”. She has written extensively on the likely financial impacts of resource depletion. She also provides consulting services to a number of actuarial organizations regarding resource depletion issues and their likely impact on insurance companies and the economy in general. Ms. Tverberg is a Fellow of the Casualty Actuarial Society and a Member of the American Academy of Actuaries. She has over thirty years of insurance company and consulting experience.

Johanna Wellington

Johanna leads a broad portfolio of advanced technology research focused on sustainable energy and water solutions. Specific research focus areas include renewables, carbon management, energy efficiency, smart grid enhancements, and low-cost water solutions.

Johanna joined GE Power Systems in 1992 as a Combustion Design Engineer. During her 6+ year tenure in Combustion Engineering, Johanna gained a strong technical foundation, earned her blackbelt certification and held roles of increasing responsibility. In 1998 she joined the Power Generation Technology Laboratory, first as Technical Leader then as Lab Manager. Johanna joined the Quality Organization in 2000 as a Master Blackbelt. In 2002 she accepted the role of General Manager, Accessory Systems Engineering and in 2004, she became the General Manager for the Generator & Electrical Systems Engineering Department. In March of 2010, Johanna joined the Research Center in her current role as Advanced Technology Leader for Sustainable Energy.

Johanna earned a BS in Mechanical Engineering from Union College in 1992 and a Masters in Engineering from Rensselaer Polytechnic Institute in 1998.

Susan Wierman

Susan Wierman has been Executive Director of the Mid-Atlantic Regional Air Management Association (MARAMA) since 1996. MARAMA promotes regional collaboration among ten state and local air quality agencies, helps member agencies train staff and develop regional emissions inventories, and supports the Mid-Atlantic Diesel

Collaborative. Before joining MARAMA, Susan served for eight years as Deputy Director for the State of Maryland's air pollution control program. She began working in air quality planning in 1977 for the State of Minnesota. Susan is a Fellow Member of the Air and Waste Management Association and serves on the Editorial Advisory Committee for EM Magazine. She holds BA and Masters degrees in Urban Planning from the University of Washington in Seattle and a Certificate in Continuing Engineering Studies from the Johns Hopkins University.

Kurt E. Yeager

Kurt E. Yeager retired as President and Chief Executive Officer of the Electric Power Research Institute (EPRI) in September 2004. Since retiring from EPRI, Mr. Yeager is serving as Executive Director of the non-profit Galvin Electricity Initiative that is focused on transforming the reliability and value of U.S. electricity service. Mr. Yeager is a Fellow of the American Society of Mechanical Engineers and has served on several National Academy of Engineering Committees and the Energy Research Advisory Board to the Secretary of Energy. He is now also serving as a Convening Lead Author for the International Institute of Applied Systems Analysis (IIASA) "Global Energy Assessment" report to the United Nations and the World Bank. Mr. Yeager has authored over 200 technical papers and publications on energy and environmental topics. Most recently, he co-authored with Bob Galvin the 2008 McGraw-Hill published book entitled, "Perfect Power".