# The National Academies of SCIENCES • ENGINEERING • MEDICINE

## Division of Behavioral and Social Sciences and Education Board on Environmental Change and Society

## SPEAKER BIOSKETCHES April 28, 2016

#### **MODERATORS**:

RICHARD H. MOSS (Chair) is a senior scientist at Pacific Northwest National Laboratory's Joint Global Change Research Institute, located at the University of Maryland in College Park, MD. Moss's research focuses on understanding how individuals and organizations use scientific information about climate change and other environmental phenomena in making decisions. His research has included tailoring climate and adaptation science to better fit decision requirements – for example by integrating climate science and decision support scenarios, and developing methods for decision-oriented vulnerability assessments. He has also focused on model- and expert-judgment-based methods for characterizing uncertainty and confidence in scientific information. Dr. Moss has also held several public service positions, including as Director of the office coordinating the US Government's climate and global change research, spanning the Clinton and Bush Administrations. He served as a technical support director, author, and review editor for the Intergovernmental Panel on Climate Change (IPCC), as well as chair of the IPCC task group on scenarios. He was director of climate and energy programs at the World Wildlife Fund and the UN Foundation. Dr. Moss also played multiple roles for the US National Climate Assessment (NCA), including as chair of the NCA scenarios working group, coconvening lead author of the decision support resources chapter, and lead author of a special report that provided recommendations on the next phases of the sustained NCA process. He is a fellow of the American Society for the Advancement of Science and the Aldo Leopold Leadership Program. He received his B.A. from Carleton College and his Ph.D. and M.P.A. from Princeton University in public policy.

J. TIMMONS ROBERTS (BECS Member) is Ittleson Professor of Environmental Studies and Sociology at Brown University, where he was Director of the Center for Environmental Studies from 2009 to 2012. He is a Non-Resident Senior Fellow at the Brookings Institution. He taught at the College of William and Mary and directed its Program in Environmental Science and Policy from 2001 to 2009, and before that he held a joint appointment in Latin American Studies and Sociology and co-directed the Environmental Studies program at Tulane University from 1991 to 2001. Dr. Timmons was a James Martin 21st Century Professor at Oxford University's Environmental Change Institute in 2006-2007, and a Research Fellow at William and Mary's Institute for the Theory and Practice of International Relations in 2008-2009. He received his B.A. in biology (with research in tropical and temperate ecology) from Kenyon College and his Ph.D. in sociology's program in comparative international development from Johns Hopkins University.

### **SPEAKERS**

Joe Aldy is an Associate Professor of Public Policy at the John F. Kennedy School of Government at Harvard University, a Visiting Fellow at Resources for the Future, a Faculty Research Fellow at the National Bureau of Economic Research, and a Senior Adviser at the Center for Strategic and International Studies. He is also the Faculty Chair for the Regulatory Policy Program at the Mossavar-Rahmani Center for Business and Government. His research focuses on climate change policy, energy policy, and mortality risk valuation. In 2009-2010, Aldy served as the Special Assistant to the President for Energy and Environment, reporting through both the National Economic Council and the Office of Energy and Climate Change at the White House. Aldy was a Fellow at Resources for the Future from 2005 to 2008 and served on the staff of the President's Council of Economic Advisers from 1997 to 2000. He also served as the Co-Director of the Harvard Project on International Climate Agreements, Co-Director of the International Energy Workshop, and Treasurer for the Association of Environmental and Resource Economists before joining the Obama Administration. He holds a PhD in economics from Harvard University, a Master of Environmental Management degree from the Nicholas School of the Environment, and a BA from Duke University.

**Keya Chatterjee** is Executive Director of US Climate Action Network (USCAN), where she works to build support for climate action. Prior to joining USCAN, Keya served as Senior Director for Renewable Energy and Footprint Outreach at the World Wildlife Fund, as well as a Climate Change Specialist at USAID. Keya also worked at NASA headquarters, communicating research results on climate change. Keya recently appeared in the documentary 'Disruption,' promoting the People's Climate March, and her commentary on climate change policy and sustainability issues has been quoted in dozens of media outlets including USA Today, the New York Times, Fox News, the Associated Press, The Washington Post, and NBC Nightly News. She is the author of the book The Zero Footprint Baby: How to Save the Planet While Raising a Healthy Baby. Keya received her Master's degree in Environmental Science, and her Bachelor's in Environmental Science and Spanish from the University of Virginia.

**Leon Clarke** is an expert in the cross-disciplinary analysis of issues relating to energy, technology, policy, and climate change. Dr. Clarke is currently a Senior Scientist and leads the Integrated Modeling and Energy Group at the Joint Global Change Research Institute (JGCRI), a collaboration between the University of Maryland and the Pacific Northwest National Laboratory (PNNL). Dr. Clarke's current activities focus on the evolution of national and international energy and agricultural systems, energy technology deployment and technological advance, scenario analysis, international climate policy, and integrated assessment of climate impacts. Dr. Clarke has served in a range of national and international leadership roles, including coordinating lead author for the Intergovernmental Panel on Climate Change (IPCC), member of the National Academy Study on America's Climate Choices, and coordinator of several multi-institution studies exploring energy, technology, policy, and climate change. Prior

to joining PNNL, Dr. Clarke worked as a decision scientist at Lawrence Livermore National Laboratory, evaluated utility demand-side management programs at Pacific Gas & Electric Company, and worked in energy consulting. Dr. Clarke holds Ph.D. and M.S. degrees in Engineering Economic Systems and Operations Research from Stanford University and B.S. and M.S. degrees in Mechanical Engineering from U.C. Berkeley.

**Thomas Dietz** is a professor of Sociology and Environmental Science and Policy at Michigan State University. Dietz has served at the National Research Council as chair of the U.S. National Research Council Committee on Human Dimensions of Global Change and the Panel on Public Participation in Environmental Assessment and Decision Making, as well as the vice chair of the Panel on Advancing the Science of Climate Change of the America's Climate Choices study. His current research examines the human driving forces of environmental change, environmental values and the interplay between science and democracy in environmental issues. He holds a Ph.D. in ecology from the University of California, Davis, and a bachelor of general studies from Kent State University.

**Nathan Hultman** is Director of the Center for Global Sustainability and Associate Professor at the University of Maryland School of Public Policy. He is also associate director of the Joint Global Change Research Institute, a collaboration between the University of Maryland and the Pacific Northwest National Laboratory. From 2014-2016, Hultman worked at the White House on the Obama Administration's climate and energy policy team. During this time, he helped develop the US 2025 climate target, worked on U.S. bilateral engagements with China, India, Brazil and others, and participated in the international climate negotiations in Lima and Paris. His current research focuses on national climate target-setting and assessment, U.S. emissions mitigation policy, energy technology transitions in emerging economies, and international climate policy. He holds an M.S. and Ph.D. in Energy & Resources from the University of California, Berkeley and a B.A. in Physics.

**Gavin Schmidt** is the director of the NASA Goddard Institute of Space Studies (GISS) and principal investigator for the GISS ModelE Earth System Model, a series of coupled atmosphereocean models with the ability to simulate different configurations of atmospheric, oceanic, and land surface components. Dr. Schmidt's research interests center on understanding climate variability, both its internal variability and the response to external forcing, as well as how paleo-climate records might inform current climate change. Prior to GISS, Dr. Schmidt worked at the Center for Climate Systems Research at Columbia University, and was a postdoctoral researcher at the Centre for Climate and Global Change Research at McGill University. He co-founded the climate blog realclimate.org and co-authored the book *Climate Change: Picturing the Science*. Dr. Schmidt received his Ph.D. from University College in London and B.A. in Mathematics from Oxford University.

**<u>Reed Schuler</u>** is a member of the Secretary of State's Policy Planning Staff at the U.S. Department of State, where he covers energy, climate change, environment, health, development, oceans, and science and technology. He previously worked at as a member of the U.S. negotiating team for the Paris Climate Agreement. Reed spent a year in China as a Fulbright Fellow, where he conducted research in urban development, transportation, and sustainability. After his Fulbright research, he led an energy efficiency and renewable energy strategy project in Boston with the social impact consulting group New Sector Alliance and the environmental NGO Mass Audubon. Next, Reed started and managed an innovative, multi-sector behavior change and energy efficiency program for the Baltimore Office of Sustainability and the Baltimore Community Foundation, developing systems to build the market for energy retrofits, learn from patterns of residential energy consumption, give people better data about their energy usage, and help communities across Baltimore reduce their energy consumption and costs. He also consulted for the economic development social enterprise KickStart in Dar es Salaam, Tanzania, and worked with the building sustainability and transparency platform startup Honest Buildings and the Environmental Defense Fund during law school. Reed is a graduate of Yale Law School, where he was an Associate Fellow with the Yale World Fellows Program.

Jennie Stephens is the Blittersdorf Professor of Sustainability Science and Policy at the University of Vermont's Rubenstein School of Environment and Natural Resources and the College of Engineering and Mathematical Sciences. Professor Stephens' research, teaching, and community engagement focus on socio-political aspects of energy technology innovation, electricity system change, climate change communication, and facilitating social learning in the transition from fossil-fuel to renewables based energy systems. She has contributed to understanding the social dynamics of wind power, carbon capture and storage, and smart grid, and brings experience in stakeholder engagement and communication among experts, practitioners, academics, and the public. Professor Stephens was previously on the faculty at Clark University, and she did post-doctoral research at Harvard's Kennedy School. She earned her PhD at Caltech in Environmental Science and Engineering and her BA at Harvard in Environmental Science and Public Policy.

**Michael Vandenbergh** is a leading scholar in environmental and energy law whose research explores the relationship between formal legal regulation and informal social regulation of individual and corporate behavior. His recent work focuses on the development of interdisciplinary teams to examine the role that private governance can play in bypassing climate policy gridlock. His work with Vanderbilt's Climate Change Research Network focuses on household sector energy use and carbon emissions, and his corporate work explores the wide range of legal, social and economic influences on firm environmental and energy behavior. Before joining Vanderbilt's law faculty, Professor Vandenbergh was a partner at a national law firm in Washington, D.C. He served as Chief of Staff of the U.S. Environmental Protection Agency from 1993 to 1995. In addition to directing Vanderbilt's Climate Change Research Network, Professor Vandenbergh serves as co-director of the law school's Energy, Environment and Land Use Program. He received his J.D. from the University of Virginia and his B.A. in zoology from the University of North Carolina – Chapel Hill.

**David Victor** is a professor at the School of Global Policy and Strategy at UC San Diego and director of the School's Laboratory on International Law and Regulation. His research focuses on highly regulated industries, such as electric power, and how regulation affects the operation

of major energy markets. Prior to joining the faculty at UCSD Victor served as director of the Program on Energy and Sustainable Development at Stanford University where he was also a professor at Stanford Law School. At Stanford he built a research program that focused on the energy markets of the major emerging countries—mainly Brazil, China, India, Mexico and South Africa. He is author of *Global Warming Gridlock*, which explains why the world hasn't made much diplomatic progress on the problem of climate change while also exploring new strategies that would be more effective. Earlier in his career he directed the science and technology program at the Council on Foreign Relations in New York and led the International Institute for Applied Systems Analysis in Austria on one of the first major assessments of the effectiveness of international environmental law. He is a member of the advisory council for Nature Climate Change, a board member of Climatic Change, and joined the board of the Electric Power Research Institute in 2013. Victor received his Ph.D. in political science from the Massachusetts Institute of Technology and an A.B. in history and science from Harvard University.