



MIT Center for Energy and
Environmental Policy Research

Fall 2023 Research Workshop

October 2-3, 2023
Hotel Washington
Washington, D.C.

BIOGRAPHIES: Speakers and Moderators



STEPHEN ANSOLABEHERE

Frank G. Thompson Professor of Government
Harvard Law School
Harvard University

Stephen Ansolabehere is the Frank G. Thompson Professor of Government at Harvard. He is an expert on democracy and representation in the United States. He is the author of five books, including *Cheap and Clean: How Americans Think About Energy in the Age of Global Warming* (2014), and *American Government* (2022), and has published academic research in a wide range of fields, including political science, economics, statistics, law, and environmental policy.

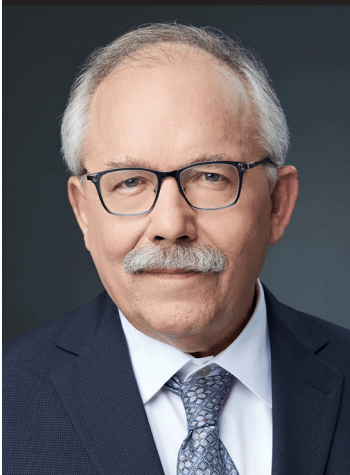
He leads the Salata Institute's Research Cluster on Strengthening Communities for Changing Energy Systems. He led the Roosevelt Project's case study of Southwest Pennsylvania and currently is leading the Roosevelt Project study of the Grid.



SARA FERRY

Research Scientist and Group Leader, Fusion Materials and Components
MIT Plasma Science and Fusion Center
Massachusetts Institute of Technology

Sara Ferry is the fusion materials and components group leader at the MIT Plasma Science and Fusion Center. Prior to joining the PSFC in 2019, her work was focused on nuclear materials for advanced fission applications. Today, her research centers on advancing the technological readiness of the various materials, components, and systems that will be needed to make commercial fusion a reality. Sara's core research projects are focused on the experimental development of molten salt tritium breeding blankets, modeling of the tritium fuel cycle, studying the proliferation risks of fusion power, development of damage-resistant first wall materials and disruption-tolerant vacuum vessels, and the optimization of novel ceramic composites for use as structural materials in a fusion power plant. She co-chairs three U.S. roadmapping efforts that are underway to define public research programs in fusion fuel cycles, breeding blankets, and materials and serves on the U.S. Fusion Materials Coordinating Committee. Sara holds a dual S.B., an S.M., and a Ph.D. from MIT.



DAVID A. FOSTER

Visiting Scholar
MIT Energy Initiative
Massachusetts Institute of Technology

David Foster currently serves as a Distinguished Associate for the Energy Futures Initiative, an energy policy think tank, led by former U.S. Energy Secretary Dr. Ernest Moniz. He is also a Visiting Scholar at the Massachusetts Institute of Technology's Energy Initiative. Previously, Foster served as Senior Advisor to U.S. Secretary of Energy Moniz from 2014-2017 on energy, environmental, climate, economic development, workforce development and labor relations issues.

Prior to working at the Department of Energy, David Foster served as the founding Executive Director of the BlueGreen Alliance (BGA), a strategic partnership of 14 of America's most important unions and environmental organizations with a combined membership of 14.5 million. From 1990-2006, he was the Director of United Steelworkers union (USW) District #11, a 13 state region based in Minneapolis, MN.

Since 2009 Foster has served on the Board of Directors of Kaiser Aluminum Corporation and, since 2006, the Board of Directors of Oregon Steel Mills and its successor, Evraz, North America. From 2003-2010, he taught graduate classes on globalization, sustainability, and labor relations at the Carlson School of Management at the University of Minnesota in the Twin Cities and at the University of Minnesota at Duluth in the Masters in Advocacy and Political Leadership.



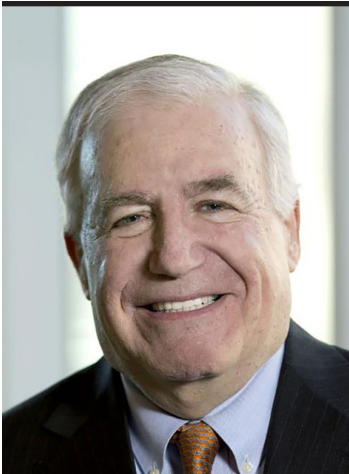
JOSHUA HODGE

Executive Director, MIT Center for Energy and Environmental Policy Research
Lecturer, Sloan School of Management
Massachusetts Institute of Technology

Joshua Hodge is the Executive Director at the MIT Center for Energy and Environmental Policy Research (CEEPR) and a Lecturer at the MIT Sloan School of Management. His areas of expertise include domestic and international climate and energy policy, with a focus on energy transition and renewable energy policies in the United States. Joshua's recent work has included assisting rural electric cooperatives in the U.S. with decarbonization strategy. He is also a member of the MIT Net-Zero by 2026 Faculty Review Committee.

Prior to his appointment as Executive Director at CEEPR, Mr. Hodge served for three years as Deputy Executive Director at both CEEPR and the MIT Joint Program on the Science and Policy of Global Change. Before joining MIT, Joshua ran the Commodities Research and Forecasts business, Americas, at Thomson Reuters, where he managed the launch of the firm's North American power and gas forecast modeling services. Previously, Mr. Hodge was Managing Director, North America, at Point Carbon where he was the firm's first hire in the region and oversaw the launch of Point Carbon's North American products. Joshua holds an MBA from the Darden Graduate School of Business at the University of Virginia.

Outside of CEEPR, Mr. Hodge has served as a Commissioner on the Commission for Energy Use and Climate Change of the City of Somerville (MA), assisted the Museum of Science, Boston with climate change programing and mentored students at the MIT Policy Hackathon.



PAUL L. JOSKOW

Elizabeth and James Killian Professor of Economics
Department of Economics
Massachusetts Institute of Technology

Paul L. Joskow is the Elizabeth and James Killian Professor of Economics at MIT and President emeritus of the Alfred P. Sloan Foundation. Joskow has been on the MIT faculty since 1972, where he was the head of the MIT Department of Economics from 1994 to 1998 and director of the MIT Center for Energy and Environmental Policy Research from 1999 to 2007. Joskow became president of the Sloan Foundation in 2008 and returned to MIT in 2018. At MIT his teaching and research areas include industrial organization, energy and environmental economics, competition policy, and government regulation of industry. He is a past-president of the International Society for New Institutional Economics, a distinguished fellow of the Industrial Organization Society, a distinguished fellow of the American Economic Association, a fellow of the Econometric Society, a fellow of the American Academy of Arts and Sciences, a fellow of the Econometric Society, and a member of the Council on Foreign Relations. He has served on the boards of the New England Electric System, National Grid PLC, TC Energy, State Farm Indemnity, Putnam Mutual Funds, Exelon Corporation, and the Whitehead Institute for Biomedical Research (current).



CHRISTOPHER R. KNITTEL

George P. Shultz Professor of Applied Economics, Sloan School of Management
Director, MIT Center for Energy and Environmental Policy Research
Deputy Director for Policy, Energy Initiative
Massachusetts Institute of Technology

Christopher Knittel is the George P. Shultz Professor of Energy Economics and a Professor of Applied Economics in the Sloan School of Management at MIT. He directs the Center for Energy and Environmental Policy Research. CEEPR, established in 1977, is the hub for social science work related to energy and the environment at MIT. Knittel is also the Deputy Director for Policy of MITEI, the hub for energy research at MIT. Finally, along with Meredith Fowlie at UC Berkeley, he co-directs the Environmental and Energy Economics Program at the National Bureau of Economic Research. He is the former co-editor of the *Journal of Public Economics*, and an associate editor of the *Journal of Transportation Economics and Policy* and *Journal of Energy Markets*.

Knittel's research studies consumer and firm decision-making and what this means for the benefits and costs of environmental and energy policy. He often interacts with policy-makers to discuss his research findings and the current research needs of policy. His current work involves studying how the costs of climate change policy vary across households and firms and how this differs across policy choices. Knittel uses a variety of empirical methods for his research, including large-scale randomized control trials and machine learning techniques. Professor Knittel received his B.A. in economics and political science from the California State University, Stanislaus in 1994, an M.A. in economics from UC Davis in 1996, and a Ph.D. in economics from UC Berkeley in 1999.



PHILIP LIPPEL

Assistant Director
MIT Washington Office
Massachusetts Institute of Technology

Philip Lippel is the Assistant Director of MIT Washington Office, which connects the MIT community with policymakers in our nation's capital. He is interested in the multifaceted role research universities like MIT play in the innovation ecosystem – educating tomorrow's workforce, driving discoveries at the leading edge of science and engineering, and working with industry and community stakeholders to transition emerging technologies to commercial scale. Since joining the Washington Office in 2012, his portfolio has featured interactions with the Department of Energy, the National Science Foundation, the Department of Education, and the National Institute of Standards and Technology, as well as relevant Congressional committees and offices. He was a member of the operating committee for the Advanced Manufacturing Partnership 2.0 and currently co-leads the environment and climate working group for the Association of Public and Land Grant University's Council on Government Affairs.

Philip received an A.B. in physics and in theatre from Williams College, and M.S. and Ph.D. degrees in physics from Brandeis University. He came to Washington 20 years ago as AAAS Science and Technology Policy Fellow at the National Science Foundation, working in the Office of Legislative and Public Affairs.



TAMMY MA

Lead, Inertial Fusion Energy (IFE) Initiative
Lawrence Livermore National Laboratory (LLNL)

Dr. **Tammy Ma** is the Lead for the Inertial Fusion Energy (IFE) Initiative at Lawrence Livermore National Laboratory. In her current role, she leads and coordinates efforts to grow and support the Department of Energy's national IFE program and the decadal vision for accelerating fusion energy. Tammy was a member of the team that achieved fusion ignition in December 2022 at the National Ignition Facility, demonstrating more energy from fusion than the energy used to drive it, for the first time in history. Tammy holds a B.S. from Caltech, and an M.S. and Ph.D. from UC San Diego. She is the recipient of a Presidential Early Career Award for Science and Engineering (PECASE), the highest honor bestowed by the U.S. government on outstanding scientists and engineers in the early stages of their independent research careers.



DHARIK S. MALLAPRAGADA

Principal Research Scientist
MIT Energy Initiative
Massachusetts Institute of Technology

Dharik S. Mallapragada is a Principal Research Scientist at the MIT Energy Initiative (MITEI), where he leads the Sustainable Energy Transitions Group. Dr. Mallapragada's research focuses on planning and operating resilient, low-carbon energy systems as well as conceptualization, design and integration of emerging energy technologies. At MIT, he has pursued research in these topics while securing funding from government, industry and philanthropic sources and establishing collaboration with multiple principal investigators across MIT and other institutions. Recently, he led the systems modeling effort for the Future of Energy Storage study, an interdisciplinary MIT project exploring the role for storage in future low-carbon grids. Prior to MIT, Dr. Mallapragada spent nearly five years in the energy industry working on a range of sustainability-focused research topics. He recently served as a member of the Massachusetts Commission on Clean Heat, and serves on the advisory committee for the Open Energy Outlook project, a multi-institution effort to create open-source energy systems models and data sets. He also co-leads systems thrust activities at the Center for Decarbonizing Chemical Manufacturing using Sustainable electrification (DC-MUSE). Dr. Mallapragada holds a M.S. and Ph.D. in Chemical Engineering from Purdue University and a B.Tech. in Chemical Engineering from the Indian Institute of Technology, Madras, India. Dr. Mallapragada will be joining the Department of Chemical and Biomolecular Engineering at New York University Tandon School of Engineering in January 2024.



COLIN MCMILLAN

Senior Analyst
Strategic Energy Analysis Center
National Renewable Energy Laboratory (NREL)

Colin McMillan is a senior analyst in the Washington, D.C. office of NREL's Strategic Energy Analysis Center, Industrial Systems & Fuels Group. His research aims are to improve the data and methods used for modeling the industrial sector, particularly within energy system models. Dr. McMillan's most recent research has involved exploring socio-technical aspects of industrial decarbonization and the ways firms mediate nontechnical and technical requirements in the adoption and implementation of alternative process heat technologies. He holds degrees in natural resources, environmental engineering, applied economics, and engineering management.



JOHN E. PARSONS

Deputy Director for Research
MIT Center for Energy and Environmental Policy Research
Massachusetts Institute of Technology

John Parsons is the Deputy Director for Research at the MIT Center for Energy and Environmental Policy Research (CEEPR). His research focuses on the valuation and financing of investments in energy markets, as well as the problems of risk in energy and environment markets. Recent publications have touched on the value of changing the utilization of transmission to maximize the value of hydro assets and expanded penetration of renewables, the value of investments in life extensions of nuclear power plants, the economics of new microreactors, and the impact of decarbonization on generation assets in the U.S. midcontinent.

Dr. Parsons serves as an Associate Member of the U.S. Commodity Futures Trading Commission's Energy and Environmental Markets Advisory Committee. He has been a Visiting Scholar at the Federal Energy Regulatory Commission. Dr. Parsons served as the Executive Director at both CEEPR and the MIT Joint Program on the Science and Policy of Global Change, and also as Head of Sloan's MBA Finance Track. Before returning to MIT, Dr. Parsons spent ten years as a business consultant at Charles River Associates. He holds a Ph.D. in Economics from Northwestern University and an A.B. from Princeton University.



BETHANY PATTEN

Senior Lecturer and Director of Policy and Engagement, Sustainability
Sloan School of Management
Massachusetts Institute of Technology

Bethany Patten is a Senior Lecturer and Director of Policy and Engagement, Sustainability at the MIT Sloan School of Management. Her interests intersect at the crossroads of corporate and public policy, with a focus on environmental and social issues. She focuses on applying business practice theory to solve real-world challenges.

As an experienced operational leader, Bethany develops relationships with public and private sector organizations, identifying the sustainability-related challenges they face. Through those engagements, she develops learning curriculum for master's-levels students, and teaches course sessions focused on problem formulation, continuous improvement, and change management for sustainability.

She is responsible for the growth and quality of MIT Sloan's Sustainability Certificate and other programming for students pursuing careers of environmental and social impact. She leads the Sustainability Initiative's efforts to accelerate the move toward evidence-based climate policy. Bethany has been an active contributor across MIT, where she serves on the Vice President for Research's Climate Action Advisory Committee, has directed the MIT Sustainability Summit, and has led several projects on campus aimed at reducing waste.



LIZA REED

Senior Policy Advisor
Grid Deployment Office
U.S. Department of Energy

Liza Reed is a Senior Policy Advisor for the Grid Deployment Office in the U.S. Department of Energy. Previously she was the research manager for electricity transmission at the Niskanen Center. She is an expert in High Voltage Direct Current, electricity transmission, and technology innovation. She holds a Ph.D. from Carnegie Mellon University in Engineering and Public Policy and a master's degree and a bachelor's degree in Electrical and Computer Engineering from The Ohio State University.



ANN SHIKANY

Deputy Assistant Secretary for Policy
U.S. Department of Transportation

Ann Shikany is the Deputy Assistant Secretary for Policy at the U.S. Department of transportation working on implementing the Bipartisan Infrastructure Law, with a focus on climate solutions. She initially joined the U.S. Department of Transportation as Chief of Staff to the Deputy Secretary in October 2021, where she managed the policy and operational portfolio of the Deputy Secretary and advising on critical issues including megaproject delivery, oversight, operations of the Joint office on EV Infrastructure, and other issues. Previously, at NRDC she developed low carbon transportation and infrastructure policies and campaigns for the federal and local levels. She also held positions at the Portland (Oregon) Bureau of Transportation, the U.S. Department of Transportation and the U.S. Department of Energy. Her policy background includes infrastructure finance, transit, active transportation, electric vehicle infrastructure deployment, congestion pricing, and women's economic empowerment. She holds a Bachelor of Arts in Political Science from Kenyon College and a Master of Arts in International Relations from Johns Hopkins School of Advanced International Studies (SAIS). She is based in Washington, D.C. with her husband and son.



JAMES H. STOCK

Vice Provost for Climate and Sustainability
Director, Salata Institute for Climate and Sustainability
Harvard University

James H. Stock is Vice Provost for Climate and Sustainability, Harvard University; the Director of the Salata Institute for Climate and Sustainability, Harvard University; and the Harold Hitchens Burbank Professor of Political Economy at Harvard University. His current research includes energy and environmental economics with a focus on fuels and on U.S. climate change policy. He is co-author, with Mark Watson, of a leading undergraduate econometrics textbook. In 2013–2014, he served as Member of President Obama's Council of Economic Advisors, where his portfolio included macroeconomics and energy and environmental policy. He was Chair of the Harvard Economics Department from 2007–2009. He holds an M.S. in Statistics and a Ph.D. in Economics from the University of California, Berkeley.



DREW STORY

Managing Director
MIT Policy Lab
Massachusetts Institute of Technology

Drew Story, Ph.D., is Managing Director of MIT's Policy Lab. In this role he guides MIT faculty through strategic policy engagement to increase the impact of their work. As a result, MIT researchers establish themselves as resources and advisors to policymakers, and they develop insight into improved research design for producing scholarship with greater potential for societal impact.

Prior to joining MIT, Drew served as a policy advisor for two U.S. Senators on energy, environment, and scientific research policy issues, including a year as an AAAS/ACS Congressional Science and Engineering Fellow. Over a dozen legislative provisions Drew led or supported were signed into law as part of the Energy Act of 2020, the Infrastructure Investment and Jobs Act, the Inflation Reduction Act, the CHIPS and Science Act, and other legislative vehicles. Following his tenure in Congress, Drew was the Global Change Science Lead at the U.S. Global Change Research Program and the staff lead for two chapters of the Fifth National Climate Assessment. Drew received his Ph.D. in Chemical and Environmental Engineering with a Designated Emphasis in Public Policy from the University of California, Riverside and his B.S. in Physical Sciences Education from LeTourneau University.



CATHERINE D. WOLFRAM

William F. Pounds Professor of Energy Economics
MIT Sloan School of Management
Massachusetts Institute of Technology

Catherine Wolfram is the William F. Pounds Professor of Energy Economics and a Professor of Applied Economics at the MIT Sloan School of Management.

She previously served as the Cora Jane Flood Professor of Business Administration at the Haas School of Business at UC Berkeley.

From March 2021 to October 2022, she served as the Deputy Assistant Secretary for Climate and Energy Economics at the U.S. Treasury, while on leave from UC Berkeley.

Before leaving for government service, she was the Program Director of the National Bureau of Economic Research's Environment and Energy Economics Program and a research affiliate at the Energy Institute at Haas. Before joining the faculty at UC Berkeley, she was an Assistant Professor of Economics at Harvard.

Wolfram has published extensively on the economics of energy markets. Her work has analyzed rural electrification programs in the developing world, energy efficiency programs in the U.S., the effects of environmental regulation on energy markets, and the impact of privatization and restructuring in the U.S. and U.K. She is currently working on several projects at the intersection of climate and trade.

She received a Ph.D. in Economics from MIT in 1996 and an A.B. from Harvard in 1989.