

The Dynamics of Climate and the Macroeconomy: A Workshop

Committee

Eric J. Kemp-Benedict

Co-Chair

Eric J. Kemp-Benedict (Co-Chair) is a Senior Economist and Director of the Equitable Transitions program at the Stockholm Environment Institute's (SEI's) US Center. He was SEI's Asia Center Director from 2013 to 2016 and has served in various SEI global leadership roles. Dr. Kemp-Benedict's research focuses on the macroeconomics of a sustainability transition, addressing questions around long-run growth, decoupling, structural change, and economic development. He contributes to interdisciplinary studies on diverse topics of relevance to sustainability at national, regional, and global levels. Among his other contributions, he is a key contributor to the Shared Socioeconomic Pathways (SSPs), part of the global climate scenario framework that underpins a wide range of climate studies. Dr. Kemp-Benedict is currently a member of the National Academies' Roundtable on Macroeconomics and Climate-related Risks and Opportunities.

Timothy M. Lenton

Co-Chair

Timothy M. Lenton (Co-Chair) is the founding Director of the Global Systems Institute and Chair in Climate Change and Earth System Science at the University of Exeter. He has more than 25 years of research experience in studying the Earth as a system, and developing and using models to understand its behavior. His books "Revolutions that made the Earth" (with Andrew Watson) and "Earth System Science: A Very Short Introduction" have popularized a new scientific view of our planetary home. Professor Lenton co-authored the "Planetary Boundaries" framework and is renowned for his work identifying climate tipping points. This award-winning work has led him to examine positive tipping points within our social systems which could help accelerate progress towards a more sustainable future. Professor Lenton's accolades include Philip Leverhulme Prize, 2004; European Geosciences Union Outstanding Young Scientist Award, 2006; Times Higher Education Award for Research Project of the Year, 2008; the Royal Society of London William Smith Fund, 2008; and the Royal Society Wolfson Research Merit Award, 2013. Professor Lenton is a member of the Earth Commission, an ISI Highly Cited Researcher, and in the top 100 of the Reuters 'Hot List' of the world's top climate scientists. He is also a Turing Fellow, a Fellow of the Linnean Society, Geological Society and the Society of Biology. Dr. Lenton is currently a member of the National Academies' Roundtable on Macroeconomics and Climate-related Risks and Opportunities.

Brad R. Colman

Member

Brad R. Colman is the President of the American Meteorological Society (AMS). Before AMS, he was the Director of Weather Strategy for The Climate Corporation. In this role, he oversaw and guided the design and execution of the Bayer & Climate Enterprise weather programs. As such, he coordinated across multiple business units to set Enterprise priorities and then works closely with vendors, engineers, and scientists to map out the optimal course necessary to meet these priorities. The program spans across global weather stations, data acquisition and validation, data repository architecture and dissemination, and domain expertise. Central to this effort was Dr. Colman's close collaboration with The Climate Corporation's Weather Science Team (a team of statisticians, machine learners, and atmospheric scientists), which developed unique weather, climate, and decision support information for the global agricultural industry. Before Climate, Dr. Colman worked for nearly two years on a Microsoft team chartered to grow a new Microsoft consumer weather service to serve the entire Microsoft ecosystem. Prior to joining the private sector, Dr. Colman enjoyed a long and diverse career with NOAA where he worked at The National Weather Service's forecast office in Seattle, Washington; NOAA's Environmental Research Laboratory in Boulder, Colorado; and was the Acting Director of NOAA's Meteorological Development Laboratory in Silver Spring, Maryland. He is a member and Fellow of the American Meteorological Society (AMS), and has served in a number of different roles within the Society. Dr. Colman is a member of the Washington State Academy of Sciences and is currently Co-Chair of NOAA's Science Advisory Board's Environmental Information Services Working Group. Dr. Colman is currently a member of the National Academies' Roundtable on Macroeconomics and Climate-related Risks and Opportunities.

Wendy Edelberg

Member

Wendy Edelberg is the director of The Hamilton Project and a senior fellow in Economic Studies at the Brookings Institution. Edelberg joined Brookings in 2020, after more than fifteen years in the public sector. She is a macroeconomist whose research has spanned a wide range of topics, from household spending and saving decisions to the economic effects of fiscal policy to systemic risks in the financial system. Most recently, she was Chief Economist at the Congressional Budget Office (CBO). Prior to working at CBO, Dr. Edelberg was the executive director of the Financial Crisis Inquiry Commission, which released its report on the causes of the financial crisis in January 2011. Previously, she worked on issues related to macroeconomics, housing, and consumer spending at the President's Council of Economic Advisers during two administrations. Before that, she worked on those same issues at the Federal Reserve Board. She is currently the co-chair of the National Academies' Roundtable on Macroeconomics and Climate-related Risks and Opportunities and was appointed as a member of the planning committee on Strengthening the Evidence Base to Improve Economic and Social Mobility in the United States in 2021.

Sathya Gopalakrishnan

Member

Sathya Gopalakrishnan is an Associate Professor in the Department of Agricultural, Environmental and Development Economics (AEDE) in the College of Food, Agricultural, and Environmental Sciences (CFAES) at The Ohio State University (OSU). She is also on the faculty of the Environmental Science Graduate Program (ESGP) and a founding member and former Director of the STEAM Factory—a diverse and inclusive grassroots faculty network at OSU committed to interdisciplinary research, community engagement, and education. Dr. Gopalakrishnan's research is motivated by an interest in applying economic theory to understand ubiquitous interdependencies between human decisions and geophysical processes in complex resource systems. She specifically focuses on developing coupled models of complex human and natural systems, applied to coastal and water resources; non-market valuation of environmental amenities and risks; and resource management problems in which environmental and economic systems are linked by spatial-dynamic processes. She serves as an associate editor for the American Journal of Agricultural Economics, Chair of the Committee for Women in Agricultural Economics, and is a member of the board of directors of the Association of Environmental and Resource Economists (AERE). Dr. Gopalakrishnan is currently a member of the National Academies' Roundtable on Macroeconomics and Climate-related Risks and Opportunities.

Lori Hunter

Member

Lori Hunter is the Director of the Institute of Behavioral Science at the University of Colorado Boulder where she also Professor of Sociology. Dr. Hunter's research and teaching focus on links between environmental context and human population dynamics. Specific settings include rural South Africa and Mexico, where her scholarship connects rural livelihoods strategies, including migration, to local shifts in rainfall, temperature, and natural resource availability. She has been an invited speaker on the topic of migration and climate change at a variety of settings including the United Nations, National Academies of Sciences, Engineering, and Medicine (NASEM), the Rio+20 Earth Summit, Future Earth, and the French Demographic Research Institute. Dr. Hunter received her Ph.D. from Brown University in 1997. She is a member of NASEM's Board on Environmental Change and Society and the Board's liaison to the NAS Committee on Managed Retreat on the Gulf Coast. Dr. Hunter is also currently a member of the National Academies' Roundtable on Macroeconomics and Climate-related Risks and Opportunities.

Paulina Jaramillo

Member

Paulina Jaramillo is currently a Professor of Engineering and Public Policy at Carnegie Mellon University. Professor Jaramillo's past research focused on life cycle assessment of energy systems with an emphasis on climate change impacts and mitigation research. She is currently involved in multi-disciplinary research projects to better understand the social, economic, and environmental implications of a low-carbon transition in the U.S. energy system. Over the past five years, Professor Jaramillo's research and education efforts have expanded to include issues related to energy access and development in the Global South. She has also worked to incorporate values and beliefs in energy planning in historically disenfranchised communities and to understand the implications of energy access in gender equity. Professor Jaramillo was a coordinating lead author for the Transportation chapter of the Working Group III report that was part of the IPCC's 6th Climate Assessment Report. She was a 2020 Andrew Carnegie Fellow of the Carnegie Corporation of New York. Dr. Jaramillo is currently a member of the National Academies' Roundtable on Macroeconomics and Climate-related Risks and Opportunities.