

Developing and Assessing Ideas for Social and Behavioral Research to Speed Efficient and Equitable Industrial Decarbonization: A Workshop

Speaker and Moderator Biographies

Susan Tierney (*committee chair/moderator*) is a Senior Advisor at Analysis Group, a consulting firm, where she is an expert on energy and environmental economics, markets, regulation, and policy, particularly in the electric and gas industries. Previously, she served as the Assistant Secretary for Policy at the U.S. Department of Energy. In Massachusetts, she was the Secretary of Environmental Affairs and Commissioner at the Department of Public Utilities. She has testified before Congress, state and federal regulatory agencies, and federal and state courts, and has authored numerous reports and articles. She earned her Ph.D. and M.A. in regional planning at Cornell University. Dr. Tierney has authored numerous reports and articles, taught at the Department of Urban Studies and Planning at MIT and at the University of California at Irvine, and lectured at major universities. She serves on the boards of many foundations, think tanks and non-governmental organizations, with a common theme associated with energy transitions and decarbonization of the U.S. economy. In addition to chairing NASEM's Board on Energy and Environmental System and serving on NASEM's Climate Crossroads Advisory Council, she has served on numerous NASEM consensus committees (including Accelerating Decarbonization in the U.S. (2021, 2023), and Future of Electric Power (2021)). She previously chaired DOE's Electricity Advisory Committee, served on the Secretary of Energy Advisory Board, and has assisted the North American Energy Standards Board (NAESB) in its Gas-Electric Harmonization Forums. In 2020 was designated as a lifetime National Associate of the National Research Council of the National Academies. She is the recipient of the Lifetime Achievement Award from DOE's Clean Energy Education and Empowerment (C3E) Initiative, and of NARUC's Mary Kilmarx Award for Good Governance, Clean Energy and the Environment.

Hilary Boudet (*speaker*) is an Associate Professor and Associate Director of Graduate Programs at the School of Public Policy at Oregon State University. She teaches courses on energy and society, social movements, policy theory and research methods. Her research interests include environmental and energy policy, natural resource sociology, social movements, and public participation in energy and environmental decision-making. Before joining the faculty at Oregon State University, she was a Postdoctoral Scholar at Stanford University, where she managed a community-based intervention with 30 Girl Scout troops aimed at reducing household energy use. In 2010, she completed her dissertation in Stanford's Emmett Interdisciplinary Program in Environment and Resources on the factors and processes shaping community opposition to energy development. She holds a BA in Environmental Engineering and Political Science from Rice University.

Holly Jean Buck (speaker) is an Assistant Professor of Environment and Sustainability at the University at Buffalo. She is an environmental social scientist whose research focuses on public engagement with emerging climate technologies. At present, she is studying regional understandings of net zero goals, and how policy for scaling up carbon dioxide removal can be designed for community benefit. Her research has appeared in scientific journals like *Nature Climate Change*, *Climatic Change*, *Nature Sustainability*, and *Environmental Research Letters*, and she has authored two books on the social dimensions of carbon removal and fossil fuel phaseout. She was a contributing author to the IPCC's AR6 Working Group III report chapter on the governance of land-based mitigation, carbon removal, and food systems. She has also served on the National Academies committees to develop research agendas on ocean carbon removal and atmospheric methane removal. Dr. Buck holds a M.Sc. in Human Ecology from Lund University in Sweden, and a Ph.D in Development Sociology from Cornell University.

Sanya Carley (*committee member/moderator*) is the Presidential Distinguished Professor of Energy Policy and City Planning at the Stuart Weitzman School of Design, and faculty co-director of the Kleinman Center for Energy Policy at the University of Pennsylvania. She holds a secondary appointment at the Wharton School and is a University Fellow at Resources for the Future. She also co-directs the Energy Justice Lab. Dr. Carley's research focuses on energy justice and just transitions, energy insecurity, electricity and transportation markets, and public perceptions of energy infrastructure and technologies. She is an author of the Fifth National Climate Assessment report and a member of the Innovation Policy Forum and the Roundtable on Macroeconomics and Climate-related Risks and Opportunities, respectively, for the National Academies. Dr. Carley received her Ph.D. in public policy from the University of North Carolina at Chapel Hill, M.S. in urban and regional planning from the University of Wisconsin-Madison, and bachelor's degrees in economics and sustainable development from Swarthmore College.

Mijin Cha (*speaker*) is an assistant professor in the environmental studies department at the University of California, Santa Cruz. I am also a Fellow at Cornell University's Climate Jobs Institute. I'm also on the Board of Greenpeace USA Fund and Emeritus Board at the Center on Race, Poverty, and the Environment (CRPE). Cha researches and writes about climate and environmental justice, just transition—how to transition to a low carbon economy in a way that protects workers and communities, labor/climate coalitions, and the relationship between inequality and the climate crisis. Previously she was an Adjunct Professor at Fordham University School of Law, Associate Director at PolicyLink, Senior Policy Analyst at Demos, Director of Campaign Research/ Policy Director at Urban Agenda (now ALIGN), Senior Policy Analyst at the Progressive States Network, and visiting legal scholar positions at CRPE, ICIMOD and IUCN. She holds a B.S. in Environmental Engineering from Cornell University, a J.D. from UC Hastings, College of the Law, and LLM and PhD degrees from the University of London, SOAS.

Jeff Colgan (*speaker*) is the Richard Holbrooke Associate Professor in the Department of Political Science and Director of the Climate Solutions Lab at the Watson Institute for Public and International Affairs at Brown University. His research focuses on international order, especially as related to energy and the environment. His triple award-winning book, *Partial Hegemony: Oil Politics and International Order* won the Jervis Schroeder Best Book Award from the APSA International History and Politics section; the Best Book Award from the APSA International Collaboration section (co-winner); and the Best Book (Energy Policy—Non-Fiction) award from

the American Energy Society. Colgan's previous book, *Petro-Aggression: When Oil Causes War*, was published in 2013. He has published work in *International Organization*, *Foreign Affairs*, *World Politics*, *International Security* and elsewhere. He also occasionally blogs at the Monkey Cage and Foreign Affairs. Colgan previously taught at the School of International Service of American University 2010-2014, and was a Fellow at the Woodrow Wilson International Center for Scholars in Washington DC in 2012-13. He completed his Ph.D. at Princeton University, and was a Canada-US Fulbright Scholar at UC Berkeley, where he earned a Master's in Public Policy. Dr. Colgan has also worked with the World Bank, McKinsey & Company, and The Brattle Group.

Nicole Darnall is Foundation Professor of Management and Public Policy and Director and Co-founder of ASU's Sustainable Purchasing Research Initiative. A Distinguished Sustainability Scholar at ASU's Global Institute of Sustainability and Innovation, she was previously Associate Dean of Faculty Success in ASU's College of Global Futures and Associate Director of ASU's School of Sustainability. Her research assesses non-regulatory sustainability governance approaches: voluntary programs, strategic alliances, certifications, and information-based initiatives. Her work investigates whether the absence of state coercion, combined with appropriate incentives, can encourage organizations and individuals to behave more sustainably. Darnall is an elected Fellow in the National Academy of Public Administration, an Abe Fellow, an Economic and Social Research Council and Social Science Research Council Collaborative Visiting Fellow, an Erasmus Mundus International Scholar, and Spanish Ministry of Education International Fellow. She has received the Academy of Management's Organizations and Natural Environment Best Paper Award. Her research on business-government collaborations received the Academy of Management Public and Nonprofit Management's Best Journal Article Award, and her scholarship on environmental audits received the Decision Science Institute's Distinguished Paper Award. She has served as a senior editor of *Production and Operations Management* and associate editor of *Business & Society* and *Organization and Environment*. She is on the Editorial Review Board of Cambridge University Press, *Public Administration Review*, *Business & Society*, *Organization & Environment*, and *Business Strategy and the Environment*. She is a founding member of the Group of Organizations and Natural Environment (GRONEN), a network of European and North American scholars focused on organization sustainability. Prior to her career in academia she worked as an economist for the U.S. Forest Service and has a PhD in Public Policy Analysis from the University of North Carolina-Chapel Hill.

Patrick Devine-Wright (*speaker*) is Professor in Human Geography at the University of Exeter. His research has been ranked in the world's top 1% of social science according to citation of publications in 2019, 2020, 2021 and 2022. With expertise spanning human geography and environmental psychology, he conducts theoretically-driven research with real-world implications, often in interdisciplinary and transdisciplinary settings. Active across local, national and international contexts, he is engaged in efforts to ensure social science insights inform decision making on a range of environmental challenges, notably climate change. Devine-Wright is Director of the new £6.25m ACCESS (Advancing Capacity in Climate and Environment Social Science) leadership team for environmental social science funded by the Economic and Social Research Council. He was a Lead Author for the IPCC Working Group III in the 6th Assessment Round contributing to a chapter on 'Demand, Services and Social Aspects of Mitigation'. From 2019-2022, he was Chair of the Devon Net Zero Task Force and has been a

Board Member, including Chair for one year, of Exeter Community Energy. He contributes to the International Energy Agency's Task 28 on Social Acceptance of Wind Energy, has been a member of the National Advisory Group for EirGrid (the Irish electricity grid operator) and advises the Sustainable Energy Authority of Ireland on the Irish Government's Renewable Energy Strategy. He is a member of the Peer Review Group for the Department for Business, Enterprise and Industrial Strategy; and was formerly a member of the Social Science Expert Panel advising Defra and DECC. He was an invited member of the National Advisory Group steering the UK Community Renewables Initiative between 2001 and 2006; and acted as Lead Expert to the Office of Science and Technology's Foresight Project on Sustainable Energy and the Built Environment (2008). He sits on the board of several academic journals including Global Environmental Change, Energy Research and Social Science, the Journal of Environmental Psychology, and Environment and Behavior. He edited a book on 'Public Engagement with Renewable Energy: From NIMBY to Participation' published by Earthscan in 2011. A book on 'Place Attachment', co-edited with Lynne Manzo won the annual Achievement Award from the US Environmental Design Research Association in 2014, with an updated second edition published in 2021. He has a Ph.D. in Social Psychology and an MSC in Environmental Psychology from Surrey, M.Sc. and a BSc in Psychology from Trinity College, Dublin.

Jennifer Dunn (*speaker*) studies emerging technologies, their energy and environmental impacts, and their potential to influence air pollutant and greenhouse gas emissions, water consumption, and energy consumption at the economy-wide level. Particular technologies of interest include biofuels and bioproducts, automotive lithium-ion batteries, fuels and chemicals made from carbon capture and utilization technologies and from natural gas liquids, and resource recovery from wastewater. She applies life cycle analysis as a key tool to evaluate emerging technologies. Dunn is a was a member of the National Academies Committee on Developing a Research Agenda for Utilization of Gaseous Carbon Waste Streams, and is currently the Associate Editor for SAE International Journal of Sustainable Transportation, Energy, Environment, and Policy. She has a Ph.D. in Chemical Engineering and M.S.E. Sustainable Chemical Engineering Systems from the University of Michigan, and a B.S. in Chemical Engineering from Purdue University.

Alexander Gazmararian (*speaker*) is a doctoral candidate in the Department of Politics at Princeton University, where he is a Prize Fellow in the Social Sciences. He studies the behavioral foundations of political economy, with a substantive emphasis on climate politics and methodological interests in causal inference and surveys. His solo-authored research on these topics has been published in The Journal of Politics (conditionally accepted) and Energy Policy. He published his first award-winning book, *Uncertain Futures: How to Unlock the Climate Impasse* (The Politics of Climate Change Series, Cambridge University Press), in 2023 with Dustin Tingley. He is currently writing a book with Helen V. Milner on the political economy of climate change. He has a B.A. in Political Science from Emory University.

Emily Grubert (*committee member/moderator*) is Associate Professor of Sustainable Energy Policy, and, concurrently, of Civil and Environmental Engineering and Earth Sciences at the University of Notre Dame. She previously served as Deputy Assistant Secretary for Carbon Management (2021-2022) and Senior Advisor for Energy Asset Transformation (2022-2023) at the US Department of Energy. Her research focuses on justice-oriented deep decarbonization and

decision support tools related to large infrastructure systems, with emphasis on physical and social transition in communities hosting industrial infrastructure. In particular, she is interested in dynamics of deindustrialization, (re)industrialization, environmental justice, and safety. Grubert is a licensed Professional Engineer, a Member of the American Society of Civil Engineers, and an Affiliate Member of the American Sociological Association. Grubert holds a Ph.D. in Environment and Resources from Stanford University, an M.S. in Environmental and Water Resources Engineering and an M.A. in Energy and Earth Resources from The University of Texas at Austin, and a B.S. in Mathematics and Atmosphere/Energy Engineering from Stanford.

David J. Hess (*speaker*) is a professor in the Sociology Department at Vanderbilt University and Director of Climate and Environmental Studies. His research and teaching is on the sociology, anthropology, and policy studies of science, technology, health, and the environment. He is the recipient of the Robert K. Merton Prize, the Diana Forsythe Prize, the Star-Nelkin Prize (shared with coauthors), the William H. Wiley Distinguished Faculty Award, and the General Anthropology Division Prize for Exemplary Cross-Field Scholarship. He has been a Fulbright scholar and the PI and Co-PI on grants from the National Science Foundation and other organizations.

Jennifer Hirsch (*speaker*) is the inaugural Senior Director of the Center for Sustainable Communities Research and Education (SCoRE) at the Georgia Institute of Technology, where she is creating a culture of collaboration in which faculty, students, and staff engage in long-term relationships with community, government, and industry partners to build sustainable communities. She is also Adjunct Associate Professor in the School of City and Regional Planning and the Sustainable Communities Initiative Lead for the Strategic Energy Institute at Georgia Tech. Dr. Hirsch is an applied cultural anthropologist recognized internationally for fostering university and community engagement in sustainability and climate action. Hirsch's research and teaching interests focus on: 1) equity in the sustainable built environment; 2) grassroots sustainability innovation; and 3) community leadership in energy equity. Dr. Hirsch is also a co-founder and lead coordinator of the multi-stakeholder network RCE Greater Atlanta, officially acknowledged by the United Nations University – a Regional Centre of Expertise on Education for Sustainable Development that advances the UN Sustainable Development Goals (SDGs) through education and training. She is an Affiliate with The Asset-Based Community Development Institute at DePaul University and served on the Board of Directors of the Association for the Advancement of Sustainability in Higher Education (AASHE) from 2018 to 2023 including as Vice Chair in 2022 and Chair in 2023. Before coming to Georgia Tech, Dr. Hirsch worked in Chicago as Associate Director of Study Abroad at Northwestern University; as Urban Anthropology Director at The Field Museum of Natural History; and as an independent consultant with clients such as the City of Cleveland, Enterprise Community Partners, the U.S. Green Building Council, The Institute of Cultural Affairs, University of Illinois at Chicago, and Joliet Junior College. Dr. Hirsch received a Bachelor's degree in American Culture from Northwestern University and a Ph.D. in Cultural Anthropology from Duke University.

David Konisky (*speaker*) is the Lynton K. Caldwell Professor at Indiana University. His research focuses on U.S. environmental policy and politics, with particular emphasis on environmental and energy justice, regulation, federalism, and public opinion. His research has been published in various journals, including the American Journal of Political Science, Climatic

Change, Environmental Research Letters, Global Environmental Change, the Journal of Policy Analysis and Management, the Journal of Politics, Nature Energy, Proceedings of the National Academy of Sciences, and Public Opinion Quarterly. He has authored or edited six books on environmental politics and policy, including *Fifty Years at the U.S. Environmental Protection Agency: Progress, Retrenchment and Opportunities*, *Failed Promises: Evaluating the Federal Government's Response to Environmental Justice*, and *Cheap and Clean: How Americans Think about Energy in the Age of Global Warming*. He has been the co-editor of the journal *Environmental Politics* since the beginning of 2021. Konisky's research has been funded by the National Science Foundation, the Alfred P. Sloan Foundation, the U.S. Department of Energy, and the Russell Sage Foundation. Konisky earned his Ph.D. in political science from MIT. He also holds two master's degrees from Yale University: one in environmental management and one in international relations. At the undergraduate level, he studied history and environmental studies at Washington University in St. Louis.

Alan Krupnick (*speaker*) is a senior fellow at Resources for the Future and an expert on the oil and gas sector, reducing greenhouse gas emissions from this and the industrial sectors, and cost-benefit analysis. In particular, Krupnick's recent research focuses on green public procurement, decarbonized hydrogen and tax credits, and developing markets for green natural gas. His portfolio also includes guiding the value of information agenda covered by our VALUABLES initiative with NASA, the valuation of reducing asthma risks, estimating the value of statistical life, and issues of regulatory reform. Krupnick served as senior economist on the President's Council of Economic Advisers, advising the Clinton administration on environmental and natural resource policy issues. In 2011 he was elected president of the Association of Environmental and Resource Economists and earlier that year was named an AERE Fellow. He has served on the Editorial Boards of a number of journals. He co-chaired a federal advisory committee counseling the US Environmental Protection Agency (EPA) on the implementation of new ozone and particulate standards. He is a regular member of expert committees from the National Academy of Sciences, EPA, and various Canadian government and non-governmental institutions. Krupnick also consults with state governments, federal agencies, private corporations, the Canadian government, the European Union, the Asian Development Bank, the World Health Organization, and the World Bank. His work has been published in the *Review of Environmental Economics and Policy (REEP)*, *Journal of Environmental Economics and Management (JEEM)*, *Journal of Risk and Uncertainty (JRU)*, *Land Economics*, *American Journal of Agricultural Economics (AJAE)*, *Decision Analysis*, *Environment and Resource Economics (ERE)*, *Journal of Policy Analysis and Management (JAPAM)*, *Environmental Science and Technology (ES&T)* and other scholarly journals and books. He received his PhD in Economics from the University of Maryland in 1980, and a BS in Finance from the Pennsylvania State University.

Thomas P. Lyon (*speaker*) holds the Dow Chair of Sustainable Science, Technology and Commerce, with appointments in both the Ross School of Business and the School of Environment and Sustainability (SEAS). Professor Lyon is a leader in using economic analysis to understand corporate environmental strategy and how it is shaped by emerging government regulations, non-governmental organizations, and consumer demands. His book *Corporate Environmentalism and Public Policy*, published by Cambridge University Press, is the first rigorous economic analysis of this increasingly important topic. His current research focuses on corporate environmental information disclosure, greenwash, the causes and consequences of renewable energy policy, and voluntary programs for environmental improvement. Lyon has been a visiting professor at Stanford University, the University of Paris, the University of California at Santa Barbara, the University of Chicago and at the University of Bonn, and a

Fulbright Scholar at the Scuola Sant'Anna in Pisa, Italy. He spent the academic year 2002/2003 as a Gilbert White Fellow at Resources for the Future in Washington, DC, and 2003/2004 as a visiting economist in the Antitrust Division of the U.S. Department of Justice. Professor Lyon serves on the editorial boards of the Journal of Economics and Management Strategy and the Journal of Regulatory Economics. His teaching experience includes energy economics and policy, environmental governance, non-market strategy, regulation, managerial economics, business and government, game theory, business strategy, and the management of innovation. Lyon earned his bachelor's degree at Princeton University and his doctorate at Stanford University.

Erin Mayfield (*speaker*) is the Hodgson Family Assistant Professor of Engineering at Dartmouth College in the Thayer School of Engineering. Her research is in the areas of sustainable systems engineering and public policy. Dr. Mayfield focuses on three interacting research themes - multiobjective modeling, intergenerational & social equity, and climate mitigation & adaptation planning. The aim of her research is to develop computational decision support tools to address real-world problems and facilitate multi-stakeholder decision-making processes. Mayfield has participated in several large-scale collaborations on infrastructure transitions, including the Net-Zero America Project and the REPEAT Project, and currently serves as a co-author of the Fifth National Climate Assessment. Her research is regularly covered in national and local media such as the New York Times, The Atlantic, and National Public Radio. Mayfield has received several awards for her research such as the Rob Socolow Best Paper Award, American Chemical Society Editor's Choice Award, and the Herbert L. Toor Doctoral Research Award. Prior to academia, Mayfield was a practitioner working with and in vulnerable communities on hazardous waste remediation, environmental litigation, and infrastructure planning. She has also held positions at the U.S. Environmental Protection Agency, U.S. Congress, Princeton University, and Environmental Law Institute. She received her doctoral degree in engineering and public policy from Carnegie Mellon University, masters in environmental engineering from Johns Hopkins University, and bachelors in environmental science from Rutgers University.

Mary Nichols (*speaker*) is the former Chair of the California Air Resources Board, where she occupied the attorney seat. She has served on the Board under Governor Edmund G. Brown, Jr. (1975–82 and 2010–18), Governor Arnold Schwarzenegger (2007–2010) and Governor Gavin Newsom (2019–2020). She also served as California's Secretary for Natural Resources (1999–2003), appointed by Gov. Gray Davis. When not working for the State of California, she was a senior staff attorney for the Natural Resources Defense Council; Assistant Administrator for U.S. EPA's Office of Air and Radiation, in the administration of President William Jefferson Clinton; and headed the Institute of Environment and Sustainability at UCLA. Over a career as an environmental lawyer spanning over 45 years, Nichols has played a key role in California and the nation's progress toward healthy air. She has also led the Board in crafting California's internationally recognized climate action plan.

Aseem Prakash (*committee member/moderator*) is Professor of Political Science, the Walker Family Professor for the College of Arts and Sciences, and the Founding Director of the Center for Environmental Politics at the University of Washington, Seattle. He is a Fellow of the National Academy of Public Administration. He has served as an International Research Fellow at the Center for Corporate Reputation, University of Oxford, and on the National Academies of Sciences, Engineering, and Medicine's Board on Environmental Change and Society. His recent

awards include the International Studies Association's 2023 Environmental Studies Distinguished Scholar Award, the American Political Science Association's 2020 Elinor Ostrom Career Achievement Award, the International Studies Association's 2019 Distinguished International Political Economy Scholar Award and the European Consortium for Political Research Standing Group on Regulatory Governance's 2018 Regulatory Studies Development Award. In a recent ranking by Research.com of the best researchers in each discipline, Professor Prakash was ranked 38th in the United States and 67th in the world.

Paty Romero-Lankao is a Canadian Excellence in Research Chair at the University of Toronto Scarborough, and she was a distinguished research scientist at the National Renewable Energy Laboratory. Paty examines crucial interactions among people and climate in many cities worldwide. She applies a transdisciplinary lens and community-engagement approach to her research on sustainability transitions, bringing social science perspectives to a field traditionally dominated by the natural sciences and engineering. Paty is widely cited in her field. As of July 2023, her record includes 148 peer-reviewed publications. She was the co-leading author of Working Group II of the Nobel Prize-winning IPCC Fourth Assessment Report. She is leading the social and policy approaches to LA100 Equity Strategies. This high social impact project, which involves a community-informed analysis of equity strategies for Los Angeles, can shed light on other cities and states transitioning to 100% clean energy while also centering on justice and the needs of underrepresented populations.

Elizabeth Ross (*speaker*) is a Mixed Methods Intersectional Analyst at the National Renewable Energy Laboratory (NREL) where she provides social science insights and research method expertise to decarbonization efforts. She previously was a Graduate Teaching Assistant and trainee in NSF's Interdisciplinary Training, Education, and Research in Food-Energy-Water Systems program at Colorado State University. She is a Ph.D. candidate in Applied Social Psychology at Colorado State University.

Edson Severnini is an Associate Professor of Economics and Public Policy at Carnegie Mellon University (Heinz College), a Research Associate at the National Bureau of Economic Research (NBER), and a Research Affiliate at the Institute of Labor Economics (IZA). His research interests lie at the intersection of *Energy and Environmental Economics*, *Economic History*, and *Labor Economics*. Dr. Severnini's work focuses on examining the impacts of the expansion of energy access, pollution, and environmental regulation on local development, health outcomes, and firm behavior since the age of electrification in the United States. He is also interested in the impacts of climate change on air pollution, electricity generation, and infectious disease, the effects of economic activity on environmental outcomes, and on racial issues in local labor markets and higher education.

Shade Shutters (*speaker*) is a Research Scientist, at the School of Complex Adaptive Systems, College of Global Futures at Arizona State University. Following a lengthy career in corporate finance and consulting, Dr. Shutters completed a PhD in Biology in 2009 at Arizona State University and went on to complete a postdoc in Applied Economics at the University of Vigo, Spain, and a postdoc on complex systems (urban systems focus) at Arizona State University. His research is focused on identifying and measuring interconnectivity in urban systems, particularly of more cryptic phenomena such as information networks and economic interdependencies.

Focusing on countries with adequate data on their metropolitan areas, he uses big data analytics and complex systems science to map and analyze how interconnectivity not only enhances efficiency, but also increases fragility and leads to cascading effects. He works closely with community stakeholders to translate his research into decision tools for economic and workforce development. His secondary focus is on trade networks of primarily agricultural commodities and how the structure of those networks relates to social stability and vulnerabilities. His long term goal is to contribute to the founding of a new science of cities and to create novel decision tools that facilitate a city's transition to a more sustainable, resilient, and knowledge-driven economy.

Udayan Singh (*committee member/moderator*) is an Energy Systems Analyst at the Argonne National Laboratory. His research looks at life-cycle assessment of low-carbon technologies and analyzing decarbonization pathways consistent with net-zero targets. He has served as a Contributing Author to the IPCC Sixth Assessment Report and a data provider to the IPCC Emission Factor Database. His scientific research has been strongly supplemented with outreach efforts; he has received the Royal Society of Chemistry's Inclusion & Diversity Fund Grant and the American Geophysical Union's Sharing Science Grant. Udayan holds a PhD in Civil and Environmental Engineering from the University of Virginia and completed his postdoctoral training at the Northwestern University.

Benjamin K. Sovacool (*speaker/BECS member*) is Professor of Earth and Environment at Boston University as well as Director of the Institute for Sustainable Energy at Boston University. Previously, he was Director of the Sussex Energy Group and Centre for Innovation and Energy Demand (CIED) at the University of Sussex; Director of the Centre for Energy Technologies at Aarhus University in Denmark; Director of the Energy Security and Justice Program at the Institute for Energy and the Environment and Associate Professor of Law at Vermont Law School in the United States; Assistant Professor at the Lee Kuan Yew School of Public Policy at the National University of Singapore; and Eugene P. Wigner Fellow at the Oak Ridge National Laboratory in the United States. With much coverage of his work in the international news media, he is one of the most highly cited global researchers on issues bearing on controversies in energy and climate policy. Professor Sovacool works as a researcher and consultant on issues pertaining to global energy policy and politics, energy security, energy justice, climate change mitigation, and climate change adaptation. More specifically, his research focuses on renewable energy and energy efficiency, the politics of large-scale energy infrastructure, designing public policy to improve energy security and access to electricity, the ethics of energy, and building adaptive capacity to the consequences of climate change. He has played a leadership role in winning collaborative research grants worth more than \$28.2 million in directly managed funds, including those from the U.S. Department of Energy, U.S. National Science Foundation, MacArthur Foundation, Rockefeller Foundation, Energy Technology Development and Demonstration Program of Denmark, the Danish Council for Independent Research, the European Commission and the European Research Council. In the United Kingdom, he has served as a Principal Investigator on projects funded by the Economic and Social Research Council, Natural Environment Research Council, and the Engineering and Physical Sciences Research Council. He is the recipient of multiple national and international awards and honors, including the "Distinguished Graduate Alumni Achievement Award" from his Alma Mater Virginia Tech, the 2019 USERN Prize for his work on "Social Justice in an Era

of Climate Change and Energy Scarcity,” the “Dedication to Justice Award” given by the American Bar Association. He is also an Academician of the Academy of Social Sciences in the United Kingdom. He is a Lead Author of the Intergovernmental Panel on Climate Change’s Sixth Assessment Report (AR6), due to be published in 2022, and an Advisor on Energy to the European Commission’s Directorate General for Research and Innovation in Brussels, Belgium. He received his PhD in science and technology studies from the Virginia Polytechnic Institute & State University in Blacksburg, Virginia, where he also won the “Outstanding Dissertation of the Year” award from the College of Social Sciences and Humanities.

Pavitra Srinivasan (*speaker*) is a Senior Manager in the Industry Program and Co-Leads the Embodied Carbon Initiative at ACEEE. She conducts research and analysis on technologies, programs and policies that facilitate industrial decarbonization and works with firms across the market spectrum from supply to demand. Prior to ACEEE, Dr. Srinivasan was a public health scientist assessing and addressing environmental health, occupational risks and industrial hygiene across several industries, business and community settings. She has supported U.S. federal agencies in rule-making efforts, is experienced in interacting with and collecting input from stakeholders and has provided scientific litigation support to industrial firms. During her doctoral research, she worked on an interdisciplinary team to conduct lifecycle assessments and better understand the technical, economic and behavioral aspects involved in decision-making around the adoption of a novel green chemistry technology, electrification and renewable energy by the cement industry in the US, India and China to mitigate carbon emissions. She has served as a guest lecturer on state industrial policy and building sector decarbonization at Georgetown University. Dr. Srinivasan holds a Dr.P.H and M.P.H in Environmental and Occupational Health from The George Washington University, Washington, D.C., and a B.Sc. in Microbiology and Immunology from McGill University, Montreal, Canada. She is an elected member of the Delta Omega Public Health Honor Society.

Dimitris Stevis (*speaker*) is a professor of politics at Colorado State University. His research, teaching, and practice combine environmental labor studies, just transitions, and ecosocial justice. His most recent books on labor and the environment *Just Transitions: Promise and Contestation* (2023) and the coedited *Palgrave Handbook of Environmental Labor Studies* (2021). Applied work include *Workers and Communities in Transition: Report of the Just Transition Listening Project* (co-authored, 2021); *Back to Paris: Prospects for a Green New Deal and Just Transition in the US* (2021); and *Labor Unions and Green Transitions in the USA: Contestations and Explanations* (2019). He is joint coordinator of the Just Transition Research Collaborative (UNRISD) and the Just Transition and Care Initiative, and on the just transitions planning group of the Global Labor University. He is currently serving on the Worker Subcommittee of Colorado’s Just Transition Advisory Committee. With respect to ecosocial justice he is the founder and co-director the Center for Environmental Justice at Colorado State University which is the southern anchor of the EPA’s Technical Assistance Center for Region 8. He has a Ph.D. in Political Science from the University of Arizona.

Simone H. Stewart (*speaker*) works as the senior industrial policy specialist on the Climate and Energy Policy team at the National Wildlife Federation, with a portfolio focused on carbon management strategies like carbon capture, utilization, and storage, carbon dioxide removal technologies, as well as other strategies to aid in a just green transition for difficult to

decarbonize sectors such as energy and industry. Her work covers the intersections of emerging technologies and environmental justice across areas such as policy, industry, NGO, and public education, and collaboration with government agencies. She joined the National Wildlife Federation in 2021 after receiving her Ph.D. in Mechanical Engineering from the University of California Santa Barbara, where she was a National Science Foundation Graduate Research Fellow. At UCSB her research focused on investigating the fluid mechanics of fluxes over rough surfaces, with applications in large-scale direct air carbon capture and clean energy architecture. During that time, Simone also worked as the graduate assistant for the UCSB Blum Center on Poverty, Inequality, and Democracy, where she led a variety of programming, created detailed info campaigns centered around justice and community enfranchisement, and helped develop a comprehensive *People's Guide to the Green New Deal* rooted in the tenants of environmental and economic justice. Prior to graduate school, she received dual bachelor's degrees in Physics and Spanish Language, Literature, and History from William Jewell College.

David Victor (*committee member/moderator*) is a professor of innovation and public policy at the School of Global Policy and Strategy at UC San Diego. He co-directs the campus-wide Deep Decarbonization Initiative, an effort to understand how quickly the world can eliminate emissions of warming gases. He is an adjunct professor in Climate, Atmospheric Science & Physical Oceanography at the Scripps Institution of Oceanography, and a professor (by courtesy) in Mechanical and Aerospace Engineering. Prior to joining the faculty at UC San Diego, Victor was a professor at Stanford Law School where he taught energy and environmental law. He has been heavily involved in many different climate- and energy-policy initiatives, including as convening lead author for the Intergovernmental Panel on Climate Change (IPCC), a United Nations-sanctioned international body with 195 country members that won the Nobel Peace Prize in 2007. His Ph.D. is from the Massachusetts Institute of Technology and his A.B. is from Harvard University.

Elke Weber (*committee member/moderator*) (National Academy of Sciences member) is a cognitive psychologist and behavioral decision theorist and professor at Princeton University, with appointments in engineering, SPIA, and psychology. Prior appointments were at Columbia University, OSU, U of Chicago, and UIUC. She received her PhD in Behavior and Decision Analysis from Harvard University in 1984, Weber is a pioneer in melding theory and tools from psychology, economics, sociology, political science, philosophy, ecology, and evolutionary biology to understand human decision making in complex situations, in particular responses to the threat posed by climate change. Weber has been documenting psychological and socio-cultural processes within the general public as well as corporations and policy bodies that function to delay the clean energy transition. She has served on various National Academy of Sciences advisory committees on the Human Dimensions of Global Change, on the U.S. Environmental Protection Agency's (EPA) Science Advisory Board, and on a Committee on Carbon Neutrality to the German government. Weber has also been a lead author on the United Nations Intergovernmental Panel on Climate Change (IPCC) Fifth and Sixth Assessment Reports. She is a fellow of the American Academy of Arts and Sciences and a member of both the German National Academy of Sciences Leopoldina and the U.S. National Academy of Sciences. In 2016, she received the Distinguished Achievement Award from the Society for Risk Analysis and in 2023 the Patrick Suppes Prize from the American Philosophical Society.

Jalonne L. White-Newsome (*speaker*) is the Senior Director for Environmental Justice for the White House Council on Environmental Quality (CEQ). White-Newsome is the second person to ever hold this position in the White House. In this historic role, White-Newsome helps advance the Biden-Harris Administration's bold and historic commitment to leverage the force of the full federal government in advancing environmental justice. A native of Detroit, Michigan, Dr. White-Newsome has tackled environmental challenges from a wide range of positions and perspectives, including in the grassroots environmental justice movement, environmental philanthropy, state government, private industry, and academia. Most recently, White-Newsome founded and led Empowering a Green Environment and Economy, LLC (EGE²), a strategic consulting firm that focused on transforming communities by using people-centered solutions to combat climate change, improve public health, pursue environmental justice, and advance racial equity. Through EGE², she and her team worked with a variety of institutions across the public and private sector to create policies, practices, and partnerships to better serve the needs of low-income communities, communities of color, and Indigenous communities. Prior to creating EGE², Dr. White-Newsome was a Senior Program Officer at the Kresge Foundation and created the Climate Resilience and Equitable Water Systems (CREWS) Initiative, the first, national grantmaking initiative focused at the intersection of climate change and water inequity. She also served as the first Director of Federal Policy for WE ACT for Environmental Justice, managing their federal policy office in Washington, D.C. She also provided leadership for the Environmental Justice Leadership Forum on Climate Change, a national coalition of environmental justice leaders. Dr. White-Newsome's early environmental justice advocacy started in her work as a chemical engineer in private industry and remains a critical dimension of her research and advocacy related to air pollution, extreme heat, and flooding, focused on improving the health of low-income, communities of color. White-Newsome is a lecturer at The George Washington University Milken Institute School of Public Health, a lifetime member of Delta Sigma Theta Sorority, Inc., and has been recognized by Grist and the Michigan League of Conservation Voters for her environmental justice advocacy. In 2022, she was named the Crains Detroit Most Notable Leader in Sustainability. She earned a Ph.D. in environmental health sciences from the University of Michigan School of Public Health, a master's degree in environmental engineering from Southern Methodist University, a bachelor's degree in chemical engineering from Northwestern University, and a certificate in Diversity and Inclusion from Cornell University.