

AI, Energy Demand, and the Environment: Perspectives on Information Sharing

August 15, 2025, 12:30 PM - 2:00 PM ET

Purpose

The projected growth in electricity demand from Al-driven data centers challenges climate mitigation, water resources, and low-cost electricity goals. Many research studies and policy responses focus on how to *supply* the projected electricity needed for growing use of Al while reducing environmental and other costs, but there has been less focus on the *demand* side of Al use.

This webinar, hosted by the <u>Societal Experts Action Network</u> in collaboration with the <u>Board on Environmental Change and Society</u>, will bring together social science and industry experts to discuss topics related to consumer and corporate use of AI, what role environmental information sharing might play in consumer and corporate behavior, and the insights social science can provide to help achieve the economic and environmental goals of both consumers and firms.

12:30–12:40 pm Welcome, Introductions, and Overview

Mike Vandenbergh, Vanderbilt Law School, Chair of the Board on Environmental Change and Society

Bilal M. Ayyub, University of Maryland, Member of the Board on Environmental Change and Society

12:40–1:20 pm Stage Setting

Jane Miller, Vanderbilt University Law School

Angel Hsu, University of North Carolina at Chapel Hill

April Salas, EFI Foundation

Ann Bostrom, University of Washington

1:20–1:55 pm Moderated Discussion

1:55–2:00 pm Closing Reflections

Mike Vandenbergh, Vanderbilt University Law School, Chair of the Board on Environmental Change and Society

Bilal M. Ayyub, University of Maryland, Member of the Board on Environmental Change and Society



PANELIST BIOGRAPHIES

Mike Vandenbergh, Vanderbilt University Law School

Professor Vandenbergh is the David Daniels Allen Distinguished Chair in Law at Vanderbilt University Law School and Co-Director of the Energy, Environment and Land Use Program. An award-winning teacher, Professor Vandenbergh has published widely on bypassing polarization, private environmental governance, and the opportunity to harness law and social science to develop feasible, non-intrusive environmental governance tools. Before joining the Vanderbilt faculty Vandenbergh was a partner at Latham & Watkins in Washington, D.C., and he served as Chief of Staff of the Environmental Protection Agency from 1993-95. He has been a visiting professor at Harvard, the University of Chicago, and the Wharton School. His research has been discussed in major media outlets such as National Public Radio's All Things Considered, National Geographic, USA Today, Psychology Today, and the Washington Post. He was a 2022 Andrew Carnegie Fellow, is a member of the American College of Environmental Lawyers, and chairs the Board on Environmental Change and Society of the National Academies of Science, Engineering and Medicine.

Bilal M. Ayyub, University of Maryland

Bilal M. Ayyub, PhD, PE, Dist.M.ASCE, Hon.M.ASME is a University of Maryland, College Park Professor and Director of Center for Technology and Systems Management. He is a Visiting Professor, Imperial College London; Senior Economist, NIST; Co-Director of Center for Resilient Infrastructure at Tongji University; Academician of Georgian National Academy of Sciences; and NOAA Science Advisory Board member. He co-chairs ASCE-NOAA Task Force of Climate Resilience in Engineering Practice. He researches risks in engineering and economics. He co-authored about 700 publications including 8 textbooks and 15 edited books, and received several awards from ASME, ASCE, ASNE and others.

Jane Miller, Vanderbilt University Law School

Dr. Jane Elizabeth Miller is a social psychologist, decision scientist, and current postdoctoral researcher at Vanderbilt Law School. Jane studies how lay people make, interpret, and communicate judgments under uncertainty and risk. She received her PhD in Psychology from the University of Iowa in 2023 as a member of Dr. Paul Windschitl's Judgment, Decision, and Social Comparison Lab. Prior to Iowa, she received a BS in Psychology and Studio Art from Union College, N.Y. Since 2023, she has been a postdoctoral research fellow as part of Vanderbilt Law School's Energy, Environment, and Land Use program as well as their Climate Change Research Network. At Vanderbilt, she leads a program of research examining various factors that influence support for environmental and energy policies as well as decisions to engage in sustainable behaviors.

Angel Hsu, University of North Carolina at Chapel Hill

Dr. Angel Hsu is an Associate Professor of Public Policy and the Environment at UNC-Chapel Hill and the founder and director of the Data-Driven EnviroLab. Her research explores the intersection of science and policy and the use of data-driven approaches, including AI, to advance understanding and action on environmental sustainability, particularly in the areas of climate change, energy, urbanization, and air quality. She is a lead author for the forthcoming IPCC Special Report on Cities and Climate, a contributing author to the IPCC 6th Assessment Report, and was the lead author of the 2018 UNEP Emissions Gap Report chapter on non-state and subnational actors. She also leads the CLAIM Center (Center for Climate Leadership and AI-driven Integrity in Mitigation), a new initiative focused on examining how generative AI tools like large language models are shaping and complicating the credibility, communication, and governance of climate action. She holds a PhD in Environmental Policy from Yale University.

April Salas, EFI Foundation

April Salas is an energy, climate, and sustainability expert with over 20 years of public and private sector experience in global and domestic capital markets. Salas joins EFI Foundation as Chief Operating Officer, from Microsoft, where she previously served as Global Director of Public Policy for Microsoft's Environmental Sustainability Team. In this role, she developed and advanced key policy positions and legislative initiatives across Microsoft's global sustainability focus areas, including Al's role in advancing a



low-carbon energy transition, carbon reductions across the supply chain - semiconductors, steel and cement, and advancing access to zero-carbon power, including advanced nuclear. Salas has coauthored Microsoft's Accelerating Sustainability with AI: A Playbook, engaged policymakers globally, and has served as a technical reviewer for the United Nations Framework Convention on Climate Change and the International Energy Agency, Salas has worked with and advised companies spanning from early-stage technology to publicly traded global firms and has extensive board experience. She has also held senior positions in both academia and the US government, including as the inaugural Executive Director of Dartmouth College's Arthur L. Irving Institute for Energy and Society, and as founding Executive Director of the Revers Center for Energy, Sustainability, and Innovation at the Tuck School of Business. At U.S. DOE, Salas directed the White House's Quadrennial Energy Review Task Force Secretariat under President Obama and EFIF Founder and CEO, and then-Secretary of Energy, Ernest J. Moniz. She has held senior roles at the U.S. Department of Energy's Offices of Energy Policy and Systems Analysis (EPSA) and Electricity Delivery and Energy Reliability (OE), leading both U.S. and global portfolios, including Director of the State Energy Assurance Program, where she led a \$50 million recovery act program supporting industry, state, and local energy officials, regulated utility commissioners, and state emergency management directors. In addition, Salas served as Chief of Planning and Analysis for all federal energy emergency responses with FEMA, and formerly worked for the United Nations and UNESCO. Salas holds MBAs from Cornell University and Queen's University; master's degrees from the American University of Paris and L'Institut Catholique de Paris; and an undergraduate degree from the College of William and Mary. She is passionate about volunteering, travel, and snowboarding. She has lived or worked in over 65 countries and speaks Arabic, French, and Spanish. Salas' husband, Dr. Zachary Salas, is an orthopedic surgeon following a long career in the US Navy as an F/A-18 pilot, and they are proud parents of four children.

Ann Bostrom, University of Washington

Ann Bostrom is the Weyerhaeuser Endowed Professor in Environmental Policy at the Evans School of Public Policy & Governance, University of Washington. Until 2007 she was Professor of Public Policy and Associate Dean for Research at the Ivan Allen College of Liberal Arts at Georgia Institute of Technology. She co-directed the Decision, Risk, and Management Science Program at the National Science Foundation (NSF) from 1999 to 2001. Bostrom studies how people understand and make decisions under uncertainty about, for example, climate change and artificial intelligence, focusing on risk perceptions, communication, and mental models. Bostrom co-directs the NSF-funded Cascadia Coastlines and Peoples Hazards Research Hub and co-leads risk communication in the NSF Artificial Intelligence (AI) Institute for Research on Trustworthy AI in Weather, Climate and Coastal Oceanography. She is a Fellow and former President of the Society for Risk Analysis, a Fellow of the American Association for the Advancement of Science, and a Fellow and serves on the Board of Directors of the Washington State Academy of Sciences. Bostrom holds a Ph.D. in policy analysis from Carnegie Mellon University, an M.B.A. from Western Washington University, and a B.A. in English from the University of Washington. She co-chaired the National Academies of Sciences, Engineering, and Medicine consensus report on Integrating Social and Behavioral Sciences Within the Weather Enterprise (2017) and contributed to Communicating Science Effectively: A Research Agenda (2016).