

Decision Making for Demonstration Funding

Workshop Agenda

9:00 – Welcome – Billy Pizer, RFF

9:05 – Workshop overview, ground rules and logistics – Aaron Bergman, RFF

9:20 – Session 1: Metrics for Demonstration Funding

- Overview and Introductions (10 min) – Aaron Bergman, RFF
- Speakers (30 min)
 - Gregory Nemet, University of Wisconsin, Madison
 - Linda Cohen, UC Irvine
- Discussion (20 min)

10:20 – Session 2: Portfolios and Risk

- Overview and Introduction (10 min) – Aaron Bergman, RFF
- Speakers (30 min)
 - Erin Baker, UMass Amherst
 - Jim Cabot, Breakthrough Energy Ventures
- Discussion (20 min)

11:20 – Break (10 min)

11:30 – Session 3: Community Benefits

- Overview and Introductions (10 min) – Alan Krupnick, RFF
- Speakers (30 min)
 - Phil Jordan, BW Research Partnership
 - Daniel Raimi, RFF
- Discussion (20 min)

12:30 – Closing remarks (10 minutes) – Alan Krupnick, RFF

Speaker Bios:

Gregory Nemet is a Professor at the University of Wisconsin–Madison in the La Follette School of Public Affairs. He teaches courses in policy analysis, energy systems, and international environmental policy. Nemet's research focuses on understanding the process of technological change and the ways in which public policy can affect it. He received his doctorate in energy and resources from the University of California, Berkeley. His A.B. is in geography and economics from Dartmouth College. He received an Andrew Carnegie Fellowship in 2017 and used it to write a book on how solar PV provides lessons for the development of other low-carbon technologies: “How Solar Energy Became Cheap: A Model for Low-Carbon Innovation” (Routledge 2019). He was awarded the inaugural World Citizen Prize in Environmental Performance by APPAM in 2019. He is currently a Lead Author for the Intergovernmental Panel on Climate Change’s 6th Assessment Report.

Linda R. Cohen is Professor Emeritus of Economics and Law at the University of California Irvine. Professor Cohen’s research lies at the intersection of economics, law and political economy. She has published extensively on the economics of energy policy and innovation policy. Her current work focuses on the relationship between regulatory policy and innovation policy in addressing climate change and on the feasibility and effectiveness of alternative innovation policies in the absence of strong markets. She is a fellow and former council member of the California Council for Science and Technology, and was a member of the Advisory Panel for the Public Interest Energy Research Program for the California Energy Commission and the American Physical Society Panel on Public Affairs on Energy and Environment. She served on numerous National Research Council committees assessing energy policies and chaired the 2020 National Academy of Sciences Committee on the Review of Methods used by the U.S. Department of Energy in Setting Appliance and Equipment Standards. She has been a Gilbert White Visiting Fellow at Resources for the Future and a Visiting Fellow at the Smith School of Enterprise and the Environment at Oxford University. Professor Cohen received a PhD in social sciences from the California Institute of Technology and a B.A. in mathematics from the University of California at Berkeley.

Erin Baker is a Distinguished Professor of Industrial Engineering and Operations Research at the University of Massachusetts, Amherst, and the Faculty Director of the Energy Transition Institute, which is focused on stakeholder-engaged research at the intersection of energy technology and social equity. She has a PhD in Engineering-Economic Systems & Operations Research from the department of Management Science and Engineering at Stanford University and a Bachelor’s in Mathematics from U.C. Berkeley. She combines operations research methods and economics to decision-making under uncertainty, with a focus on Energy Justice and publicly-funded energy technology Research & Development portfolios in the face of climate change

Jim Cabot leads policy and communications at Breakthrough Energy Ventures. He has been working on sustainability and clean technology development for the past 25 years. He spent 12 years at the US EPA, founding a clean technology development center and later became Director of Strategic Planning for EPA New England. He then moved to the private sector running the energy and environment practice for a national public affairs firm where he built one of the nation’s leading clean energy practices focusing on policy and strategic communications. In this role, Jim advised a wide variety of clients ranging from

multinational energy companies to venture-backed startups to clean energy advocacy organizations. Jim founded his own advisory firm, Cabot Strategies, in 2015 offering strategic communications services.

Jim serves on the President's Council for the Woods Hole Research Center and the Global Leadership Council for NRDC. He has a BA from Harvard College and MBA from the Harvard Business School.

Philip Jordan is the Vice President of BW Research and manages the firm's Massachusetts office. He has worked in research, law, and policy for nearly two decades in the private sector, government, and academia. Phil is an adept problem-solver who is intensely focused on building systems that are more equitable and effective.

Phil leads the firm's energy practice and his research is focused on the intersection of the human age and the digital, especially with regards to inclusive economic and talent development that lead to increased mobility. He is a Luma Certified Practitioner of Human Centered Design and is credited for using data and communications to create change.

Phil is a Senior Fellow at the Ash Center for Democratic Governance at Harvard University's John F. Kennedy School of Government, where he focuses his teaching and research on comparative talent and labor practices in the U.S. and Asia, and is an attorney and member of the Massachusetts Bar. He has his J.D. and Certificate in Environment and Land Law from Boston College and his B.A. in Psychology from the University of Connecticut. When not working, you can find Phil outside with his family, on the water, in the woods, or in the garden.

Daniel Raimi is a fellow at RFF and a lecturer at the Gerald R. Ford School of Public Policy at the University of Michigan. He works on a range of energy policy issues with a focus on tools to enable an equitable energy transition. He has published in academic journals including *Science*, *Science Advances*, *Environmental Science and Technology*, *Journal of Economic Perspectives*, *Review of Environmental Economics and Policy*, *Energy Research and Social Science*, and *Energy Policy* and in popular outlets including *The New Republic*, *Newsweek*, *Slate*, and *Fortune*. He has presented his research for policymakers, industry, and other stakeholders around the United States and internationally, including before the Energy and Mineral Resources Subcommittee of the US House's Natural Resources Committee. In 2017, he published *The Fracking Debate* (Columbia University Press), a book that combines stories from his travels to dozens of oil- and gas-producing regions with a detailed examination of key policy issues.

He also co-hosts *Resources Radio*, a weekly podcast from RFF, in which he interviews leading researchers on energy and environmental topics.

He received his master's degree in public policy from Duke University's Sanford School of Public Policy and his bachelor's degree in music from Wesleyan University. Prior to entering graduate school, Raimi worked as a guitarist, composer, and music instructor in New York and Los Angeles. In his spare time, he still plays music (mostly jazz and bluegrass), cooks, plays tennis, and spends time with family. He lives in Ann Arbor, Michigan, with his wife and kids.

Aaron Bergman is a fellow at Resources for the Future. Prior to joining RFF, he was the Lead for Macroeconomics and Emissions at the Energy Information Administration (EIA), managing EIA's modeling in those areas. Before working at EIA, Bergman spent over a decade in the policy office at the

Department of Energy, working on a broad array of climate and environmental policies. Bergman has worked in the White House at the Office of Science and Technology Policy, managing the Quadrennial Energy Review and handling the methane measurement portfolio, and at the Council on Environmental Quality, working on carbon regulation. Bergman entered the federal government in 2009 as a Science and Technology Policy Fellow with the American Association for the Advancement of Science, after working in high energy physics.

Alan Krupnick 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. He received his PhD in Economics from the University of Maryland in 1980.

Krupnick's primary research methodology is in the development and analysis of stated preference surveys (such as contingent valuation and choice experiments), which include eliciting preferences for reductions in mortality risks, environmental risks, tradeoffs involved in improving community drinking water quality with respect to removal of carcinogens versus microbiological agents, and most recently, the risks from shale gas development as seen by experts and the general public. 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.