

John Bistline

CONTACT INFORMATION

John Erik Truxaw Bistline
Watershed, Head of Science
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RESEARCH INTERESTS

Energy and Environmental Economics, Policy Analysis, Energy-Economic Modeling, Power Systems, Risk Analysis, Technological Change

EDUCATION

Stanford University, Stanford, CA
PhD, Management Science and Engineering, 2010–2013
Dissertation: “Essays on Uncertainty Analysis in Energy Modeling: Capacity Planning, R&D Portfolio Management, and Fat-Tailed Uncertainty”
Committee: John Weyant (primary adviser), Gerd Infanger, Jim Sweeney, Yinyu Ye, Chris Edwards (defense chair)

Stanford University, Stanford, CA
MS, Mechanical Engineering, 2008–2010
Depth: Energy Systems

Carnegie Mellon University, Pittsburgh, PA
BS, Mechanical Engineering and Engineering and Public Policy, 2004–2008

EXPERIENCE

Watershed
Head of Science 2026–Present

The Electricity Journal
Associate Editor 2024–Present

MIT
Research Affiliate 2026–Present

Electric Power Research Institute, Palo Alto, CA
Senior Program Manager, Energy Systems and Climate Analysis 2025–2026
Program Manager, Energy Systems and Climate Analysis 2021–2025
Principal Project Manager, Energy Systems and Climate Analysis 2020–2021
Principal Technical Leader, Energy and Environmental Analysis 2018–2020
Senior Technical Leader, Energy and Environmental Analysis 2017–2018
Project Manager and Technical Lead, Energy and Environmental Analysis 2013–2017

Stanford University, Stanford, CA
Research Fellow, Steyer-Taylor Center for Energy Policy and Finance 2013–2016
Research Assistant for Prof. John Weyant, Energy Modeling Forum 2010–2013
Research Assistant for Prof. Chris Edwards, Advanced Energy Systems Lab 2008–2010

Electric Power Research Institute, Palo Alto, CA and Washington, DC
Research Assistant, Energy and Environmental Analysis 2010
Research Assistant, Energy Technology Assessment Center 2007

Applied Research Laboratory, State College, PA
Research Assistant for Prof. Robert Kunz 2006

Particle Flow and Tribology Laboratory, Pittsburgh, PA
Research Assistant for Prof. C. Fred Higgs, III 2005–2007

Intergovernmental Panel on Climate Change (IPCC)

Sixth Assessment Report, Working Group III: Contributing Author for the “Energy Systems” Chapter

U.S. National Climate Assessment (NCA)

Fifth National Climate Assessment: Author for the “Mitigation” Chapter

Sixth National Climate Assessment: Graphics Development Lead Author for the “Mitigation” Chapter

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- [2] **Bistline, J.**, G. Blanford, A. Diamant, A. Kaye, D. Livengood, Q. Zhu, and F. Ralston Fonseca (2026). System Effects of Carbon-Free Electricity Procurement: Regional Technology and Emissions Impacts of Voluntary Markets. *The Electricity Journal*, 39(2): 107535.
- [3] **Bistline, J.** and A. Watten (2025). Emissions Reductions of Rooftop Solar Are Overstated by Approaches That Inadequately Capture Substitution Effects. *Nature Climate Change*, 15: 1173–1175.
- [4] Muratori, M., D. Arent, M. D. Bazilian, **J. Bistline**, B. Borlaug, A. Brown, P. Cazzola, E. Dede, C. Gearhart, D. Greene, A. Jenn, A. Kendall, C. Ledna, Y. Liu, T. Lipman, S. Narumanchi, A. Pesaran, R. Sioshansi, T. Timbario, K. Walkowicz, and A. Yip (2025). Trends and 2025 Insights on the Rise of Electric Vehicles in the USA. *Nature Reviews Clean Technology*.
- [5] Hoehne, C., M. Muratori, **J. Bistline**, C. Lenox, D. McCollum, M. Browning, K. Podkaminer, R. Beach, R. Orvis, S. Ou, P. Kyle, S. Lie, M. Mahajan, H. McJeon, C. Ledna, M. Melaina, Y. Cai, C. Ramig, A. Bahreinian, N. Victor, O. Bahn, K. Vaillancourt, E. Starke, R. Sands, A. Fawcett, J. McFarland, G. Blanford, T. Mai, and J. Weyant (2025). Transportation in Net-Zero Emissions Futures: Insights from the EMF-37 Model Intercomparison Study. *Energy and Climate Change*, 6: 100211.
- [6] **Bistline, J.** and C. Wolfram (2025). Inflation Reduction Act: Origins, Policy Implications, and Research Gaps. *Review of Environmental Economics and Policy*, 19(2).
- [7] Baker, E., **J. Bistline**, and N. Attiogbe (2025). Robust Pathway Analysis of Electricity Investments Under Net-Zero Uncertainties. *Energy and Climate Change*, 6: 100204.
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- [9] **Bistline, J.**, M. Binsted, G. Blanford, G. Boyd, M. Browning, Y. Cai, J. Edmonds, A. A. Fawcett, J. Fuhrman, R. Gao, C. Harris, C. Hoehne, G. Iyer, J. X. Johnson, P. O. Kaplan, D. Loughlin, M. Mahajan, T. Mai, J. R. McFarland, H. McJeon, M. Melaina, S. S. Mousavi, M. Muratori, R. Orvis, A. Prabhu, C. Rossmann, R. D. Sands, L. Sarmiento, S. Showalter, A. Sinha, E. Starke, E. Stewart, K. Vaillancourt, J. Weyant, F. Wood, and M. Yuan (2025). Policy Implications of Net-Zero Emissions: A Multi-Model Analysis of United States Emissions and Energy System Impacts. *Energy and Climate Change*, 6: 100191.
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Electricity Supply and Demand under a Net-Zero Economy Scenario: Insights from the EMF-37 Study. *Energy and Climate Change*, 6: 100196.

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OPINION

Diaz, D., **J. Bistline**, S. Davis, L. Fischer, and Z. Hausfather (2023). A Glimpse of Optimism on Climate Change. *The Hill*, 23 November 2023.

Bistline, J., I. Azevedo, C. Bataille, and S. Davis (2022). Climate Debates Are Stalling Progress. *The New York Times*, 10 April 2022.

TECHNICAL
REPORTS

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J. Bistline and D. Livengood (2026). System Impacts of 24/7 Carbon-Free Electricity Procurement and “Emissionality” Strategies: Regional Modeling and Emissions Impacts of Voluntary Markets. EPRI Report 3002033175.

Venkatesh, A., **J. Bistline**, and F. Fonseca (2026). Zero CO₂ Electric Sector and System Reliability. EPRI Report 3002032445.

Blanford, G., T. Wilson, **J. Bistline**, and N. Johnson (2026). Powering Intelligence 2026: Updated Scenarios of U.S. Data Center Electricity Use and Power Strategies. EPRI Report 3002034696.

J. Bistline and A. Ratnayake (2026). Balancing Speed and Affordability: The NIPSCO GenCo Model for Hyperscale Load Growth. EPRI Report ID 3002034667.

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PAPERS IN PREPARATION OR UNDER REVIEW	Goteti, N. S., N. Santen, and J. Bistline . “Impacts of Zero CO ₂ Power Sector Policy Design on System Reliability” (under review). Bistline, J. and A. Watten. “Inframarginal Investments with Clean Energy Subsidies: Evidence from the Inflation Reduction Act” (in preparation).
SERVICE AND OUTREACH	ESIG Large Loads Task Force: Rate Impacts Project Team Guest editor of the Energy Modeling Forum 37 <i>Energy and Climate Change</i> special issue (“Deep Decarbonization & High Electrification Scenarios for North America”) Editorial advisory board for <i>Energy Findings</i> journal Guest editor of the <i>Energy and Climate Change</i> special issue on “Net-Zero Energy Systems” Lawrence Berkeley National Laboratory EE/DR technical advisory group (“A Framework and Tools to Assess the System-Level Relationships Between Energy Efficiency (EE) and Demand Response (DR) Measures”), 2018–2021 Guest editor of the Energy Modeling Forum 32 <i>Energy Economics</i> special issue and steering committee member (“Technology and Climate Policy Strategies for Greenhouse Gas Reductions in the U.S. Electric Power Sector”)
HONORS AND AWARDS	Fortnightly Under Forty, Public Utilities Fortnightly 2020 Chauncey Award, Electric Power Research Institute 2018 Chauncey Award, Electric Power Research Institute 2016 Chauncey Award, Electric Power Research Institute 2014 Best Early Career Article, <i>Environmental Research Letters</i> 2014 School of Engineering Fellowship, Stanford 2010–2011 William K. Bowes, Jr. Fellow, Stanford 2008–2011 Bennett Award for Academic Achievement, Carnegie Mellon 2008 Tau Beta Pi Fellow 2008–2009 National Science Foundation Research Fellowship Honorable Mention 2009 CIT Dean’s List, Carnegie Mellon 2004–2008

Thomas H. Johnson Engineering and Public Policy Fellow, Carnegie Mellon 2007
John S. Morrison Scholarship 2004–2008

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Stanford University

- 2012–2013: Teaching Assistant for *Energy Policy Analysis* (Graduate), Seminar Coordinator for *Doctoral Research Seminar in Energy-Environmental Systems Modeling and Analysis* (Graduate).
- 2011–2012: Teaching Assistant for *Climate Policy Analysis* (Graduate), Project Mentor for *Introduction to Decision Analysis* (Undergraduate), Seminar Coordinator for *Doctoral Research Seminar in Energy-Environmental Systems Modeling and Analysis* (Graduate), Teaching Assistant for *Economic Growth and Development* (Graduate).
- 2010–2011: Teaching Assistant, *Energy Policy Analysis* (Graduate), Project Mentor for *Introduction to Decision Analysis* (Undergraduate).
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REFEREE SERVICE

Applied Energy; Climate Change Economics; Climate Policy; Climatic Change; Ecological Economics; The Electricity Journal; Energy and Climate Change; Energy Economics; Energy Findings; The Energy Journal; Energy Policy; Energy Research and Social Science; Environmental Research Letters; Environmental and Resource Economics; Environmental Science & Technology; IEEE Transactions on Energy Markets, Policy, and Regulation; IEEE Transactions on Power Systems; Joule; Nature; Nature Climate Change; Nature Communications; Nature Energy; Nature Sustainability; Proceedings of the National Academy of Sciences; Renewable and Sustainable Energy Reviews; Science; Technological Forecasting and Social Change; WIREs Climate Change

REVIEW SERVICE

Alfred P. Sloan Foundation; Canadian Climate Institute; Columbia University SIPA Center on Global Energy Policy; Electric Power Research Institute; Engineering and Physical Sciences Research Council; International Energy Agency; International Renewable Energy Agency; Lawrence Berkeley National Laboratory; National Academies of Sciences, Engineering, and Medicine; National Renewable Energy Laboratory; Organisation for Economic Co-operation and Development; United States Congressional Budget Office; United States Department of Energy; United States Energy Information Administration; United States Environmental Protection Agency