

MEREDITH FOWLIE
Agricultural and Resource Economics, UC Berkeley

Department of Agricultural and Resource Economics
UC Berkeley
327 Giannini Hall
Berkeley CA 94720

fowlie@berkeley.edu
<https://www.meredithfowlie.com>

Current Appointments

2021-present Professor, Department of Agricultural and Resource Economics University of California, Berkeley
2021-present Co-director of the NBER's Environment and Energy Economics Program
2020-present Faculty Director, Energy Institute at Haas
2015-present Class of 1935 Endowed Chair in Energy
2014-present J-PAL Affiliate
2014-present Center for Global Action (CEGA) Affiliate.
2013-present Research Associate, National Bureau of Economic Research
2010-present Affiliated Faculty, Energy and Resources Group, UC Berkeley

Previous Appointments

2013-2021 Associate Professor (with tenure), Agricultural and Resource Economics University of California, Berkeley.
2009-2013 Assistant Professor of Agricultural and Resource Economics, University of California, Berkeley
2008-2013 Faculty Research Fellow, National Bureau of Economic Research
2006-2009 Assistant Professor of Economics and Public Policy, University of Michigan

Education

Ph.D. Agricultural and Resource Economics, UC Berkeley, 2006
M. Sc. Environmental Economics, Cornell University, 2000
B.Sc. International Agriculture and Development, Cornell University, 1997

Selected Editorial Positions and Professional Service (Selected)

Associate Editor, *Review of Environmental Economics and Policy*
Member, California Independent Emissions Market Assessment Committee
Member, Environmental Defense Economics Advisory Council
Advisory Council, Brookings Institution Center on Regulation and Markets

RESEARCH

"Wildfire Insurance, Information, and Self-Protection" (with Judson Boomhower and Andrew Plantinga). *AEA Papers and Proceedings*. 2022. 113: 310-15.

["How Does the US Price Carbon? How Could We Price Carbon?"](#) (with Joe Aldy, Dallas Burtraw, Carolyn Fisher, Rob Williams and Maureen Cropper). *Journal of Benefit-Cost Analysis*. 13(3), 310-334, November 2022

["Mitigating Emissions Leakage in Incomplete Carbon Markets"](#) (with Mar Reguant). *Journal of the Association of Environmental and Resource Economists*. 2022. Vol. 9: No. 2. Pages 307-343.

["Default Effects and Follow-on Behavior: Evidence from an Electricity Pricing Program"](#) (with Catherine Wolfram, Patrick Baylis, C. Anna Spurlock, Annika Todd, and Peter Cappers). *Review of Economic Studies*. 2021. Vol. 88, Issue 6, Pages 2886–2934

["The Economics of Energy Efficiency in Developing Countries"](#) (with Robyn Meeks). *Review of Environmental Economics and Policy*. 2021. Vol. 111.

["Border Carbon Adjustments When Carbon Intensity Varies Across Producers: Evidence from California"](#). *American Economic Review Papers and Proceedings*. (with Mar Reguant and Claire Peterson). 2021. Vol 111: Pages 401-405.

"Co-Benefits and Regulatory Impact Analysis: Theory and Evidence from Federal Air Quality Regulations" (with Joseph Aldy, Mary Evans, Matthew Kotchen, Meredith Fowlie, Arik Levinson, and K. Palmer). 2020. *Environmental and Energy Policy and the Economy*. 2021. Vol. 2.

"Climate Policy, Environmental Justice, and Local Air Pollution" (with Reed Walker, and David Wooley). *Brookings Economic Studies Program*, October, 2020.

"Deep Flaws in a Mercury Regulatory Analysis" (with Joseph Aldy, Matthew Kotchen, Mary Evans, Arik Levinson, and Karen Palmer). *Science*. 2020 Apr 17;368(6488).

"Bringing Satellite-Based Air Quality Estimates Down to Earth" (with Edward Rubin and Reed Walker) *American Economic Review Papers and Proceedings*. 2019 109, 283-288.

"Solar Microgrids and Remote Energy Access: How Weak Incentives Can Undermine Smart Technology" (with Yashraj Khaitan, Catherine Wolfram, and Derek Wolfson) *Economics of Energy and Environmental Policy*. 2019. 8(1):33:49.

"Market-based Emissions Regulation when Damages Vary Across Sources: What are the Gains from Differentiation?" (with Nicholas Muller). *Journal of the Association of Environmental and Resource Economists*. 2019. 6(3), 593-632

"Challenges in the Measurement of Leakage Risk," (with Mar Reguant). *American Economic Review Papers and Proceedings*, 2018, 108:124-29.

“Do Energy Efficiency Investments Deliver? Evidence from the Weatherization Assistance Program,” (with Michael Greenstone and Catherine Wolfram). *Quarterly Journal of Economics*, 2018, 133(3): 1597–1644.

“Location, Location, Location: The Variable Value of Renewable Energy and Demand-side Efficiency Resources.” (with Duncan Callaway and Gavin McCormick). *Journal of the Association of Environmental and Resource Economists*. 2018. 5(1), 39-75.

“Influence of Acceleration Tradeoffs on CO2 Emissions and Costs of Fuel Economy and Greenhouse Gas Regulations” (with Kate Whitefoot and Steven Skerlos). *Environmental Science and Technology*. 2017. 51(18):10307-10315.

“Reforming the Federal Coal Leasing Program” (with Gillingham, K., J. Bushnell, M. Greenstone, C. Kolstad, A. Krupnick, A. Morris, R. Schmalensee, J. Stock). *Science*, 2016, 354(6316): 1096-1098.

“Market-based Environmental Regulation and the Evolution of Market Structure” (with Stephen Ryan and Mar Reguant). *Journal of Political Economy*, 2016, 12(1): 249-302.

“Are the Non-Monetary Costs of Energy Efficiency Investments Large? Understanding Low Take-up of a Free Energy Efficiency Program,” (with Michael Greenstone and Catherine Wolfram), *American Economic Review Papers and Proceedings*, May 2015.

“An Economic Perspective on the EPA’s Clean Power Plan,” with Lawrence Goulder and Matthew Kotchen, (lead authors); James Bushnell, Lucas Davis, Michael Greenstone, Charles Kolstad, Christopher Knittel, Robert Stavins, Michael Wara, and Frank Wolak. *Science*, 2014, Vol. 346 (November): 815-816.

“Distributing Pollution Rights in Cap-and-Trade Programs: Are Outcomes Independent of Allocation?” (with Jeffrey Perloff). *Review of Economics and Statistics*, 2013, 95(5).

“The Economics of Solar Energy” (with Erin Baker, Derek Lemoine, and Stanley Reynolds). *Annual Review of Resource Economics*, 2013, Vol. 5: 387-426.

“What Do Emissions Markets Deliver and to Whom? Evidence from Southern California’s NOx Trading Program” (with Stephen P. Holland and Erin Mansur). *American Economic Review*, 2012, 102(2): 965-93.

“Sacred Cars? Cost-Effective Regulation of Stationary and Non-stationary Pollution Sources” (with Christopher Knittel and Catherine Wolfram). *American Economic Journal: Economic Policy*, 2012, 4(1): 98-126.

“Emissions Trading, Electricity Industry Restructuring, and Investment in Pollution Control.” *American Economic Review*, 2010, 100(3):837-83.

“Incomplete Environmental Regulation, Imperfect Competition, and Emissions Leakage.” *American Economic Journal: Economic Policy*, 2009, 1(2): 72-112.

“Demand Side Management and Energy Efficiency Revisited” (with Maximilian Auffhammer and Carl Blumstein). *The Energy Journal*, 2008, 29(3): 91-104.

“Public Goods and Private Interests: Understanding Non-Residential Demand for Green Power” (with Edward Holt and Ryan Wiser). *Energy Policy*. 29(13):1085-1097. November 2001.

Book Chapters, Reports, Monographs

“Annual Report of the Independent Emissions Market Advisory Committee” (with Dallas Burtraw, Danny Cullenward, Brian Holt, Katelyn Roedner, Ross Brown). 2023.

“Annual Report of the Independent Emissions Market Advisory Committee” (with Dallas Burtraw, Danny Cullenward, Brian Holt, Katelyn Roedner, Ross Brown). 2022.

“Annual Report of the Independent Emissions Market Advisory Committee” (with Dallas Burtraw, Danny Cullenward, Brian Holt, Katelyn Roedner, Ross Brown). 2021.

“Annual Report of the Independent Emissions Market Advisory Committee” (with Dallas Burtraw, Ann Carlson, Danny Cullenward, Jennifer Kropke). 2020.

“Annual Report of the Independent Emissions Market Advisory Committee.” (with Dallas Burtraw, Ann Carlson, Danny Cullenward, Quentin Foster). 2019.

Aldy, Joseph, Matthew Kotchen, Mary Evans, Meredith Fowlie, Arik Levinson, Karen Palmer. 2019. E-EEAC Report on the Proposed Changes to the Federal Mercury and Air Toxics Standards.

“Annual Report of the Independent Emissions Market Advisory Committee.” (with Dallas Burtraw, Ann Carlson, Danny Cullenward, Quentin Foster). 2018.

[“E-EEAC Report on the Proposed Changes to the Federal Mercury and Air Toxics Standards”](#) (with Joseph Aldy, Matthew Kotchen, Mary Evans, Meredith Fowlie, Arik Levinson, Karen Palmer). 2019.

“Measuring Leakage Risk” with Mar Reguant, and Stephen Ryan. 2016, Report for the California Air Resources Board.

“Updating the Allocation of Greenhouse Gas Emissions Permits in a Federal Cap-and-Trade Program.” In Don Fullerton and Catherine Wolfram, ed. *The Design and Implementation of U.S. Climate Policy*, University of Chicago Press. 2012.

“The Environment and Competition in Electricity in the USA and the UK: The Impact of Restructuring on CO₂ Emissions.” Oxford Institute for Energy Studies Monograph EV7. 1999.

Selected Research Grants

- 2021-2023 Co-principal investigator. Alfred P. Sloan Foundation, The Berkeley Initiative on Equity in Energy and Environmental Economics. UCB Award ID: 051311-001 (with Reed Walker)
- 2020-2022. J-PAL North America: “Exploring Bill Affordability for Low Income Electricity Customers in California” (with Jesse Buchsbaum).
- 2020-2021 Co-principal Investigator: US Environmental Protection Agency. “Retrospective Analysis Retrospective Analysis of Indirect Air Quality Benefits from Power Sector Emissions Reductions” (with Ed Rubin).
- 2020-2023 Co-principal Investigator: UCB Award. “Mitigating and Managing Extreme Wildfire Risk in California” (with Charles Jones, Judson Boomhower, Duncan Callaway, Andrew Plantinga)
- 2019-2021 Co-principal Investigator: Next 10. “Why are High Electricity Prices a Problem for Climate Change?. (with Severin Borenstein and James Sallee).
- 2019-2021 Co-Principal Investigator: Energy and Economic Growth Program “Sustainable Access to Reliable Energy Services: What Role for Energy Efficiency and Storage?” (with Jayendran Venkataswaran).
- 2016-2017 Co-Principal Investigator: International Growth Center: "Smart Meters for Promoting Energy Efficiency in Rural India" (with Catherine Wolfram).
- 2015-2017 Alfred P. Sloan Foundation Grant for NBER program to support pre-doctoral fellowships in energy economics. (co-PI, \$724,500)
- 2014-2016 Co-principal Investigator: “Electrifying India Intelligently- Bringing Smart Grids to Rural India” (with Eric Brewer, Yashraj Khaitan, Edward Miguel, and Catherine Wolfram), US AID DIV.
- 2013-2015 Co-principal Investigator: “Measuring and monitoring potential cap-and-trade program-related greenhouse gas emissions leakage in emissions-intensive, trade-exposed industries” (with Wayne Gray, Joshua Linn, Richard Morgenstern, Mar Reguant, Stephen Ryan).
- 2011-2013 Co-Principal Investigator: “Reconcilable Differences? Examining the Gap between Engineering Projections and Ex-Post Realized Gains from Energy Efficiency Investments” (with Catherine Wolfram), BECI Innovation Seed Fund in Energy and Climate Research.
- 2010-2012 Co-Principal Investigator: “Reducing Energy Consumption and Greenhouse Gas Emissions through Energy-Efficiency Retrofits: Evidence from Low-Income Households” (with Michael Greenstone and Catherine Wolfram), funded by the Alfred P. Sloan Foundation.

- 2010-2012 Co-Principal Investigator: “Smart Grid and Dynamic Pricing: Large-Scale Demonstration Projects” (with Catherine Wolfram), funded by the Department of Energy.
- 2010-2011 Co-Principal Investigator: “Randomized Encouragement Design Analysis of the DOE Weatherization Assistance Program” (with Catherine Wolfram), funded by the Department of Energy
- 2009-2011 Co-Principal Investigator: “Market-based Environmental Regulation of Industry: An Empirical Approach” (with Stephen Ryan), NSF Grant SES-0922401.

Visiting Positions

Federal Reserve Bank of San Francisco (2022)
 Vancouver School of Economics (2021)
 University of Zurich and ETH (2018)

Referee service

Co-editor: *Review of Environmental Economics and Policy*

Editorial council member: *Journal of the Association of Environment and Resource Economists*

American Economic Journal: Economic Policy, American Economic Review, American Journal of Agricultural Economics, B.E. Journals in Economic Analysis & Policy, Climate Policy, Ecological Applications, The Energy Journal, Environment Research Letters, International Journal of Environmental Research and Public Health, Journal of Agricultural and Resource Economics, Journal of Applied Economics, Journal of the Association of Environmental and Resource Economists, Journal of Economic Literature, Journal of the European Economic Association, Journal of Environmental Economics and Management, Journal of Industrial Economics, Journal of Political Economy, Journal of Public Economics, Journal of Public Economic Theory, Operations Research, Proceedings of the National Academy of Sciences, Quarterly Journal of Economics, RAND Journal of Economics, Review of Economics and Statistics, Review of Economic Studies, Science.

UC Berkeley PhD Advising (initial placement), Dissertation committee

Jenya Kahn-Lang	2023	Resources for the Future
Jaechol Lee	2023	EPIC Post-doc, University of Chicago
Jesse Buchsbaum	2022	University of Chicago, Post-doc
Yulei (Shelley) He	2022	Amazon
Will Gorman	2022	Lawrence Berkeley National Lab
Derek Wolfson	2022	Ironcloud Metalworks
Hal Gordon	2022	Demand Side Analytics
Eva Lyubich	2022	U.S.Census Bureau

Sebastian Annan-Phan	2021	JD.com
Karl Dunkle Werner	2021	U.S. Treasury
Kate Pennington	2021	U.S. Census Bureau
Katie Wright	2021	Reddit
Susanna Berkouwer	2020	Wharton School of Business
Steven Jarvis	2020	London School of Economics
Dina Gorenshteyn	2019	Amazon
Jonathan Proctor	2019	Harvard Post-doc
Matthew Woerman	2019	UMass Amherst
James Gillan	2018	Amazon
Louis Preonas	2018	University of Maryland, AREC
Edward Rubin	2018	University of Oregon
Deirdre Sutula	2018	Government Accountability Office
Dan Hammer	2017	Earthrise Media
Joachim Seel	2017	Lawrence Berkeley National Lab
Katalin Springel	2017	Georgetown McDonough
Nate Aden	2017	World Resources Institute
Joshua Blonz	2017	Federal Reserve Board
Pat Baylis	2016	Vancouver School of Economics
Ranjit Deshmukh	2016	UC Santa Barbara
Walter Graf	2016	Brattle Group
Ken Lee	2016	University of Chicago (EPIC)
Geoff Barrows	2015	Ecole Polytechnique
Judson Boomhower	2015	UC San Diego
Qu Tang	2015	Jinan University
Rebecca Taylor	2015	University of Sydney
Dilek Uz	2015	University of Nevada
Erica Myers	2014	University of Illinois
Matt Zaragoza-Watkins	2014	Vanderbilt
Cathering Hausman	2013	University of Michigan
Anna Spurlock	2013	Lawrence Berkeley National Lab
Kate Foreman	2013	NERA