

## T. Robert Fetter

Duke Center for International Development | Duke University | Durham, NC 27708  
rob.fetter@duke.edu

### Education

Ph.D., Environmental Policy, Duke University, 2017

Dissertation: Innovation, Diffusion, and Regulation in Energy Technologies

Committee: Lori Benneer (chair), Chris Timmins, Steve Sexton, Billy Pizer

M.S., Environmental Economics, Yale University, 2015

M.S., Resource Economics, University of Massachusetts Amherst, 2002

B.S., Resource Economics, University of Massachusetts Amherst, 1999

### Fields

Energy and Environmental Economics, Development Economics, Applied Microeconomics, Technology Innovation and Diffusion

### Positions Held

Principal Consultant, Environmental Resources Management, 2022 –

Senior Policy Associate, Nicholas Institute for Environmental Policy Solutions, 2017 – 2022

Equitable Origin, Quito, Ecuador: Co-Founder; Vice President for Strategy and Standards (2009-12);  
Technical Committee (2011-present)

ICF International, Quito, Ecuador, and Denver, CO: Program Manager and Economist, 2011-12

Science Applications International Corporation, Denver, CO, and Irvine, CA: Project Manager and  
Economist, 2001-2010

### Research

#### *Peer-Reviewed Publications*

Building the supply of demand: Experiments in mini-grid demand stimulation. 2021. *Development Engineering* 6: 100058. With June Lukuyu, Krishnapriya Perumbillissery, Jay Taneja, and Nathan Williams.

- Media: [Future Development Blog](#) (Brookings Institution/World Bank)

Is energy the golden thread? A systematic review of the impacts of modern and traditional energy use in low- and middle-income countries. 2021. *Renewable and Sustainable Energy Reviews* 135 (January), 110406. With Faraz Usmani, Marc Jeuland, Yating Li, Subhrendu Pattanayak, and others.

Who Lives on the Wrong Side of the Environmental Tracks? Evidence from the EPA's Risk-Screening Environmental Indicators Model. 2004. *Social Science Quarterly*, 85(2):441-462. With Michael Ash.

Variation in Organic Standards Prior to the National Organic Program. 2002. *American Journal of Alternative Agriculture*, 17(2): 55-74. With Julie A. Caswell.

#### *Working Papers*

Utilizing geospatial data for assessing energy security: Mapping small solar home systems using unmanned aerial vehicles and deep learning. With Simiao Ren, Jordan Malof, Robert Beach, Jay Rineer, and Kyle Bradbury. [arXiv:2201.05548 \[eess.IV\]](#). (Under review)

Energy Transitions and Technology Change: "Leapfrogging" Reconsidered. (Revise and resubmit at *Resource and Energy Economics*)

Fracking, Farmers, and Rural Electrification in India. With Faraz Usmani. *Ruhr Economic Papers* No. 864.

- Media: [World Bank Development Impact Blog](#), [International Growth Centre Ideas for India Blog](#)

Learning by Viewing? Social Learning, Regulatory Disclosure and Firm Productivity in Shale Gas. With Andrew L. Steck, Christopher Timmins, and Douglas H. Wrenn. NBER Working Paper No. 25401.

- Featured in the [NBER Digest](#), April 2019

Evaluating Electric Stoves as a Solution to Air Pollution in the World's Most Polluted Region. With Eswaran Somanathan, Marc Jeuland, Subhrendu Pattanayak, and others.

Fracking, Toxics, and Disclosure.

Averting Expenditures and Desirable Goods: Consumer Demand for Bottled Water in the Presence of Fracking. With A. Justin Kirkpatrick.

#### *Non-Peer-Reviewed Publications*

“Catalysing Climate Finance for Low-Carbon Agriculture Enterprises.” 2022. With Jonathan Phillips, Victoria Plutshack, Marc Jeuland, Francis Elisha, Abi Vanover, and Elizabeth Yoder. ([Link](#))

“Solar technologies can speed up vaccine rollout in Africa. Here’s how.” 2021. The Conversation Africa. With Cyrus Sinai. ([Link](#)) (Republished in [Quartz](#), [Sun-Connect News](#) and the [World Economic Forum](#))

“You Can’t Fight Pandemics Without Power—Electric Power.” 2020. Future Development Blog. Washington, DC: Brookings Institution and World Bank. With Anthony Fuller, Jem Porcaro, and Cyrus Sinai. ([Link](#))

“Harnessing Data Analytics to Accelerate Energy Access.” 2020. Nicholas Institute Policy Brief 20-03. Durham, NC: Duke University. With Justin S. Baker. ([Link](#))

“Can Microgrids Enable Macro Development?” 2019. Future Development Blog. Washington, DC: Brookings Institution and World Bank. With Jay Taneja, Nathan Williams, and June Lukuyu. ([Link](#))

“The True Cost of Solar Tariffs in East Africa.” 2019. Nicholas Institute Policy Brief 19-01. Durham, NC: Duke University. With Jonathan Phillips. ([Link](#))

### **Teaching**

Strategies for Energy, Water and Agriculture in Rural Ethiopia (with Justin Baker, Marc Jeuland, and Jonathan Phillips, Duke; Fall 2020 and Spring 2021)

From the Ground Up: The Business and Policy Landscape for Electricity Access in Zambia (assisted by Jonathan Phillips, Duke; Fall 2018 and Spring 2019)

Electricity Access in Developing Countries from Aerial Imagery (with Kyle Bradbury, Leslie Collins, and Marc Jeuland, Duke; Fall 2017 and Spring 2018)

### **Seminar and Conference Presentations**

2021 International Energy Workshop (virtual); Sustainable Energy Transitions Initiative (virtual)

2020 American Economic Association, San Diego, CA; Centre for the Study of African Economies, Oxford, UK (invited; event cancelled due to pandemic); Association for Environmental and Resource Economics (virtual); London School of Economics Workshop in Environmental Economics (virtual); European Association for Environmental and Resource Economics (virtual)

2019 Environment for Development, Bogotá, Colombia; Centre for Research on the Economics of Climate, Food, Energy and Environment (CECFEE), Tezpur, India; Data for Development, Nairobi, Kenya; Carnegie Mellon University Africa Campus, Kigali, Rwanda; North East Universities Development Consortium, Evanston, Illinois; Alliance for Research on Corporate Sustainability,

- Chapel Hill, NC; Association for Environmental and Resource Economics, Tahoe, NV; Midwest International Economic Development Conference, Madison, WI
- 2017 Environment for Development, Addis Ababa, Ethiopia; Academy of Management, Atlanta, GA; Sustainable Energy Transitions Initiative, Durham, NC; European Association for Environmental and Resource Economics, Athens, Greece; Association for Environmental and Resource Economics, Pittsburgh, PA; National Bureau of Economic Research (Environment and Energy Economics), Cambridge, MA; Fuqua School of Business, Duke University, NC
- 2016 Association for Public Policy Analysis & Management (APPAM), Washington, DC; Sanford School of Policy, Duke University, Durham, NC; Conference on New Directions in the Analysis of Environmental Justice, Duke University, Durham, NC; Camp Resources, Wrightsville Beach, NC; ETH Academy on Sustainability and Technology, Zürich, Switzerland; Sustainable Energy Transitions Initiative, Durham, NC
- 2015 Heartland Environmental and Resource Economics Workshop, University of Illinois at Urbana-Champaign, IL; Association of Environmental and Resource Economists Summer Conference, San Diego, CA; Alliance for Research on Corporate Sustainability, Chicago, IL
- 2014 Northeast Agricultural and Resource Economics Association Post-Meeting Workshop, Morgantown, WV
- 2002 University of Colorado Environmental and Resource Economics Workshop, Boulder, CO
- 2001 Brown University Department of Environmental Studies, Providence, RI
- 1999 U.S. Department of Agriculture, Economic Research Service, Washington, DC; Henry A. Wallace Institute of Alternative Agriculture, Greenbelt, MD

### **Selected Fellowships and Grants (as PI or Co-PI)**

- Programme on Enterprise Development in Low-Income Countries: “Enhancing Agricultural Community Resilience through Solar Mini-Grid Irrigation in Ethiopia”. 2022. (\$404,000)
- USAID: “Do Better Managers Engage in Less Corruption?” 2021. (\$230,000)
- Catalyst Program, Duke University Nicholas Institute: Mapping Solar Photovoltaic Arrays Using Unpiloted Aerial Vehicles. 2020. (\$25,000)
- Catalyst Program, Duke University Nicholas Institute: “An Analysis of the Industrial ‘Opt-Out’ Challenge”. 2020. (\$25,000)
- Energy Research Seed Fund, Duke University: “Powering Health Care: Energy Access, Coping Costs, and Patient Outcomes in Uganda Health Clinics”. 2019. (\$27,000)
- Resources for the Future Joseph L. Fisher Doctoral Dissertation Fellowship, 2016-2017
- Duke Environmental Economics Doctoral Scholars Fellowship, 2015-2016
- Carolyn Harper Memorial Fellowship, Univ. of Massachusetts Resource Economics Department, 2000

### **Referee Service**

California Management Review, Development Engineering, Journal of the Association of Environmental and Resource Economists, Journal of Environmental Economics and Management, Resource and Energy Economics

### **Languages**

English (native), Spanish (advanced)

**Affiliations**

American Economic Association

Association of Environmental and Resource Economists

Alliance for Research on Corporate Sustainability

Environment for Development

Sustainable Energy Transitions Initiative