Shaun D. McRae May 2024

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**MEXICO** 

RESEARCH Energy Economics

INTERESTS Environmental Economics

**Industrial Organization** 

ACADEMIC ITAM

APPOINTMENTS Assistant Professor 2016–

Centro de Investigación Económica and Department of Economics

**University of Michigan** 

Assistant Professor, Department of Economics 2010–2016

**Stanford University** 

Visiting Scholar, Program on Energy and Sustainable Development Spring 2014

**University of California, Berkeley** 

Visiting Scholar, Energy Institute at Haas Fall 2013

EDUCATION Stanford University, Stanford, CA

Ph.D., Economics 2010
M.A., Economics 2010

University of Auckland, Auckland, New Zealand

B.Sc.(Hons.) (First Class), Mathematics 1998

University of Otago, Dunedin, New Zealand

B.Com.(Hons.) (First Class), Economics 1997

WORKING PAPERS "Competitive Effects of Entry in Gasoline Markets" (with Lucas Davis and Enrique Seira). Revise and resubmit at *Journal of Industrial Economics*.

"Efficiency and Equity Effects of Electricity Metering: Evidence from Colombia".

"Electricity Pricing for the Energy Transition" (with Frank Wolak).

"Reliability Options in Renewable-Dominated Electricity Markets" (with Frank Wolak).

"Why Are Connection Charges So High? An Analysis of the Electricity Sector in Sub-Saharan Africa" (with Moussa Blimpo and Jevgenijs Steinbuks).

### PUBLISHED PAPERS

- "Fueling Alternatives: Gas Station Choice and the Implications for Electric Charging" (with Jackson Dorsey and Ashley Langer), *American Economic Journal: Economic Policy*, forthcoming.
- "Residential Electricity Consumption and Adaptation to Climate Change by Colombian Households", *Economics of Disasters and Climate Change*, 2023, Vol. 7, 253–279.
- "Retail Pricing in Colombia to Support the Efficient Deployment of Distributed Generation and Electric Stoves" (with Frank Wolak), *Journal of Environmental Economics and Management*, 2021, 102541.
- "Self-Regulation vs State Regulation: Evidence from Cinema Age Restrictions" (with Ryan Lampe), *International Journal of Industrial Organization*, 75, 2021, 102708.
- "An Economic Perspective on Mexico's Nascent Deregulation of Retail Petroleum Markets" (with Lucas Davis and Enrique Seira), *Economics of Energy and Environmental Policy*, 8(2), 2019, 181–199.
- "Infrastructure Quality and the Subsidy Trap", *American Economic Review*, 105(1), January 2015, 35–66.
- "Testing the convergence hypothesis: a new approach" (with Erkin Bairam), *Economics Letters*, 1999, v.64: pp. 351–355.

## OTHER PUBLICATIONS

- "Diagnosing the Causes of the Recent El Niño Event and Recommendations for Reform" (with Frank Wolak).
- "Book review: 'The Economics of Electricity Markets: Theory and Policy", *Journal of Economic Literature*, 2014, 52(2), 554–5.
- "How Do Firms Exercise Unilateral Market Power? Evidence from a Bid-Based Wholesale Electricity Market," (with Frank Wolak), in *Manufacturing Markets: Legal, Political and Economic Dynamics*, Eric Brousseau and Jean-Michel Glachant (eds), Cambridge University Press, 2014.
- "Merger Analysis in Restructured Electricity Supply Industries: The Proposed PSEG and Exelon Merger (2006)," (with Frank Wolak), in *The Antitrust Revolution: Economics, Competition and Policy*, John E. Kwoka and Lawrence J. White (eds), Oxford University Press, 2009.

## OLDER WORKING PAPERS

- "Crude Oil Price Differentials and Pipeline Infrastructure" (NBER Working Paper No. 24170).
- "Market Power in a Hydro-Dominated Wholesale Electricity Market" (with Frank Wolak).
- "Price Perceptions and Electricity Demand with Nonlinear Prices" (with Robyn Meeks).
- "Reliability, Appliance Choice, and Electricity Demand".

"Step on It: A New Approach to Improving Vehicle Fuel Economy" (with Ashley Langer).

"Vertical Integration and Price Differentials in the U.S. Crude Oil Market".

### CONFERENCE AND SEMINAR PRESENTATIONS

**2024**: ASSA Annual Meeting, Toulouse Conference on the Economics of Energy and Climate (upcoming), IAEE Annual Conference (upcoming).

**2023**: UC San Diego/ITAM workshop, Inter-American Development Bank, CAF, AERE Summer Conference, SETI pre-conference workshop, EAERE Summer Conference, Notre Dame-ITAM PODER mini-conference, LACEA, RIDGE Forum on Environmental Economics.

**2022**: ASSA Annual Meeting, International Industrial Organization Conference, AERE Summer Conference, Sustainable Energy Transitions Initiative annual meeting, Environment for Development annual meeting, USAEE/IAEE North American Conference, RIDGE Forum on Industrial Organization.

**2021**: ASSA Annual Meeting, ADBI-IFS Conference on Sanitation and Development (discussant).

**2020**: ASSA Annual Meeting, SETI annual meeting (discussant), AERE summer meeting, EAERE summer meeting, NBER Summer Institute Industrial Organization meeting.

2019: Inter-American Development Bank, NBER Environmental and Energy Economics Program Meeting (discussant), POWER Conference on Energy Research and Policy, International Industrial Organization Conference, Workshop on Energy Markets in Mexico, Sustainable Energy Transitions Initiative annual meeting, NBER Economics of Electricity Markets and Regulation Workshop, Becker Friedman Institute New Developments in Structural Econometrics and Policy Analysis conference, Toulouse Conference on the Economics of Energy and Climate, Fundação Getúlio Vargas EPGE, Fundação Getúlio Vargas CERI, PUC-Rio, Energy Policy Research Conference (Boise State), University of Southern California, OPIS Mexico-U.S. Petroleum Summit, University of California Davis, USAEE/IAEE North American Conference, Environment for Development annual meeting, Infrastructure in the Digital Era #Infra4Dev conference (Toulouse).

**2018**: ASSA Annual Meeting, CIDE Santa Fe, IAEE International Conference, Environmental Taxation v Other Approaches workshop at University of Maryland (discussant), Occasional Workshop in Environmental and Resource Economics (discussant), Inter-American Development Bank, CIDE Aguascalientes, Economics of Low Carbon Markets workshop.

**2017**: Energy Summit Centroamérica 2017 (panelist), International Industrial Organization Conference, Sustainable Energy Transitions Initiative workshop, NBER Hydrocarbon Infrastructure and Transportation Conference, AERE Summer Conference, EAERE annual conference, Bolivian Conference on Development Economics.

**2016**: AERE Summer Meeting, Mannheim Energy Conference, NBER Environmental and Energy Economics meeting, World Bank.

**2015**: ASSA Annual Meeting, ALADEE conference, International Industrial Organization Conference, SITE workshop, NBER Hydrocarbon Infrastructure and Transportation meeting, UM/MSU/WMU Energy and Environment Day, Latin American Environmental and Energy workshop at CIDE, University of Calgary, LACEA annual meeting, PUC-Chile, TE3 transportation conference, University of Chicago Booth, University of Maryland, Clemson University, ITAM.

**2014**: University of Michigan, International Industrial Organization Conference, Energy Institute at Haas Energy Camp, SITE workshop, World Bank, Heartland workshop, LACEA annual meeting.

**2013**: Cornell Energy and Environmental workshop (discussant), SITE workshop, Energy Institute at Haas, AERE Summer Meeting, University of California Davis, Economics of Low Carbon Markets workshop.

**2012**: ASSA Annual Meeting (discussant), University of Michigan, LACEA annual meeting, DePaul University, CFSP IO/Development workshop, AERE summer meeting.

**2011**: ASSA Annual Meeting, Chicago-RFF Energy Symposium (discussant), UM/MSU Energy and Environment Day, Energy Institute at Haas Energy Camp, Cowles Foundation Structural Micro Summer Conference.

**2010**: Clemson University, Energy Institute at Haas Energy Camp, IFPRI, Indiana University SPEA, Michigan Development Day, Michigan State University, Motu, Resources for the Future, University of Michigan, University of Michigan Erb Institute, University of North Carolina, Washington St. Louis (Olin).

#### TEACHING ITAM

Eco 35141: Energy Markets and Policy Master in Public Policy	2016		
Energy Economics Undergraduate / Master in Applied Economics	2017–19, 2021		
Environmental and Natural Resource Economics Master in Economic Theory	2017, 2018, 2020		
Economics Research Seminar Undergraduate	2017–20		
Applied Economics Research Seminar Master in Applied Economics	2019, 2021		
Applied Microeconometrics Undergraduate	2020–22		
Industrial Organization Undergraduate	2022–24		
University of Michigan			

2016

Mean teaching evaluation: 4.71 (course), 4.79 (instructor).

Econ 472: Natural Resource Economics

	Econ 437: Energy Economics & Policy Mean teaching evaluation: 4.65 (course), 4.74 (instructor).	2011–2016		
	Econ 662: Environmental Economics (graduate) Mean teaching evaluation: 4.91 (course), 4.99 (instructor).	2011–2016		
	Teaching evaluations on a five-point scale are the mean for all courses taught.			
	Stanford University			
	Econ 271, Graduate Econometrics II (teaching assistant) Outstanding Teaching Assistant Award (2009)	2008–2009		
	University of Otago			
	Introductory Microeconomics (teaching assistant)	1995-1996		
	Introductory Macroeconomics (teaching assistant)	1995–1996		
	Mathematical Economics (teaching assistant)	1997		
STUDENT	Undergraduate Theses			
ADVISING	Jordán Mosqueda Juárez	2018		
	Oscar González Gil	2018		
	Juan Pablo Grimaldi	2019		
	Ricardo Enrique Miranda Montero	2019		
	Arturo Soberón Cedillo	2019		
	Paola Cymet Monroy	2020		
	Fidel González Parra	2020		
	Andres Glase Ordóñez	2021		
	Inés Valenzuela Muñoz Castillo	2021		
	Jorge Acedo Glaros	2021		
	Juan Pablo Martínez Giorgi	2021		
	Alfonso Lugo Sánchez	2021		
	Regina Calles Martínez	2021		
	Diego Olea Barragán	2022		
	Sabrina Fajardo Gallegos	2022		
	Alejandro Hernández González	2022		
	Andrés Villarreal Villegas	2022		
	Raul Mejia Ibañez	2023		
	José Ignacio Avalos	2023		
	Mauricio Pérez Ramírez	2023		
	Aranxta Martínez Aguilar	2023		
	Camila Flores Fernández	2023		
	Josué Emmanuel De León	2023		
	Master's Theses			
	Daniel Loredo Duran	2020		
	Ramiro Agustín Beltrán Alessio Robles	2021		
	David Ontaneda Navarrete	2022		
	Ph.D. Dissertation Committee Member (initial placement)			
	Jacqueline Doremus (Cal Poly San Luis Obispo)	2015		
	Reid Dorsey-Palmateer (Western Washington University)	2015		

	Eric Lewis (Department of Justice) Mike McWilliams (University of Michigan RSQE) Paul Brehm (Oberlin College) Hope Thompson (FEMA)	2015 2016 2017 2017
	Hope Thompson (FEMA)  Graduate Student Third Year Paper advisor / reader Oxana Azgaldova Meera Mahadevan Alecia Cassidy Sarah Johnston Ben Meiselman Yiyuan Zhang Paul Brehm Austin Davis Adam Larson Eric Lewis	2017 2016 2016 2015 2014 2014 2014 2014 2013 2012 2012
	Jacqueline Doremus  Undergraduate Honors Theses  Jesse Buchsbaum  Eugene Tan  Karl Dunkle-Werner	2012 2011 2015 2013 2013
Honors, Awards, and Sponsored Research	David Tigges  Premio Citibanamex de Economía (2nd place)  Public Utility Research Center Prize for the Best Paper in Regulator the 13th Annual International Industrial Organization Conference	2012 2022 ry Economics at 2015
	University of Michigan  Weiser Center for Emerging Democracies Faculty Grant University of Michigan Office of Research award MITRE Faculty Research Grant MITRE Faculty Research Grant Rackham Spring/Summer Research Award	2015 2015 2015 2013 2011
	Stanford Institute for Economic Policy Research Claire and Ralph Landau Student Working Paper Prize Kapnick Fellowship	2010 2009–10
	Stanford University  Martin Lee Johnson Stanford Graduate Fellowship	2003–08
REFEREE SERVICE	American Economic Journal: Applied Economics, American Economic nomic Policy, American Economic Journal: Macroeconomics, American Economic Review, American Economic Review: Insights, B.E. Journal of Economic Policy, Econometrica, Economic Change and Restructuring, Economic Environmental Policy, Economic Journal, Electricity Journal, Energy Policy, Energy Strategy Reviews, European Economic Review	rican Economic omic Analysis & omics of Energy Energy Journal,

Journal of Industrial Organization, Journal of the Association of Environmental and Resource Economists, Journal of Development Economics, Journal of Environmental Economics and Management, Journal of Industrial Economics, Journal of Political Economy, Journal of Public Economics, Journal of Regulatory Economics, Latin American Economic Review, Latin American Research Review, National Science Foundation, Nature Energy, RAND Journal of Economics, Review of Development Economics, Review of Economics and Statistics, Review of Network Economics, Utilities Policy, Water Policy.

# OTHER EXPERIENCE

#### Credit Suisse First Boston, Auckland, New Zealand

Investment Banking Analyst 1999–2001 Investment Banking Associate 2002