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# **JACQUELYN PLESS**

# MIT SLOAN SCHOOL OF MANAGEMENT

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### **ACADEMIC ROLES & AFFILIATIONS**

2019 -	MIT Sloan School of Management, Fred Kayne (1960) Career Development Professor of Entrepreneurship and Assistant Professor of Technological Innovation, Entrepreneurship, and Strategic Management
2019 -	University of Oxford, Honorary Research Associate with the Smith School of Enterprise and the Environment
2016-19	University of Oxford, Oxford Martin Fellow & Postdoctoral Researcher, Institute for New Economic Thinking, Smith School of Enterprise and the Environment, Oxford Martin Programme on Integrating Renewable Energy, Research Associate of OxCarre (Economics)
Fall 2018	Harvard University, Visiting Researcher in the Kennedy School of Government, Postdoctoral Affiliate of the Harvard Environmental Economics Program
2015	The Wharton School & Kleinman Center for Energy Policy, University of Pennsylvania, Research Assistant to Arthur van Benthem

### **EDUCATION**

2012-16	Colorado School of Mines, Ph.D. in Mineral & Energy Economics
2012-14	Colorado School of Mines, M.S. in Mineral & Energy Economics
2005-09	University of Vermont, Honors College, B.A. in Economics and Political Science

### RESEARCH FIELDS

Economics of innovation, energy and environmental economics

#### OTHER PROFESSIONAL EXPERIENCE

2017-19	Quartz Associates, Head of Analysis
2013-16	National Renewable Energy Laboratory, Joint Institute for Strategic Energy Analysis,
	Research Economist
2010-13	National Conference of State Legislatures, Energy Policy Specialist
2009-10	Pennsylvania House of Representatives, Legislative Assistant
2008	The World Bank, Chief Economist's Office of the Human Development Network, Intern

### PUBLICATIONS AND ACCEPTED PAPERS

Pless, J., Hepburn, C., and Farrell, N., forthcoming. "Bringing rigour to energy innovation policy evaluation", *Nature Energy*.

Pless, J., van Benthem, A., 2019. "Pass-Through as a Test for Market Power: An Application to Solar Subsidies", *American Economic Journal: Applied Economics*, 11(4), p. 367-401.

- Pless, J., Fell, H., and Sigrin, B., forthcoming. "Information Searching in the Residential Solar PV Market", accepted by *The Energy Journal*.
- O'Shaughnessy, E., Nemet G., Pless J., and Margolis R., 2019. "Addressing the soft cost challenges in U.S. small-scale solar PV system pricing," *Energy Policy*, 134.
- Hepburn, C., Pless, J., Popp, D., 2018. "Encouraging Innovation that Protects Environmental Systems: Five Policy Proposals," *Review of Environmental Economics and Policy*, 12(1), Winter, p. 154-169.
- Heidari-Robinson, S., Heywood, S., and Pless, J., 2018. "How to Make Your Post-Merger Reorg a Success", *Harvard Business Review* [online article only, not peer-reviewed].
- McKenna E., Pless J., and Darby S., 2018. "Solar photovoltaic self-consumption in the UK residential sector: new estimates from a smart grid demonstration project," *Energy Policy*, 118.
- Pless J., Fell, H., 2017. "Bribes, Bureaucracies, and Blackouts: Towards Understanding How Firm-Level Corrupt Behavior Impacts Electricity Reliability," *Resource and Energy Economics*, 47, p. 36-55.
  - ♦ Selected for coverage in "Research Highlights" by *Nature Energy*
  - ♦ Finalist for IAEE Best Student Paper Award (2014)
- Pless J., Arent D., Cochran J., Logan J., and Zinaman O., 2016. "Quantifying the value of investing in distributed natural gas and renewable electricity systems as complements: Applications of discounted cash flow and real options analysis with stochastic inputs," *Energy Policy*, 97.
- Sigrin B., Pless J., and Drury E., 2015. "Diffusion into new markets: Evolving customer segments in the solar photovoltaics market," *Environmental Research Letters*, 10(8).
- Arent D., Pless J., Mai T., Wiser R., Hand M., Baldwin S., Heath G., Macknick J., Bazilian M, Schlosser A., and Denholm P., 2014. "Implications of high renewable electricity penetration in the U.S. for water use, greenhouse gas emissions, land-use, and materials supply," *Applied Energy*, 123, p. 3368-377.

#### WORKING PAPERS

### **RESEARCH IN PROGRESS**

"Some Causal Effects of Technology and Environmental Policy Interactions" (with Sugandha Srivastav)

#### **CHAPTERS AND PERMANENT WORKING PAPERS**

"Steering the Climate: Comment" (with L. Mattauch, R. Millar, F. van der Ploeg, A. Rezai, A. Schultes, F. Venmans, N. Bauer, S. Dietz, O. Edenhofer, N. Farrell, C. Hepburn, G. Luderer, F. Spuler, N. Stern, and A. Teytelboym), Grantham Research Institute on Climate Change and the Environment Working Paper No. 315, 2019.

<sup>&</sup>quot;Are 'Complementary Policies' Substitutes? Evidence from R&D Subsidies in the UK"

<sup>&</sup>quot;Prosumer Consumption Substitution and Disentangling Uncertainty from Salience" (w/ E. McKenna)

<sup>&</sup>quot;Induced Innovation from Environmental Regulation: Evidence from China" (with Yangsiyu Lu)

<sup>&</sup>quot;Innovation and Entrepreneurship in the Energy Sector" (with David Popp, Ivan Hascic, and Nick Johnstone) [chapter in preparation for NBER volume]

<sup>&</sup>quot;Do Subsidies Impact Firm Innovation? Evidence from EV Manufacturing in China" (with Yangsiyu Lu)

<sup>&</sup>quot;R&D Subsidies and Directed Technological Change"

# **S**ELECT **H**ONORS & **A**WARDS

2018	Marie Curie Fellowship, mobility grant
2016	Hubert and Sarah Risser Award for "outstanding academic and co-curricular performance"
	CSM Division of Economics and Business
2015	P.E.O Scholar Award, an international merit-based award for "women who are expected to
	make significant contributions to their fields"
2014	Finalist, IAEE Best Student Paper Award
2012	13,15 Darlene Regina Pauli Scholarship, CSM Division of Economics and Business
2009	Gersten Award given by the Department of Economics, Univ. of Vermont, to "a senior
	demonstrating outstanding academic achievement in economics"
2008	Milton J. Nadworny Award given by the Department of Economics, Univ. of Vermont, for
	"academic merit, independence of mind, determination, intellectual curiosity, and
	commitment to human welfare"

# RESEARCH GRANTS

2019	Junior Faculty Research Assistance Program Award (MIT Sloan) (\$22,000)
2015	Center for Sustainable Energy Research Grant (\$35,000)
2014	National Renewable Energy Laboratory Research Grant (\$46,000)
2013	Joint Institute for Strategic Energy Analysis Research Grant (\$18,200)

# TEACHING

2020	Innovation Strategy, MIT Sloan School of Management
2020	New Enterprises (co-teaching)
2018, 19	Lecturer, Environmental Economics Session, Financing Sustainable Energy Futures,
	University of Oxford
2018	Guest Lecturer, Econometrics, Quantitative Skills Module (MSc), University of Oxford
	Guest Lecturer, Introduction to Economics (D.Phil short course), University of Oxford
2017, 18	Grader, Energy Markets (MBA), University of Oxford
2016	Graduate Teaching Assistant, Principles of Economics (undergrad), CSM
2015, 16	Guest Lecturer, "So, you want to 'do' econometrics?" (PhD), CSM

# ACADEMIC SEMINARS & CONFERENCE PRESENTATIONS

<sup>\*</sup> indicates scheduled

2020	Harvard (HEEP)*, NBER EEE Spring Meetings*, Boston University (Questrom School of
	Business, Strategy & Innovation)*, Clemson University (Economics)*, CESifo Energy and
	Climate Conference*, New Approaches to Sustainable and Inclusive Growth Conference
	(Tsinghua University)*, LSE & Imperial College Workshop in Environmental Economics*,
	University of Vermont (Economics), International Workshop on Empirical Methods in Energy
	Economics (ETH Zurich), NBER Conference on the Role of Innovation and Entrepreneurship
	in Economic Growth
2019	University of California-Berkeley (EEE), Roundtable for Engineering Entrepreneurship (REER)
	Conference (Georgia Tech), Ostrom Symposium at Indiana University, University of
	Wisconsin-Madison (Applied Economics), NBER Summer Institute (Innovation (full) and EEE
	(egg-timer)), Camp Resources (Asheville), GRI/CEP/STICERD Symposium on Technical
	Change, Innovation, and Climate, CEPR/LSE/EBRD Conference on Environmental Economics
	and the Green Transition (discussant), AERE Summer Conference (Lake Tahoe), Toulouse
	School of Economics, IZA Workshop on Environment and Labor Markets, MIT Sloan (TIES),

Imperial College London, Georgia Tech, U. of Western Ontario (Ivey Business School), LSU,
UT Arlington, Texas A&M, University of Maryland (AREC), Brookings Institution
Harvard (HEEP), ASSA (Philadelphia), Royal Economic Society (Brighton), Oxford
(Economics), Oxford (Nuffield), WCERE (Gothenburg), University of Kansas (Economics)
Oxford (Economics), AERE Summer Conference (Pittsburgh), IAEE (Singapore), University of
Sussex (SPRU), Oxford (INET)
University of Cambridge (Judge Business School & Faculty of Economics), Oxford (Säid
Business School), University of Manchester (Economics), AERE Summer Conference
(Breckenridge), North Carolina State University (ARE), Colorado State University (DARE), CU-
Boulder (Economics), CSM (Economics), Front Range Energy Workshop (Golden)
AERE Summer Conference (San Diego), University College London, CU-Boulder (Economics),
CU-Boulder Environmental and Resource Economics Workshop (Vail), University of Vermont
(Economics), Front Range Energy Workshop (Boulder)
IAEE Best Student Paper Competition (New York), CSM (Economics)

# OTHER SELECT PRESENTATIONS & PANELS

2019	Weston Roundtable Series (University of Wisconsin-Madison), Colorado Technology Primer for Economists and Social Scientists
2017	Harnessing International Cooperation to Advance Clean Energy Innovation (Council on Foreign Relations), National Renewable Energy Laboratory Seminar (NREL)
2016	Breaking Carbon Lock-in (CIFF, JISEA), JISEA 2016 Annual Meeting (Golden)
2015	JISEA 2015 Annual Meeting (Golden)
2014	Synergies of Natural Gas and Renewable Energy Workshop (San Antonio), NREL
2013	Midwest Environmental Health Policy Summit (Des Moines)
2012	University of Michigan (Gerald R. Ford School of Public Policy), U.S. DOE of Indian Energy, University of Maryland (School of Public Health)

# **DOCTORAL STUDENTS**

Yangsiyu Lu, University of Oxford (expected graduation year: 2021) (co-advisor)

# **PROFESSIONAL ACTIVITIES**

TROTESSIONAL ACTIVITIES	
Refereeing:	Journal of Financial Economics, Journal for the Association of Environmental and
	Resource Economics, Journal of Economics & Management Strategy, Journal of
	Environmental Economics and Management, Journal of Economic Behavior &
	Organization, Oxford Review of Economic Policy, Journal of Policy Analysis and
	Management, Ecological Economics, Resource and Energy Economics, The Energy
	Journal, Energy Economics, Energy Policy, Journal of Renewable and Sustainable Energy,
	WIREs Energy and Environment
Memberships:	American Economic Association (AEA), Association of Environmental & Resource
	Economists (AERE)
Other:	
2018	Co-organizer of "Clean Energy Innovation: Making the Most of R&D Investments" [in
	partnership with the Energy Policy Institute at Chicago, ClearPath, and ACCF]
2015-16	Women in Economics & Business, initiated discussion group
2016	USAEE CSM Chapter, Vice President
2014-15	USAEE CSM Chapter, Secretary

#### SELECT MEDIA

The Irish Economics Podcast, "Energy Economics", Fall 2019

Wall Street Journal, "As energy boom nears cities, a backlash grows," February 27, 2013

The Denver Post, "As energy boom nears Colorado cities, a backlash grows," February 27, 2013

Governing, Stateline, "States Scramble to Regulate, Ban Fracking," May 9, 2012

The Michigan Daily, "Forum considers fracking in Michigan," December 3, 2012

Illinois Public Radio interview on natural gas development in the U.S., 2012

Ohio Public Radio interview on natural gas development in the U.S., 2012

NBC-Dallas-Fort Worth, Vortex, "Texas Could Lead Way in Fracking Disclosure," May 13, 2011

Huffington Post, "Texas Fracking Bill would Be First to Require Public Disclosure of Gas Drilling Chemicals," May 12, 2011

Bloomberg Business, "NJ considering ban on fracking despite little gas," June 28, 2011

#### **SELECT TECHNICAL & POLICY REPORTS**

Pless J., Langheim R., Machak C., Hellow H., Sigrin B., 2017. *The Price-Concentration Relationship in Early Residential Solar Third-Party Markets*, National Renewable Energy Laboratory.

Hepburn C., Pless J., Teytelboym A., 2016. Response to the House of Lords Economic Affairs Committee Inquiry into the *Economics of UK Energy Policy: A Focus on Electricity*.

Pless J., Schiele J., 2016. "Why we should think of power grids like fisheries," Oxford Martin School *Opinion*, University of Oxford

Adams R., Pless J., Arent D., Locklin K., 2016. *Accelerating Clean Energy Commercialization: A Strategic Partnership Approach*, National Renewable Energy Laboratory.

Carmichael S., Booten C., Robertson J., Chin J., Christensen D., Pless J., Arent D., 2016. *Annual energy savings and thermal comfort of autonomously heated and cooled office chairs,* National Renewable Energy Laboratory.

Pless J., Arent D., Logan J., Cochran J., Zinaman O., Stark C., 2015. *Pathways to Decarbonization: Natural Gas and Renewable Energy*, National Renewable Energy Laboratory.

Stark C., Pless J., Logan J., Zhou E., Arent D., 2015. *Renewable Electricity: Insights for the Coming Decade*, National Renewable Energy Laboratory.

Cowlin S., Heimiller D., Macknick J., Mann M., Pless J., Munoz D., 2014. *Multi-Metric Sustainability Analysis*, National Renewable Energy Laboratory.

Bazilian, M., Pless, J., 2013. *Increasing Energy Access in Sub-Saharan Africa: Exploring Public-Private Models for Intervention*, Energy+ Technical Working Group.

Heap, D., Pless, J., 2013. "Clean Energy Finance: Challenges and Opportunities of Early-Stage Energy Investing," National Renewable Energy Laboratory. Dec. 3, 2013.

Pless, J., 2013. States Take the Lead on Regulating Hydraulic Fracturing: A Policymaker's Guide. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. *Natural Gas Development and Hydraulic Fracturing*. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. *Oil and Gas Severance Taxes: States Work to Alleviate Fiscal Pressures Amid the Natural Gas Boom.* National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. *Metal Theft Can Threaten U.S. Energy Security: A Hot Issue in 2012.* National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. "Fracking Fracas," *State Legislatures Magazine*. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. "Copper Robbers," *State Legislatures Magazine*, National Conference of State Legislatures, Denver, CO: NCSL.

Pless, J., 2011. *A Policymaker's Guide to Climate Economics*. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2011. *Making State Gas Pipelines Safe and Reliable: An Assessment of State Policy.* National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2011. *Copper Theft Can Cause Major Electrical Outages and Impact Ratepayers: A Hot Issue in 2011*. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2011. *Climate Change: Policy Update 2011.* National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2011. Fracking Update: What States are doing to Ensure Safe Natural Gas Extraction. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2010. *Taxing Natural Gas Production*. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2010. *Hydraulic Fracturing: What's the Big Fracking Deal?* National Conference of State Legislatures. Denver, CO: NCSL.