

JACQUELYN PLESS

MIT SLOAN SCHOOL OF MANAGEMENT

100 Main Street, E62-479
Cambridge, MA 02142
Citizenship: United States

Email: jpless@mit.edu
Office Phone: +1 617-715-4849
Website: <http://jacquelynpless.com/>

CURRENT APPOINTMENTS

2019-present Fred Kayne (1960) Career Development Professor of Entrepreneurship, and Assistant Professor of Technological Innovation, Entrepreneurship, and Strategic Management, MIT Sloan School of Management

2019-present Faculty Affiliate, MIT Center for Energy and Environmental Policy Research

2019-present Faculty Affiliate, Martin Trust Center for MIT Entrepreneurship

2019-present Honorary Research Associate, University of Oxford, Smith School of Enterprise and the Environment

2020-present Research Affiliate, CESifo

2021-present Member, Editorial Board, *Economics of Energy & Environmental Policy*

PREVIOUS ACADEMIC POSITIONS AND AFFILIATIONS

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

2018-19 Oxford Centre for the Analysis of Resource-Rich Economies, Research Associate

Fall 2018 Harvard University, Visiting Researcher, 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

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

FIELDS OF INTEREST

Economics of innovation, energy economics, environmental economics, public economics

EXTERNAL 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

JOURNAL PUBLICATIONS

- Pless, J., Hepburn, C., and Farrell, N., 2020. "Bringing rigour to energy innovation policy evaluation", *Nature Energy*, 5, p. 284-290.
- Pless, J., Fell, H., and Sigrin, B., 2020. "Information Searching in the Residential Solar PV Market", *The Energy Journal*, 41(4).
- 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.
- 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

- "Are 'Complementary Policies' Substitutes? Evidence from R&D Subsidies in the UK" (submitted)
- "Productivity and Environmental Regulation Are Not Always at Odds: Evidence from Industrial Firms in China" (with Yangsiyu Lu) (submitted)
- "Digitization and Disentangling Inattention to Prices from Uncertainty" (with Eoghan McKenna)

SELECT RESEARCH IN PROGRESS

- "Innovation for Social Progress: When Imperfect Appropriability Meets Incorrect Prices" (with Sugandha Srivastav)
- "Improving Infrastructure Quality with Smart Technology" (with Robyn Meeks and Zhenxuan Wang)
- "Steering the Direction of Inventors with Supply vs. Demand Policies" (with Eugenie Dugoua, Todd Gerarden, and Kyle Myers)

CHAPTERS

Popp D., Pless J., Hascic I., and Johnstone, N., 2020. "Innovation and Entrepreneurship in the Energy Sector" in NBER book *The Role of Innovation and Entrepreneurship in Economic Growth*.

OP-EDS

"Clean energy innovation can make COVID-19 recovery greener," June 4, 2020, *Bloomberg Law*

"Why we should think of power grids like fisheries," December 1, 2016, *Opinion*, University of Oxford (with Johanna Schiele)

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.

SELECT HONORS & AWARDS

- | | |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2020 | Finalist, Distinguished CESifo Affiliate Award in Energy and Climate Economics
Finalist, Distinguished CESifo Affiliate Award in Public Economics (withdrew, CESifo rules) |
| 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

- | | |
|------|-------------------------------------------------------------------------|
| 2021 | Junior Faculty Research Assistance Program Award (MIT Sloan) (\$27,500) |
| 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, 21 | Innovation Strategy, MIT Sloan School of Management |
| 2020, 21 | New Enterprises, MIT Sloan School of Management |
| 2018, 19 | Lecturer, 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 |

INVITED SEMINARS & CONFERENCE PRESENTATIONS

* indicates scheduled

- 2022 Northwestern University (Kellogg)*, University of Chicago (EPIC)*, Carnegie Mellon University*
- 2021 London School of Economics*, Wharton (Management)*, University of Calgary (Economics)* (Economics), MIT China Seminar*, NBER Productivity Lunch Seminar*, AIEA-NBER Conference, Harvard (HEEP), ASSA Annual Meeting (presenter and discussant), NBER Economics of Energy Innovation Conference (egg timer), MIT Sustainability Lunch, AERE Summer Conference
- 2020 Wharton (EEE), NBER Economics of Innovation in the Energy Sector Conference, CESifo Energy and Climate Conference, NYU Stern Economics of Strategy Workshop, LSE & Imperial College Environmental Economics Workshop, Exeter University, AERE Annual Conference, CEPR/EBRD Symposium on the Economics of Industrial Policy, NBER EEE Spring Meetings, Boston University (Questrom, Strategy & Innovation), University of Vermont (economics), Workshop on Empirical Methods in Energy Economics (ETH Zurich), NBER Conference on the Role of Innovation and Entrepreneurship in Economic Growth
Scheduled but cancelled due to COVID-19: Clemson (economics), New Approaches to Sustainable and Inclusive Growth Conference (Tsinghua University), Society for Institutional & Organizational Economics 2020 Conference
- 2019 University of California-Berkeley, Roundtable for Engineering Entrepreneurship Conference, Ostrom Symposium at Indiana University, University of Wisconsin-Madison (applied economics), NBER Summer Institute Innovation Meetings, NBER Summer Institute EEE Meetings (egg timer), Camp Resources, 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, IZA Workshop on Environment and Labor Markets, MIT Sloan School of Management, Imperial College London, Georgia Tech, U. of Western Ontario (Ivey Business School), LSU, Texas A&M, University of Maryland (AREC), Brookings Institution, Toulouse School of Economics
- 2018 Harvard, ASSA Annual Meeting, Royal Economic Society, Oxford (economics), Oxford (Nuffield), WCERE, University of Kansas (economics)
- 2017 Oxford (Economics), AERE, IAEE, University of Sussex (SPRU), Oxford (INET)
- 2016 University of Cambridge (Judge Business School & Faculty of Economics), Oxford (Säid Business School), University of Manchester (economics), AERE Summer Conference, North Carolina State University (ARE), Colorado State University (DARE), CU-Boulder (economics), CSM (economics), Front Range Energy Workshop
- 2015 AERE, University College London, CU-Boulder (economics), Front Range Environmental and Resource Economics Workshop, University of Vermont (economics)
- 2014 IAEE Best Student Paper Competition (finalist), CSM (economics)

OTHER SELECT INVITED SPEAKING ENGAGEMENTS

- 2021 ClimateTech Energy Prize Speaker Series, MIT Sloan Renewable Energy Finance Roundtable
- 2020 National Academies of Science, Engineering, and Medicine Expert Roundtable on “Enhancing Federal Clean Energy Innovation”
- 2019 Weston Roundtable Series (University of Wisconsin-Madison’s Center for Sustainability and the Global Environment), 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
- 2016 Breaking Carbon Lock-in (Cliff, JISEA), JISEA 2016 Annual Meeting

- 2015 JISEA 2015 Annual Meeting
- 2014 Synergies of Natural Gas and Renewable Energy Workshop
- 2013 Midwest Environmental Health Policy Summit
- 2012 University of Michigan (Gerald R. Ford School of Public Policy), U.S. DOE of Indian Energy,
University of Maryland (School of Public Health)

ADVISING

Yangsiyu Lu, University of Oxford DPhil (co-advisor) (expected graduation: 2022) (co-advisor)
 Sugandha Srivastav, University of Oxford Dphil (co-advisor) (expected graduation: 2023)
 Jordan Zerr, MIT, SDM Fellow (expected 2022)
 Wynn Tucker, MIT, MBA Independent Study (2021)
 Daniel Rahill, MIT, SDM Fellow (2020)

PROFESSIONAL SERVICE

Journal Refereeing: *Journal of Public Economics, Management Science, Science, Journal of Financial Economics, Research Policy, European Economic Review Plus, Journal for the Association of Environmental and Resource Economics, Journal of Economics & Management Strategy, Strategic Management Journal, 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*

Grant Refereeing: Alfred P. Sloan Foundation

Other

- 2019-2021 TIES Seminar Series, co-organizer
- 2020 Committee on the Status of Women in the Economics Profession (CSWEP) Graduate Student Mentor
- 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 at CSM, initiated group
- 2016 USAEE CSM Chapter, Vice President
- 2014-15 USAEE CSM Chapter, Secretary

Memberships

American Economic Association (AEA), Association of Environmental & Resource Economists (AERE)

SELECT MEDIA MENTIONS AND INTERVIEWS

- Scientific Sense Podcast, February 2021
- Yahoo! Finance, “MIT Sloan professor identifies key challenges and solutions for evaluating energy innovation policy,” May 12, 2020
- Smart Energy International, “Challenges to evaluating energy innovation policies and how to address them,” May 13, 2020
- PV Magazine, “Monopolies aren’t as sexy as they want you to think,” October 30, 2019
- PV Buzz, “New solar rebate study, by MIT Sloan economist, finds user savings but lack of competition,” October 30, 2019
- 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 REPORTS & POLICY WHITE PAPERS

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*.

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.

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

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

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

Pless, J., 2012. “Fracking Fracas,” *State Legislatures Magazine*. National Conference of State Legislatures.

Pless, J., 2012. “Copper Robbers,” *State Legislatures Magazine*, National Conference of State Legislatures,

Pless, J., 2011. *A Policymaker’s Guide to Climate Economics*. National Conference of State Legislatures.

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

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

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

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

Pless, J., 2010. *Taxing Natural Gas Production*. National Conference of State Legislatures.

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