

JACQUELYN PLESS

UNIVERSITY OF OXFORD

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CURRENT POSITION & RESEARCH EXPERIENCE

- 2016 - University of Oxford, Oxford Martin Fellow, Postdoctoral Researcher, Institute for New Economic Thinking, Oxford Martin Programme on Integrating Renewable Energy, Oriel College Associate Member
- 2015 The Wharton School & Kleinman Center for Energy Policy, University of Pennsylvania, Research Assistant to Prof. Arthur van Benthem
- 2014-15 Colorado School of Mines, Division of Economics & Business, Research Assistant to Prof. Harrison Fell

EDUCATION

- Ph.D. in Mineral & Energy Economics, Colorado School of Mines, 2012-2016
Dissertation: *Three Empirical Essays in Energy Economics*
- M.S. in Mineral & Energy Economics, Colorado School of Mines, 2012-2014
- B.A. in Economics and Political Science, Honors College, University of Vermont, 2005-2009

FIELDS OF SPECIALIZATION

Energy and environmental economics, innovation, public economics, applied econometrics

PROFESSIONAL EXPERIENCE

- 2017 - Quartz Associates, Head of Analytics
- 2016 - Oxford University Innovation, Consultant
- 2013-16 National Renewable Energy Laboratory, Joint Institute for Strategic Energy Analysis, Economist
- 2010-13 National Conference of State Legislatures, Energy Policy Specialist (promoted twice)
- 2009-10 Pennsylvania House of Representatives, Legislative Assistant
- 2008 The World Bank, Chief Economist's Office of the Human Development Network, Intern

PRIMARY RESEARCH

- “Are ‘Complementary Policies’ Substitutes? The Case of Public Spending on R&D” [JMP]
- “Disentangling Uncertainty and Salience” (with Eoghan McKenna)
- “Pass-Through as a Test for Market Power: An Application to Solar Subsidies” (with Arthur van Benthem) [submitted]
- “Identifying Collaboration and Product Market Rivalry Effects on Innovation”

OTHER PAPERS

- “Assessing the Impact of Innovation Policy” (with Cameron Hepburn, John Rhys, and Niall Farrell)
- “To Buy or Lease? Business Model Consumer Preferences in the Residential Solar PV Market” [R&R with *The Energy Journal*] (with Harrison Fell and Ben Sigrin)
- “Is This the End of Conventional Wholesale Electricity Markets?” (with Niall Farrell, Cameron Hepburn, and John Rhys) [submitted]
- “Solar PV self-consumption in the UK residential sector” (with Eoghan McKenna and Sarah Darby) [R&R with *Energy Policy*]

PEER-REVIEWED JOURNAL PUBLICATIONS

- “Encouraging Innovation that Protects Environmental Systems: Five Policy Proposals,” (with Cameron Hepburn and David Popp). *Review of Environmental Economics and Policy*. 2018.
- “Bribes, Bureaucracies, and Blackouts: Towards Understanding How Firm-Level Corrupt Behavior Impacts Electricity Reliability,” (with Harrison Fell). *Resource and Energy Economics*, 2017.
Coverage: highlighted in *Nature Energy* (January 2017)
- “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”, (with D. Arent, J. Cochran, J. Logan, O. Zinaman). *Energy Policy* 97, p. 378-390. 2016.
- “Diffusion into new markets: Evolving customer segments in the solar photovoltaics market,” (with B. Sigrin and E. Drury). *Environmental Research Letters*. 2015.
- “Implications of high renewable electricity penetration in the U.S. for water use, greenhouse gas emissions, land-use, and materials supply,” (with D. Arent, T. Mai, R. Wisler, M. Hand, S. Baldwin, G. Heath, J. Macknick, M. Bazilian, A. Schlosser, P. Denholm). *Applied Energy*. 2014.
- “Shale Gas in China: Prospects, Concerns, and Potential International Collaboration,” (with M. Bazilian, A. Pedersen, J. Logan, K. Medlock III, F. O’Sullivan, J. Nakano). *International Shale Gas & Oil Journal*. 2013.

SELECT HONORS & AWARDS

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| 2016 | Hubert and Sarah Risser Award for outstanding academic and co-curricular performance, CSM |
| 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/USAEE Best Student Paper Award |
| 2013, 15 | Scholarship to represent CSM at the 2013 Vail Global Energy Forum, supported by Stanford University’s Precourt Institute for Energy and Precourt Energy Efficiency Center |
| 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 |
| 2009 | College Honors, Economics, Univ. of Vermont |
| 2009 | Departmental Honors, Political Science, Univ. of Vermont |
| 2008 | Milton J. Nadworny Award given by the Department of Economics, Univ. of Vermont to a junior for academic merit, independence of mind, determination, intellectual curiosity, and commitment to human welfare |
| 2007-09 | James Buxton Scholarship, given by the Univ. of Vermont for academic achievement |
| 2006-09 | Golden Key International Honor Society, National Society of Collegiate Scholars |
| 2005 | STAR Award for achieving a GPA in the top 5% of students on campus, Univ. of Vermont |

RESEARCH GRANTS

- 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)

ACADEMIC CONFERENCE & SEMINAR PRESENTATIONS

- 2018 ASSA Annual Meeting, Royal Economic Society Annual Conference (scheduled), Nuffield College Postdoctoral Seminar
2017 University of Oxford (OxCarre), AERE Summer Conference (Pittsburgh), IAEE Conference (Singapore), University of Sussex, INET Oxford
2016 University of Cambridge (Judge Business School & Faculty of Economics), University of Oxford (Säid Business School), University of Manchester (Economics), Association of Environmental & Resource Economists (AERE) Summer Conference (Breckenridge), North Carolina State University (ARE), Colorado State University (DARE), University of Colorado at Boulder (Economics), Colorado School of Mines (Economics & Business), Front Range Energy Workshop (Golden)
2015 AERE Summer Conference (San Diego), University College London (International BE4 Workshop on Incorporating Behavior in Energy Research, London), University of Colorado at Boulder (Economics), CU-Boulder Environmental and Resource Economics Workshop (Vail), University of Vermont (Economics), Front Range Energy Workshop (Boulder)
2014 International Association for Energy Economics (IAEE) Conference Best Student Paper Competition (New York), Colorado School of Mines (Economics & Business)

OTHER PANEL, WORKSHOP PARTICIPATION, & SPEAKING ENGAGEMENTS

- 2017 Harnessing International Cooperation to Advance Clean Energy Innovation (Council on Foreign Relations), National Renewable Energy Laboratory (NREL)
2016 Breaking Carbon Lock-in: Strategies, Examples, and Proposed Action (CIFF, JISEA), Research and Matchmaking Conference of the Applied Research Programme on Energy and Economic Growth (DFID, OPM, and Berkeley), JISEA 2016 Annual Meeting (Golden)
2015 JISEA 2015 Annual Meeting (Golden)
2014 Synergies of Natural Gas and Renewable Energy Workshop (San Antonio), National Renewable Energy Laboratory (Golden)
2013 Midwest Environmental Health Policy Summit (Des Moines)
2012 University of Michigan Gerald R. Ford School of Public Policy (Ann Arbor), U.S. Department of Energy Office of Indian Energy (Energy Tax Policies and Interjurisdictional Challenges, New Orleans), University of Maryland (Network for Public Health Law Eastern Regional Symposium, Baltimore), National Council on Electricity Policy and National Conference of State Legislatures (webinar), ASTM International Online Forum on Standards for Hydraulic Fracturing (webinar), National Conference of State Legislatures (webinar)

TEACHING EXPERIENCE

- 2018 Lecturer, Econometrics Session, Quantitative Skills MSc, University of Oxford
Lecturer, Introduction to Economics (one session of short course), University of Oxford
2017 Grader, Energy Markets MBA Course, University of Oxford
2016 Graduate Teaching Assistant, Principles of Economics, Colorado School of Mines

Other invited lectures:

- 2015, 2016 “So, you want to ‘do’ econometrics?” PhD econometrics course, CSM
2012 “What’s the Big Fracking Deal? U.S. Natural Gas Policy”, undergraduate seminar, CSM

PROFESSIONAL ACTIVITIES

- Refereeing:** *Oxford Review of Economic Policy, Journal of Environmental Economics and Management, Ecological Economics, Journal of Policy Analysis and Management, 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)
- Service:**
2016 USAEE CSM Chapter, Vice President
2015-16 Women in Economics & Business Discussion Group, initiated group
2014-2015 USAEE CSM Chapter, Secretary

DOCTORAL STUDENTS

Yangsiyu Lu, University of Oxford (expected graduation year: 2020)

SELECT POLICY ENGAGEMENT

- 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., 2011. Provided written testimony on community solar gardens legislation (Nevada)

SELECT MEDIA

- 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

OTHER REPORTS, POLICY BRIEFS, AND OP-EDS

- 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.
- Adams R., Pless J., Arent D., Locklin K., 2016. *Accelerating Clean Energy Commercialization: A Strategic Partnership Approach*, National Renewable Energy Laboratory.
- Pless J., Schiele J., 2016. “Why we should think of power grids like fisheries,” *Oxford Martin School Opinion*, University of Oxford
- 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., 2016. “Combining different technologies can help secure a low-carbon energy system, but market design needs to catch up,” *Oxford Martin School Opinion*, University of Oxford.

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.

Arent D., Pless J., 2015. “The Role of Natural Gas and Renewables in Our Energy System Transformation,” invited guest blog post for the Cynthia and George Mitchell Foundation.

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.

Pless, J., Bazilian, M., 2013. *Enhancing Energy Access in Sub-Saharan Africa with Solar PV: Barriers and Opportunities*. Energy+ Technical Working Group, for internal use only.

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.

NCSL, 2012. *Transportation Energy for the Future: A Guide for State Policymakers* (contributor). National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. *State Tax Policies and Incentives and Regulatory Policies Impacting Energy Development: Arizona, California, Idaho, New Mexico, Nevada, Oregon, South Dakota and Washington*. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. *Taxing Oil and Gas Production*. LegisBrief. 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. *Securing our Nation’s Energy*. LegisBrief. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2012. *2012 Smart Grid Legislation*. 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. *Lawmakers Hammer Against Metal Theft*. LegisBrief. 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. *Solar Energy Development: State Incentives and Regulatory Policies in Arizona, California, Nevada and New Mexico*. 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. “Fracturing for Natural Gas—Trends,” 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. *2011 Smart Grid Legislation*. 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., 2011. *Transmitting Electricity in an Increasingly Complex Energy Market*. National Conference of State Legislatures. Denver, CO: NCSL.

Pless, J., 2011. *Energy Security Legislative Update*. 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.

PERSONAL

Date of birth: March 19, 1988

Citizenship: United States