

Present
position

Founding Director, Arthur L. Irving Institute for Energy and Society
Professor (2017-present)
Environmental Studies, **Dartmouth College**

Professor (2015-2017)
Associate Professor (2010-2015)
Assistant Professor (2005-2010)
Energy and Environmental Policy and Law
McKnight Land Grant Professor 2008-2010
Humphrey School of Public Affairs, **University of Minnesota**

- Faculty Affiliate, Law School
- Faculty Affiliate, Interdisciplinary Center for the Study of Global Change
- Faculty Scholar, Center for Transportation Studies
- Fellow, Institute on the Environment
- Board Member, Institute for Advanced Study

Visiting Professor
Management Engineering, **Danish Technical University**, Lyngby, Denmark 2016-7
Center for Industrial Development and Environmental Governance, School of Public Policy and Management and the Tsinghua BP Clean Energy Research and Education Center
Tsinghua University, Beijing, China, 2009-2010
Visiting Scholar, School of Environment, **Nanjing University**, Nanjing, China June 2011, 2012, 2013

Education

Ph.D. **Carnegie Mellon University**, Pittsburgh, PA (2004)
Engineering and Public Policy
M.S. **Vrije Universiteit Brussel**, Brussels, Belgium (1997)
Human Ecology, *magna cum laude*
B.A. **University of California, Santa Cruz**, CA (1991)
Environmental Studies

Scholarships,
Board Service
and Honors

- Founding Director, Arthur L. Irving Institute for Energy and Society, 2017 to present
- Committee on Modernizing the U.S. Electricity System, National Academies, 2019-present
- Earth Leadership Program Advisory Board, 2020-present
- Energy and Environment Program Advisory Committee, Sloan Foundation, 2020 to present
- Board on Earth Sciences and Resources (BESR), National Research Council, 2018-present
- VEIC Board, 2019-present
- University Energy Institute Collaborative, Steering Committee, 2019 to present
- National Petroleum Council, 2018-2020
- Commission on Geosciences, Environment and Resources, National Research Council, 2012-2018
- Andrew Carnegie Fellow, 2015
- Organizing Committee, Third Arab American Frontiers of Science, Engineering and Medicine, King Abdullah University of Science and Technology (KAUST), Saudi Arabia, December 2015
- Kalvi Fellow, selected to participate in National Academies of Science/Japan Society for the Promotion of Science 14th Japanese-American Frontiers of Science Symposium, Tokyo, December 4-7 2014
- Committee on Institutional Cooperation Academic Leadership Program Fellow, 2014-2015
- Bulletin of the Atomic Scientists Science and Security Board, 2012-2016
- Committee on Earth Resources Member, Board on Earth Sciences and Resources, National Academies of Science, 2012-2018

- Leopold Leadership Fellow, 2011
- Member, U.S.-China Delegation to Study CCS, led by World Resources Institute, funded by the U.S. State Department, 2009
- McKnight Land Grant Professor, University of Minnesota, July 2008-June 2010
- Selected Participant NSF funded Dissertation Initiative for the Advancement of Climate Change Research, Kilauea, Hawai'i, 2007
- Keynote Speaker, Minnesota Economic Association, 2007
- Plenary Speaker, Carbon Capture and Sequestration Conference, Pittsburgh, PA 2007
- CNRS Research Scholarship, Catholic University of Louvain, 1996-1998

Publications

Refereed journal articles

(underline denotes co-author is student or research associate)

- | | |
|------|---|
| 2020 | 1. Li, Mo, Yi Yang, T.M. Smith, E.J. Wilson , (2020) Wind can reduce storage-induced emissions at grid scales, <i>Applied Energy</i> , 276, https://doi.org/10.1016/j.apenergy.2020.115420 . |
| 2018 | 2. Feldspach-Parker, AM, TR Peterson, JC Stephens EJ Wilson (2018) Smart grid electricity system planning and climate disruptions: A review of climate and energy discourse post-Superstorm Sandy, 82, 1961-1968 doi:10.1016/j.rser.2017.06.015 |
| | 3. Mallett A, JC Stephens, EJ Wilson , R Langheim, R Reiber, TR Peterson (2018) Electric (dis) connections: Comparative review of smart grid news coverage in the United States and Canada. <i>Renewable and Sustainable Energy Reviews</i> , 82, 1913-1921 https://doi.org/10.1016/j.rser.2017.06.017 |
| 2017 | 4. Thind, MPS, EJ Wilson , IL Azevedo, JD Marshall (2017) Marginal Emissions Factors for Electricity Generation in the Midcontinent ISO, <i>Environmental Science and Technology</i> , 51 (24), pp 14445–14452 doi:10.1021/acs.est.7b03047 |
| | 5. Li, M, TM Smith, Y Yang, EJ Wilson (2017) Marginal Emission Factors Considering Renewables: A Case Study of the U.S. Midcontinent Independent System Operator (MISO) System. <i>Environmental Science and Technology</i> , Oct 3;51(19):11215-11223. doi: 10.1021/acs.est.7b00034 |
| | 6. Hall, DM, Feldpausch-Parker, A, Peterson TR, Stephens J, Wilson EJ (2017) Social-ecological system resonance: a framework for brokering sustainable solutions. <i>Sustainability Science. Hall</i> , DOI: 10.1007/s11625-017-0424-6 |
| 2016 | 7. <u>S Lenhart</u> , N Nelson-Marsh, EJ Wilson , D Solan (2016) Electricity governance and the Western energy imbalance market in the United States: The necessity of interorganizational collaboration, <i>Energy Research & Social Science</i> 19 94-107 doi:10.1016/j.erss.2016.05.015 |
| | 8. <u>Stafford, B</u> , EJ Wilson , (2016) Winds of Change in Energy Systems: Policy Implementation, Technology Deployment, and Regional Transmission Organizations in the United States, In press: <i>Energy Research & Social Science</i> 21 222-236, http://dx.doi.org/10.1016/j.erss.2016.08.001 |
| | 9. Bielicki, Jeffrey; M Pollak, <u>H. Deng</u> ; EJ Wilson , JFitts, C Peters (2016) The Leakage Risk Monetization Model for Geologic CO2 Storage, <i>Environmental Science and Technology</i> 50 (10) 4923-4931 doi: 10.1021/acs.est.5b05329 |
| 2015 | 10. Bielicki, JM, JP Fitts, CA Peters EJ Wilson , (2015) The RISCs Model for Monetizing Leakage Risk of Geologic CO2 Storage, <i>International Journal of Greenhouse Gas Control</i> 35, 61-75 doi:10.1016/j.ijggc.2015.02.023 |
| | 11. TR Peterson, JC Stephens, EJ Wilson , (2015) Public Acceptance of and Engagement with Low-Carbon Energy Technologies. <i>Energy and Sustainability</i> , 2, 1-14, doi:10.1557/mre.2015.12 |
| 2014 | 12. Paine, N, FR Homans, MF Pollak, JM Beilicki, EJ Wilson . (2014) Why market rules matter: Optimizing pumped hydroelectric storage when compensation rules differ <i>Energy Economics</i> 46 (November) 10-19 doi: 10.1016/j.eneco.2014.08.017 |
| | 13. Fischlein, M., TR Peterson, JC Stephens, EJ Wilson . (2014) Which way does the wind blow? Analyzing the State context for renewable energy deployment in the United States. <i>Environmental Policy and Governance</i> , 24(3)163-187 doi: 10.1002/eet.1636 |
| | 14. <u>Beilicki, J.</u> , C. Peterson, J. Fitts, EJ Wilson . (2014) Causes and Financial Consequences of Geologic CO2 Storage Reservoir Leakage and Interference with other Subsurface Resources. <i>International Journal of Greenhouse Gas Controls</i> . 20 272-281 http://doi.org/10.1016/j.ijggc.2013.10.024 |
| 2013 | |

15. Koenigs, C M Suri, C Elling, A Kreiter, J Eagles, TR Peterson, JC Stephens **EJ Wilson** (2013) A Smarter Grid for Renewable Energy: Different States of Action. *Challenges*. 4(2), 217-233; doi:10.3390/challe4020217
16. Stephens, JC, **EJ Wilson**, TR Peterson, J Meadowcroft. Getting Smart? Climate Change and the Electric Grid. *Challenges*. 4 201-216, <http://doi:10.3390/challe4020201>
17. Chaudhry, R, M Fischlein, J Larson, DM Hall, TR Peterson, **EJ Wilson**, JC Stephens. Policy Stakeholders' Perceptions of Carbon Capture and Storage (CCS): A Comparison of Four U.S. States. *Journal of Cleaner Production*. 52 21-32, <http://dx.doi.org/10.1016/j.jclepro.2013.02.002>
18. Boyd A, E Einsiedel, Y Liu, J Meadowcroft, TR Peterson, MF Pollak, JC Stephens **EJ Wilson** Controversy in Technology Innovation: Contrasting Media and Expert Risk Perception of the Alleged Leakage at the Weyburn Carbon Dioxide Storage Demonstration Project. *International Journal of Greenhouse Gas Controls*. 14 259-269, <http://dx.doi.org/10.1016/j.ijggc.2013.01.011>
19. Fischlein, M, EJ Wilson, JC Stephens, TR Peterson. States of transmission: moving towards large scale wind power. *Energy Policy*. 56 101-113, 2013 <http://dx.doi.org/10.1016/j.enpol.2012.11.028>
- 2012 20. AM Feldpausch-Parker, R Chaudhry, JC Stephens, M Fischlein, DM Hall, LL Melnick, TR Peterson, CJ Ragland, E J Wilson. Spreading the News on Carbon Capture and Storage: A State-Level Comparison of US Media. *Environmental Communication*, <http://dx.doi.org/10.1080/17524032.2013.807859>
- 2011 21. J Schrifels, Y Fu, EJ Wilson. Sulfur Dioxide Control in China: Evolving Policies and Practices of the 10th and 11th Five-year Plans and Lessons for the Future. *Energy Policy* 48 779-789, 2012. <http://dx.doi.org/10.1016/j.enpol.2012.06.015>
22. MF Pollak, B Meyer, EJ Wilson Reducing Greenhouse Gas Emissions: Lessons from State Climate Action Plans. *Energy Policy* 39 5429-5439, 2011. doi:10.1016/j.enpol.2011.05.020
23. **EJ Wilson, D Zhang, Z. Li**. Socio-political Context for Deploying Carbon Capture and Sequestration in China. *Global Environmental Change* 21 324-235 2011. doi:10.1016/j.gloenvcha.2011.01.012
- 2010 24. M Fischlein, J Larson, D Hall, R Chaudhry, JC Stephens, TR Peterson, EJ Wilson. Policy stakeholders and deployment of wind power in the sub-national context: a comparison of four U.S. states. *Energy Policy* 38 4429-4439, 2010. doi:10.1016/j.enpol.2010.03.073
25. **EJ Wilson**, J Marshall, KJ Krizek, R Wilson. By Foot, Bus or Car: Children's School Travel and School Choice Policy. *Environment and Planning A* 42, 2168-2185 doi:10.1068/a435
26. JD Marshall, R Wilson, KL Meyer, SK Rajangam, N McDonald, EJ Wilson, Vehicle Emissions during Children's School Commuting: Impacts on Education Policy. *Environmental Science and Technology* 44(5), pp 1537-1543, 2010. doi: 10.1021/es902932n
27. H Zerriffi and **EJ Wilson**. Leapfrogging Over Development? Promoting Rural Renewables for Climate Change Mitigation. *Energy Policy* 38 (4) 1689-1700, 2010. doi:10.1016/j.enpol.2009.11.026
- 2009 28. **EJ Wilson** and JC Stephens. Wind in a Carbon-Managed World: States, Resources, Policy and Discourse. *Environmental Science and Technology* 43 (24), 9063-9070. 2009 doi: 10.1021/es900802s
29. A Boies, S Hankey, D Kittelson, J Marshall, P Nussbaum, W Watts, EJ Wilson. Reducing Motor Vehicle GHG Emissions in a State that is Not California. *Environmental Science and Technology* 43 (23), 8721-8729. 2009, doi: 10.1021/es902019z
30. M Fischlein, T Smith, EJ Wilson. Carbon emissions and management scenarios for consumer-owned utilities. *Environmental Science and Policy* 12(7) 778-790, 2009 doi: 10.1016/j.envsci.2009.07.011
31. MF Pollak, EJ Wilson. Regulating geologic sequestration in the US: Early rules take divergent approaches. *Environmental Science and Technology* 43(9), 3035-3041. 2009, doi: 10.1021/es803094f
32. L Schmitt-Olabisi, PB Reich, KA Johnson, AR Kapuscinski, S Suh, EJ Wilson. Reducing greenhouse gas emissions for climate stabilization: Framing regional options. *Environmental Science and Technology* 43(6), 1696-1703. 2009, doi: 10.1021/es801171a
33. M Pollak, EJ Wilson. Managing risks of carbon capture and storage projects in the Clean Development Mechanism. *Climate Policy* 9, 71-87. 2009, <http://www.earthscanjournals.com/cp/009/cp0090071.htm>
- 2008 34. **EJ Wilson, J Plummer, M Fischlein, T Smith**. Implementing Energy Efficiency: Challenges and Opportunities for Rural Electric Cooperatives and Small Municipal Utilities. *Energy Policy* 36(9) 3383-3397. 2008 doi:10.1016/j.enpol.2008.05.007

35. D Gerard and **EJ Wilson**. Environmental Bonds and the Challenge of Long-Term Carbon Sequestration. *Journal of Environmental Management* 90, 1097–1105. 2009, doi:10.1016/j.jenvman.2008.04.005
36. JC Stephens, **EJ Wilson**, TR Peterson. Socio-Political Evaluation of Energy Deployment (SPEED): An Integrated Research Framework for Analysis of Energy Technology Deployment. *Technological Forecasting and Social Change* 75, 1224–1246. 2008, doi:10.1016/j.techfore.2007.12.003
37. **EJ Wilson**, M Granger Morgan, J Apt, M Bonner, C Bunting, J Gode, C Jaeger, DW Keith, SP McCoy, R. S. Haszeldine, M. Pollak, D. Reiner, E. Rubin, A. Torvanger, C. Ularidic, S. Vajjhala, D Victor, I Wright. Regulating Geologic Sequestration of CO₂. *Environmental Science and Technology* 42: 2718-2722. 2008. doi: 10.1021/es087037k
- 2007 38. **EJ Wilson**, A Gibbons. Deploying Carbon Capture and Storage in Europe and the United States: A Comparative Analysis. *Journal for European Environmental and Planning Law* 5. 2007
39. **EJ Wilson**, R Wilson, KJ Krizek. Examining the Implications of School Choice on Travel Behavior and Environmental Emissions. *Transportation Research Part D: Transport and the Environment* 12(7) 506-518. 2007. doi:10.1016/j.trd.2007.07.007
40. **EJ Wilson**, SJ Friedmann, MF Pollak. Research for Deployment: Incorporating Risk, Regulation and Liability for Carbon Capture and Sequestration. *Environmental Science and Technology* 41(17) 2007. doi: 10.1021/es062272t
- 2005 41. DW Keith, J Guardiola, G Morgan, **EJ Wilson**. Regulating the Underground Injection of CO₂. *Environmental Science and Technology* 39(24). 2005. doi:10.1021/es0534203 (feature)
42. **EJ Wilson**, DW Keith, M Wilson. Considerations for a Regulatory Framework for Large-Scale Geologic Sequestration of Carbon Dioxide: A North American Perspective, in *Peer Reviewed Proceedings of the 7th International Greenhouse Gas Technologies Conference*, E Rubin DW Keith, Editors. 2005.
43. **EJ Wilson**, TL Johnson, DW Keith. Regulating the Ultimate Sink: Managing the risks of geologic CO₂ storage. *Environmental Science and Technology*. 37(16) 3476-3483. 2003. doi: 10.1021/es021038+
- 2003 and before 44. **EJ Wilson**. Life Cycle Inventory for Municipal Solid Waste Management. *Waste Management and Research* 20(1) 16-22. 2002. doi: 10.1177/0734242X0202000103
45. **EJ Wilson**. Life Cycle Inventory for Municipal Solid Waste Management: Part 2 MSW management scenarios and modeling. *Waste Management and Research* 20(1) 23-36. 2002. doi: 10.1177/0734242X0202000104
46. **EJ Wilson**, FR McDougall, J Willmore. Euro-trash: Searching Europe for a more sustainable approach to waste management. *Resources, Conservation & Recycling* 31(4) 327-346. 2001. doi: 10.1016/S0921-3449(00)00089-6

Publications in progress

47. Butler, M, Prebich, T, **EJ Wilson**, Gaming Energy Efficiency: Why all Savings Estimates are not Created Equally. Revise and Resubmit to *Environmental Science and Technology*

Books

48. Davies L, AB Klass AB, H Osofsky, J Tomain, **EJ Wilson**, 2018 Energy Law and Policy 2nd Edition, West Academic Publishing. St. Paul, MN
49. Stephens JC, **EJ Wilson**, TR Peterson, 2015 Smart Grid (R)evolution: Electric Power Struggles, Cambridge University Press, Cambridge, UK
50. Davies L, AB Klass AB, H Osofsky, J Tomain, **EJ Wilson**, 2014 Energy Law and Policy, West Academic Publishing. St. Paul, MN
51. M Granger Morgan, ST McCoy, J Apt, M Dworkin, P Fischbeck, D Gerard, K Gregg, RL Gresham, C Hagan, D Kreis, R Nordhaus, E Pitlick, M Pollak, J Reiss, E Rubin, K Twaite, **EJ Wilson**, 2012 Carbon Capture and Sequestration: Removing the Legal and Regulatory Barriers. RFF Press and Routledge. New York
52. **EJ Wilson**, D Gerard, editors. 2007 Carbon Capture and Sequestration: Technology, Monitoring, and Regulation. Blackwell Scientific. Ames, IA

Book Chapters

53. EJ Wilson and EG Nielsen, 2020, Energy, in Philippe Tortell (Ed.) *Earth 2020: An Insider's Guide to a Rapidly Changing Planet*, Open Book Publishers, <https://www.openbookpublishers.com/product/1109>
54. KJ Krizek, **EJ Wilson**, R Wilson, JD Marshall. Transport Costs of School Choice, published in GK Ingram and DA Kenyon (Eds.), *Education, Land, and Location*, Lincoln Institute of Land Policy. Cambridge Massachusetts. 2014 (peer reviewed book chapter)
55. **EJ Wilson**, S Bergan. Managing Liability: Comparing Nuclear Waste and Carbon Capture and Storage, published in F.L. Toth (Ed.) *Geological Disposal of CO₂ and Radioactive Waste: A Comparative Assessment*. Springer, Dordrecht, The Netherlands. 2011 (peer reviewed book chapter)
56. **EJ Wilson**, D Gerard. Carbon Capture and Sequestration in Context: Technology, regulation, and social acceptance, in *Carbon Capture and Sequestration: Technology, monitoring, and regulation*. EJ Wilson and D Gerard, (Editors) Blackwell Scientific. Ames, IA 2007
57. **EJ Wilson**, D Gerard, Risk Assessment and Management for Geologic Sequestration of Carbon Dioxide in *Carbon Capture and Sequestration: Technology, Monitoring, and Regulation*. EJ Wilson and D Gerard, (Editors) Blackwell Scientific. Ames, IA 2007
58. **EJ Wilson**, D Gerard, Geologic Sequestration Under Current U.S. Regulations: Problems and Prospects in *Carbon Capture and Sequestration: Technology, Monitoring, and Regulation*. EJ Wilson and D Gerard, (Editors) Blackwell Scientific. Ames, IA 2007
59. **EJ Wilson**. Subsurface Property Rights: Implications for geologic CO₂ sequestration, in *Underground Injection Science and Technology*. J Apps and CF Tsang, editors. Elsevier, Amsterdam. 2005

Law Review and Legal Articles

60. AB Klass and **EJ Wilson** (2016) Remaking Energy: The Critical Role of Energy Consumption Data, 2016 Spring *California Law Review (UC Berkeley)*
61. AB Klass and **EJ Wilson**, Energy Consumption Data: The Key to Improved Energy Efficiency, *San Diego Journal of Climate and Energy Law* (2015) Volume 6, Issue 69, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2602974
62. Stephens, JC, **EJ Wilson**, TR Peterson, Smart Grid: Promoting System Innovation in Complex Multi-jurisdictional Socio-Political Contexts, *UCLA Law Review*, (July 2014) Volume 61, Issue 6
63. AB Klass and **EJ Wilson**, Interstate Transmission Challenges for Renewable Energy: A Federalism Mismatch, 65 *Vanderbilt Law Review* 1801 (Fall 2012), special edition on energy, awarded Honorable Mention in the 7th annual Environmental Law and Policy Annual Review (ELPAR)
64. AB Klass and **EJ Wilson**. Climate Change, Carbon Sequestration and Property Rights. *University of Illinois Law Review* (Spring 2010), (selected by Land Use and Environment Law Review and republished in 2011 as one of best ten environmental and land use law articles published during 2009-2010).
65. AB Klass, **EJ Wilson**. Carbon Capture and Sequestration: Identifying and Managing Risks, special edition Balancing the Risks: Managing Technology and Dangerous Climate Change, special issue of *Issues in Legal Scholarship* 18(3) 2009, doi: 10.2202/1539-8323.1108, <http://www.bepress.com/ils/vol8/iss3/art1>
66. AB Klass, **EJ Wilson**. Climate Change and Carbon Sequestration: Assessing a Liability Regime for the Long-term Storage of Carbon Dioxide. *Emory Law Review* 58(103) Fall 2008
67. **EJ Wilson**, M de Figueiredo. Geologic Carbon Dioxide Sequestration: An analysis of subsurface property law. *Environmental Law Reporter* 36 10114, 2006

Academic Reports, Policy Briefs and Other Publications (non-peer reviewed)

68. Holst Jorgensen, Birte, K.K. Andersen, EJ Wilson (eds) DTU International Energy Report 2018: Accelerating the clean Energy Revolution-Perspectives on Innovation Challenges, Danish Technical University
69. Meadowcroft J, JC Stephens, EJ Wilson, IH Rowlands (2018) Social dimensions of smart grid: Regional analysis in Canada and the United States. Introduction to special issue of Renewable and Sustainable Energy Reviews, 82, 1909-1912.
70. KR Sharma and EJ Wilson. 2016 Book Review of Energy-Based Economic Development: How Clean Energy Can Drive Development and Stimulate Economic Growth. *Journal of Policy Analysis and Management* 35 (3) 728-31, DOI: 10.1002/pam.21919

71. EJ Wilson and S. Lenhart. 2016. Why updated policies are needed to spur modernization of America's electricity grid. Scholar Strategies Network, Policy Brief, Climate and Working Group, <http://www.scholarsstrategynetwork.org/brief/why-updated-policies-are-needed-spur-modernization-americas-electricity-grid>
72. Monti, M, Rose S, Mullins K, Wilson, EJ. 2016. Transmission Planning and CapX2020: Building trust to build regional transmission systems. Report. May 2016.
73. Stephens, JC. & Wilson, EJ. 2015. Climate Change, Renewable Energy, and Letting Conventional Wisdom Go. Bulletin of the Atomic Scientists Roundtable. October 21, 2015. <http://thebulletin.org/technologys-role-climate-solution8815>
74. Langheim, R, M Skubel, X Chen, W Maxwell, TR Peterson, EJ Wilson and JC Stephens. (2014) Smart Grid Coverage in U.S. Newspapers: Characterizing Public Conversations. *Electricity Journal*, 27(5) 77-87 <http://dx.doi.org/10.1016/j.tej.2014.05.008>
75. EJ Wilson, Large scale Wind and Transmission: Western Challenges and Opportunities, for Regional Transmission Planning Workshop, Energy Policy Institute, Boise State University, Boise, ID, April 2012
76. Zhang, B and EJ Wilson, J Bi, Controlling air pollution from coal power plants in China: incremental change or a great leap forward. *Environmental Science and Technology*, Viewpoints, (2011) 45(24):10294-5
77. JA Dammel, JM Bielicki, MF Pollak, and EJ Wilson, A Tale of Two Technologies: Hydraulic Fracturing and Geologic Carbon Sequestration, *Environmental Science and Technology*, Viewpoints, (2011) 45(12) 5075-5076. doi: 10.1021/es201403c
78. While U.S. energy and climate policy founders, China forges ahead, *Momentum Magazine*, Scientist's Soapbox, April 2011. <http://www.environment.umn.edu/momentum/issue/3.2s11/soapbox.html>
79. Reducing Greenhouse Gas Emissions From Transportation Sources in Minnesota, Report for the Minnesota State Legislature, June 2008 CTS 08-10, Adam Boies, David Kittelson, Winthrop Watts (Department of Mechanical Engineering), Jan Lucke, Laurie McGinnis (Center for Transportation Studies), Julian Marshall, Tyler Patterson (Department of Civil Engineering), Peter Nussbaum, **EJ Wilson** (Humphrey Institute of Public Affairs), <http://www.cts.umn.edu/Research/Featured/GreenhouseGas/>
80. Carbon Capture and Sequestration: Framing the Issues for Regulation, An Interim Report from the CCSReg Project, January 2009, http://www.ccsreg.org/working_papers.html (with 30 others)
81. **EJ Wilson**, Melisa Pollak. Regulation for Carbon Capture and Sequestration, Policy Brief for the International Risk Governance Council, 2008, http://www.irgc.org/IMG/pdf/Policy_Brief_CCS.pdf
82. **EJ Wilson**, M. de Figueiredo, C. Trabuchi. K. Larsen. Liability and Financial Responsibility Frameworks for Carbon Capture and Sequestration, World Resources Institute Issue Brief 3 on Carbon Capture and Sequestration, 2007, <http://pdf.wri.org/liability-and-financial-responsibility.pdf>
83. **EJ Wilson**, F McDougall, J Willmore. Towards Integrated Management of Municipal Solid Waste Volumes I and II, a report for the European Recovery and Recycling Association, 1997, Centre Entreprise-Environment, Institut d'administration et de gestion, Université catholique de Louvain, Belgium.
84. **EJ Wilson**. Life Cycle Inventory Tools in Pamplona, Spain. *Warmer Bulletin*. 1998

Conference Presentations and Posters

1. **EJ Wilson** First Asian Energy Conference: Smart Grids, Sustainability Transition and innovation in Governance, November 2, 2015, Hong Kong
2. **EJ Wilson S Lenhart, B Stafford**, and N Nelson-Marsh Science Policy and Technology Innovation in the Context of Large-Scale, Implementation: The Co-Evolution of Policy, Markets, and Technologies for Wind Power Integration, Atlanta Conference on Science Policy, Atlanta, GA, September 16-18, 2015
3. **B. Stafford, EJ Wilson**, Integrating Wind into the Electric Grid: The Case of the Midcontinent Independent System Operator, APPAM, Albuquerque, New Mexico, November 6-8, 2014
4. **EJ Wilson**, JC Stephens, A Feldspauch-Parker, TR Peterson, Adapting Energy Systems for Climate Instability: Learning from Superstorm Sandy, APPAM, Albuquerque, New Mexico, November 6-8, 2014

5. N Johnson, S Blumsack, **EJ Wilson**. Cross-Organizational Learning in Regional Planning for Electric Transmission, Industry Studies Association, Portland, Oregon, May 28-30, 2014
6. **EJ Wilson**, B Stafford. Regional Transmission Organizations and Sustainability: Renewable Energy Integration, Industry Studies Association, Portland, Oregon, May 28-30, 2014
7. J Eagles, A Strubb, TR Peterson, JC Stephens, **EJ Wilson**. Regional Transmission Organizations Getting Smart(er): Grid Modernization and Socio-technical Transformation, Texas Energy Conference, Austin, Texas, February 18, 2014, Poster presentation
8. **EJ Wilson**, AB Klass. Energy Use Data: Evaluate, Use, Scale. Information and Communication Technologies for Environmental Regulation, Galway, Ireland, July 18-19 2013
9. **EJ Wilson**, Clark Koenigs, Mudita Suri, JC Stephens, TR Peterson. Regional Differentiation of Smart Grid in the United States, 4S Conference, Copenhagen, Denmark, October 17-20, 2012
10. TR Peterson (presenter), JC Stephens, J Meadowcroft, **EJ Wilson**. Constructing the Smart Grid: Technological Options, Policy Choice and Energy Transitions, 4S Conference, Copenhagen, Denmark, October 17-20, 2012
11. J. Bielicki (presenter), Pollak, M., **EJ Wilson**, Fitts, J, and Peters, C. Quantifying Basin Scale Leakage Risk and Stakeholder Impacts, Eleventh International Conference on Greenhouse Gas Technologies. Kyoto, Japan. November 18-22, 2012
12. J. Bielicki, Pollak, M., **Wilson, EJ**, Fitts, J, and Peters, C. Potential Cost of Leakage from Geologic Sequestration in the Michigan Basin. Eleventh International Conference on Greenhouse Gas Technologies. Kyoto, Japan. November 18-22, 2012.
13. **EJ Wilson** (presenter), J. Beilicki, Pollak, M., and Peters, C. CCS in a Hot, Crowded World: Integrating Subsurface Management. (2012) American Public Policy and Management Fall Research Conference. Baltimore, MD. November 8-10, 2012
14. J. Beilicki (presenter) Middleton, R., Pollak, M., **EJ Wilson**, Fitts, J, and Peters, C. Carbon Dioxide Pipeline Infrastructure Dependence on Reservoir Risk, American Institute of Chemical Engineering 2012 Annual Meeting. Pittsburgh, PA. October 28-November 2, 2012.
15. Pollak, M., **Wilson, EJ**, Belicki, J. Fitts, J., and Peters, C. Spatially Integrated Assessment of Leakage Risk from CO2 Storage Reservoirs from Multiple Stakeholder Perspectives, DOE-NETL Tenth Annual Conference on Carbon Capture, Utilization, and Sequestration. Pittsburgh, PA. April 30-May 3, 2012. Poster Presentation.
16. Pollak, M. (presenter), **Wilson, EJ**, Bielicki, J., Dammel, J., Fitts, J., and Peters, C. Estimating Financial Consequences of Leakage from Geologic Sequestration, DOE-NETL Tenth Annual Conference on Carbon Capture, Utilization, and Sequestration. Pittsburgh, PA. April 30-May 3, 2012.
17. Saar, M., Adams, B., Kuehn, T., Mevissen, A., Paine, N., Pollak, M., Randolph, J., Smale, A., Taff, S., J. Bielicki and **EJ Wilson**. CO2 Plume Geothermal (CPG) Energy Production at Geologic Sequestration Sites DOE-NETL Tenth Annual Conference on Carbon Capture, Utilization, and Sequestration. Pittsburgh, PA. April 30-May 3, 2012. Poster Presentation.
18. J. Belicki, Pollak, M., **EJ Wilson**, Elliot, T., Guo, B., Nogues, J., Peters, C. and Fitts, J. Your View or Mine: Spatially Quantifying CO2 Storage Risk from Multiple Stakeholder Perspectives, EOS Transactions, AGU. 90(52), Fall Meeting Supplement, Abstract H42C-08. December 5-9, 2011.
19. Guo, B (presenter), Matteo, E., Elliot, T., Nogues, J., Deng, H., Fitts, J., Pollak, M., Bielicki, J., **Wilson, EJ**, Celia, M., and Peters, C. Semi-analytical estimation of wellbore leakage risk during CO2 sequestration in Ottawa County, Michigan, EOS Transactions, AGU. 90(52), Fall Meeting Supplement, Abstract GC51A-0948. December 5-9, 2011. Poster presentation.
20. J. Beilicki (presenter), D. Bael, M. Pollak, M. Rahimi, and **EJ Wilson**. RISCs: Risk Interference of Subsurface CO2 Storage, Sixth Trondheim CCS Conference on CO2 Capture, Transport, and Storage. Trondheim, Norway. June 14-16, 2011.
21. MF Pollak (presenter), J. Beilicki, J. Dammel, M. Rahimi, and **EJ Wilson**. Integrating Geologic Carbon Dioxide Storage with Other Subsurface Activities, DOE-NETL Ninth Annual Conference on Carbon Capture and Sequestration. Pittsburgh PA. May 2-5, 2011.
22. MF Pollak (presenter), D. Bael, J. Bielicki, M. Rahimi, and **EJ Wilson**. Interference and CO2 Storage, DOE-NETL Ninth Annual Conference on Carbon Capture and Sequestration. Pittsburgh PA. May 2-5, 2011. Accepted oral presentation.
23. M. Saar, J. Beilicki, J. Randolph, M. Pollak (presenter), **EJ Wilson**, T. Keuhn, S. Taff, A. Smale. Carbon Dioxide Plume Geothermal Energy: Making Electricity (and Money) from Geologic

- Sequestration of Carbon Dioxide, DOE-NETL Ninth Annual Conference on Carbon Capture and Sequestration. Pittsburgh PA. May 2-5, 2011. Poster presentation.
24. **EJ Wilson**, Clark Koenigs, Mudita Suri, JC Stephens, TR Peterson. Smart Grid in Context: Technology and Policy across Regions, Western Energy Policy Research Conference, Boise, ID, August 28-31, 2012
 25. **EJ Wilson**, MF Pollak, JM Belicki, C Peters, M Celia, J Fitts, V Bhatt Integrating Geologic Storage of Carbon Dioxide with Other Subsurface Activities, Carbon Capture and Sequestration Conference, Pittsburgh, PA, May 2-5, 2011
 26. EJ Wilson, M Pollak B Meyer. Reducing Greenhouse Gas Emissions: Lessons from State Climate Action Plans, APPAM Fall Conference, Boston MA, November 4-6, 2010
 27. **EJ Wilson**, J Stephens, TR Peterson, J. Larson, M. Fischlein, R. Chaudry, D.Hall. Wind Power: The Relationship between Stakeholder Perceptions and Technology Deployment, APPAM Fall Conference, Washington DC, November 7-8 2009
 28. **EJ Wilson**, J Stephens, TR Peterson. Carbon capture and storage in context: the importance of state policy and discourse in deploying emerging energy technologies. Greenhouse Gas Control Technology Conference 9, Washington DC, November 17, 2008
 29. **EJ Wilson**, A Klass, S.Bergan. Assessing a Liability Regime for Carbon Capture and Storage. Greenhouse Gas Control Technology Conference 9, Washington DC, November 17, 2008 (paper and poster)
 30. M.Pollak, J Johnson, **EJ Wilson**. The geography of CCS regulatory development in the U.S. Greenhouse Gas Control Technology Conference 9, Washington DC, November 17, 2008 (paper and poster)
 31. **EJ Wilson**, J Stephens, TR Peterson. Framing Wind: The importance of State-Level Policy and Discourse in Deploying Emerging Energy Technologies, APPAM Fall Conference, Los Angeles, CA, November 7-8 2008.
 32. **EJ Wilson**, KJ Krizek, R.Wilson. School Transportation Survey and School Choice, 87th Transportation Research Board Conference, Washington DC, January 13-17, 2008
 33. **EJ Wilson**, AB Klass. Recognizing Tort and Property Law Risks Associated with Geologic Carbon Storage, Society for Risk Analysis, San Antonio, TX, December 9-12, 2007
 34. **EJ Wilson**, J Stephens, C.Mitchell. Deploying Emerging Energy Technologies: An Interdisciplinary Framework. AAAS meeting, San Francisco, CA, Feb 15-16, 2007 (poster)
 35. Biofuels within a Larger Policy Context. Pathways toward a renewable energy future: Environmental sustainability through technology and policy, St. Paul, MN, February 1, 2007
 36. **EJ Wilson**, KJ Krizek, R.Wilson. School Transportation and School Choice, 86th Transportation Research Board Conference, Washington DC, January 21-25, 2007
 37. D Gerard, **EJ Wilson**. Mechanisms for Long-term care for CCS: Environmental Bonding, Society for Risk Analysis, Baltimore, MD, December 3-6, 2006
 38. **EJ Wilson**, MF de Figueiredo. The Impact of Liability on the Adoption and Diffusion of Carbon Capture and Sequestration Technologies, APPAM Fall Conference, Madison, WI, November 2-4, 2006.
 39. D Gerard, **EJ Wilson**. Environmental bonds and the problem of long term carbon sequestration. International Society for New Institutional Economics (ISNIE), Boulder, Colorado September 22-24 2006 (presented by D Gerard)
 40. **EJ Wilson**, J Friedmann. Squaring the long view: Regulatory and geological considerations for establishing future research agendas for carbon capture and sequestration. Fifth Annual Department of Energy Conference on Carbon Capture and Sequestration, Washington, D.C. May 8-11, 2006
 41. **EJ Wilson**, C Schively. Siting Geological Sequestration Projects: Public Perception, Regulatory Structures, and Legal Considerations. CO₂ Siting Conference, Lawrence Berkeley National Laboratory, Berkeley CA, March 20-23, 2006
 42. Considerations for a Regulatory Framework for Large-Scale Geologic Sequestration of Carbon Dioxide: A North American Perspective, at the 7th International Greenhouse Gas Technologies Conference, Vancouver, Canada. September 5-9, 2004
 43. Subsurface Property Rights: Implications for Geologic CO₂ Storage. Second International Symposium on Underground Injection Science and Technology, Berkeley, CA, October 22-25, 2003

44. **EJ Wilson**, DW Keith. Geologic Carbon Storage: Understanding the Rules of the Underground. Proceedings of the 6th Greenhouse Gas Control Conference. Kyoto, Japan. October 1-4, 2002
45. Assessing the Regulatory Environment for the Geological Sequestration of CO₂. Presented at the Ground Water Protection Council Conference. Reno, NV., September 22-25, 2001
46. Life Cycle Inventory Tools Applied to the Pamplona Region, Spain. Presented and published in conference proceedings of the Management in Europe in the 21st Century, 3rd Community of European Management Schools Conference, Institut d'Administration et de Gestion, Louvain-la-Neuve, Belgium. May 7-9, 1998
47. Incorporating the Environment into Municipal Solid Waste Planning. Presented at Systems engineering models for waste management, International Workshop, Göteborg, Sweden. February 22-25, 1998
48. Influences of paper Collection on Material Collection and Waste Management Objectives: A Curbside Dublin Case Study. Published in the conference proceedings of the 13th Municipal Solid Waste Management and Technology. Philadelphia, PA. November 17-19, 1997
49. MP Kestemont, **EJ Wilson**. Selective Collection in Prato, Italy. Explorec, Porte-de-Versailles, France. March 26-28, 1997

Invited Talks, Conference and Workshop Presentations

1. Keynote Talk, International Sustainability Transitions Conference, Manchester, UK, June 11-14 2018
2. Forum for Energy & Society, Electricity Systems in Transition: Tools, Rules and Joules, Dartmouth College, New Hampshire US, September 13, 2017
3. Modern Challenges in Power System Operations and Electricity Markets, DTU Summer School, June 16, 2017, Lyngby, Denmark
4. Tools, Rules and Joules: Negotiating the co-evolution of technology, policy and future electricity systems, May 24, 2017, Lund University, Sweden
5. Tools, Rules and Joules: Negotiating the co-evolution of technology, policy and future electricity systems, May 23, 2017, Chalmers University, Sweden
6. Tools, Rules and Joules: Negotiating the co-evolution of technology, policy and future electricity systems, March 21, 2017
7. Climate Change Conference, Energy Transition presentation at Stockholm Chamber of Commerce, Stockholm, Sweden, November 21, 2016
8. Tools, Rules and Joules: Negotiating the co-evolution of technology, policy and future electricity systems, October 28, 2016, SPRU Freeman Friday Seminar, Sussex University, UK
9. Tools, Rules and Joules: Negotiating the co-evolution of technology, policy and future electricity systems, September 2, 2016, Danish Technical University, Lyngby, Denmark
10. "Tools, Rules and Joules: Regional Transmission Organizations Transforming Electricity" Lawrence Livermore National Laboratory, Global Security Group, June 9, 2016, Livermore, CA
11. Panel member, Does Decentralization Make Sense? Austin Electricity Conference, April 21-22, 2016
12. RTO Decision Making in Practice: Negotiating Values, Goals, and the FERC, at The Nature of Technological Transition and Innovation in the Electricity Industry, Santa Fe Institute, Santa Fe, NM, March 30-April 1, 2016
13. (with Sudeen Kelly and Jeff Dennis) PowerShift RTO Governance Webinar, March 25, 2016.
14. Stakeholder Processes: 'The Worst Form of Government, except for All the Others,' Panel member, Harvard Electricity Policy Group, Washington DC, March 10, 2016
15. How Renewable Energy Really Gets on the Power Grid (or Doesn't), Sustainability Seminar, Penn State University, State College, PA, March 3, 2016
16. Integrating Renewable Energy in the Western United States, GCSC Seminar Series, University of Utah, February 9, 2016
17. With Alex Klass, Can energy use data reduce electricity costs and environmental impacts? Frontiers Series, Institute on the Environment, December 9, 2015
18. Integrating Big Wind into the Electricity Grid, Energy Research Seminar Series, Hong Kong Baptist University, Hong Kong, November 3, 2015
19. Catalyst Presentation, Convergence Colloquia: Renewable Energy, University of Minnesota, Minneapolis, MN, October 9, 2015

20. Energy Evolution: Shaping the Future of Electricity, Headliners Discussion Series, University of Minnesota, St. Paul, MN October 8, 2015
21. Decision Making in U.S. Regional Transmission Organizations: Shifting Value Propositions in the Future Electricity Grid, International Energy Agency, Paris, France, July 7, 2015
22. Creating Sustainable U.S. Electricity Systems: Negotiation and Decision Making within Regional Transmission Organizations, Leuphana University, Lüneberg, Germany, July 2, 2015
23. Making the Future U.S. Electricity System: Decision Making across Regional Transmission Organizations, Climate and Energy Group, Danish Technical University, Lyngby, Denmark, June 30, 2015
24. U.S. Electricity System of the Future: Decision Making within Regional Transmission Organizations, Cambridge University, Cambridge UK, June 12, 2015
25. Building the Electricity System of the Future: Energy Communities Shaping Regional Transmission Organizations, Energy and Society Seminar Series, Arizona State University, Tempe, April 22, 2015
26. Implementation in the Real World, Invited presentation at Reinventing the Grid: Designing Resilient, Adaptive and Creative Power Systems, Santa Fe Institute, Santa Fe, April 15, 2015
27. The Benefits and Costs of Pushing Renewables, Panel participant, Austin Electricity Conference, University of Texas, Austin, April 9, 2015
28. Making Electric Futures: Decision Making in Regional Transmission Organizations, Energy and Environment Lunch, University of North Carolina, Chapel Hill, March 6, 2015
29. Making Electric Futures: Decision Making in Regional Transmission Organizations, Smart Grid IGERT, University of Vermont, Burlington, VT, February 11, 2015
30. Decision Making in Regional Transmission Organizations, Center for Climate and Energy Decision Making, Carnegie Mellon University, January 26, 2015
31. Policy, Engagement and Technology: Building a Smarter Grid, Technology and Ethics Study Group, Yale University, New Haven, CT, November 19, 2014
32. The Dynamic Evolution of a Socio-Technical System: Smart Grid in the Electricity Sector, Gordon Conference on Science and Technology Policy, Waterville, NH, August 10-15, 2014
33. The Co-Evolution of Smart Grid and Wind Power, Carleton University, Ottawa, Canada, May 7, 2014
34. The Socio-Technical Evolution of Wind, Department of Natural Resources and Environmental Studies, University of Illinois, Urbana, January 31, 2014
35. Wind: Turbines, Transmission and Integration; Leading Voices in Energy, Sustainability, and Security Series, President's Office, Dartmouth University, July 11, 2013
36. Socio-Technical Determinants of Developing Large Scale Wind Energy Systems, Wuhan University, China, May 23, 2013
37. U.S. Re-reflections on China's Energy, Nanjing University, China, May 21, 2013
38. Wind, Wires, and Changing Rules, University of Calgary, January 21, 2013
39. Science, Innovation and Partnerships for Sustainability Solutions, Rapporteur for Breakout session on Energy, Hazards, and Climate Change, The National Academies, Washington DC, May 16-18, 2012
40. Regional Transmission Planning Workshop, Energy Policy Institute, Boise State, ID, April 26-27, 2012
41. Energy and Transmission Challenges, with Alex Klass, Minnesota Environmental Institute Case Law, Regulatory and Legislative Update, Minneapolis, MN, April 19, 2012
42. China, Energy and Development, Keynote speaker at the Minnesota Environmental Advocacy Women's Breakfast, Saint Paul, MN, April 18, 2012
43. The Many Facets of Sustainable Development, NSF sponsored Forum, Materials Research Society Spring Conference, San Francisco, CA, April 9, 2012
44. Policy Instruments for Limiting Greenhouse Gas Emissions, panelist, Austin Electricity Conference, Austin, Texas, April 4-5, 2012
45. Wind, Transmission and Integration: Policy and Politics of Renewable Energy, March 28 2012
46. States of Greenhouse Gas Policy, Invited seminar at the Nicholas School of the Environment, Duke University, NC, March 16, 2012
47. Planning MN's Future Energy Infrastructure, by Environmental Initiative, Science Museum, St. Paul, Minnesota, panel member September 16, 2011

48. China and Large-Scale CCS, Carbon Mitigation Initiative, Princeton University, Princeton, NJ, April 12, 2011
49. China: Energy and Environmental Considerations, University of Minnesota Law School, Law Affiliates Lunch, March 8, 2011
50. U.S. States and Greenhouse Gas Planning and Management, Universidad Autonoma de Mexico, Morelia campus, March 22, 2011
51. China's Challenges: Energy, Environment, and Development, Minnesota Pollution Control Agency, St. Paul, MN, January 31, 2011
52. Greenhouse Gases in the US States, IGERT Seminar, Goldman School of Public Affairs, UC Berkeley, January 26, 2011
53. Perspectives on Climate Change: China's Challenges: Energy, Environment, and Development, Will Steger Foundation, Minneapolis, MN, December 10, 2010
54. China's Challenges: Energy, Environment, and Development, Frontiers on the Environment Series, Institute on the Environment, University of Minnesota, December 1, 2010
55. China's Challenges: Energy, Environment, and Development, E3 Conference, St. Paul River Center, St. Paul, MN, November 30, 2010
56. Keynote talk, Status and Trends of Global New Energy Industrial Development: Technology Alone Is Not Enough, 4th China New Energy International Forum, National Conference Center, Beijing, China, January 20, 2010
57. Wind Power: The Relationship between Media Representation, Stakeholder Perceptions and Technology Deployment, Center for Industry and Environmental Governance, Tsinghua University, Beijing, China, December 24, 2009
58. Wind Power: The Relationship between Media Representation, Stakeholder Perceptions and Technology Deployment, BP-Tsinghua Low Carbon Energy Center, Tsinghua University, Beijing, China, December 17, 2009
59. The Relationship between Media Representation, Stakeholder Perceptions and Technology Deployment, Peking University, Beijing, China, December 3, 2009
60. Mythical Beasts in the Academic Zoo: Sustainability and Interdisciplinarity, Kadoorie Institute, Hong Kong, China, May 26, 2009
61. AB Klass and **EJ Wilson**, Energy Policy and Regulation: Federal and State Perspectives in a Carbon-Managed World, Minnesota Environmental Institute, April 24, 2009
62. Overcoming Obstacles to Carbon Capture & Sequestration Energy Policy and Regulation, Harvard University, March 30, 2009
63. Federal and State Perspectives in a Carbon-Managed World, Hennepin County Bar Association, Environmental Section, Minneapolis, MN, March 4, 2009
64. Regulatory and Legal Context of Carbon Capture and Sequestration, World Resources Institute, Washington DC, February 23, 2009
65. AB Klass and **EJ Wilson**, Liability and CCS, Dorsey and Whitney Law Firm, Minneapolis, MN January 8, 2009
66. Policy and practice: Regulation of Carbon Capture and Sequestration, Chinese Academy of Sciences, Beijing, China, December 17, 2008
67. Policy and practice: Regulation of Carbon Capture and Sequestration, Tsinghua University, Beijing, China, December 18, 2008
68. Policy and practice: Regulation of Carbon Capture and Sequestration, The Regulatory Challenge of CCS Environmental Risks and Public Acceptance, UC Berkeley, Berkeley, CA, October 16, 2008
69. Policies (and Politics) for the Management of Carbon, Gordon Conference in Industrial Ecology, New London, NH, August 18, 2008
70. Policy and practice: Regulation of Carbon Capture and Sequestration, CSIRO, Brisbane Australia, July 14, 2008
71. Legal Aspects of Carbon Capture and Storage, American Bar Association Section of Environment, Energy and Resources, National Teleconference, June 20, 2008
72. Property Rights and Access Issues, Launch of the International CCS Regulators' Network, International Energy Agency, Paris, France, May 13-14, 2008
73. Liability: Comparing Nuclear Waste and Carbon Capture and Storage, Joint ICTP-IAEA Meeting on Technical and Environmental Issues Related to Geological Storage of Carbon Dioxide and Nuclear Wastes, Trieste, Italy, April 14-18, 2008

74. Deploying Carbon Capture and Storage: International Regulatory and Legal Considerations, Department of Civil Engineering, Rice University, Houston TX, December 10, 2007
75. School Travel and the Implications for Advances in Transportation Related Technology, Advanced Transportation Technologies Seminar Series, University of Minnesota, Minneapolis, MN, November 20, 2007
76. Coal and Carbon Capture and Sequestration, Program on Energy and Sustainable Development Review, Stanford University, Palo Alto, CA, November 13-14, 2007
77. Recommendations by the International Risk Governance Council for the Regulation of CCS, Conference on Regulating and Financing Carbon Capture and Storage, Swiss-Re Centre for Global Dialogue, Rüschiikon, Switzerland, November 7-8, 2007
78. Carbon capture and storage in the context of climate change, Swiss-Re Risk Talk, Swiss Re Center for Global Dialogue, Rüschiikon, Switzerland, November 8, 2007
79. Managing Carbon Sequestrations—Risks within a Larger Context, Workshop on Moral Considerations for Carbon Capture and Sequestration, Rio de Janeiro, Brazil, October 30-November 1, 2007
80. DISCCRS III Symposium, NSF sponsored symposium for young researchers working on climate issues, Hawaii National Park, HI, September 10-17, 2007
81. Technology Embedded within a larger Socio-Political Context, Carbon Capture and Sequestration Social Research Network Meeting, Banff, Canada, September 19-20, 2007
82. Carbon Capture and Sequestration: The Policy Context, Research Experience on Carbon Sequestration, Bozeman, MT, August 5-6, 2007
83. Considerations for Carbon Sequestration. Seminar for Program on Energy and Sustainable Development, Stanford University, Palo Alto, CA, July 24, 2007
84. Regulatory and Legal Aspects for Carbon Capture and Sequestration, presentation to the Earth Sciences Board, National Research Council, Washington DC, May 31, 2007
85. Adaptive Management for CCS. Plenary Talk, 6th Annual Conference on Carbon Capture and Sequestration, Pittsburgh, PA, May 7-10, 2007
86. Policy Considerations for a Carbon Managed Energy System, Mechanical Engineering Seminar, University of Minnesota, Minneapolis, MN, February 14, 2007
87. Speaker with “The Future of Minnesota’s Energy” by the MN Chamber of Commerce, St. Paul, MN, Feb 21, 2007
88. Carbon Sequestration, Resources for the Future, Washington DC, December 7, 2006
89. CCS Regulatory and Legal Issues. Summit on Coal Technology and Policy, Columbia University, New York, NY, October 12-13, 2006
90. Liability Working Group Efforts: CCS Regulatory and Legal Issues, WRI Workshop on Liability, Washington DC, September 29, 2006
91. CCS Regulatory and Legal Issues. Big Sky Carbon Sequestration Partnership, Big Sky MT, September 19-20, 2006
92. New Initiatives: Climate and Energy, with University of Minnesota Delegation, Norwegian University of Life Sciences, Ås, Norway, September 11, 2006
93. Conversations on Sustainability: Global Change, Energy Use, and Solutions for the Future, Minneapolis, MN, April 19, 2006
94. Geological Sequestration Embedded: Regulatory Structures and Liability Considerations, Strategic Initiatives for Coal and Power Workshop, Wye Conference Center, Queenstown, MD, March 30, 2006
95. Air, Water and Waste Conference, Minneapolis, MN Energy Futures of Minnesota, St. Paul, MN, February 15, 2006
96. Climate Change: Science, Technology and Public Policy, Civil Engineering Seminar, University of Minnesota, Minneapolis, MN, February 19, 2006
97. Regulatory and Legal Considerations for Carbon Capture and Sequestration, Applied Economics Seminar Series, University of Minnesota, St. Paul, MN, November 7, 2005

**Conferences
and
Conference**

- Energy Disaster and Resilience Workshop, April 24-26 2018, Dartmouth College
- U.S.-Danish Electricity Frontiers Workshop May 7-9 2016, Danish Technical University, Lyngby, Denmark

Sessions Organized

- (with the Institute for Advanced Study), INFRASTRUCTURE, ART, AND ENERGY: An Afternoon with Richard Hirsh, Soap Factory, February 17, 2016
- Distribution Network Planning Workshop, University of Minnesota, September 24, 2015
- Session Chaired and Co-organized (with Nadia Maizi, S. Fu, Olivier Boucher), Decarbonizing Electricity/Electricity Transition, Our Common Future Under Climate Change, July 7-10 2015, Paris, France
- Managing Energy in A Renewables Rich World, Session organized and chaired, Industry Studies Association, Kansas City, MO, May 2015
- Sustainable Electricity: RTO Roles in Managing Risk and Transitions, Session organized and chaired, Industry Studies Association, Portland Oregon, May 2014
- Constructing Smart Grids: Technological Innovation, Political Choice, and the Challenge of Sustainable Energy, with James Meadowcroft, Carleton University, Ontario, Canada, held in Wakefield, Quebec, Canada October 5-7, 2011
- Energy at the Crossroads: A Smart Grid for the Upper Midwest, with Great Plains Institute, Minneapolis, MN. August 17-18, 2011
- Organization Committee, Bio-fuels, Carbon and Trade. Minneapolis, MN. October 22-23, 2007
- Co-organizer (with Harvey Thorleisen, Director of the Minnesota Geological Survey), Prospects for CO₂ Sequestration in the Upper Midwest. Minneapolis, MN. March 21, 2007
- Co-organizer (with Granger Morgan of Carnegie Mellon University), International Risk Governance Council Workshop on Geologic Sequestration. Washington DC. March 15-16, 2007

Legislative Testimony

- MN Public Utilities Commission, on Energy Use Data, June 17, 2013
- MN Senate Energy Committee, on Global Warming Mitigation Act, February 2, 2007
- MN House Energy Committee, for Energy Efficiency and Conservation Bill, March 3, 2007
- Statement to European Commission and UNFCCC (with the International Risk Governance Council) on Regulation for Carbon Capture and Storage, April 2007 and May 2007

Media

- Quoted in Science, 2018
- Interviewed on MPR on the COP 21 in Paris, February 2016
- Interviewed on MPR on Smart Grid, January 2016
- Interviewed on MPR on the Chinese Energy System, December 2015
- Quoted in the Star Tribune on editorial by John Rash on Oil and energy issues, <http://www.startribune.com/opinion/commentaries/278081771.html>, October 6, 2014
- Interviewed by WCCO on how China's energy use could affect US consumers, Minneapolis, MN, June 9, 2011
- Interviewed by WCCO on high oil and gas prices, Minneapolis, MN, April 27, 2011
- Interviewed by KSTP on high oil and gas prices, Minneapolis, MN, April 27, 2011
- Quoted by Brian Walsh in *Time Magazine* on U.S.-China Energy cooperation, January 18, 2011, <http://www.time.com/time/health/article/0,8599,2042690,00.html>
- Quoted by New York Times reporter, Elisabeth Rosenthal, on school travel and mode choice, March 26, 2009 http://www.nytimes.com/2009/03/27/world/europe/27bus.html?_r=1
- Interviewed by Star Tribune March 23, 2009 on coal use
- Interview by Wall Street Journal reporter Rob Tomsho on school transportation and school choice. September 4, 2008
- Interviewed by Climate Wire reporter Evan Lehmann on liability and CCS. August 12, 2008
- Interview by Business Week reporter Ben Elgin on subsurface property rights for CCS. May 28, 2008
- Quoted in Star Tribune, on climate and energy issues. June 6, 2008
- Interview WJON morning show, St. Cloud, MN. May 22, 2007
- Interview with Tom Hauser on At Issue, KSTP, Minneapolis, MN. May 20, 2007
- Global Warming Roundtable, Minnesota Public Radio, April 3, 2007, rebroadcast on Mid-Morning April 4, 2007
- Interviewed by Star Tribune on Global Warming. Article published February 4, 2007

- Midmorning with Gary Eichman to speak on Global Warming. February 2, 2007
- WCCO Morning Radio Program, Guest on Energy Policy and Fuel Prices. April, 18, 2006.
- Los Angeles Times, Janet Wilson, Interview for feature on Carbon Capture and Sequestration. September 14-15, 2006
- Time Magazine, Interview Mark Hequet with on policies to drastically reduce oil consumption. August 31, 2006
- KSTP-TV (ABC affiliate), Interview with Mike Maybay for 10 pm news on Mark Kennedy's energy campaign aired August 21, 2006
- WCCO, Interview for evening news segment on international gasoline tax, Ben Tracy. June 6, 2006
- KSTP-TV (ABC affiliate), Interview with Tom Hauser on oil and gasoline prices for At Issue. aired April 30, 2006
- KFAI radio program organized by HHH students Karisha Kulpers and Sarah Thompson. March 10, 2005

**Completed
Research
Projects
(sponsored)**

- | | |
|--|-------------|
| • Co-PI (with Tim Smith): Institutional considerations for greenhouse gas reductions: Survey and assessment of conservation improvement programs in Minnesota, Consortium on Law Values and the Environment (Awarded August 2006) | \$32,900 |
| • Head, Liability Working Group, World Resources Institute Carbon Capture and Sequestration Project (2006) | \$10,000 |
| • Co-PI (with Kevin Krizek): Impacts of school choice on travel mode, environmental emissions and risk, State and Local Policy Program (Awarded November 2006) | \$12,000 |
| • Co-PI (with Granger Morgan): Regulation on Carbon Capture and Sequestration, International Risk Governance Council (Awarded October 2006) | \$204,000 |
| • PI (with Kevin Krizek and Julian Marshall): School Travel and the Implications for Advances in Transportation Related Technology, Techplan, ITS Institute (Awarded January 2007) | \$84,400 |
| • Co-PI (with Julian Marshall, David Kittleson, and Laurie McGinnis): Assessment of Transportation Policy and Technology Options to Reduce Greenhouse Gas Emissions in Minnesota, Center for Transportation Studies (Awarded July 2007) (\$100,000) | \$300,000 |
| • Co-PI (with Julian Marshall): Decision tools for assessing transportation impacts of school policy and school choice, Techplan, ITS Institute (Awarded September 2008) | \$78,800 |
| • PI (with Jennie Stephens and Tarla Rai Peterson): Diffusion of Emerging Energy Technologies within a State Context, National Science Foundation (Awarded September 2007 SES-0724184) (\$133,000) | \$390,000 |
| • Co-PI (with Granger Morgan): Regulation for Carbon Capture and Sequestration, Doris Duke Charitable Foundation (Awarded January 2008) (\$200,000) | |
| • PI: State Climate Action Planning: Geography of Regional and National Climate and Renewable Energy Policy, Initiative on Renewable Energy and the Environment (Awarded March 2009) | \$1,800,000 |
| • Co-I (with Martin Saar and others): Combining Geothermal Energy Extraction and CO2 Sequestration to Produce Clean, Renewable, Carbon Negative Electricity, Initiative on Renewable Energy and the Environment (Awarded March 2009) (\$60,000) | \$69,100 |
| • Co-I (with Donald Fosnacht, NRRI and others) Pumped Hydro Energy Storage (PHES) Using Abandoned Mine Pits on the Mesabi Iron Range of Minnesota, Initiative on Renewable Energy and the Environment (Awarded July 2010) (\$50,000) | \$600,000 |
| • Co-PI (with Catherine Peters PI, Princeton University and Brookhaven National Laboratory): Basin-Scale Leakage Risks from Geologic Carbon Sequestration: Impact on CCS Energy Market Competitiveness, Department of Energy (Awarded August 2009) (\$500,000) | \$285,000 |
| • PI, An Investigative Report of the CapX2020 Transmission Project, Great River Energy (Awarded February 2015) | \$1,867,000 |
| | \$79,529 |

**Research
Projects
(sponsored)**

- Co-PI (with Jennie Stephens, Clark University and Tarla Rai Peterson, Texas A&M): Smart Grid: An Analysis of How Socio-Political Contexts Shape Energy Technology Development and Policy, National Science Foundation (Awarded September 2011, SES - 1127697) (\$165,000) \$498,300
- Co-PI (with Jennie Stephens, Clark University, Tarla Rai Peterson, Texas A&M, Andrea Feldpausch-Parker, Syracuse): RAPID: Collaborative Research: Post-Sandy Discourse about Energy Infrastructure and Security, National Science Foundation Awarded September 2013, SES-1316330) (\$15,000) \$45,000
- PI (with Seth Blumsack (Penn State), Sairaj Dhople, Alex Klass, Julian Marshall, Hari Osofsky, Pete Seiler, Tim Smith, Bruce Wollenberg (UMN)): Innovating for sustainable electricity systems: Integrating renewables, reallocating transmission and driving demand, Initiative on Renewable Energy and the Environment (Awarded November 2012) \$375,000
- Co-PI (with Donald Fosnacht, PI, NRRI, UM-Duluth) Compressed Air Energy Storage on the Mesabi Iron Range and in Underground Copper-Nickel Mines, Initiative on Renewable Energy and the Environment (Awarded November 2012) \$324,458
- Co-PI (with Seth Blumsack, Penn State, David Solon and Natalie Marsh, Boise State) Collaborative Research: Planning for Renewables: Regional Transmission Organizations Managing Tension and Networking Innovation (Awarded July 2013, SES-1261670) \$499,990
- PI (project with Sairaj Dhople, Pete Seiler, Tim Smith (UMN)), “Sustainable Energy Systems: Control Systems and Sensors to Link Rural Renewables and Demand for Sustainable Industrial Energy in Food Processing Systems” MN-Drive (Awarded June 30, 2014) \$500,000
- Collaborator, Reducing Household Food, Energy and Water Consumption: A Quantitative Analysis of Interventions and Impacts of Conservation, NSF (Michigan Tech Lead, UMN \$550,000, Awarded October 2016, INFEWS-1639342) \$2,983,385
- PI and Co-PI Barriers and Opportunities for Distributed Energy Resources among Minnesota’s Municipal Utilities and Electric Cooperatives, McKnight Foundation, (Awarded August 2016) \$200,000

Review Activity

- Peer Reviewer, research manuscripts for:
American Association of Petroleum Geologists (2006)
Applied Energy (2009, 2010)
Climate Policy (2008, 2012)
Ecological Economics (2012)
Energy Policy (2010-2016)
Environment and Planning, A (2009, 2011)
Environmental Conservation (2006)
Environmental Management (2006)
Environmental Research Letters (2008, 2013)
Environmental Science and Technology (2005, 2008, 2010, 2011, 2012, 2014, 2016)
Global Environmental Change (2011, 2013)
International Journal of Greenhouse Gas Control (2007, 2008, 2009)
Journal of the American Planning Association (2006)
Journal of Solar Energy Engineering, ASME (2007)
Landscape and Urban Planning (2008)
Policy Studies Journal (2012, 2013)
PNAS (2014)
Science (2009, 2012)
Sustainability (2010)
Transportation and Research A: Policy and Practice (2009)
Waste Management and Research (2006)

University Service

- Co-Chair IonE Director Search Committee 2014-2015
- Institute for Advanced Studies Advisory Board 2010-present
- McKnight Land Grant Selection Committee 2013, 2014, 2015
- Applied Economics Search Committee 2013-2014
- HHH STEP Search Committee 2013-2014
- HHH Ph.D. Committee 2013-2014
- HHH Promotion and Tenure Committee, 2010-2014
- HHH Awards Committee 2010-2012
- Search Committee for Energy Economist, Applied Economics, 2008
- University-wide Sustainability Goals and Outcomes Committee, Summer 2008
- Fellow, Institute on the Environment, 2010-2014
- Founding Fellow, Institute on Environment, 2007-2008
- HHH Operations Committee, 2005-2007
- HHH Curriculum Committee, 2007, 2008
- HHH Denny Chair Search Committee, 2006-2007, 2007-2008, 2011-2012
- Institute on the Environment Director Search Committee, 2007-2008
- Consortium on Law and Values in Health, Environment & the Life Sciences and the Joint Degree Program in Law, Health & the Life Sciences, Degree Program Representative, 2006-2007
- Guest lectures in Departments of Ecology, Evolution and Behavior, Computer and Electrical Engineering, Civil Engineering, Chemical Engineering, Architecture and Design, the Law School, the Carlson School of Management

Professional Service

- Co-chair of APPAM Fall Conference Energy and Environment Committee (2009, 2010, 2011), co-chair for Natural Resource Security, Energy and Environmental Policy (2014, 2015)
- Reviewer for DISCCRS Program (2010, 2011, 2012)
- Reviewer for Leopold Leadership Program (2012)
- NSF Reviewer
- Israeli National Science Foundation
- Estonian National Science Foundation Reviewer
- External Reviewer for the Energy Program, American University of Beirut, Lebanon

Consulting Experience

- Sierra Club, 2008
- International Atomic Energy Agency, 2008
- International Council on Risk Governance, 2007
- World Resources Institute, 2006, 2007
- Union of Concerned Scientists 2009
- Carbon Management Canada (2011, 2012)

Professional Experience

- Environmental Scientist, *Office of Research and Development, U.S. Environmental Protection Agency*, Research Triangle Park, NC (1999-2005)
Performed and published technology assessments within a multidisciplinary global change context, Contributed to IGCC Special Report on Carbon Capture and Storage.
- Researcher, *Centre Enterprise-Environment, IAG Management School, Catholic University of Louvain*, Louvain-la-Neuve, Belgium, (1996-1999)
Explore use of Life Cycle Analysis tools in municipal solid waste management and planning. Assess effectiveness of integrated waste and resource management in 11 European cities, analyzing factors that influence system management, decision-making, and policy choice. Lead international, interdisciplinary research team on municipal planning, solid waste and recycling management.
- Program coordinator, *San Francisco Clean City Coalition*, San Francisco, CA (1994-1995)
- Executive Assistant, *Co-operation Section, Belgian Embassy of Tanzania*, Dar es Salaam, Tanzania (1993-1994)
- Environmental Educator, *U.S. Peace Corps*, Gitega, Burundi (1992-1993)
- Intern, *United Nations Environment Programme*, Nairobi, Kenya (1990)

**Student Papers
Advised**

- Vivek Bhandari, PhD Committee chair (completed 2019)
- Mo Li, PhD Committee co-chair (completed 2019))
- Stephanie Lenhart, Committee member , 2017 (Boise State University)
- Ann Benson, MPP 2016
- John Howard, MPP 2016
- Divya Narasimhan MPP 2016
- Tom Prebich, MPP 2015
- Matthew Prorock MS 2015
- Danielle Winner MPP 2015
- Jamie Fitzke, MS 2014
- Linnea Nelson, MS 2014
- Julia Haltiwanger, Ph.D. Committee, Mechanical Engineering (2009)
- Michael Gillenwater, Ph.D. Committee, Princeton University (2013)
- Rebecca Pickens—MS 2012
- Sarah Johnson—MS/JD 2009
- Joel Larson—MPP 2009
- Steve Cayford—MS 2009
- Andrew Gibbons—MS/JD 2008
- Melisa Pollak—MS 2008
- Margaret Linnak—Ph.D. Committee, Chemical Engineering (2012)
- Anthony Giaccamoni—Ph.D. Committee, Electrical Engineering (2012)
- Miriam Fischlein—Ph.D. Committee, Natural Resources (2010)
- David Rennard—Ph.D. Committee, Chemical Engineering (2010)
- Stacey Miller—MS (2009)
- Rane Cortez—MS 2007, Winner Lloyd B. Short Award
- Joe Plummer—MS 2007
- Kyle MacLaury—MS 2006
- Rong Yu—MS 2006
- Capstone Project Papers 2008-2016

**Outreach,
Professional
Service, and
Languages**

- Member, Association of Public Policy Analysis and Management (2006-present)
- Member, Society for Risk Analysis (2009-2012)
- Member, American Association for the Advancement of Science (2005-present)
- Board Member, Neighborhood Energy Consortium, St. Paul, MN (2006-2009)
- Board Member, Fresh Energy (2008-2012)
- Board Member, YMCA Camp du Nord (2014 to present)

- Strong French, Good Spanish, Danish in progress, Deteriorating Swahili, Chinese stalled