JONN AXSEN, Ph.D. (Updated June 5, 2014)

School of Resource and Environmental Management Simon Fraser University 8888 University Drive, Burnaby, B.C. V5A 1S6

EDUCATION

Ph.D., Transportation Technology and Policy, University of California, Davis, 2010. Dissertation: Interpersonal influence within car buyers' social networks: Observing consumer assessment of plug-in hybrid electric vehicles (PHEVs) and the spread of pro-societal values. Advisor: Dr. Kenneth S. Kurani, Dr. Thomas Turrentine and Prof. Daniel Sperling.

Master of Resource Management, Simon Fraser University, Vancouver, Canada, 2006. Thesis: Combining stated and revealed choice research to inform energy system simulation models: The case of hybrid-electric vehicles. Advisor: Prof. Mark Jaccard and Prof. Dean Mountain.

Bachelor of Business Administration, First class honors, Simon Fraser University, Vancouver, Canada, 2004.

RESEARCH INTERESTS

- Environmental attitudes, preferences, values and lifestyle
- Consumer purchase and use of energy-using technologies
- Diffusion of innovations, social networks and interpersonal influence
- Technological change and energy-use modeling
- Energy and environmental policy and impacts
- Alternative-fuel infrastructure, recharging behavior, and grid interactions
- Ecosystems services and environmental valuation

RESEARCH SKILLS

- Behavioral research methods: consumer surveys and interviews; social network mapping, analysis and observation.
- Simulation modeling: energy-economy models, discrete choice models, and integration across models.
- Quantitative analysis: continuous and categorical statistics; linear and logistic regression; factor and cluster analysis.
- Qualitative analysis: narrative and content analysis.
- Risk and uncertainty: decision analysis; Monte Carlo; Bayesian; sensitivity analysis.
- Policy analysis: quantitative and qualitative tradeoffs.
- Life-cycle impact assessment: quantifying and comparing impacts.
- Management: economics; finance; business strategy; human resources.

ACADEMIC POSITIONS

Assistant Professor, Simon Fraser University, 8/11 – present.

Post-Doctoral Research, UC Davis, 7/10 – 7/11.

Doctoral Research, UC Davis, 3/07 – 6/10.

Research Associate, Canada Industrial Energy Data Center (CIEEDAC) and MKJA & Associates Consulting, 5/04 – 3/07.

Masters Research, Simon Fraser University, 9/04 – 9/06.

PEER-REVIEWED PUBLICATIONS

[Journal impact factors and journal ranking (for each field) cited from Journal Citation Reports (JCR) where available.]

<u>Published</u>

- Axsen, J., and K.S. Kurani (In Press). Social influence and pro-environmental behavior: The reflexive layers of influence framework. *Environment and Planning B*, accepted October 2013. [2011 JCR = 0.8]
- 2. Cusack, D., J. Axsen, R. Shwom, L. Hartzell-Nichols, S. White, K. Mackey (2014). Assessing climate engineering solutions as complements to mitigation: An interdisciplinary framework. *Frontiers in Ecology and the Environment*, 12(5), 280-287. [2012 JCR = 7.6]
- Axsen, J., C. Orlebar, and S. Skippon (2013). Observing social influence and consumer preference formation: The case of a U.K. workplace electric-vehicle trial. *Ecological Economics*, 95, 96-107. [2011 JCR = 2.7, #18/320 in Economics, #6/89 in Environmental Studies]
- 4. **Axsen, J.** and K. Kurani (2013). Hybrid, plug-in hybrid or electric—what kind of electric-drive vehicles do consumers want? *Energy Policy*, 61, 532-543. [2011 JCR = **2.7**, #5/89 in Environmental Studies]
- Axsen, J. and K. Kurani (2013). Connecting plug-in vehicles to green electricity through consumer demand: A survey of U.S. new car buyers, *Environmental Research Letters*, 8, 1-8.
 [2011 JCR = 3.6]
- Axsen, J., and K.S. Kurani (2013). Developing sustainability-oriented values: Insights from households in a trial of plug-in hybrid vehicles, *Global Environmental Change*, 23(1), 70-80. [2011 JCR = 6.9, #1/89 in Environmental Studies]
- 7. Axsen, J., J. TyreeHageman, and A. Lentz (2012). Lifestyle practices and pro-environmental technology, *Ecological Economics*, 82, 64-74. [2011 JCR = 2.7, #18/320 in Economics, #6/89 in Environmental Studies]
- 8. Axsen, J., and K.S. Kurani (2012). Social influence, consumer behavior and low-carbon energy transitions, *Annual Review of Environment and Resources*, 37, 311-40. [2011 JCR = 6.4, #2/89 in Environmental Studies]
- Axsen, J., and K.S. Kurani (2012). Who can recharge a plug-in electric vehicle at home? Submitted to *Transportation Research Part D: Transport and Environment*, 17(5), 349-353. [2011 JCR = 1.7, #9/24 in Transportation]
- Axsen, J., and K.S. Kurani (2012). Interpersonal influence within car buyers' social networks: Applying five perspectives to plug-in hybrid vehicle drivers, *Environment and Planning A*, 44(5), 1047-1065. [2011 JCR = 1.9, #22/89 in Environmental Studies]
- Axsen, J., K.S. Kurani, R. McCarthy and C. Yang (2011). Plug-in hybrid vehicle GHG impacts in California: Integrating consumer-informed recharge profiles with an electricity-dispatch model, *Energy Policy*, 39(3), 1617-1629. [2011 JCR = 2.7, #5/89 in Environmental Studies]

- 12. Axsen, J., and K.S. Kurani (2011). Interpersonal influence in the early plug-in hybrid market: Observing social interactions with an exploratory multi-method approach, *Transportation Research Part D: Transport and Environment*, 16(2), 150-159. [2011 JCR = 1.7, #9/24 in Transportation]
- 13. Axsen, J., and K.S. Kurani (2010). Anticipating plug-in hybrid vehicle (PHEV) energy impacts in California: Constructing consumer-informed recharge profiles, *Transportation Research Part D: Transport and Environment*, 15(4), 212-219. [2011 JCR = 1.7, #9/24 in Transportation]
- 14. Axsen, J., K.S. Kurani, and A. Burke (2010). Are batteries ready for plug-in hybrids buyers? *Transport Policy*, 17 (3), 173-182. [2011 JCR = 1.7, #8/24 in Transportation]
- 15. Axsen, J., and K.S. Kurani (2009). Early U.S. market for plug-in hybrid electric vehicles: Anticipating consumer recharge potential and design priorities, *Transportation Research Record: Journal of the Transportation Research Board*, 2139, 64-72. [2011 JCR = 0.5]
- 16. Axsen, J., D. Mountain, and M. Jaccard (2009). Combining stated and revealed choice research to simulate the "neighbor effect": The case of hybrid-electric vehicles, *Resource and Energy Economics*, 31 (3), 221-238. [2011 JCR = 1.2, #91/320 in Economics]

Manuscripts under review

- 17. Axsen, J. (Under review). Citizen acceptance of new fossil fuel infrastructure: Value Theory and Canada's Northern Gateway Pipeline, Submitted to *Energy Policy*. [2011 JCR = 2.7, #5/89 in Environmental Studies]
- 18. Fox, J., J. Axsen and M. Jaccard (Under review). Picking winners: Assessing the costs of technology-specific climate policy for U.S. passenger vehicles, Submitted to *Resource and Energy Economics*. [2011 JCR = 1.2, #91/320 in Economics]
- Rhodes, E., J. Axsen and M. Jaccard (Under review). Does climate policy require wellinformed citizen support? Submitted to *Global Environmental Change*. [2011 JCR = 6.9, #1/89 in Environmental Studies]
- 20. Bailey, J. H. and, **J. Axsen** (Under review). Anticipating consumer acceptance of utility controlled charging for plug-in vehicles, Submitted to *Energy Policy*. [2011 JCR = 2.7, #5/89 in Environmental Studies]

Works in progress

- 21. Rhodes, E., **J. Axsen** and M. Jaccard (Early draft). Citizen acceptance for a low-carbon fuel standard, to be submitted to *Energy Policy*.
- 22. Melton, N., J. Axsen (Outline). Hype cycles for alternative fuel vehicles: A U.S. media analysis, 1980-2010, to be submitted to *Technological Forecasting and Social Change*.

- 23. Miele, A., **J. Axsen** and J.H. Bailey (Draft). Is awareness of public charging stations associated with consumer interest in plug-in vehicles? To be submitted to *Transportation Research Part D: Transport and Environment*.
- 24. **Axsen, J.**, M. Castro, and H.J. Bailey (Outline). Characterizing heterogeneity in the early market for plug-in vehicles, to be submitted to *Ecological Economics*.
- 25. Axsen, J., K. Kurani and M. Lee-Gosselin (Early draft). Design space as a method to value-proenvironmental technology, to be submitted to *Environment and Planning A*. [2011 JCR = 1.9, #22/89 in Environmental Studies]
- 26. **Axsen, J.** (Outline). Electric vehicle hype and hope: The key to sustainable mobility? To be submitted to *Renewable & Sustainable Energy Reviews*. [2011 JCR = **6.0**.]

BOOK CHAPTERS

Published

Axsen, J., C. Yang, R. McCarthy, A. Burke, K. Kurani, and T. Turrentine (2011), The Plug-in Electric Vehicle Pathway, in *Sustainable Transportation Energy Pathways: A Research Summary for Decisionmakers*, Eds. Joan Ogden and Lorraine Anderson, Regents of the University of California, Davis campus. Available under a Creative Commons BY-NC-ND 3.0 license, published 2011, p.38-63.

Axsen, J, A. Burke, and K.S. Kurani (2010). Batteries for PHEVs: Comparing Goals and the State of Technology, in *Electric and Hybrid Vehicles: Power Sources, Models, Sustainability, Infrastructures and the Market*, Ed. Gianfranco Pistoia, Elsevier, ISBN 978-0-444-53565-8.

In Progress

Ehardt-Martinez, K., J. Axsen, et al. (early draft). Consumption and Climate Change, in *American Sociological Association's Special Task Force on Climate Change*.

ACADEMIC AND INDUSTRY REPORTS

Axsen, J., H. J. Bailey, and G. Kamiya (2013). *The Canadian Plug-in Electric Vehicle Survey* (*CPEVS 2013*): *Anticipating Purchase, Use, and Grid Interactions in British Columbia*, Preliminary Report, Prepared for BC Hydro and the British Columbia Government, October 31, 2013.

Axsen, J., and K. Kurani (2012). *Plug-in Vehicles and "Green" Electricity: A Survey of U.S. new car buyers*. Prepared for BMW of North America, LLC, Submitted May 31, 2012.

Axsen, J., C. Orlebar and S. Skippon (2011). *Social Influence and Consumer Perceptions during a U.K. Workplace EV Trial*. Report Submitted to Shell Global Technology, November 30, 2011.

Axsen, J. (2010). Interpersonal Influence within Car Buyers' Social Networks: Observing Consumer Assessment of Plug-in Hybrid Electric Vehicles (PHEVs) and the Spread of Pro-Societal Values. Institute of Transportation Studies, University of California, Davis, PhD Dissertation, Research Report UCD-ITS-RR-10-15.

Kurani, K.S., J. Axsen, N. Caperello, J. Davies, and T. Stillwater (2009). *Learning from Consumers: Plug-in Hybrid Electric Vehicle (PHEV) Demonstration and Consumer Education,* *Outreach*, Market Research Program. Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RR-09-21.

Axsen, J., and K.S. Kurani (2008). *The Early U.S. Market for PHEVs: Anticipating Consumer Awareness, Recharge Potential, Design Priorities, and Energy Impacts.* Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RR-08-22.

Axsen, J., A. Burke, and K.S. Kurani (2008). *Batteries for Plug-in Hybrid Electric Vehicles* (*PHEVs*): *Goals and the State of Technology circa 2008*. Institute of Transportation Studies, University of California, Davis, Research Report UCD-ITS-RR-08-14.

Axsen, J. (2006). Combining Stated and Revealed Choice Research to Inform Energy System Simulation Models: The Case of Hybrid Electric Vehicles, Master's Thesis, Simon Fraser University.

Axsen, J., J. Nyboer and C. Bataille (2005). *Goods-Producing Small to Medium-Sized Enterprises: Energy End Use and Efficiency Potentials*, Prepared for Natural Resources Canada, Canadian Industrial Energy End-Use Data and Analysis Centre (CIEEDAC), March 2005.

ACADEMIC CONFERENCE PRESENTATIONS

2014 (5 presentations)

Powering plug-in electric vehicles with Renewable Energy Supply in BC (Co-organizer with Prof. Curran Crawford), University of Victoria, May 12-13, 2014.

Presentation: "Consumer acceptance of utility controlled charging for plug-in vehicles"

Grid Integration Workshop, Integrated Energy Systems, University of Victoria (IESVic), May 12, 2014.

Invited presentation: *"CIMS technology simulation model: An introduction to energy demand modeling in CIMS."*

Unlocking the potential of smart grids: A partnership to explore policy dimensions (Second annual meeting), Wakefield, Quebec, May 7-9, 2014 (part of a SSHRC Partnership Development Grant).

Presentation: "Consumer acceptance of utility controlled charging for plug-in vehicles"

Transportation Research Board 93^{*rd*} *Annual Meeting*, Washington, DC. January 12-16, 2014. **Presentations (peer-reviewed, accepted):**

- 1. "Citizen acceptance of new fossil fuel infrastructure."
- 2. "Picking winners: Assessing the costs of technology-specific climate policy for U.S. passenger vehicles"

2013 (7 presentation)

International Conference on Advances in Energy Research (ICAER), Indian Institute of Technology Bombay, Mumbai, India, December 10-12, 2013.

Presentation (invited): "Connecting plug-in vehicles to green electricity through consumer demand."

Behavior, Energy and Climate Change, Sacramento, California, November 17-21, 2013.

- 1. "Consumer acceptance of utility controlled charging for plug-in vehicles"
- 2. "Characterizing green lifestyle using segmentation analysis"

Unlocking the potential of smart grids: A partnership to explore policy dimensions, Wakefield, Quebec, May 1-3, 2013 (part of a SSHRC Partnership Development Grant). **Presentations:**

- 1. "Linking plug-in vehicles to renewable energy through Smart Grids"
- 2. "Citizen perceptions of Smart Meters: Comparing survey results across Canadian regions"

Transportation Research Board 92^{*nd*} *Annual Meeting*, Washington, DC. January 13-17, 2013. **Presentations (peer-reviewed, accepted):**

- 3. "Hybrid, plug-in hybrid or electric: What do car buyers want?"
- 4. "The 'design space' approach: Observing disaggregated consumer response and preference formation."

2012 (7 presentations)

Behavior, Energy and Climate Change, Sacramento, California, November 11-14, 2012. **Presentation (invited)**: "Will electric vehicle buyers want green electricity?"

International Society of Ecological Econonomics (ISEE 2012), Rio de Janeiro, Brazil, June 16-19, 2012. **Presentations**:

- 1. "Observing social influence and consumer preference formation: The case of a U.K. workplace electric-vehicle trial."
- 2. "Lifestyle practices and pro-environmental technology."

Transportation Research Board 91st Annual Meeting, Washington, DC. January 22-26, 2012. **Presentations (peer-reviewed):**

- 1. "Can markets for electric vehicles and green electricity accelerate each other? Initial conversations with consumers."
- 2. "Characterizing residential recharge potential for plug-in electric vehicles."
- 3. "Lifestyle practices and pro-environmental technology."
- 4. "Developing sustainability-oriented values and practices: Narrative accounts of drivers of plug-in hybrids."

2011 (4 presentations)

7th Social Network Conference 2011, Greenwich, U.K., July 7-9, 2011. **Presentation**: "Processes of social influence and sustainable consumption: Reflexive layers of influence as an integrative theoretical framework."

Transportation Research Board 90th Annual Meeting, Washington, DC. January 23-27, 2011.

Presentations (peer-reviewed):

- 1. "Plug-in hybrid greenhouse gas impacts in California: Integrating consumer research with electricity grid modeling."
- 2. "Interpersonal influence in the early plug-in hybrid market: Observing social interactions."
- 3. "Processes of social influence and sustainable consumption: Reflexive layers of influence as an integrative theoretical framework."

2010 (3 presentations)

Behavior, Energy and Climate Change, Sacramento, California, November 29-December 2, 2010. **Presentation**: "Social influence matters: How environmental values develop within social networks." Transportation Research Board 89th Annual Meeting, Washington, DC. January 10-14, 2010,

Presentations (peer-reviewed):

- 1. "Interpersonal influence within car buyers' social networks."
- 2. "Are batteries ready for plug-in hybrid buyers?"

2009 (5 presentations)

- *Frontiers in Transportation: Social Interactions*, Niagara on the Lake, Ontario, August 25-27, 2009. **Presentation**: "Interpersonal influence within car buyers' social networks."
- *Plug-in 2009*, Long Beach, CA, August 11-13, 2009. **Invited Panelist:** "Telling stories: Conversations with consumers about PHEVs."
- 24th International Electric Vehicle Symposium (EVS-24), Stavanger, Norway, May 13-16, 2009. **Presentation**: "Anticipating PHEV energy impacts in California."
- *Greening the Internet Economy: ICT and Global Change*, California Public Utilities Commission, San Diego, CA, January 22-23, 2009. **Invited Panelist**: "Information and communications technology (ICT) and intelligent transportation."
- *Transportation Research Board 88th Annual Meeting*, Washington, DC. January 11-15, 2009. **Presentation (peer-reviewed):** "The early market for PHEVs: Anticipating consumer recharge potential and design priorities."

2008 (2 presentations)

- *Behavior, Energy and Climate Change (BECC) 2008,* Sacramento, CA, November 16-19, 2008. **Presentation:** "Confusion of innovations: Exploring the adoption and diffusion of "green cars."
- *Plug-In 2008*, San Jose, CA, July 22-24, 2008.**Presentation:** "Challenging our assumptions: Anticipating the early market for PHEVs."

2007 (2 presentations)

- 23rd International Electric Vehicle Symposium (EVS-23), Anaheim, CA, December 2-5, 2007. **Presentation:** "Consumer preferences for hybrid-electric vehicles: Understanding the neighbor effect."
- *Behavior, Energy & Climate Change (BECC) 2007*, Sacramento, CA, November 7-9, 2007. **Poster presentation:** "Market Research for PHEVs."

I've also presented research findings to professional representatives from various organizations such as automakers, electric utilities and energy companies. Recent examples include Mercedes-Benz, Toyota, Shell Global, Nissan, Harley-Davidson, BMW motors, Volkswagen, Daimler, San Diego Gas & Electric, the California Public Utilities Commission, BC Hydro, Shell Oil, Aramco, and Chevron.

TEACHING

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Courses
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REM-658: Sustainable Energy and Materials Systems Modeling, SFU, Spring 2012, 2013, 2014.
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5-credit graduate course with 12 students (meets 4 hours per week for 13 weeks).

All 12 (100%) students rated the course as an "A" (9) or "B" (3).

- 11 students rated the instructor's teaching ability as an "A" (10) or a "B" (1).
- **REM/ENV-321: Ecological Economics**, SFU, Fall 2011, 2012 and 2013.

3-credit undergraduate course with 52 students in 2012 (2 hours per week, 1 hour tutorial).

- In 2012, 94% of students rated the course as an "A" (19) or "B" (14)
- In 2012, 92% rated the instructor's teaching ability as an "A" (23) or "B" (8)
- **REM-621: Ecological Economics**, SFU, Fall 2012 and 2013.

5-credit graduate course with 25 students (meets 4 hours per week for 13 weeks).

In 2012, 100% of students rated the course as an "A" (12) or "B" (9)

- In 2012, 96% rated the instructor's teaching ability as an "A" (17) or "B" (5)
- **Social Research Methods in Environmental Studies,** SFU, Spring 2012 and 2013. Exploratory (presently non-credited) course with 6 and 4 graduate students.
- **ECI-163 Energy and Environmental Aspects of Transportation**, UC Davis, Fall 2010. 3-credit undergraduate course with 108 students (3 hours lecture per week) Served as co-lecturer with Professor Daniel Sperling.

<u>Training</u>

- "**Rethinking Teaching**" Curriculum Design Workshop, 4-day workshop, SFU (April 26-May 1, 2012).
- Instructional Skills Workshop (ISW), 3-day workshop, SFU (May 2-4, 2012).
- "Collaborative Connections: Develop a Community of Learners in Your Classroom and Beyond," six-part workshop, University of California, Davis (May-June, 2010).

<u>Leadership</u>

Invited co-faciliator of "**Rethinking Teaching**" Curriculum Design Workshop, 4-day workshop, SFU (April 18-23, 2013 and April 24-29, 2014).

SENIOR SUPERVISORY DUTIES

- 1. Cairns, Josh, Master's of Resource Management (M.R.M.), Fall 2013 to present, "Plug-in electric vehicle buyers in British Columbia: Understanding motives and usage patterns."
- 2. Atherley, Dominque, Master's of Resource Management (M.R.M.), Fall 2013 to present, "Modeling the role of refueling infrastructure in alternative-fuel vehicle deployment: The case of EV chargers in British Columbia."
- 3. Lepitzki, Justin, Master's of Resource Management (M.R.M.), Fall 2013 to present, "Designing a low-carbon fuel standard for British Columbia: Insights from a hybrid energy-economy simulation model."
- 4. Langman, Brad, Master's of Resource Management (M.R.M.), Spring 2013 to present, "Understanding consumer demand for PEVs and green electricity using qualitative interviews."
- 5. Sykes, Maxwell, Master's of Resource Management (M.R.M.), Fall 2012 to present, "Prioritizing plug-in vehicle policy strategies by Canadian region."
- 6. Peters, Derek, M.R.M., Fall 2012 to present, "Assessing 'smart grid' opportunities and barriers through media analysis."
- 7. Kamiya, George, M.R.M., Fall 2011 to present, "Greenhouse gas impacts from plug-in vehicle use in Canadian regions: Comparing BC, Alberta and Ontario."

- 8. Moulé, Danette, M.R.M., Fall 2011 to present, "Assessing 'green lifestyles' in Canada."
- 9. Mascarenhas, Karen, M.R.M., Fall 2011 to present, "Public acceptance of carbon capture and storage in Alberta regions."
- 10. Fox, Jacob, M.R.M, Spring 2011 to May 2013, "Comparing the societal costs of technologically-neutral and technologically-specific climate policies." Defended May 27, 2013.

SERVING ON STUDENT COMMITTEES

- Petropavlova, Ekatrina, Ph.D. Spring 2011 to present, "Public acceptance of climate policy in BC." Bailey, Harry Joseph, Ph.D. Fall 2011 to present, "A joint discrete choice model of plug-in vehicle buyer's purchase and recharge behaviour."
- Murphy, Rose, Ph.D., Fall 2012 to Fall 2013, "Use of empirically-based models to evaluate the potential of energy efficiency and forest carbon sequestration for mitigating climate change." Defended November 25, 2013.

SERVING ON PH.D. COMPREHENSIVE EXAMS

Breen, Sarah, Ph.D. Fall 2012, "From Staples to Sustainability: New Regionalism and the future of infrastructure in rural Canada."

SUPERVISON OF TEACHING ASSISTANTS

Langman, Brad, REM/ENV-321, Ecological Economics, three tutorials, Fall 2013. Kamiya, George, REM/ENV-321, Ecological Economics, three tutorials, Fall 2012. Irwin, Kim, REM-621, Ecological Economics, Fall 2011. Lutes, Kristin, REM/ENV-321, Ecological Economics, two tutorials, Fall 2011.

MEDIA EXPOSURE

<u>Print</u>

- 1. Moore, D. (2014). No quick-fix solution for climate change, study says, printed in *The Canadian Press, The Vancouver Province, Windsor Star, Montreal Gazette, The Globe and Mail, Calgary Herald, The Vancouver Sun* and *Victoria Times Colonist,* June 4, 2014,
- 2. Fletcher, T. (2014). Giant space mirrors, cloud-seeding not practical solutions to climate change: SFU researcher, *Metro Vancouver*, June 3, 2014.
- 3. Moreau, J. (2013). Clark making pipeline deals "on the fly": MP, *Burnaby Now*, November 6, 2013.
- 4. Time Colonist (2013). Editorial: Collision ahead over pipelines, *Times Colonist*, October 26, 2013.
- 5. Bernard, R. (2013). Are pipeline protestors "radicals"? SFU's Jonn Axsen conducted online survey to find out, *News 1130*, October 18, 2013.
- 6. Nuttall, J. (2013). Alberta, B.C. reach framework deal on oil pipeline, *24 Hours Vancouver*, November 5, 2013.
- 7. Craft, L (2013), Tesla earns accolades, but market still niche, *Energy Intelligence:* New Energy, Volume 11, Number 36, September 5, 2013.

- 8. Anscombe, N. (2013). Green electricity drives demand for plug-in vehicles. *Environmental Research Web*, June 22, 2013.
- 9. Metro Vancouver (2013). Green energy sells electric cars, not fossil-fuelled plug-ins: SFU study, *Metro*, March 30, 2013.
- 10. Richter, B. (2013). Fully charged: North van electric vehicle advocate takes on our gas-addicted society, *North Shore News*, March 3, 2013.
- 11. Vancouver Sun (2013). B.C. lays the groundwork for a surge in electric car charging stations, *Vancouver Sun*, February 2, 2013.
- 12. Millar, E. (2012). Green versus green: An ecological economist asks: Does the environment get ignored in the economics courses business students take? *The Globe and Mail*, November 5, 2012.
- 13. Axsen, J. (2011). B.C. government's plan to construct three LNG plants counters CO2 reduction efforts (Op-ed), *Vancouver Sun*, November 14, 2011.
- 14. Luba, F. (2011). Burnaby native named young researcher of the year. *The Province*, May 18, 2011.
- 15. Margonelli, L. (2008). The plug-in paradox, Forbes Magazine, November 24, 2008.

<u>Radio</u>

- 1. CFAX Victoria, Pamela McCall Show, June 4, 2014: Regarding recent study on climate policy and climate engineering.
- 2. CKNW Vancouver, Bill Good Show, April 8, 2014: "Are electric vehicles about to fizzle out?" regarding the potential market for electric vehicles in British Columbia.
- 3. CFAX Victoria, Pamela McCall Show, October 22, 2013: Regarding public controversy over the Northern Gateway Pipeline.
- 4. CBC Radio Victoria, February 3, 2012: Regarding BC Hydro's announcement on liquefied natural gas (LNG).
- 5. CBC Daybreak North, Prince Rupert, October 12, 2011: Regarding BC Province's claims of job growth from new LNG plants.
- 6. The Afternoon News with Tom Young, May 20, 2011: Regarding "Why do consumers buy electric cars?"

RESEARCH FUNDING

Awarded (Total funds brought to SFU to date: \$663,471)

1. **Province of British Columbia: Clean-energy vehicle fund,** principal investigator, "The effects of a low-carbon fuel standard on Clean-Energy Vehicle (CEV) diffusion in BC: An energy-economy approach" \$25,000, 2 years funding for one Master's student, awarded March 2013.

- 2. Pacific Institute of Climate Solutions 2013 Fellowship: Energy and Water, co-applicant (Principal Investigator is Dr. Curran Crawford), "British Columbia liquefied natural gas policy: A net CO2 benefit?" \$54,000, three years funding for one Ph.D. student, awarded March 2013.
- 3. NRCan ecoENERGY Innovation Initative R&D Contribution Initiative, primary coinvestigator (Principal Investigator is Dr. Curran Crawford), "Powering plug-in electric vehicles with renewable energy supply in BC," \$600,000, four years, awarded March 2013. [\$300,000 sub-grant for my research group.]
- 4. **SSHRC Insight Development Grant,** principal investigator, "Transitioning to sustainable lifestyle practices in Canada," \$54,420, one year, awarded July 2012.
- 5. **SSHRC Insight Grant**, principal investigator, "Socio-technical transitions to low-carbon consumption: Assessing Canadian consumers' readiness for electric-mobility," \$223,051, three years, awarded May 2012.
- 6. **SSHRC Partnership Development Grant**, co-investigator (Principal Investigators are Drs. Ian Rowlands and James Meadowcroft), "Unlocking the potential of smart grids: A partnership to explore economic, social and policy dimensions," \$180,000, three years. Awarded May 2012. [Resulted in \$21,000 sub-grant for my research group.]
- 7. SFU President's Research Start-up Grant, principal investigator, \$40,000, two years, Awarded September 2011.

HONORS AND AWARDS

- Scholar for Dissertations Initiative for the Advancement of Climate Change Research (DISCCRS VI), NSF and NASA sponsored symposium, Colorado Springs, Colorado, November 22-29, 2011. [35 scholars selected from over 200 applicants.]
- International Transportation Forum (OECD), **Young Researcher of the Year**, (\$7,000), 2011. [Selected from 40 submissions from 22 countries.]
- Winner: **Outstanding Ph.D. Dissertation in Transportation Technology and Policy** (\$1,500), UC Davis, 2010
- **Eno Fellow in Transportation Leadership Development**, week-long policy training in Washington, D.C., 2010.
- Chevron Corporate Fellowship (\$9,000), UC Davis, 2009.
- Social Sciences and Humanities Research Council of Canada: SSHRC Doctoral Fellowship (\$80,000), 2007 2010.
- **Canadian Institute of Energy Scholarship Award** (\$750), Simon Fraser University, spring 2006.
- British Columbia Automobile Association Environmental Studies in Transportation Award (\$800), Simon Fraser University, fall 2005.
- Social Sciences and Humanities Research Council of Canada: SSHRC Master's Scholarship (\$17,000), 2004 2005 academic year.
- World Petroleum Congress Scholarship (\$3,000), Simon Fraser University, 2003.
- Mildred Wirtanen Academic Scholarship (\$4,000), Simon Fraser University, 2003.
- SFU Open Scholarship (\$4,500), Simon Fraser University, 2002 2003.
- Connell Prize in Corporate Finance (\$300), Murdoch University, spring 2002.

ACTIVE COMMITTEE SERVICE

Department specific (REM)

- 1. REM Tenure and Promotion Committee, Spring 2014 to present.
- 2. REM Undergraduate Curriculum Committee, fall 2011 to present.

University-wide (SFU)

- 3. SFU Research Ethics Board, June 2014 to present. (3-year appointment.)
- 4. SFU Sustainability Mobility committee, June 2013 to present.
- 5. SFU Environmental Science Steering committee, fall 2012 to present.

Broader community

- 6. SSHRC Insight Grant Adjudication Committee for Environmental Studies, spring 2013 and spring 2013.
- 7. BC Government, Renewable and Low Carbon Fuels Technical Advisory Working Group, June 2013 to present.

SERVICE TO COMMUNITY AT LARGE

2014

Lecture: "Electric vehicles: Matching low-carbon technology to people and policy," for Environment Canada, Gatineau, QC, May 7, 2014

Invited participant: "Technical Session #1: Emerging and Alternative Fuels," BC Government, Sheraton Vancouver Airport, Richmond, BC, May 21, 2014.

Invited participant: "Renewable and low carbon fuel requirements: Discussion to assess pathways to compliance," BC Government, Sheraton Vancouver Airport, Richmond, BC, April 16, 2014.

Participant: "Public finance and climate policy implications of BC's LNG export Strategy," Carbon Management Canada, Morris J. Wosk Center for Dialogue, Vancouver, BC, April 11, 2014

Public lecture: "Oil pipelines: Jobs, risks and the Canadian vision," Cool Drinks, North Vancouver, February 11, 2014.

Public lecture: "Citizen acceptance of new fossil fuel infrastructure: Value theory and Canada's Northern Gateway Pipeline," SFU Institute for the Humanities, SFU Harbour Center, January 21, 2014.

2013

Public lecture: "Green technologies, lifestyles and values: How people live and how that can change," Thompson River University, Kamloops, BC, April 11, 2013.

Public lecture: "Electric vehicles: Matching low-carbon technology to people and policy," for the Pacific Institute for Climate Solutions, UBC Robson Square, February 21, 2013.

Participant: "Five ideas for climate action in British Columbia," facilitated by the Pacific Institute for Climate Solutions, Vancouver, BC, December 2012 and January 2013.

2012

Public lecture: "Electric vehicle hype and hope: The key to sustainable mobility?" for SFU's Faculty of Environment Speaker Series, SFU, Burnaby, BC, March 23, 2012.

2011

Panelist for "Energy resiliency: Meeting the challenge," for Metro Vancouver Sustainable Region Initiative, Vancouver, BC, November 3, 2011.

REVIEWER OF MANUSCRIPTS AND GRANTS FOR:

Academic Journals and Conferences

- 1. 2012 ASME International Design Engineering Technical Conference
- 2. ASME Journal of Mechanical Design
- 3. Canadian Public Policy
- 4. Ecological Economics
- 5. Energies
- 6. The Energy Journal
- 7. Energy Policy
- 8. Environmental Science and Technology
- 9. Geoforum
- 10. Global Environmental Change
- 11. International Journal of Electric Power and Energy Systems
- 12. Journal of Cleaner Production
- 13. Journal of Environmental Psychology
- 14. Resource and Energy Economics
- 15. Transportation Research Part A: Policy and Practice
- 16. Transportation Research Part C: Emerging Technologies
- 17. Transportation Research Part D: Environment and Transport
- 18. Transportation Research Part E: Logistics and Transportation Review
- 19. Transportation Research Board (Of the U.S. National Academies)
 - Transportation Energy Committee
 - Alternative Transportation Fuels and Technologies Committee
 - Traveler Behavior and Values Committee

<u>Grants</u>

- 20. UC Berkeley Transportation Center (UCTC)
- 21. UCLA Transportation Center
- 22. Vanderbilt University
- 23. Invited reviewer for adjudication of 2013 Social Sciences and Humanities Research Council (SSHRC) of Canada, Insight Grants in "Canadian Environmental Issues" and "Northern Communities: Towards Social and Economic Prosperity" (March 4-6, 2013).
 - 2013: I personally reviewed 24 proposals, and helped committee to rank 115 proposals.
 - 2014: I personally reviewed 25 proposals, and helped committee to rank 112 proposals.