

RANDALL MARK WIGLE

CURRICULUM VITÆ

January, 2018

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Balsillie School of International Affairs
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CITIZENSHIP

Canadian

LANGUAGES

English (First language)

French (Working knowledge)

DEGREES

B.A. Economics, (University of Windsor) 1975

M.A. Economics, (University of Windsor) 1977

Ph.D. Economics, (University of Western Ontario) 1986

EMPLOYMENT HISTORY

Professor, Wilfrid Laurier University (1997 to present)

Associate Professor, Wilfrid Laurier University (1991 to 1997) Tenured since July 1, 1992

Assistant Professor, Wilfrid Laurier University (1988 to 1991)

(Visiting) Assistant Professor, University of Western Ontario (1986-87)

(Visiting) Lecturer, University of Western Ontario (1985) on leave from University of Saskatchewan

Assistant Professor, University of Saskatchewan (1982-87)

RESEARCH FUNDING

- Sustainable Prosperity provided \$4,000 to support research into “Accelerating Clean Innovation” in academic year 2015–2016.

Sustainable Prosperity provided \$22,100 to support Marisa Beck, a Ph. D. student at the Balsillie School and research time stipends for Dr. Wigle as part of a project entitled ‘Accelerating Clean Innovation’ in academic year 2014–2015. The funding came in part from Environment Canada’s Economy and the Environment Research Network. Stewart Elgie (University of Ottawa) was co-investigator. The overall project aims to pull together existing knowledge on the policy mix needed to accelerate clean innovation in Canada, looking at the public policies, investments and institutions that are best suited to do so. The larger project is made possible through the financial support from Environment Canada, the U.S. Embassy in Canada, the Canadian Association of Petroleum Producers and the Social Sciences and Humanities Research Council.

Carbon Management Canada (CMC) provided \$400,000 (Award D-387) over two years for the project “Designing Carbon Pricing Policy to Drive Innovation in Low Carbon Technologies and Practices.” The project started in November, 2012 and will run for two years. Dr. Wigle and Dr. Nicholas Rivers of the University of Ottawa are Co-PI’s on the grant. The grant’s total budget is \$400,000 and covers 4 other co-investigators. The funds cover student support, a post-doctoral fellow, travel, software and research time stipends.

Sustainable Prosperity provided \$8,000 funding for the project “Learning by Doing and Ontario’s Green Energy Act” for 2012. This project is joint with Nic Rivers (U Ottawa) and will look at the possible size and scope of learning by doing benefits from renewable energy promotion.

Loch Alpine Economics signed a Research Contract with Laurier to continue Dr. Wigle's support for CGE Modelling of Canadian Climate Policy. The contract covers activities between December 2010 and March, 2011. The total amount of the contract was \$21,426. This research contract provided student support, release time and incidental expenses.

CGE Support (2009-2010) Environment Canada signed a Research Contract with Laurier to continue Dr. Wigle's support for CGE Modelling of Canadian Climate Policy. The contract covers activities between June, 2009 and March, 2010. The total amount of the contract was \$22,966. This research contract provided student support, release time and incidental expenses.

Sustainable Prosperity (2009) (\$12,500) Drs. Snoddon and Wigle received a research grant from Sustainable Prosperity for studying climate policy in a Canadian federal-provincial context.

CGE Support (2008-2009) (\$20,000) Environment Canada provided funding for Dr. Wigle to provide support for Environment Canada's CGE modeling work, and to use the Environment Canada CGE models to address selected policy issues.

Climate Policy Modeling Workshop (December, 2009) (\$9,000) Dr. Wigle arranged funding through Environment Canada to provide an evaluation and commentary for Environment Canada's climate policy modeling work. The funding was in the context of a workshop he organized at CIGI in December 2008.

CGE Modelling of Canadian Climate Policy (2007-2008) (\$48,000) Dr. Wigle participated in a research team to develop, deploy and support a suite of CGE models delivered to Environment Canada. This research contract was administered through Laurier's Research Office and provided graduate students support, release time and incidental support. The client was Loch Alpine Economics.

Ontario Cattlemen's Association 2006 (\$15,000) The OCA funded a project housed at the University of Guelph's Department of Food, Agricultural, and Resource Economics. This project, in turn, provided \$15,000 to enable me to participate in the project in academic year 2005-6.

Federalism and environmental taxation: The case of carbon taxes 2001-2004 (\$32,000) SSHRCC grant to investigate possible policy tax and permit options to comply with Canada's Kyoto Protocol emission targets.

Environment-Trade Linkages: 1992-1994 (\$34,000) SSHRCC grant to investigate linkages between trade (and trade policy) and the environment. Primarily provides support for graduate and undergraduate research assistants. (Co-investigator Carlo Perroni, University of Western Ontario)

International Aspects of Global Warming 1990-91 (\$9,000) The University of Western Ontario's Centre for the Study of International Economic Relations directly supported the applicant's involvement with John Whalley in a number of research efforts considering the effects of various policy responses to global warming. Funds primarily provided a Research Time Stipend.

Trade Data Project 1989 (\$5,500) United States Department of Agriculture grant to support data-assembly associated with the SSHRCC-funded project (Uruguay Round) mentioned below. Funds primarily provided a Research Time Stipend.

Uruguay Round Trade Policy Modelling Project 1988-1990 (\$33,636) SSHRCC grant to investigate effects of Uruguay Round Trade Liberalization. Funds provided for research expenditures including a Research Time Stipend. (Co-investigator T. T. Nguyen, University of Waterloo)

HONORS

Senior Fellow, Canadian Agricultural Trade Policy Research Network (2004–2013) CATPRN was funded by Agriculture and Agri-Food Canada until March 2013.

Global Trade Analysis Project Fellow (1996–2002)

The Global Trade Analysis Project is based in the Agricultural Economics Department at Purdue University, and honoured me for my contributions to the distribution of an early version of their data set and for being the first web master of their web site.

PUBLICATIONS

Articles in Refereed Journals

Beck, Marisa, Nicholas Rivers, Randall Wigle and Hidemichi Yonezawa (2015) "Carbon Tax and Revenue Recycling: Impacts on Households in British Columbia"¹ *Resource and Energy Economics* Vol 41C, pages 40–69.

Böhringer, Christoph, Nicholas Rivers, Thomas F. Rutherford and Randall Wigle (2015) "Sharing the burden for climate change mitigation in the Canadian federation" *Canadian Journal of Economics* Vol 48 (4) pages 1350–1380, November.

Böhringer, Christoph, Nicholas Rivers, Thomas F. Rutherford and Randall Wigle (2012) "Green Jobs and Renewable Electricity Policies: Employment Impacts of Ontario's Feed-in Tariff," *Berkeley Electronic Journal of Economic Analysis & Policy*. (with Vol. 12 Iss. 1 (June))

¹Article Featured as a most-downloaded article for the journal. (<http://www.journals.elsevier.com/resource-and-energy-economics/most-downloaded-articles>)

Nguyen, T. T. and R. Wigle (2011) “Border Delays Re-Emerging Priority: Within-Country Dimensions for Canada” *Canadian Public Policy* Volume 37, Number 1 (March) pp 49–59.

Prasada, Pahan, Maury E. Bredahl and R. Wigle (2010) “Market Impacts of Technological Change in Canadian Agriculture” *Canadian Journal of Agricultural Economics* Volume 58, Issue 2 (June), pp 235–247.

“Welfare Costs of Border Delays: Numerical Calculations From a Canadian Regional Trade Model” (with Trien Nguyen) *Canadian Journal of Regional Science* Vol XXXII No. 2 (Summer, 2009) pp 203–222

Snoddon, Tracy and Randall Wigle (2007) “Regional Incidence of the Costs of Greenhouse Policy” *Canadian Journal of Regional Science* XXX:2 Summer pp 313–335

Wigle, Randall, Jeevika Weerahewa, Maury Bredahl, and Sudarma Samarajeeva “Impacts of BSE on World Trade in Cattle and Beef: Implications for the Canadian Economy” (2007) *Canadian Journal of Agricultural Economics* 55:4 pp 535–549.

Abrego, Lisandro, Carlo Perroni, John Whalley and Randall Wigle (2001) “Trade and Environment: Bargaining Outcomes from Linked Negotiations” *Review of International Economics* Vol. 9 No. 3

Perroni, Carlo and Randall Wigle (1999) “International Process Standards and North–South Trade” *Review of Development Economics* Vol 3, Issue 1 pp 11–26

Nguyen, T. T., Carlo Perroni and Randall Wigle (1996) “Uruguay Round Impacts on Canada,” *Canadian Public Policy*

Nguyen, T. T., Carlo Perroni and Randall Wigle (1995) “A Uruguay Round Success?” *The World Economy* Vol. 18 No. 1 pp 25–30

Perroni, Carlo and Randall Wigle (1994) “International Trade and Environmental Quality: How Close are the Linkages?” *Canadian Journal of Economics* Vol XXVII No 3 pp 551–567

This paper was the 9th most cited paper in the *Canadian Journal of Economics* between 1993 and 2016.²

Piggott, John, John Whalley and Randall Wigle (1993) “How Large are the Incentives to Join Sub-Global Carbon-Reduction Initiatives?” *Journal of Policy Modeling* Vol 15 No 5–6 (Oct–Dec) pp 473–490

² Brian R. Copeland and M. Scott Taylor “Environmental and resource economics: A Canadian retrospective” *Canadian Journal of Economics* Vol 50 No 5, December 2017.

Nguyen, T.T., Carlo Perroni and Randall Wigle (1993) "An Evaluation of the Draft Final Act of the Uruguay Round" *The Economic Journal* Vol 103 No 421 (Nov) pp 1540–9.

Kimbell, Lawrence, Glenn Harrison, Richard Jones and Randall Wigle (1993) "How Robust is General Equilibrium Analysis?" *Journal of Policy Modeling* Volume 15 Number 1 (1993) pp 99–115 (with

Wigle, Randall (1992) "Transportation costs in regional models of international trade: An application to Canada-U.S. Trade" *Journal of Regional Science* Volume 32, No. 2 (May) pp 185–207.

Nguyen, T. T. and Randall Wigle (1992) "Trade liberalisation with imperfect competition: The large and the small of it." *European Economic Review* Vol. 36 No. 1 pp 17–35

Nguyen, T. T., Carlo Perroni and Randall Wigle (1991) "The Value of a Uruguay Round Success" *The World Economy* Vol 14 No. 4 (December)

Wigle, Randall (1991) "The Pagan-Shannon Approximation: Unconditional Systematic Sensitivity Analysis in Minutes." *Empirical Economics* Volume 16 Number 1 (pp 35–49)

Nguyen, T.T. and Randall Wigle (1991) "Three Variants of the Whalley Model of Global Trade" *Empirical Economics* Volume 16, Number 1 (pp 121–137)

Whalley, John and Randall Wigle (1991) "Cutting CO2 Emissions: The Effects of Alternative Policy Approaches," *The Energy Journal* Volume 12, Number 1. (January) pages 109–124

Markusen, James R. and Randall Wigle (1990) "Explaining the Volume of North-South Trade" *The Economic Journal* Vol. 100 (Dec.) 1206–1215.

Rutherford, Thomas F., John Whalley and Randall Wigle (1990) "Capitalization, Conditionality and Dilution: Land Prices and the U.S. Wheat Program" *The Journal of Policy Modeling* Vol. 12 No. 3 pp. 605–622 (Fall)

Markusen, James R. and Randall Wigle. "Nash-Equilibrium Tariffs for the U.S. and Canada: The Role of Country Size, Scale Economies and Capital Mobility." *Journal of Political Economy*, Vol. 97 No. 2 (April, 1989) 368–386.

Wigle, Randall "General Equilibrium Evaluation of Canada-U.S. Trade Liberalization in a Global Context," *Canadian Journal of Economics* Vol. XXI, No. 3 (August, 1988), 539–564.

Wigle, Randall (1988) "Between a Rock and a Hard Place: The Economics of Canada-U.S. Free Trade," *Canadian Public Policy* Vol. XIV, No. 1 (March), 104–108.

Trela, Irene, John Whalley and Randall Wigle (1987) "International Trade in Agriculture: Domestic Policies and Trade Conflicts," *Scandinavian Journal of Economics*, Vol. 89 No.3 271–283.

Whalley, John and Randall Wigle (1983) "Are Developed Country Tariff Reductions Necessarily Beneficial for the U.S.?" *Economics Letters* 12: 61–67.

Chapters in Books and Conference Proceedings

"Carbon Pricing in Canada: Options and Specifics" (2010) (joint with Tracy Snoddon) Chapter 19 of *Critical Issues in Environmental Taxation: International and Comparative Issues* Volume VIII, eds. Claudia Dias Soares, Janet E Milne, Hope Ashiabor, Larry Kreiser and Kurt Dekelaere. Oxford University Press.

Tracy Snoddon and Randall Wigle (2008) "Fraying Over Paying: Who Will Bear the Costs of Greenhouse Policy" Chapter 10 of *Critical Issues in Environmental Taxation Volume V: International and Comparative Perspectives* Oxford University Press

Tracy Snoddon and Randall Wigle (2003) "Overview and Evaluation of the Climate Change Plan for Canada" pp 57–81 in: "The Kyoto Protocol and Environmental Policy in Atlantic Canada," Policy Studies Centre, Economics Department University of New Brunswick. (Policy Studies Centre UNB)

"Quantifying the Effects of Labour Sanctions on Trade" (joint with John Whalley) Chapter 9 in Paul Brenton and Jacques Pelkmans (eds.) *Global Trade and European Workers* London: MacMillan Press, 1999.

Perroni, Carlo and Randall Wigle (1996) "Environmental Policy Modeling" Chapter 12 in Hertel (ed) *Global Trade Analysis: Modeling and Applications* Cambridge University Press: Cambridge.

Whalley, John and Randall Wigle (1993) "Results for the OECD Comparative Modeling Exercise Using the Whalley-Wigle Model." In the OECD Document *The Costs of Cutting Carbon Emissions: Results from Global Models* OECD: Paris, pp 125–139

Piggott, John, John Whalley and Randall Wigle (1992) "International linkages and carbon reduction initiatives" Chapter 6 in *The Greening of World Trade Issues* Kym Anderson and Richard Blackhurst eds. Toronto: Harvester Wheatsheaf

Whalley, John and Randall Wigle (1991) "The International Incidence of Carbon Taxes," In *Economic Policy Responses to Global Warming* James Poterba and Rudiger Dornbusch eds., MIT Press

Whalley, John and Randall Wigle (1990) "Terms of Trade Effects, Trade Liberalization and Developing Countries" in: OECD/World Bank *Agricultural Trade Liberalization: Implications for Developing Countries* Paris: OECD.

Harrison, Glenn, Lisa Rutström and Randall Wigle (1989). "The Costs of an Agricultural Trade War." In Stoeckel, Andrew B., David Vincent and Sandy Cuthbertson (eds.) *Macroeconomic Consequences of Farm-Support Policies* Durham, N.C.: Duke University Press, 330–367.

Wigle, Randall (1987) "The Received Wisdom of Canada-U.S. Free Trade: Qualifications," In Riggs, A.R. and T. Velk (eds.) *Canadian-American Free Trade: Historical, Political and Economic Dimensions* Institute for Research on Public Policy, Halifax, 105–114.

Wigle, Randall (1986) "Summary of the Panel and Floor Discussion" in T.N. Srinivasan and J. Whalley (eds.) *General Equilibrium Trade Policy Modelling* M.I.T. Press, 323–354.

Whalley, John and Randall Wigle (1985) "Price and Quantity Rigidities in Adjustment to Trade Policy Changes: Alternative Formulations and Initial Calculations." Chapter 9 in Karl Jungenfelt (ed.) *Structural Adjustment in Developed Economies* Macmillan.

Jones, Richard C., John Whalley and Randall Wigle (1985) "Regional Impacts of Tariffs in Canada: Preliminary Results From a Small Dimensional Numerical General Equilibrium Model." In *New Developments in Applied General Equilibrium Analysis* J. Piggott and J. Whalley (eds.) Cambridge University Press New York, 175–188.

Published Commentaries and Reviews

Book Review of Dessler and Parson **The Science and Politics of Global Climate Change: A Guide to the Debate** *Canadian Public Policy* Vol. 32 No. 4 (December, 2006)

Book Review of Keith E. Maskus and John S. Wilson, Editors **Quantifying the Impact of Technical Barriers to Trade: Can it be Done** *Journal of Economic Literature* Vol XLI (June, 2003) pp 596–7.

Book Review of Michael Hart **Fifty Years of Canadian Tradecraft: Canada at the GATT 1947–1997** *Canadian Public Policy* Vol XXV No 2 (1999) pp 279–80.

Book review of Michalopoulos and Tarr (eds) **Trade in the New Independent States** *Review of International Economics* Vol 4 No 2 (1996) pp 256–7.

Book Review of Lipsey et al **NAFTA: What's in, What's out, What's Next** *Canadian Public Policy* (December, 1995) p. 495–6

Book review of Willenbockel, D. **Applied General Equilibrium Modeling, Imperfect Competition and European Integration** *The World Economy* Vol 18 No. 5 (Sept. 1995) pp 738–9.

Book review of Francois and Shiells (eds) **Modeling trade policy: Applied General equilibrium assessments in North American free trade** *Journal of Economic Literature* Vol XXXIII (June, 1995) pp 845–6

Book review of Anderson **NAFTA and the Environment** *Canadian Public Policy* Vol XX No 2 (June, 1994) pp 206–7

Book review of **Assessment of Benefits of Environmental Measures** *The World Economy* Vol 16, No 6 (Nov. 1993) p 745.

Book review of Deardorff and Stern **Computational Analysis of Global Trading Arrangements** *Journal of Economic Literature* Vol. XXX Number 4 (December, 1992) p 2152

Commentary on D. Burgess's Paper. "The Effect of Canada-U.S. Trade Liberalization on Investment and Plant Location" in Stern, Tresize and Whalley (eds.) *Perspectives on a U.S.-Canadian Free Trade Arrangement* Washington Brookings Institution, 1987, 214-215.

Reprinted Articles

“International Process Standards and North–South Trade” (originally published in the *Review of Development Economics* in 1999 was reprinted as Chapter 8 in Henson, Spencer and John S. Wilson (eds.) *The WTO and Technical Barriers to Trade* (2005). The series is published by Edward Elgar as part of the series entitled *Critical Perspectives on the Global Trading System and the WTO*. The series editors are Kym Anderson and Bernard Hoekman. The paper is joint with Carlo Perroni.

“Trade and Environmental Quality: How Close are the Linkages?” originally published in the *Canadian Journal of Economics* in 1994 was reprinted as Chapter 3 in Sampson, Gary and John Whalley (eds.) *The WTO Trade and the Environment* (2005). The series is published by Edward Elgar as part of the series entitled *Critical Perspectives on the Global Trading System and the WTO*. The series editors are Kym Anderson and Bernard Hoekman. The paper was joint with Carlo Perroni.

“Trade and the Environment: Bargaining Outcomes from Linked Negotiations” originally published in the *Review of International Economics* in 1999 was reprinted as Chapter 8 in Sampson, Gary and John Whalley (eds.) *The WTO Trade and the Environment* (2005) The series is published by Edward Elgar as part of the series entitled *Critical Perspectives on the Global Trading System and the WTO*. The series editors are Kym Anderson and Bernard Hoekman. The paper was joint with Lisandro Abrego, Carlo Perroni and John Whalley.

Perroni, Carlo and Randall Wigle (1994) “Trade and Environmental Quality: How Close are the Linkages?” *Canadian Journal of Economics* Vol XXVII No 3 pp 551–567 is to be reprinted in Dean, Judith (ed.) *International Trade and the Environment* Ashgate Publishers (2002). This volume is part of the International Library of Environmental Economics and Policy Series edited by Tom Tietenberg, Wendy Morrison and Theodore Panayotou.

Perroni, Carlo and Randall Wigle (1994) “Trade and Environmental Quality: How Close are the Linkages?” *Canadian Journal of Economics* Vol XXVII No 3 pp 551–567 is to be reprinted in Batabayal and Beladi (eds) *The Economics of International Trade and the Environment* Lewis Publishers (2001)

Nguyen, T.T., Carlo Perroni and Randall Wigle (1993) “An Evaluation of the Draft Final Act of the Uruguay Round” *The Economic Journal* Vol 103 No 421 (Nov) pp 1540–9. Reprinted in Volume XV of the New World Order Series (entitled *TRIPS and the Uruguay Round Contents*) Hans Singer, Neelambar Hatti and Rameshwar Tandon eds. (published by BR Publications, New Delhi)

Markusen, James R. and Randall Wigle (1990) “Explaining the Volume of North-South Trade” *The Economic Journal* Vol. 100 (Dec.) 1206–1215 Reprinted in Volume XIII *Export-oriented versus Balanced Growth in the 1990’s* of the New World Order Series R. Tandon ed. Delhi: B. R. Publishing, 1998 pp 65-77.

‘Cutting CO2 Emissions: The Effects of Alternative Policy Approaches,’ *Energy Journal* (1991) Vol 12 No 1 (joint with John Whalley) is reprinted in Tietenberg, Tom (ed) *The Economics of Global Warming* (1997). The volume is published by Elgar as part of the Series: *The International Library of Critical Writings in Economics*. (Series Editor Mark Blaug).

Trela, Irene, John Whalley and Randall Wigle (1987) “International Trade in Agriculture: Domestic Policies and Trade Conflicts,” *Scandinavian Journal of Economics*, Vol. 89 No.3 271–283 reprinted in Haaland and Norman (eds.) *Modelling Trade and Trade Policy* London: Basil Blackwell 1988).

Technical Reports

*Reducing Greenhouse Gas Emissions in Transport: All in One Basket?*³ (joint with Nicholas Rivers) School of Public Policy Briefing Paper Volume 11:5 February 2018. <https://www.policyschool.ca/wp-content/uploads/2018/01/GHG-Emissions-Rivers-Wigle.pdf>

An evaluation of policy options for reducing greenhouse gas emissions in the transport sector: The cost-effectiveness of regulations versus emissions pricing (joint with Nicholas Rivers) LCERPA Working Paper 2018-1, January 2018.

“A ‘quick’ British-American trade deal? NAFTA suggests not a chance” was published by *The Conversation*.

<http://theconversation.com/a-quick-british-american-trade-deal-nafta-suggests-not-a>

Reprinted in the Guardian Newspaper <https://www.theguardian.com/commentisfree/2017/nov/24/trump-quick-uk-us-post-brexite-trade-deal-nafta>

Carbon Pricing and Mind the Hissing (joint with Marisa Beck) Sustainable Prosperity Research Report <http://www.sustainableprosperity.ca/article3966> December, 2014

³This paper was the focus of a *Globe and Mail* article entitled “Significant hike to carbon prices necessary to achieve emissions targets, study finds” by Shawn McCarthy (March 21, 2018). <https://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/significant-hike-to-carbon-prices-necessary-to-achieve-emissions-targets-study-finds/article37676745/>

“Carbon Revenue: Recycling versus Technology Incentives” (with M. Beck) Technical Report prepared for the Carbon Management Canada Workshop: “Key Issues in The Design of Carbon Management Policies and Regulations in Alberta” January, 2014

“Overlapping Federal–Provincial Climate Policies” Report to the National Round Table on the Environment and the Economy, by Randy Wigle and Nic Rivers, March, 2012

“Clearing the Air on Federal and Provincial Climate Change Policy in Canada” (joint with Tracy Snoddon) IRPP Choices Vol. 15, No. 11 (December, 2009)

“Carbon Pricing in Canada: Options and Specifics” (joint with Tracy Snoddon) Background Paper prepared for Sustainable Prosperity (May, 2009)

Model and Data Documentation for the CREAP project (<http://creap.wlu.ca>)

- “BMRT 2001 Version 3.0 User Guide” (with Trien Nguyen) October, 2007
- “BMRT 2001 Version 3.0 Model Documentation” (with Trien Nguyen and Tracy Snoddon) October, 2007
- “CREAP 2001 Version 3.0 Data Documentation and Methods” (with Trien Nguyen, Krista Phillips and Tracy Snoddon) October, 2007

(October, 2007) *Closing the U.S. Borders to Trade: A CGE Investigation for Canada and its Regions* (with Marcel Mérette and Li Xiu Jun (Consulting Report for Department of Foreign Affairs and International Trade)

(January, 2008) “Labour Market Impacts of External Shocks: The Skill Dimension” (Consulting report for Human Resources and Social Development Canada)

BMRT Model Documentation (joint with Tracy Snoddon) June, 2004 (<http://creap.wlu.ca/doc/bmrt-1-doc.pdf>)

CREAP Data V1.0 Documentation and Methods (joint with Tracy Snoddon) June, 2004 (<http://creap.wlu.ca/doc/creap-data-98-1.pdf>)

CREAP Data V2.0 Documentation and Methods (joint with Tracy Snoddon) November, 2004 (<http://creap.wlu.ca/doc/creap-data-98-v2.pdf>)

C. D. Howe Institute Commentary Number 169 “The Kyoto Protocol: Canada’s Risky Rush to Judgment” (with Ross McKittrick) October 1, 2002.

Wigle, R. Industry Canada Working Paper #34 *Sectoral impacts of Kyoto compliance* Released December, 2001.

Wigle, R. *Broad Liberalization Based on Fundamentals: A Framework for Canadian Commercial Policy* published as Scene Setting Paper No. 2 of the Series: Canada in the 21st Century. Published by Industry Canada, November, 1998.

Nguyen T.T., Carlo Perroni and Randall Wigle *Model Documentation for the Uruguay Round "Transparency Model"* March, 1992

Carlo Perroni and R. Wigle "Suggested Revisions to the SALTER Model" Industry Commission Working Paper #9 September, 1991.

Wigle, Randall *Documentation for the RMD Model and Data*, July, 1991.

Nguyen T.T., Carlo Perroni and Randall Wigle "A Micro-Consistent Data Set for the Analysis of World Trade: Methodology and Features" December, 1990.

Markusen, James R. and R. Wigle. "U.S.-Canada Free Trade: Effects on Welfare and Sectoral Output/Employment Levels in the Short and Long Run." Report for the U.S. Department of Labour, December 1986.

"The Effects of Canada-U.S. Free Trade on Saskatchewan." Report prepared for the Department of Economic Development and Trade, Province of Saskatchewan, 1985.

WORK IN PROGRESS

Dr. Wigle is refining a working paper about renewable energy policy in Canada with Marisa Beck and Nicholas Rivers. The paper "Ontario's Renewable Support: Far from Optimal?" is intended for an academic journal.

PRESENTATIONS

Panelist with Simon Dalby, Thomas Homer-Dixon and Kathryn Hochstetler Climate Policy Current Issues Seminar at the Balsillie School of International Affairs, February 2015

"Ontario's Renewable Support: Far from Optimal?" presentation of joint work with Marisa Beck and Nic Rivers at the Workshop on Energy Regulation and Global Environmental Issues, Loughborough UK, February, 2016.

"Pulling the Plug on Renewable Energy Support" presentation of joint work with Marisa Beck and Nic Rivers at the Canadian Economics Association meetings, May 2015.

“Pulling the Plug on Renewable Energy Support” presentation of joint work with Marisa Beck and Nic Rivers at the Workshop on Energy Regulation and Global Environmental Issues, Loughborough UK, February, 2015.

Session Chair and Discussion at “Accelerating Clean Innovation” a Conference organized by Sustainable Prosperity in Calgary Alberta March 31, 2015.

Member of a Round Table on the theme of Prosperity and Sustainability at CIGI involving Premier Kathleen Wynne March, 2015.

“Designing Climate Policy: Modeling” presented an overview of work done by the ‘DCP’ research group⁴ at the Carbon Management Canada annual conference in Banff Alberta, May 27, 2014.

Invited presentation to the “Green Fiscal Commission” in Wakefield Quebec entitled “ETR Modeling of the CMC-DCP Team.” This presentation provided an overview of the modeling work done to date by the CMC-DCP team⁵ in February, 2014.

Presentation of the paper: “Carbon Revenue: Recycling versus Technology Incentives” (with M. Beck) at the Carbon Management Canada Workshop: “Key Issues in The Design of Carbon Management Policies and Regulations in Alberta” in Calgary, January, 2014

Presentation entitled “*Let’s All Play Nice: An Environmental Economist’s Pleas*” given to the Balsillie School of International Affairs’ Global Environmental Governance Group (Dec 4, 2013)

“The “Other” Benefits of Renewable Energy Promotion” (joint with Marisa Beck and Nicholas Rivers) presented at Canadian Economics Association meetings June, 2013

The “Other” Benefits of Renewable Energy Promotion (Nov, 2012) – presented at the North American Regional Science Council Conference in Ottawa (December, 2012) joint with Nicholas Rivers.

“Endogenous Burden Sharing in a Provincial Context” Presentation at the Southern Ontario Resource, Environmental, and Ecological Economics Workshop May 4, 2011. Presentation based on a paper with Christoph Böhringer and Thomas F. Rutherford.

“Climate Policy in a Federation: Treating All Provinces Fairly” (joint paper with C. Böhringer and T. Rutherford) presented at Congrès Walras, Université de Pau France, December 15, 2010.

⁴Marisa Beck, Nicholas Rivers, Hidemichi Yonezawa and Myself are major contributors to the CMC-financed project D-387.

⁵Marisa Beck, Jared Carbone, Nic Rivers, Randall Wigle, Hidemichi Yonezawa

Presented “Climate Policy in a Federation: Treating All Provinces Fairly” (joint paper with C. Böhringer and T. Rutherford) to the Energy and Materials Research Group at Simon Fraser’s Harbour Centre Campus November, 2010)

“Sectoral and Labour Market Impacts of Border Delays in Canada” (with Trien Nguyen) was presented at The Asia Pacific Gateway and Corridor Initiative: Toronto Workshop (June, 2010)

Presented the paper “Border Bottlenecks in a Canadian Regional Context” (joint with Trien Nguyen) at the SOEGW (Small Open Economies in a Globalized World) conference held at Wilfrid Laurier University in June, 2008.

Presented the paper “Border Bottlenecks in a Canadian Regional Context” (joint with Trien Nguyen) at the Canadian Regional Science Association Meetings in Québec city, May 23, 2008.

Gave a workshop on “CGE modeling using GAMS/MPSGE, CREAP data and the BMRT/CMRT family of CGE Models” at the Energy and Materials Research Group, Simon Fraser University (May 14–17, 2007)

Invited Speaker at the C. D. Howe Conference entitled “The Economics of Greenhouse Gas Emissions Control in Canada” December 6–7, 2007

Invited speaker at the “Population, Work and Family Policy Research Collaboration” Research Pre-Symposium held in Ottawa.

The session was entitled: “The Use of Computable General Equilibrium Modelling for Policy Analysis and Applications. (December 12, 2007)

Presented the paper “Going it Alone on Climate” (joint with T. Snoddon) at the *Statistics Canada Socio-Economic Conference 2007* held in Ottawa Ontario (May 29, 2007)

Presented the paper “Going it Alone on Climate” (joint with T. Snoddon) at the Viessmann European Research Centre conference entitled *Comparing North American and European Approaches to Climate Change* held at WLU on September 27, 2007

Gave a talk entitled “Kyoto Compliance: Pay Now and Prepare for KP-2” at the University of Ottawa’s Institute for the Environment, February 15, 2007

Presented “Overview of the Canadian Regional Economic Analysis Project” at the Regional Science Association International conference in Toronto, Ont. (Nov 17, 2006)

Presented the paper “Fraying Over Paying: Who Will Bear the Costs of Greenhouse Policy” (joint with T. Snoddon) at the *Seventh Annual Global Conference on Environmental Taxation* held in Ottawa Ontario (October 24, 2006)

Presented “Economy-Wide Impacts of BSE in Ontario: A CGE Analysis” at the CATPRN/FLMN meeting in Calgary, AB. The paper is joint work with Maury Bredahl, Sudarma Samarajeewa and Jeevika Werahewa (all from the University of Guelph’s Food Agriculture and Resource Economics Department) October 15, 2006

Presented “Economy-Wide Impacts of BSE in Ontario: A CGE Analysis” at the CEA/CAES meetings in Montreal . The paper is joint work with Maury Bredahl, Sudarma Samarajeewa and Jeevika Werahewa (all from the University of Guelph’s Food Agriculture and Resource Economics Department) May 27, 2006

Presented the paper “Fraying Over Paying: Who Will Bear the Costs of Greenhouse Policy” University of Ottawa Sept 27, 2006

Presented “Regional Incidence of the Costs of Greenhouse Policy” at the CEA meetings in Montreal (joint with Tracy Snoddon) May 27, 2006.

Presentation about the Canadian Regional Economic Analysis Project given at the Canadian Regional Science Association (Innis College, University of Toronto) Friday June 3, 2005

Invited talk entitled “Canada, Public Economics and Climate Change” presented at the Canadian Public Economics Study Group at McMaster University May 27, 2005.

Invited talk at Montreal Natural Resources and Environmental Economics Workshop at McGill University January 28, 2005 on the topics of CGE analysis of Environmental Issues and CREAP Project/Data and Model. This is a resource and environmental workshop sponsored by CIREQ (Centre interuniversitaire de recherche en économie quantitative) involving faculty and graduate students from McGill, Université de Montréal, Université de Québec à Montréal and HEC.

Fraying Over Paying: Who Will Bear the Costs of Greenhouse Policy Joint paper with Tracy Snoddon presented at the Canadian Resource and Environmental Economics Study Group, October 2004.

Invited talk about the Canadian Regional Economic Analysis Project at the Université d’Ottawa’s Département des sciences économiques. (August 4, 2004)

Invited talk about the Canadian Regional Economic Analysis Project at the University of Western Ontario’s Economics Department. (June 7, 2004)

“Overview and Evaluation of the Climate Change Plan for Canada” (joint with Tracy Snoddon) presented at Policy Studies Centre UNB May 2, 2003 (Fredericton NB)

“Canada’s Climate Change Plan: Questions and Uncertainties” (University of Waterloo Department of Economics) March 21, 2003.

“The Kyoto Protocol Revisited” was presented at the University of Windsor (joint seminar of the Economics Department and Great Lakes Institute of Environmental Research) October 25, 2002

“The Kyoto Protocol Revisited” was presented at the CEA meetings in the session *Contemporary Trade Issues* (May 31, 2002)

Presented the paper ‘International Process Standards and North–South Trade’ (joint with Carlo Perroni) at the NBER/Yale Climate Change Conference Snowmass Colorado August 10–14, 1998.

Presented the paper: Trade and Environment: Bargaining Outcomes from Linked Negotiations (joint with Carlo Perroni, Lisandro Abrego and John Whalley at the First Annual conference on Global Economic Analysis (Purdue University) June 8–10, 1998.

Presented the paper ‘International Process Standards and North–South Trade’ (joint with Carlo Perroni) at the NBER Universities conference on Trade and the Environment May 8–9, 1998.

Joint presentation of the paper “Trade and Environment: Bargained Outcomes from Linked Negotiations” at NBER Summer Institute meetings August 5, 1997

Presented the paper “Trade and Environment: Bargained Outcomes from Linked Negotiations” at the conference “Empirical Investigations in International Trade” Purdue University (Oct 31 to Nov 2, 1997)

Presented the paper “International Process Standards and Trade” at the Department of Agricultural Economics, Purdue University Nov 21, 1995

Presented the paper “International Process Standards and Trade” at the conference entitled: *Empirical Investigations in International Trade* Purdue University Nov 10–12, 1995

Presented the paper “Environmental Dimensions of Trade and Trade Policy” at University of South Carolina Columbia (Apr 15, 1994)

Presented the paper “Environmental Dimensions of Trade and Trade Policy” at North Carolina State University (Apr 13, 1994)

Presentation on the topic of Trade and Environmental Policy at the Modeling Symposium held at the University of Colorado, Boulder (Apr. 1, 1994)

Presented the paper “The Design of Environmental Trade Policy” at University of Colorado, Boulder (Dec. 10, 1993)

Presented the paper “The Design of Environmental Trade Policy” at Purdue University (Dec. 8, 1993)

Presented the paper “Trade and the Environment: How Important Are the Linkages” at the Australian Bureau of Agricultural and Resource Economics (Canberra, Australia) August 24, 1993.

Presented the paper “Trade and the Environment: How Important Are the Linkages” at Monash University, Melbourne Australia (Centre of Policy Studies and Impact Research Centre) August 19, 1993.

Presented the paper “International Trade and the Environment: How Important are the Linkages?” At the University of Western Ontario, December 6, 1992

Presented the paper “International Trade and the Environment: How Important are the Linkages?” At the University of Guelph, Sept. 18, 1992

Presented the paper “Modeling Environment–Trade Linkages” January 7, 1992 at Brock University

Lecture entitled: “Further thoughts on Carbon Taxes” given at The Industry Commission (Canberra, Australia) August 27, 1991

Lecture entitled: “Further thoughts on Carbon Taxes” given at The IMPACT Centre (University of Melbourne) August 19, 1991

Lecture entitled: “Further thoughts on Carbon Taxes” given at Monash University (Melbourne, Australia) August 16, 1991

Presented the paper “A Uruguay Round Outcome” at the Canadian Economics Association Annual Meetings June, 1991.

Presented the paper “A Uruguay Round Outcome” at the “Workshop on Algorithms and Applications of Economic Equilibrium Models,” held at the University of Western Ontario, (June 22–23, 1991).

The paper “A Micro-Consistent Data Set for the Analysis of World Trade: Methodology and Features” was presented at the Eastern Economics Association in Pittsburgh (March, 1991).

An earlier version of the paper “A Micro-Consistent Data Set for the Analysis of World Trade: Methodology and Features” as well as a thematic talk on CGE analysis were presented at the Waterloo CGE Conference (October, 1990).

An earlier version of the paper “A Micro-Consistent Data Set for the Analysis of World Trade: Methodology and Features” was presented at the Midwest International Economics Meetings, Indiana University (May, 1990).

“Explaining the Volume of North-South Trade” — Paper presented at Purdue University, November, 1989.

The paper *Trade Liberalization with Imperfect Competition: The Large and Small of it* was presented at the Université de Montréal, November, 1989.

OTHER ACTIVITY

Conference Organizer of *Climate Choices Canada* conference held at the Balsillie School of International Affairs Feb 18–20 2016. (joint with Tracy Snoddon)

Model Development and Support (with Tom Rutherford, Christoph Böhringer and Jared Carbone) for a suite of dynamic CGE models for Environment Canada. The models were being used for the analysis of Canadian climate and air pollution policy. Supported Environment Canada staff using the EC-PRO model. (2007–2012)

Founder and Organizer: Southern Ontario Resource, Environmental and Ecological Economics (SOREEE) Workshops. Dr. Wigle founded this informal association of economists who have met more or less regularly since 2005. Dr. Wigle organized the workshops in 2005 and 2011. Other sessions were organized by Margaret Insley in 2006 (University of Waterloo) and in 2008 by Brady Deaton (Guelph).

Dr. Wigle was part of an International support group for the project *Fiscal Policies and the Environment* of the Global Environmental Change Programme. This programme is funded by the (UK) Economic and Social Research Council, and my specific involvement will be on the topic of ‘International Carbon Treaties and Supporting Mechanisms’ with Carlo Perroni (University of Warwick) and John Whalley (UWO and University of Warwick). 1996–1999

Panelist in the session “The Unanswered Questions About Carbon Taxes” at the Canadian Economics Association Meetings in Prince Edward Island, June, 1992.

Co-organizer (and chair) of the Waterloo CGE Modeling Conferences (1990–2)

Invited member of a panel entitled “Looking Forward: Modelling/Econometrics” at the CEA meetings in Kingston (June, 1991) the presentation concerned the future developments in the area of CGE modelling.

Panelist in the session “The Unanswered Questions About Carbon Taxes” at the Canadian Economics Association Meetings in Prince Edward Island, June, 1992.

Centre for International Studies, University of Toronto, Presentation at the Session on Agriculture at *The Toronto Summit: Prospects and Challenges* (An interview by Rick MacInnis-Rea aired on CBC’s “The House”). June 15, 1988.

OTHER ACHIEVEMENTS

The Economist news magazine has carried detailed coverage of research reported in a previously published paper. (See Nguyen, Perroni and Wigle: *The World Economy* December, 1991) In the June 27–July 3, October 17–23 and October 24–30 numbers in 1992, our results were cited in the lead article. In the earliest number there was a study focusing on our results. (See pages 77-8)

Joint work with John Whalley on the topic of Carbon Taxes was quoted in some detail in *The Economist* January, 1991. My affiliation was listed as The University of Western Ontario, rather than Wilfrid Laurier University.

Academic Refereeing

In recent years, Professor Wigle has refereed for the following scholarly journals or granting agencies:

Canadian Journal of Economics

Canadian Public Policy

Economic Modeling

Energy Economics

The Energy Journal

Fonds pour la formation des chercheurs et l’aide de recherche

Journal of Regional Science

North American Journal of Economics and Finance

Research in Transportation Business & Management

Social Sciences and Humanities Research Council of Canada

TEACHING AND SUPERVISION

Courses already taught

Microeconomics (introductory, intermediate)

Macroeconomics (introductory, intermediate)

Mathematical Economics (MA level graduate)

Environmental Economics (undergraduate, MA level graduate)

Economics of Environmental and Natural Resource Policy⁶ (MA level graduate)

International Environmental Policy (Interdisciplinary Seminar, MA level graduate)

Labour Economics (undergraduate)

International Trade (undergraduate, MA level graduate)

International Trade Policy (senior undergraduate)

International Finance (undergraduate)

Regional Economics (undergraduate)

Computable General Equilibrium Modeling (senior undergraduate course, MA level course, introductory and intermediate workshops)

Graduate Student Supervision

Jude Kurniawan (Ph D Candidate, Geography and Environmental Studies University of Waterloo) Dec, 2015–present

Marisa Beck (Ph D Candidate, Balsillie School of International Affairs⁷) (Committee) 2013–2017.

Calvin Lakhan (Ph D candidate, Geography WLU) Committee member 2014–Nov 2015.

Dan Herman (Ph D Candidate, Balsillie School of International Affairs) (Titular co-supervisor) 2013–May 2016.

Veronica Rubio-Vega (Ph D Candidate, Balsillie School of International Affairs) (Titular co-supervisor) 2013–Sept, 2015.

⁶Course was previously called “Economics of Environmental Accords”

⁷University of Waterloo

Nic Rivers (Ph. D. candidate Simon Fraser University) Member of supervisory committee, May, 2008–2011

Stephanie Morris (MABE, WLU) “Transportation-related Fuel Demand in Canada” (Supervisor) December, 2007

Zahoor ul Haq (Ph. D., University of Guelph Department of Food, Agriculture and Resource Economics) member of supervisory committee (November, 2005–July, 2008)

Pahan Prasada (M. Sc., University of Guelph Department of Food, Agriculture and Resource Economics) member of supervisory committee May, 2006–December, 2007.

Krista Phillips (M. Sc. candidate, Simon Fraser University, Energy and Materials Research Group) I have been acting as a member of Krista’s supervisory committee since January, 2006.⁸

Donna Airey M. A. Wilfrid Laurier University “Cost-Effectiveness Analysis of Ontario’s Drive Clean Program” (September, 1999) (Supervisor)

Muhamood Kisekka M. A. Wilfrid Laurier University “Exploring Causality in NAFTA,” June, 1999 (Supervisor)

Troy Elyea M. A. Wilfrid Laurier University “Foreign Direct Investment in Developing Countries and the Impact on Growth” September, 1998 (Supervisor)

Victoria Sampson M. A. Wilfrid Laurier University “The Demand for Automobiles in the Canadian Market.” April, 1998 (Supervisor)

Winnie Lam, Ph. D. University of Western Ontario “China’s Trade, Foreign Investment and Factor Market Reforms” (Committee member) June, 1996.

Andrew Storey, M. A. Wilfrid Laurier University ‘A Decomposition of Industrial Energy Use in Canada: A Regional Analysis.’ April, 1996 (Supervisor)

Eric Devuyst, Ph. D. Purdue University “Moment Preserving Approximations of Multivariate Probability Distributions: Theory and Application” This thesis won the university-wide competition for best Social Science dissertation for Purdue University in 1994. (Committee member)

P. Martin, M.Sc. “The Effects of Agricultural Trade Liberalization on Developing Countries: A General Equilibrium Analysis.” University of Guelph, 1989, (Committee Member).

⁸Krista took inactive status in January 2008.

E. Van Duren, Ph.D. "An Economic Analysis of Countervailing Duty Law: Cases Involving Agriculture," University of Guelph, 1989, (Committee Member).

T. Wong, M.A. "An Analysis of the Canadian Income Distribution," August 1985, University of Saskatchewan (Supervisor).

J. Sampson, M.A. "Government Interventions and Wheat Production in Saskatchewan and North Dakota: An Empirical Analysis," 1983, University of Saskatchewan (Reader).