## DONNA RAMIREZ HARRINGTON

Department of Economics, University of Vermont 233 Old Mill Building, 94 University Place, Burlington, VT 05405 USA Tel: +1 (802) 656-0964, Fax: +1 (802) 656-8405 Email: djramire@uvm.edu

#### **EDUCATION**

Ph.D. University of Illinois at Urbana-Champaign, 2004.

B.S. University of the Philippines at Los Baños, 1996. Summa cum laude

#### ACADEMIC APPOINTMENTS

2014-present	Associate Professor, Department of Economics,
	University of Vermont, Burlington, VT 05405 USA
2007-2014	Assistant Professor, Department of Economics,
	University of Vermont, Burlington, VT 05405 USA
2004-2007	Assistant Professor, Department of Food, Agricultural and Resource Economics,
	University of Guelph, Guelph, Ontario, N1G 2W1, Canada

## **OTHER POSITIONS**

1998-2004	Graduate Research/Teaching Assistant, Department of Agricultural and Consumer
	Economics, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA
1996-1998	Research Assistant, The Philippine Environmental and Natural Resources
	Accounting Project-Phase 4 (ENRAP4), Quezon City, Philippines

#### FIELD OF EXPERTISE

Environmental economics and policy, environmental regulation, environmental technology adoption and technical change, corporate environmental strategy

### **PUBLICATIONS**

### Journal Articles

- The Effect of Enforcement Fairness on Environmental Performance, Forthcoming at *Environmental Management and Sustainable Development* (with D. Earnhart and Robert Glicksman).
- The Effects of Enforcement on Corporate Environmental Performance: The Role of Fairness, Forthcoming at *Review of Law & Economics* (with D. Earnhart and Robert Glicksman)
- Patent Citations and Network Effects from Climate Wise Program, (2015), *Economics Bulletin*, 35 (4): A234 (with B. Graham and K. Brouhle)
- Effect of audits on the extent of compliance with wastewater discharge limits, (2014), *Journal of Environmental Economics and Management* 68(2): 243-261 (with D. Earnhart)
- Does Pollution Prevention Reduce Toxic Emissions? A Dynamic Panel Data Model (2014), *Land Economics*, 90(2): 199-221 (with G. Deltas and M. Khanna)

- EMS and the VCR: The role of environmental management systems in the Canadian Voluntary Climate and Challenge Registry, (2013), *Journal of Environmental Planning and Management*, 57(8): 1145-1168 (with K. Brouhle)
- Green Management and the Nature of Pollution Prevention Innovation, (2013), *Applied Economics* 46(5), 465-482 (with G. Deltas and M. Khanna)
- Market with (Somewhat) Environmentally Conscious Consumers, (2013), *Journal of Economics and Management Strategy*, 22(3):640–667 (with G. Deltas and M. Khanna)
- Innovation under the Climate Wise Program, (2013), *Resource and Energy Economics*, 35(2): 91–112 (with K Brouhle and B. Graham)
- Effectiveness of State Pollution Prevention Programs and Policies, *Contemporary Economic Policy*, 31(2): April 2013, 255–278.
- Two-Stage Adoption of Pollution Prevention Technologies, *Resource and Energy Economics*, January 2012, 34 (3): 349–373.
- GHG Registries: Participation and Performance under the Canadian Voluntary Climate Challenge Program, *Environmental and Resource Economics*, December 2010 47(4): 521-548 (with K. Brouhle).
- Adoption of Pollution Prevention Techniques: The Role of Management Systems, Demand-Side Factors and Complementary Assets, *Environmental and Resource Economics*, September, 2009 44(1): 85-106 (with M. Khanna and G. Deltas).
- Firm Strategy and the Canadian Voluntary Climate Challenge and Registry (VCR), *Business Strategy and the Environment*, 2009, 18, 360-379 (with K. Brouhle).
- Striving to be Green: The Adoption of Total Quality Environmental Management, *Applied Economics*, December 2008, 40: 2995-3007 (with M. Khanna and G. Deltas).
- Evaluating an Environmental Right: Public Comment and Government Decision Making in Ontario, *Canadian Journal of Agricultural Economics*, July 2008, 56(3): 277-294 (with B.J. Deaton and A. Lintner).
- Probability distributions for carbon emissions and atmospheric response, *Climatic Change*, From the issue entitled "Special Topic on Carbon Budgets", April 2008, 88(3-4): 309-342, (with C.E. Singer, T.S.G. Rethinaraj, S. Addy, D. Durham, M. Isik, M. Khanna, B.Kuehl, J. Luo, W. Quimio and K. Rajendran, J. Qiang, J.Jurgen Scheffran, T.N. Tiouririne, J. Zhang).
- Student-friendly TDP game *Journal of Economic Education*, April 2006, 37(2): 187-203. (with A.W. Ando).
- Conservation Capital and Sustainable Economic Growth *Oxford Economic Papers*, April 2005, 57(2), 336-359 (with M. Khanna and D. Zilberman).

## **Book Chapters**

- Natural Resources Policy: A Pragmatic Approach, In J.D. Ackerman and W. Chesworth (eds), *Health and the Planet*. Hammond Lecture Series, Faculty of Environmental Sciences, University of Guelph, December 2005 (with B.J Deaton).
- Effectiveness of Voluntary Approaches: Implications for Climate Change Mitigation In Baranzini, A. and P. Thalmann, eds. *Voluntary Agreements in Climate Policies: An Assessment*. Edward Elgar, 2004 (with M. Khanna).

#### **UNDER REVIEW**

- The Impact of Management Systems on Technical Change: The Adoption of Pollution Prevention Techniques, under revision for *Economic Change and Restructuring* (with George Deltas and Madhu Khanna).
- Information Disclosure as Policy Tool for Climate Mitigation (with K. Brouhle), Under review at *International Journal of Economics and Business Research*.
- The Effect of Local Community Pressure on Environmental Performance: The Role of Regulatory Fairness, under review at *Journal of Environmental Planning and Management* (with Dietrich Earnhart)

### **WORK IN PROGRESS**

- How do Technology, Management and Input Choices Shape Abatement and Output? The Case of Chemical Pollution.
- P2 and Patents: The Dynamics of Technology Adoption and Innovation and Environmental Performance (with K. Brouhle and B. Graham).
- Effect of Audits on Environmental Compliance: The Roles of Audit Quality and Facility Age Can You Teach An Old Dog a New Trick with a Good Enough Lesson? (with D. Earnhart).

### INVITED PAPER AND CONFERENCE PRESENTATIONS

- Patents and P2: The Dynamics of Innovation and Technology Adoption for Environmental Improvements (with K. Brouhle and B. Graham), Selected paper presentation, Northeastern Agricultural and Resource Economics Association (NAREA) Conference, June 9-11 2019, Portsmouth, N.H
- How Technology, Management and Input Choices Influence Abatement and Output: The Case of Chemical Pollution, Selected paper presentation, Northeastern Agricultural and Resource Economics Association (NAREA) Conference, June 9-11 2019, Portsmouth, N.H.
- Can Information Disclosure be an Effective Policy Tool for Climate Change Mitigation?, Selected paper, 6<sup>th</sup> World Congress of Environmental and Resource Economists, 11-15 June 2018, Gothenburg, Sweden.
- P2 and Patents: The Dynamics of Technology Adoption and Innovation and Environmental Performance, Selected paper presentation, Northeastern Agricultural and Resource Economics Association (NAREA) Conference, June 11-13 2017, Washington, D.C.
- Can You Teach an Old Dog New Tricks? Audit Frequency and Audit Quality for Improving Water Quality
- Selected paper presentation, Northeastern Agricultural and Resource Economics Association (NAREA) Conference, June 19-21 2016, Bar Harbor, Maine.
- Selected presentation of work in progress, Heartland Environmental and Resource Economics Workshop, October 17-18 2015, University of Illinois, Urbana-Champaign
- Northeastern Agricultural and Resource Economics Association (NAREA) Conference, Selected paper presentation, Information Disclosure as Policy Tool: The Canadian Mandatory Greenhouse Gas Reporting System, June 28-30 2015, Newport, RI
- Targeting Polluters for Enforcement Action under the Canadian Environmental Protection Act of 1999

- Selected paper presentation, Association of Environmental and Resource Economists (AERE), Asheville, NC, June 4-6, 2012
- Selected paper presentation, Northeastern Agricultural and Resource Economics Association (NAREA), Lowell, MA, June 11-12 2012
- The Role of Environmental Audits in Reducing Water Effluent Levels, Selected paper presentation, Association of Environmental and Resource Economists (AERE), Asheville, North Carolina, June 4-6, 2012
- Two-Stage Adoption of Three Types of Pollution Prevention Activities, Selected paper presentation, American Applied Economic Association (AAEA), Pittsburgh, PA, July 24-26, 2011
- Innovation under the Climate Wise Program, Selected paper presentation, Heartland Environmental and Resource Economics Conference, Urbana-Champaign, IL, October 2010.
- Pollution Prevention: State Policies and Past Experience, Invited seminar presentation at the Department of Economics, University New Hampshire, October 2010
- EMS and the VCR: The Role of Environmental Management Systems in the Canadian Voluntary Climate Registry,
- Selected paper presentation, 4<sup>th</sup> World Congress for Environmental and Resource Economists, Montreal, Quebec, Canada, 28 June-2 July 2010.
- Invited presentation, Corporate Environmental Sustainability Conference University of Kansas, Lawrence, KS, 29-31 October 2009.

Does Pollution Prevention Reduce Toxic Emissions? A Dynamic Panel Approach

- Selected paper presentation, 4<sup>th</sup> World Congress for Environmental and Resource Economists, Kyoto, Japan, 28 June-2 July 2010.
- Selected paper presentation at the Annual Meetings Northeast Agricultural and Resource Economics Association (NAREA) Burlington, VT 7-9 June 2009.
- Selected paper presentation at the American Agricultural Economic Association (AAEA), Orlando, FL, USA, July 27-29, 2008

The Effectiveness of Policy Instruments in Promoting Pollution Prevention

- Selected paper presentation, American Economic Association-Allied Social Science Association (AEA-ASSA) Meeting, San Francisco, CA, 3-5 January 2009.
- Selected paper presentation, International Symposium on Society and Resource Management (ISSRM), Burlington VT, USA, June 8-13, 2008
- The Canadian Voluntary Climate Registry: Determinants of Firm Participation and Quality of Action Plans, Selected paper presentation at the Annual Meetings of the Canadian Agricultural Economics Society (CAES) and Northeast Agricultural and Resource Economics Association (NAREA) Quebec City, Quebec, Canada, June 30-July 1 2008
- The Canadian Voluntary Climate Registry: Why Do Firms Participate?
  Presented at the Heartland Environmental and Resource Economics Conference, Ames, Iowa, September 2007
- Adoption of Pollution Prevention Technologies: The Role of Environmental, Technology and Management Policies on Environmental Innovation, Invited paper presentation, 6<sup>th</sup> IDEI-LERNA Conference on Environmental and Resource Economics: "Environment, Finance and Corporate Behavior", Toulouse, France, 31 May- 2 June 2007.

Green management and the nature of technology adoption

• Selected paper presentation, 2006 American Agricultural Economic Association (AAEA) Meeting, Long Beach, California, 23-26 July 2006.

- Selected paper presentation, Canadian Agricultural Economics Society (CAES), Montreal, Quebec, 26-28 May 2006.
- Selected paper presentation, International Industrial Organization Conference (IIOC), Boston, Massachusetts, 07-09 April 2006.

Seeking Proactive Compliance: Incentives for Environmental Audits

- Selected paper presentation, 2006 American Agricultural Economic Association (AAEA) Meeting, Long Beach, California, 23-26 July 2006.
- Selected paper presentation, 3<sup>rd</sup> World Congress for Environmental and Resource Economists, Kyoto, Japan, 3-7 July 2006.
- Striving to be Green: The Adoption of Total Quality Environmental Management, Selected paper presentation, 3<sup>rd</sup> World Congress for Environmental and Resource Economists, Kyoto, Japan, 3-7 July 2006.

Adoption of Pollution Prevention Techniques: The Role of Management Systems, Demand-Side Factors and Complementary Assets

- Selected paper presentation, 3<sup>rd</sup> World Congress for Environmental and Resource Economists, Kyoto, Japan, 3-7 July 2006.
- Selected paper presentation, 2005 American Agricultural Economic Association (AAEA) Meeting, Providence, Rhode Island, 24-27 July 2005.

Adoption of Environmental Management Systems in Agriculture, Selected paper presentation, 2005 American Agricultural Economic Association (AAEA) Meeting, Providence, Rhode Island, 24-27 July 2005.

The Effect of Class Size on Learning

- Selected paper presentation, Improving University Teaching (IUT) Conference, Pittsburgh, Pennsylvania, 12-14 July 2005.
- Selected paper presentation, STLHE Conference, Charlottetown, Prince Edward Island, June 8-11, 2005.

Market with Environmentally Conscious Consumers

- Selected paper presentation, 2005 American Economic Association-Allied Social Science Association (AEA-ASSA) Meeting, Philadelphia, Pennsylvania, 7-9 January 2005.
- Selected paper presentation, 2004 American Agricultural Economic Association (AAEA) Meeting, Denver, Colorado, 1-4 August 2004.

Conservation Capital and Sustainable Economic Growth

- Selected paper presentation, 2002 American Agricultural Economic Association (AAEA) Meeting, Long Beach, California, 28-31 July 2002.
- Selected paper presentation, 2<sup>nd</sup> World Congress for Environmental and Resource Economists, Monterey, California, 24-27 June 2002.

# **COURSES TAUGHT**

Principles of Microeconomics, Economics of Globalization, Economics of Environmental Policy, Microeconomic Theory, Cost-Benefit Analysis, Markets, Firms and Natural Amenities, Advanced Topics in Natural Resource Economics

# HONORS, AWARDS AND GRANTS

2019-2020	United States Department of Agriculture, National Institute of Food and Agriculture (USDA-NIFA), 2019 NAREA Post Conference Workshop on "Environmental Regulation and Innovation in Rural Communities", Amount: \$35,000
2008-2009	Canadian Studies Faculty Research Grant, Canadian Embassy
2008	Honors College Faculty Seminar Award, University of Vermont
2006	Dean's Research Grant, Ontario Agricultural College, University of Guelph
2004	Dissertation Scholarship Award, Department of Agricultural and Consumer
	Economics, University of Illinois at Urbana-Champaign, January 2004.
2003	Outstanding Graduate Student Award, Department of Agricultural and Consumer
	Economics, University of Illinois at Urbana-Champaign, April 2003.

## PROFESSIONAL SERVICE ACTIVITIES

# <u>University/College/Department</u>

UA Department Representative, 2019-2020.

Member, College of Arts and Sciences Curriculum Committee, 2016-2019

Member, Department of Economics, NTT Hiring Committee, Fall 2018-Spring 2019

Member, CAS Kidder Scholarship Committee, April 2018

Member, Grossman Business School Dean's Staff Award Committee, Spring 2017

Member, College of Arts and Sciences Curriculum Kidder Scholarship Interviewer, Spring 2016

Member, Department of Economics Awards Committee, 2016, 2017

Member, College of Arts and Sciences Admissions Committee, AY 2014-2015

Member, Department BSc Program Committee, Department of Economics, University of Vermont, Fall 2014

Member, College of Arts and Sciences Economics Department Chair Review Committee, Fall 2014

Member, Department BSC Economics Program Committee, Department of Economics, University of Vermont, Fall 2014

Member, College of Arts and Sciences Honors Committee, AY 2010-2013

Member, Department Honors Committee, Department of Economics, University of Vermont, Spring 2011, 2012

Member, Department Scholarship Awards, Department of Economics, University of Vermont, Spring 2008, Spring 2009, 2010, 2016

# Academic Organizations/Academic Journals/Profession

Guest Editor, Agricultural and Resource Economics Review, Special Issue: Environmental Regulation and Innovation in Local Communities August 2019- August 2020 External referee for tenure evaluation, Fall 2019.

- Chair, 2019 NAREA (Northeastern Agricultural and Resource Economics Association), Post-Conference Workshop, May 2018- June 2019.
- Member, Selected Paper Review Committee, Association of Environmental and Resource Economists (AERE), February 2019
- Member, Selected Paper Review Committee, NAREA (Northeastern Agricultural and Resource Economics Association), March 2018
- Associate Editor of Applied Economic Perspectives and Policy (AEPP), a journal of the American Applied Economics Association, AAEA (2015-2019)
- External referee for tenure evaluation, Summer 2017.
- Member, Selected Paper Review Committee, NAREA (Northeastern Agricultural and Resource Economics Association), 2017
- Associate Editor of Applied Economic Perspectives and Policy (AEPP), a journal of the American Applied Economics Association (AAEA), 2015-2018
- Board Member, Northeast Agricultural and Resource Economics Association (NAREA), 2014-2017
- Member, Outstanding MS Thesis Committee, Northeast Agricultural and Resource Economics Association (NAREA), 2011-2013
- Member, Distinguished Member Award Committee, Northeast Agricultural and Resource Economics Association (NAREA), 2009-2011, 2013
- Chair, Distinguished Member Award Committee, Northeast Agricultural and Resource Economics Association (NAREA), 2012
- Board Member at Large, Committee of Women in Agricultural Economics (CWAE), 2006-2007.

### **Academic Conferences**

- Discussant, Association of Environmental and Resource Economists (AERE) Session, Association of Environmental and Resource Economists (AERE) Conference, Asheville, NC, 4-6 June 2012.
- Discussant, Association of Environmental and Resource Economists (AERE) Session, American Applied Economic Association (AAEA) Meetings, Pittsburgh, PA, 24-26 July 2011.
- Moderator, Association of Environmental and Resource Economists (AERE) Session, American Agricultural Economic Association (AAEA) Meetings, San Francisco, CA 3-5 January 2009.
- Moderator, Northeast Agricultural and Resource Economics Association (NAREA) Meetings, 7-9 June 2009.
- Co-Topic Leader/Abstract Selection Committee for Environmental Economics, for the 2008 Annual American Agricultural Economics Association Meetings, Orlando, FL, January-February 2008
- Moderator, Policy Education Program, Department of Food, Agricultural and Resource Economics, February 2006.
- Discussant, Southern Ontario Resource and Environmental Economists (SOREE), University of Waterloo, Waterloo, Ontario, 4 May 2006.
- Moderator, Canadian Agricultural Economics Society (CAES) Meetings, Montreal, Quebec, 24-27 May 2006.
- Discussant, International Industrial Organization Conference (IIOC), Boston, Massachusetts, 7-9 April 2006.

Moderator, Association of Environmental and Resource Economists (AERE) Session, American Agricultural Economic Association (AAEA) Meetings, Providence, Rhode Island, 24-27 July 2005.

Discussant, Southern Ontario Resource and Environmental Economists (SOREE), Wilfrid Laurier University, Waterloo, Ontario, 5 May 2005.

Discussant, Western Economic Association International (WEAi), San Francisco, California, 5-8 July 2001.

### Journal Review

Applied Economic Perspectives and Policy, Applied Economics, Applied Financial Economics, B.E. Journal of Economic Analysis and Policy, Canadian Journal of Agricultural Economics, Contemporary Economic Policy, Ecological Economics, Energy and Resource Economics, Environmental and Resource Economics, Environmental Science & Technology, European Journal of Law and Economics, Evaluation and Program Planning, Human Ecology Review: Special Issue on Business and the Environment, International Journal of Environmental Research and Public Health, Journal of Development Studies, Journal of The Association of Environmental and Resource Economists, Journal of Environmental Economics and Management, Journal of Environmental Management, Journal of Public Economics, Land Economics, Social Science and Humanities Research Council-Standard Research Grants Program, Resource and Energy Economics.

#### PROFESSIONAL AFFILIATIONS

Association of Environmental and Resource Economists, American Economic Association American Applied Economic Association, Northeastern Agricultural and Resource Economics Association.