THOMAS PEYTON LYON

Dow Chair of Sustainable Science, Technology and Commerce Stephen M. Ross School of Business School of Natural Resources and Environment University of Michigan Ann Arbor, MI 48109

EDUCATION:

- Ph.D. Stanford University, Engineering-Economic Systems, 1989.
- M.S. Stanford University, Engineering-Economic Systems, 1984.
- B.S.E. Princeton University, Civil Engineering, 1981.

Research Fields: Corporate Environmental Strategy, Industrial Organization, Regulation, Contracts.

EMPLOYMENT:

- Dow Chair of Sustainable Science, Technology and Commerce, Stephen M. Ross School of Business and School of Natural Resources and Environment, University of Michigan, 2004-present.
- **Director,** Erb Institute for Global Sustainable Enterprise, Stephen M. Ross School of Business and School of Natural Resources and Environment, University of Michigan, 2006-2011.
- **Distinguished Adjunct Professor,** McDonough School of Business, Georgetown University, 2002-2004.
- Visiting Economist, U.S. Department of Justice, Antitrust Division, 2003-2004.
- Gilbert F. White Fellow, Resources for the Future, Washington, DC, 2002-2003.
- **Professor**, Business Economics and Public Policy, Kelley School of Business, Indiana University. 2002.
- Associate Professor and Bank One Faculty Fellow, Business Economics and Public Policy, Kelley School of Business, Indiana University. 1995 2002.
- **Visiting Associate Professor**, Zentrum für Europaische Integrations-forschung, Universität Bonn, Germany, May-June, 1997.
- Pisa Chair in the Economics of Innovation (Fulbright Grant), Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna, Pisa, Italy. January-April 1997.
- **John M. Olin Visiting Associate Professor,** Graduate School of Business, University of Chicago, August 1995 July 1996.
- **Assistant Professor**, Business Economics and Public Policy, School of Business, Indiana University. 1989 1995.
- Senior Associate, Benjamin Schlesinger and Associates, Bethesda, MD. 1985 86.
- Economist, U.S. Department of Energy, Washington, DC. Summer 1984.
- Environmental Policy Intern, National Audubon Society, NY, NY. 1982 83.
- Planning Engineer, Public Service Electric and Gas Co., Newark, NJ. 1981 82.

BOOKS:

- Good Cop/Bad Cop: Environmental NGOs and Their Strategies towards Business, editor, Washington, DC: Resources for the Future Press, 2010.
- The Political Economy of Regulation, editor, Northampton, MA: Edward Elgar Publishing, 2007.
- Corporate Environmentalism and Public Policy, (with John W. Maxwell), Cambridge: Cambridge University Press, 2004.

JOURNAL ARTICLES:

- "How Does Environmental Disclosure Work?: Evidence from Newsweek's Green Companies Rankings," (with Jay P. Shimshack), *Business and Society*, forthcoming.
- "Fragmenting Forests: The Double Edge of Effective Forest Monitoring," (with Andrew R. Bell, Rick L. Riolo, Jacqueline M. Doremus, Daniel G. Brown, John Vandermeer, and Arun Agrawal), *Environmental Science and Policy*, forthcoming.
- "Lurching towards Markets for Power: China's Electricity Policy 1985-2007," (with Xiaoli Zhao and Cui Song), *Applied Energy*, forthcoming.
- "Is "Smart Charging" Policy for Electric Vehicles Worthwhile?," *Energy Policy*, (with Mark Michelin, Arie Jongejan, and Thomas Leahy), 2012, 41: 259–268.
- "Creating a Plug-In Electric Vehicle Cluster in Michigan: Prospects and Policy Options," (with Russell Baruffi), *Michigan Telecommunications and Technology Law Review*, 2011, 18: 303-347.
- "When Does Institutional Activism Increase Shareholder Value?: The Carbon Disclosure Project," (with Eun-Hee Kim), *The BE Journal of Economic Analysis and Policy*, 2011. Volume 11(1) (Contributions), Article 50. Available at: http://www.bepress.com/bejeap/vol11/iss1/art50
- "Does Public Disclosure Reduce Pollution? Evidence from India's Pulp and Paper Industry," (with Allen Blackman, Urvashi Narain, and Nicholas Powers), *Environmental and Resource Economics*, 2011, 50: 131-155.
- "Strategic Environmental Disclosure: Evidence from the DOE's Voluntary Greenhouse Gas Registry," (with Eun-Hee Kim), *Journal of Environmental Economics and Management*, 2011, 61: 311–326.
- "Greenwash: Corporate Environmental Disclosure under Threat of Audit," (lead article, with John W. Maxwell), *Journal of Economics and Management Strategy*, 2011, 20: 3-41.
- "What Drives Participation in State Voluntary Cleanup Programs? Evidence from Oregon," (with Allen Blackman, Sarah Darley, and Kris Wernstedt). *Land Economics*, 2010, 86: 785–799.
- "Why Do States Adopt Renewable Portfolio Standards? An Empirical Investigation," (with Haitao Yin), *The Energy Journal*, 2010, 31: 131-155.
- "Introduction to the Special Issue on Management Strategy and the Environment," *Journal of Economics and Management Strategy*, 2009, 18: 1-6.
- "Corporate Social Responsibility and the Environment: A Theoretical Perspective," (with John W. Maxwell), *Review of Environmental Economics and Policy*, 2008, 2: 240-260.
- "Environmental Public Voluntary Programs Reconsidered," (with John W. Maxwell), *Policy Studies Journal*, 2007, 35: 723-750. Reprinted in Peter de Leon and Jorge Rivera, editors, *Voluntary Environmental Programs: A Policy Perspective*, Lanham, MD: Lexington Books, December 2009.

- "Why Rate-of-Return Adders are Unlikely to Increase Transmission Investment," *The Electricity Journal*, 2007, 5: 48-55.
- "Voluntary Environmental Agreements when Regulatory Capacity is Weak," (with Allen Blackman and Nicholas Sisto), *Comparative Economic Studies*, 2006, 48: 682-702.
- "Does Dual Sourcing Lower Procurement Costs?," *Journal of Industrial Economics*, June 2006, 54: 223-252.
- "Regulatory Opportunism and Investment Behavior: Evidence from the Electric Utility Industry," (with John P. Mayo), *RAND Journal of Economics*, 2005: 628-644.
- "Astroturf: Interest Group Lobbying and Corporate Strategy," (lead article, with John W. Maxwell), *Journal of Economics and Management Strategy*, December 2004, 13(4), pp. 561-598.
- "Spatial Proximity and Complementarities in the Trading of Tacit Knowledge," (with Neslihan Aydogan), *International Journal of Industrial Organization*, November 2004, 22: 1115-1135.
- "Buyer-Option Contracts Restored: Renegotiation, Inefficient Threats, and the Hold-up Problem," (with Eric Rasmusen), *Journal of Law, Economics and Organization*, April 2004, v. 20, no. 1, pp. 148-169.
- "Self-Regulation, Taxation, and Public Voluntary Environmental Agreements," (with John W. Maxwell), *Journal of Public Economics*, v. 87, August 2003, pp. 1453-1486.
- "Legal Remedies for Breach of the Regulatory 'Contract'," (with Haizhou Huang), *Journal of Regulatory Economics*, v. 22, no. 2, October, 2002, pp. 107-132.
- "Self-Regulation and Social Welfare: The Political Economy of Corporate Environmentalism," (with Steven C. Hackett and John W. Maxwell), *Journal of Law and Economics*, v. 43, no. 2, October 2000, pp. 583-618.
- "Quality Leadership when Regulatory Standards are Forthcoming," (with Stefan Lutz and John W. Maxwell), *Journal of Industrial Economics*, v. 48, no. 3, September 2000, pp. 331-348.
- "Quality, Insurance, and Consumer Choice in Health Care Markets," *Journal of Economics and Management Strategy*, v. 8, no. 4, 1999, pp. 545-580.
- "Corporate Environmental Strategies as Tools to Influence Regulation," (with John W. Maxwell), *Business Strategy and the Environment, v.* 8, no. 3, May-June 1999, pp. 189-196.
- "Innovation and Imitation in an Asymmetrically-Regulated Industry," (with Haizhou Huang), *International Journal of Industrial Organization*, v. 15, no. 1, 1997, pp. 29-50.
- "A Model of Sliding-Scale Regulation," *Journal of Regulatory Economics*, v. 9, no. 3, May 1996, pp. 227-248.
- "Evaluating the Performance of Non-Bayesian Regulatory Mechanisms," Journal of Regulatory Economics, v. 9, no. 1, January 1996, pp. 41-60.
- "Asymmetric Regulation and Incentives for Innovation," (with Haizhou Huang), *Industrial and Corporate Change*, v. 4, no. 4, 1995, pp. 769-776.
- "Regulatory Hindsight Review and Innovation by Electric Utilities," *Journal of Regulatory Economics*, v. 7, no. 3, May 1995, pp. 233-254.
- "What do 'Facilitating Practices' Facilitate?; An Empirical Investigation of Most-Favored Nation Clauses in Natural Gas Contracts," (lead article, with Keith J. Crocker), *Journal of Law and Economics*, October 1994, pp. 297-322.
 - "Bottlenecks and Governance Structures: Open Access and Long-Term Contracting in Natural Gas," (with Steven C. Hackett), *Journal of Law, Economics and Organization*, v. 9, no. 2, October 1993, pp. 380-398.

- "Equilibrium Incentives for Most-Favored Customer Clauses in an Oligopolistic Industry," (with David Besanko), *International Journal of Industrial Organization*, v. 11, 1993, pp. 347-367.
- "Regulation with 20-20 Hindsight: Least-Cost Rules and Variable Costs," *Journal of Industrial Economics*, v. 60, no. 3, September 1992, pp. 277-290.
- "Regulation with 20-20 Hindsight: Heads I Win, Tails You Lose?," *RAND Journal of Economics*, Winter 1991, v. 22, no. 4, pp. 581-595.
- "Designing Price Caps for Gas Distribution Systems," (with Michael A. Toman), *Journal of Regulatory Economics*, v. 3, no. 2, June 1991, pp. 175-192. Reprinted after independent review in *California Public Utilities Commission*, Working Paper Series, Volume III, July 1, 1992, pp. 19-40.
- "Spot and Forward Markets for Natural Gas: The Effects of State Regulation," *Journal of Regulatory Economics*, v. 2, no. 3, 1990, pp. 299-326.
- "Natural Gas Policy: The Unresolved Issues," *The Energy Journal*, v. 11, no. 2, April 1990, pp. 23-50.
- "Gas Utility Supply Planning: Risk Management and Regulatory Oversight," (with Benjamin Schlesinger), *The Energy Journal*, October 1988.

BOOK CHAPTERS AND OTHER ARTICLES:

- "On the Profitability of Corporate Environmentalism," (with John W. Maxwell), in Christopher Thomas, Jr. and William F. Shughart II, eds., *Oxford Handbook of Managerial Economics*, Oxford University Press, forthcoming.
- "Environmental Governance," (with David P. Baron), in Tima Bansal and Andrew J. Hoffman, eds., *Handbook on Business and the Environment*, Oxford University Press, 2012.
- "Environmental Governance: An Economic Perspective," in Magali Delmas and Oran Young, eds., *Governing the Environment: Interdisciplinary Perspectives*, Cambridge: Cambridge University Press, 2009.
- "China is Key to Global Climate Solution," Barron's, Monday, March 2, 2009.
- "A U.S.-China Partnership to Protect Our Climate," 107 *Michigan Law Review First Impressions*, 2008, http://www.michiganlawreview.org/vol107/lyon.pdf
- "Capitale sociale e crescita economica in Italia (1970-1995)," in C. Carboni e M. Moroni, editors, *Lo sviluppo locale: Storia, economia e sociologia*, Turin, Italy:Il Mulino, 2007.
- "Reciprocity, Proximity and Performance of Research Consortia," (with Neslihan Aydogan), in Neslihan Aydogan and Vincent Chen, editors, *Social Capital and Business Development in High-Technology Clusters: An Analysis of Contemporary U.S. Agglomerations*, New York: Springer Press, forthcoming.
- "Greenwash," (with John W. Maxwell), Administrative and Regulatory Law News, Summer 2007.
- "Public Voluntary Programs for Mitigating Climate Change," (with John W. Maxwell), in Andrea Baranzini and Philippe Thalmann, editors, *Voluntary Agreements in Climate Policies*, Edward Elgar Press, 2004.
- "Green Firms Bearing Gifts," Regulation, Fall 2003, v. 26, no. 3, pp. 36-40.
- "Voluntary versus Mandatory Approaches to Climate Change Mitigation," *Resources*, Spring 2003, pp. 8-9.

- "Voluntary versus Mandatory Approaches to Climate Change Mitigation," Resources for the Future Issues Brief 03-01, February 2003, available at http://www.rff.org/issue_briefs/PDF_files/IB0301.pdf.
- "Voluntary Approaches to Environmental Protection: A Survey," (with John W. Maxwell), in Maurizio Franzini and Antonio Nicita, editors, *Economic Institutions and Environmental Policy: Past, Present and Future*, (Alder-shot, Hampshire, UK: Ashgate Publishing Ltd.), 2002.
- "Preventing Exclusion at the Bottleneck: Structural and Behavioral Approaches," in Michael A. Crew, editor, *Expanding Competition in Regulated Indus-tries*, (Boston, MA: Kluwer Academic Publishers), 2000.
- "An Institutional Analysis of Voluntary Environmental Agreements," (with John W. Maxwell) in Eric Orts and Kurt Deketelaere, editors, *Environmental Contracts: Comparative Approaches to Regulatory Innovation in Europe and the United States*, (Boston, MA: Kluwer Academic Publishers), 2000.
- "Voluntary Approaches to Environmental Protection," (with John W. Maxwell), in Charles Bonser, editor, *Security, Trade, and Environmental Policy: A US/European Union Transatlantic Agenda*, (Boston, MA: Kluwer Academic Publishers), pp. 259-265, 2000.
- "Most-Favored Customer Clauses," in Peter Newman, editor, *The New Palgrave Dictionary of Economics and the Law*, (London: Macmillan), 1998.
- "Incentive Regulation in Theory and Practice," in Michael A. Crew, editor, *Incentive Regulation for Public Utilities*, (Boston, MA: Kluwer Academic Publishers), 1994.
- "Incentive Regulation for Gas Distribution Systems," (with Michael A. Toman) in *Energy Disruptions:* Lessons, *Opportunities, Prospects*, (Washington, D.C.: International Association for Energy Economics), 1991, pp. 316-327.
- "Gas Inventory Charges and Peak-Load Reliability," (with Steven C. Hackett) in *Energy Supply/Demand Balances: Options and Costs*, (Washington, D.C.: International Association for Energy Economics), 1990, pp. 173-183.
- "The Structure and Regulation of the Natural Gas Industry," (principal author), Chapter 5, North American Natural Gas Markets: Energy Modeling Forum #9, June 1989.
- "Spot Prices, Contracts, and Policy Options in the Natural Gas Industry," in *Energy Markets in the 1990s and Beyond*, (Washington, D.C.: International Association for Energy Economics), 1989, pp. 192-201.
- "Direct Gas Markets: What They Mean for Distributor Supply Planning," (with Benjamin Schlesinger), Public Utilities Fortnightly, v. 119, n. 2, January 22, 1987, pp. 18-23.
- "Modeling the Strategic Petroleum Reserve: Public/Private Inventory Inter-actions and Price Controls," (with B.M. Miller and S.T. Minihan), *Proceedings of the Second IMACS Symposium on Energy Modeling and Simulation*, August 1984.

BOOK REVIEWS:

- "Review of *An Introduction to Corporate Environmental Management* by Stefan Schlaltegger, Roger Burritt and Holger Petersen," *Environment*, June 2004, 46: 43-44.
- "Review of *Designing Incentive Regulation for the Telecommunications Indus-try* by David E.M. Sappington and Dennis L. Weisman," *Southern Economic Journal*, July 1999, pp. 197-198.
- "Review of The Emerging New Order in Natural Gas: Markets versus Regulation by Arthur S. De

- Vany and W. David Walls," Managerial and Decision Economics, forthcoming.
- "Review of Current Issues in Industrial Economics, John Cable, editor," Review of Industrial Organization, v. 10, pp. 101-103, 1995.
- "Review of A *Theory of Incentives in Procurement and Regulation* by Jean-Jacques Laffont and Jean Tirole," *Information Economics and Policy*, v. 6, pp. 89-93, 1994.
- "Review of Regulatory Choices: A Perspective on Developments in Energy Policy, Richard J. Gilbert, editor," Journal of Economic Literature, September 1993, pp. 1480-1481.
- "Review of *Regulation of the Firm and Natural Monopoly* by Michael Waterson," *Managerial and Decision Economics*, v. 13, no. 1, January/February 1992, pp. 86-88.

RESEARCH IN PROGRESS

- "How Do Shareholders Respond to Sustainability Awards?: Evidence from China," with Yao Lu, Xinzheng Shi, and Qie Yin, mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Voluntary Agreements and Regulatory Flexibility," with John W. Maxwell, mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Self-Regulation and Negotiated Agreements: Substitutes or Complements," with John W. Maxwell, mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Evaluating Mexico's Green Supply Chain Program," with Bart van Hoof, mimeo, Stephen M. Ross School of Business, University of Michigan.
- "A Model of Voluntary Cleanup Programs for Brownfield Sites," with Allen Blackman, Kris Wernstedt and Haitao Yin, mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Competing Environmental Labels," with Carolyn Fischer, mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Voluntary Environmental Agreements in Developing Countries: The Colombian Experience," with Allen Blackman, Eduardo Uribe, and Bart van Hoof, Resources for the Future Discussion Paper June 2009.
- "Regulatory Uncertainty and Regulatory Scope," with Jing Li, mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Most-Favored Nation Clauses in Health Care Markets," mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Capture or Contract? Evidence from the Early Years of Electric Utility Regulation," mimeo, Stephen M. Ross School of Business, University of Michigan.
- "Auctions vs. Bargaining: An Empirical Analysis of Medical Device Procurement," (with Andrea Bonaccorsi, Fabio Pammolli and Giuseppe Turchetti), mimeo, Stephen M. Ross School of Business, University of Michigan.

PAPER PRESENTIONS:

American Economic Association Annual Meetings (1989, 1992, 1993, 1994, 1997, 1998,1999, 2000, 2001, 2003, 2004, 2005, 2006, 2008, 2009), California Public Utilities Commission, Canadian Association of Members of Public Conference on "The Future of Incentive Regulation

in the Electric Utility Industry," Dublin Workshop on "Voluntary Approaches, Transaction Costs and Free-Riding," European Association for Environmental and Resource Economics Meetings (2008, 2011), Federal Energy Regulatory Commission, Federal Trade Commission, First Annual Northeast Regional Health Economics Symposium, Fourth Annual National Health Economics Conference, Georgetown University, GTE Laboratories, Harvard University, INSEAD, Institute for Defense Analyses, International Association for Energy Economics Annual North American Conference (1989, 1990, 1991), London Business School, London School of Economics, MIT, National Regulatory Research Institute, Northwestern University, Pennsylvania State University, Purdue University, Resources for the Future, Rutgers University Advanced Workshop in Regulation and Public Utility Economics (1989-1996,1999), Scuola Sant'Anna, Stanford University, SUNY-Albany, Telecommunications Policy Research Conference (1993, 1994), Transportation and Public Utilities Group Annual Meetings, Universita di Ancona, Universitad di Barcelona, University of Arizona, University of California at Berkeley, UCLA, UC Santa Barbara, University of Chicago, University of Colorado, University of Illinois, University of Michigan, University of Michigan Telecommunications Conference, University of Oregon, University of Siena, University of Tennessee, University of Texas, University of Toronto, University of Toulouse, Washington University, Western Economic Association Annual Meetings (1992,1993,1995,1999), Milan Workshop on "Voluntary Approaches, Competition and Competitiveness," World Congress of Environmental and Resource Economists (1998, 2006, 2010)

HONORS, GRANTS AND AWARDS:

- Professor Invitee, University of Paris 1, February March 2011.
- Distinguished Visitor, Zurich Financial Services Distinguished Visitors Program, University of California Santa Barbara, Winter 2009
- Fellow, Georgetown University Center for Business and Public Policy, 2008-2011.
- Guest Editor, Special Issue on Management Strategy and the Environment, Journal of Economics and Management Strategy, forthcoming
- Contribution to the Research Environment Award, Ross School of Business, University of Michigan, 2008
- Center for International Business Education, "Market-based Diffusion Mechanisms for Ecoefficiency in SMEs: Mexico's Green Supply Chains Program," 2008, \$6,000.
- National Science Foundation Grant, "Environmental Governance, Logging and Forests," 2008-2012, \$1,497,108.
- Michigan Memorial Phoenix Energy Institute Research Grant, "Sustainable Electricity Generation," 2007-2009, \$199,484
- Alcoa Foundation Grant, "Creating a Sustainable Energy Future through Interdisciplinary Research," 2006-2010, \$844,000.
- Gilbert White Fellowship, Resources for the Future, Washington, DC, 2002-2003.
- Bank One Faculty Fellow, Indiana University School of Business, 1997-2002.
- Research Excellence Award, Indiana University School of Business, 1996-97.
- Fulbright Grant, Pisa Chair in the Economics of Innovation, Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna, Pisa, Italy, January-April 1997.
- John M. Olin Visiting Associate Professorship, Center for the Study of the Economy and the

State, University of Chicago, 1995-96.

- Indiana University School of Business Alumni Association Faculty Fellowship, 1994, 1995.
- Indiana University Summer Faculty Fellowship, 1993.
- Indiana University School of Business Competitive Summer Research Grants, 1993-2001.
- Department of Veterans Affairs Research Grant to investigate "Incentive Regulation with Deadbands and Sharing Rules," 1992.
- General Motors Fellowship, 1988-89.
- California Public Utilities Commission Research Grant to investigate "Supply Contracts, Regulatory Lag and Cost Disallowance in the Natural Gas Industry," 1987-89.
- Stanford University Fellowship, 1983-84.
- Jesse Smith Noyes Foundation Grant, 1982-83.

EDITORIAL BOARDS:

- *Economic Inquiry (1999-2002)*
- Journal of Regulatory Economics (1999-present)
- Journal of Economics and Management Strategy (2006-present)

REFEREEING:

American Economic Review, Contemporary Policy Issues, Economic Inquiry, Economic Journal, The Energy Journal, European Economic Review, International Journal of Industrial Organization, Journal of Economics and Business, Journal of Economics and Management Strategy, Journal of Environmental Economics and Management, Journal of Financial Intermediation, Journal of Industrial Economics, Journal of Law and Economics, Journal of Law, Economics and Organization, Journal of Policy Analysis and Management, Journal of Political Economy, Journal of Regulatory Economics, National Science Foundation, Open Economies Review, RAND Journal of Economics, Review of Economics and Statistics, Small Business Economics.

TEACHING:

- Environmental Governance
- Game Theory and Competitive Tactics
- Regulation
- Non-Market Strategy
- Energy Markets and Energy Politics
- Environmental Management in the Global Economy
- Managerial Economics
- The Business Manager in the Economic Environment: A Policy Perspective

- Thinking Strategically: Game Theory and Business Strategy
- The Economics of Innovation
- Business Strategy
- Business and Economic Strategy in the Public Arena

CONSULTING:

• AT&T, Air Products, Cogentrix, Eli Lilly, Enron Capital and Trade Resources, Huron Consulting Group, Indiana Builders Association, Indiana Utility Regulatory Commission, Industrial Economics, Logistics Management Institute, National Regulatory Research Institute, National Renewable Energy Laboratory, State of Connecticut, U.S. Department of Energy.