

Ann Wolverton, Economist in EPA's [National Center for Environmental Economics](#)

Research Interests: Computable general equilibrium modeling, energy efficiency paradox, climate change, environmental justice, effectiveness of voluntary and regulatory programs

Biography: Ann Wolverton has been an economist at the National Center for Environmental Economics at the U.S. EPA since 2001, where she currently leads a team building computable general equilibrium (CGE) modeling capacity for the agency. Previously, she spent ten years leading a team of economists working on climate and international issues. In addition, Ann has been involved in the development of EPA's SAGE CGE model, EPA technical guidances for conducting economic analysis and for analysis of environmental justice concerns, and in interagency efforts to develop social cost of carbon estimates for use in federal regulatory analysis. Ann was a senior economist at the Council of Economic Advisers in 2006-2007 and again in 2009-2010. She served on the Board of the Association of Environmental and Resource Economists (AERE) in 2006-2009 and in 2016-2019. Ann has a PhD (1999) and MS (1995) in economics from the University of Texas at Austin and BAs in economics and English (1989) from Arizona State University.

E-mail: Wolverton.ann@epa.gov

Recent NCEE Working Papers:

“[Consumer Valuation of Fuel Economy: Findings from Recent Panel Studies](#)” (with Heather Klemick and Elizabeth Kopits). NCEE Working Paper #2019-02.

“[Evaluating the Effectiveness of Voluntary Programs: Did Ohio's Tox-Minus Initiative Affect Participants' TRI Emissions?](#)” (with Charles Griffiths and William Wheeler). NCEE Working Paper #2016-05.

Peer-Reviewed Publications:

“[Exploring the General Equilibrium Costs of Sector-Specific Environmental Regulations](#)” (with Alex Marten and Richard Garbaccio). *Journal of the Association of Environmental and Resource Economists*. 2019, 6(6), pp. 879-918, 2019.

“[How Do Data Centers Make Energy Efficiency Investment Decisions: Qualitative Evidence from Focus Groups and Interviews](#)” (with Heather Klemick and Elizabeth Kopits). *Energy Efficiency* 2019, 12(5), pp. 1359-1377, 2019.

“[Retrospective Evaluation of the Costs of Complying with Light-Duty Vehicle Surface Coating Requirements](#)” (with Ann Ferris and Nathalie Simon). *Journal of Benefit-Cost Analysis*. 2018, 10(1), pp. 39-64, 2019.

“[Potential Barriers to Improving Energy Efficiency in Commercial Buildings: The Case of Supermarket Refrigeration](#)” (with Heather Klemick and Elizabeth Kopits). *Journal of Benefit-Cost Analysis*. 2017, 8(1), pp. 115-145.

[“The Impacts of Environmental Regulation on the U.S. Economy”](#) (with Ann Ferris, Richard Garbaccio and Alex Marten). *Oxford Encyclopedia of Environmental Economics*. (J. Kahn, D. Biller, J. Whitehead, and R. Ara Begum, editors), 2017.

[“Heavy-Duty Trucking and the Energy Efficiency Paradox: Evidence from Focus Groups and Interviews,”](#) (with Elizabeth Kopits, Heather Klemick and Keith Sargent), *Transportation Research Part A: Policy and Practice*, 77, pp. 154-166, 2015.

“Evaluating Environmental Justice: Analytic Lessons from the Academic Literature and in Practice” (with Ron Shadbegian), in [Failed Promises: Evaluating the Federal Government’s Response to Environmental Inequity](#), (D. Konisky, editor), MIT Press, 2015.

[“Impacts of Ethanol Policy on Corn Prices: A Review and Meta-analysis of Recent Evidence,”](#) (with Nicole Condon and Heather Klemick), *Food Policy*, 51, pp. 63-73, 2015.

[“Corrigendum to Incremental CH₄ and N₂O Mitigation Benefits Consistent with the US Government’s SC-CO₂ Estimates”](#) (with Alex Marten, Elizabeth Kopits, Charles Griffiths and Steve Newbold). *Climate Policy* 15(5), pp. 678-679, 2015

[“Incremental CH₄ and N₂O Mitigation Benefits Consistent with U.S. Government’s SC-CO₂ Estimates”](#) (with Alex Marten, Elizabeth Kopits, Charles Griffiths and Steve Newbold). *Climate Policy*. 2014, 15(2), pp. 272-298.

[“Retrospective Evaluation of Costs Associated with Methyl Bromide Critical Use Exemptions for Open Field Strawberries in California,”](#) *Journal of Benefit Cost Analysis*, 5(2), pp. 225-257, 2014.

[“Retrospective Cost Analyses of EPA Regulations: A Case Study Approach,”](#) (with Elizabeth Kopits, Al McGartland, Carl Pasurka, Ronald Shadbegian, Nathalie Simon, David Simpson and Cynthia Morgan), *Journal of Benefit-Cost Analysis*, 5(2), pp. 173-179, June 2014.

[“The Effect of Environmental Regulation on Power Sector Employment: Phase I of the Title IV SO₂ Trading Program,”](#) (with Ann Ferris and Ron Shadbegian), *Journal of the Association of Environmental and Resource Economists*, 1(4), pp. 521-553. 2014.

[“Further Comment on ‘A Rapid Assessment Model for Understanding The Social Cost Of Carbon’”](#) (with Steve Newbold, Charles Griffiths, Chris Moore and Elizabeth Kopits), *Climate Change Economics*, 5 (2) pp. 1-5, 2014.

[“A Rapid Assessment Model for Understanding the Social Cost of Carbon,”](#) (with Steve Newbold, Charles Griffiths, Chris Moore and Elizabeth Kopits), *Climate Change Economics*, 4(1), pp. 1-40, 2013.

[“Incorporating “Catastrophic” Climate Change into Policy Analysis”](#) (with Alex Marten and Elizabeth Kopits), *Climate Policy*, 14(5), pp. 637-664, 2014.

[*Women Breaking In: How Choices Shape STEM Careers*](#) (with Lisa Nagaoka and Mimi Wolverton). Stylus Publishing. December 2014.

[“Improving the Assessment and Valuation of Climate Change Impacts for Policy and Regulatory Analysis”](#) (with Alex Marten, Robert Kopp, Kate Shouse, Charles Griffiths, Elke Hodson, Bryan Mignone, Chris Moore, Steve Newbold, Stephanie Waldhoff and Elizabeth Kopits), *Climatic Change* 117(3), pp. 433-438, 2013.

["Developing a Social Cost of Carbon for U.S. Regulatory Analysis: A Methodology and Interpretation,"](#) (with Michael Greenstone and Elizabeth Kopits). *Review of Environmental Economics and Policy*, 7(1), pp. 23-46, 2013.

“The Energy-Efficiency Gap” (with Heather Klemick) for [*The Encyclopedia of Energy, Natural Resource, and Environmental Economics*](#), (J. Shogren, editor), Elsevier Academic Press, 2013.

“The Social Cost of Carbon: Valuing Carbon Reductions in Policy Analysis” (with Elizabeth Kopits, Charles Griffiths, Alex Marten, Chris Moore and Steve Newbold), in [*Fiscal Policy to Mitigate Climate Change: A Guide for Policymakers*](#), (R. de Mooij, M. Keen, and I. Parry, editors), International Monetary Fund, 2012.

"The Role of Demographic and Cost-Related Factors in Determining Where Plants Locate - A Tale of Two Texas Cities," in [*The Political Economy of Environmental Justice*](#). (Spencer Banzhaf, editor), Stanford University Press, 2012.

“Environmental Justice: Do Poor and Minority Populations Face More Hazards?” (with Wayne Gray and Ron Shadbegian), in [*Oxford Handbook of the Economics of Poverty*](#), (P. Jefferson, editor), University of Oxford Press, 2012.

["Evaluating the Consumer Response to Fuel Economy: A Review of the Literature,"](#) (with Gloria Helfand), *International Review of Environmental and Resource Economics*, 5(2) pp, 103-146, 2011.

[“Location Decisions of U.S. Polluting Plants: Theory, Empirical Evidence, and Consequences”](#) (with Ron Shadbegian), *International Review of Environmental and Resource Economics*, 4(1), pp.1- 49, 2010.

["Effects of Socio-Economic and Input-Related Factors on Polluting Plants' Location Decisions,"](#) *Berkeley Electronic Journal of Economic Analysis and Policy, Advances*, 9(1), 2009.

["Evaluating the Effectiveness of EPA Voluntary Programs: An Examination of the Strategic Goals Program for Metal Finishers"](#) (with Keith Brouhle and Charles Griffiths), *Journal of Environmental Economics and Management*, 57(2), pp. 166-18, 2009.

[“Water Quality Trading in the United States: Trading Programs and One-time Offset Agreements,”](#) (with Cynthia Morgan), *Water Policy*, 10(1), pp. 73-93, 2008.

"The Use of Market-Based Environmental Policies in Latin America," (with Sarah West), in [*Environmental Issues in Latin America*](#) (A. Romero and S. West, editors), Springer Press, 2005.

"The Use of Voluntary Approaches for Environmental Policymaking in the U.S.," (with Keith Brouhle and Charles Griffiths), in [*The Handbook of Environmental Voluntary Agreements*](#), (E. Croci, editor), Kluwer Academic Publisher, 2005.

[*"The Two Part Instrument in a Second Best World,"*](#) (with Don Fullerton), *Journal of Public Economics*, 89(9-10), pp. 1961-1975, September 2005.

[*"Two Generalizations of a Deposit-Refund System,"*](#) (with Don Fullerton), *American Economic Review*, 90(2), pp. 238-242, May 2000.

"The Case for a Two-Part Instrument: Presumptive Tax and Environmental Subsidy," (with Don Fullerton), in [*Environmental Economics and Public Policy Essays in Honor of Wallace E. Oates*](#), (P. Portney and R. Schwab, editors), Edward Elgar, 1999.

Select EPA Publications:

"Retrospective Evaluation of the Costs Associated with Methyl Bromide Critical Use Exemptions for Open Field Strawberries in California," Chapter 3 (pp. 67-114), in [*Retrospective Study of the Costs of EPA Regulations: A Report of Four Case Studies*](#), National Center for Environmental Economics, Office of Policy, EPA 240-F-14-001, 2014.

Honors and Awards:

2017 EPA Science and Technology Achievement Awards, for "Analyzing retrospective cost of EPA regulations" (with Al McGartland, Cynthia Morgan, Carl Pasurka, Ron Shadbegian, Nathalie Simon, David Simpson, and Ann Wolverton). Level III Award.

2017 EPA Science and Technology Achievement Awards, for "Filling an analytic gap in benefit-cost analysis of methane and nitrous oxide emission reductions" (with Alex Marten, Charles Griffiths, Steve Newbold, and Ann Wolverton). Level III Award.

2016 EPA Science and Technology Achievement Awards, for "Developing a Social Cost of Carbon for US Regulatory Analysis: A Methodology and Interpretation" (with Michael Greenstone and Ann Wolverton). Level III Award.

2016 EPA Science and Technology Achievement Awards, for "Incorporating "Catastrophic" Climate Change into Policy Analysis" (with Alex Marten and Ann Wolverton). Honorable Mention.

2016 EPA Science and Technology Achievement Awards, for "A Rapid Assessment Model for Understanding the Social Cost of Carbon" (and associated "Further Comment") (with Ann Wolverton, Steve Newbold, Chris Moore, and Charles Griffiths). Honorable Mention.

