

## RACHAEL L. SHWOM

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### ACADEMIC PREPARATION

- Ph.D. Sociology, Environmental Science and Policy Program Specialization, Michigan State University, December 2008  
M.E.M. Masters of Environmental Management, Resource Economics and Policy, Duke University, September 2001  
B.A. English and Textual Studies, Syracuse University, May 1999

### ACADEMIC POSITIONS

Assistant Professor, Department of Human Ecology, School of Environmental and Biological Sciences, Rutgers University, January 2009 to present

- Associate member, graduate faculties of the School of Planning and Public Policy and the Department of Sociology

### PUBLICATIONS

#### Peer-Reviewed Journal Articles

**Shwom, R.** Forthcoming 2014. "Nonprofit-Business Partnering Dynamics in the Energy Efficiency Field," *Non-Profit and Voluntary Sector Quarterly*.

Cusack, D., Axsen, J., **Shwom, R.**, Hartzell-Nichols, L., White, S., Mackey, K. R. M. Forthcoming 2014 "Review: An Interdisciplinary Assessment of Climate Engineering Strategies." *Frontiers In Ecology and Environment*

**Shwom, R.** and Lorenzen, J. A. 2012. "Changing household consumption to address climate change: social scientific insights and challenges." *WIREs Clim Change*, 3: 379–395. doi: 10.1002/wcc.182 <http://wires.wiley.com/WileyCDA/WiresArticle/wisId-WCC182.html>

Gray, S., **Shwom, R.**, Jordan, R. 2012. "Understanding Factors That Influence Stakeholder Trust of Natural Resource Science and Institutions" *Environmental Management* 49:3:663-674. <http://www.springerlink.com/content/g22w2526828wtk1x/>

**Shwom, R.** 2011. "A middle range theory of energy politics: The U.S. struggle for energy efficient appliances" *Environmental Politics*. 20:5:706–727. <http://www.tandfonline.com/doi/abs/10.1080/09644016.2011.608535>

**Shwom, R.** and Marquett-Pyatt, S. (shared first authorship), Dietz, T., Dunlap, R., McCright,

A., Kaplowitz, S., Zahrar, S. 2011 “Understanding Changing Public Opinion on Climate Change” *Environment: Science and Policy for Sustainable Development* 53:4:38-42.  
<http://www.tandfonline.com/doi/abs/10.1080/00139157.2011.588555>

**Shwom, R.**, D. Bidwell, Dan, A. and Dietz, T. 2010 “Understanding U.S. Public Support of Domestic Climate Change Policies” *Global Environmental Change* 20: 472-482.  
<http://www.sciencedirect.com/science/article/pii/S0959378010000099>

**Shwom, R.** 2009. “Strengthening Sociological Perspectives on Organizations and Environment” *Organization and Environment* 22:3:271-292.  
<http://oae.sagepub.com/content/22/3/271.short>

**Shwom, R.**, Dietz, T.M., Dan, A. 2008. “The Effects of Information and State of Residence on Climate Change Policy Support” *Climatic Change* 90:4:343-358.  
<http://www.springerlink.com/content/5g5073635215m32w/>

Dietz, T.M., Dan, A., and **Shwom, R.** 2007. “Support for Climate Change Policy: Social Psychological and Social Structural Influences” *Rural Sociology* 72:2:185-214.  
<http://onlinelibrary.wiley.com/doi/10.1526/003601107781170026/abstract>

Dietz, T.M., Fitzgerald, A., **Shwom, R.**, 2005. "Environmental Values" *Annual Review of Environment & Resources*. 30:12; 1-38.  
<http://www.annualreviews.org/doi/abs/10.1146/annurev.energy.30.050504.144444>

#### Peer-Reviewed Book Chapters

McCright, A.M., and **Shwom, R.** 2010. “Newspaper and Television Coverage.” Pp. 405-413 in *Climate Change Science and Policy*, edited by Stephen H. Schneider, Armin Rosencranz, Michael D. Mastrandrea, and Kristin Kuntz-Duriseti. Washington, D.C.: Island Press.  
<http://islandpress.org/ip/books/book/islandpress/C/bo8030850.html>

**Shwom, R.**, Brechin, S., and McCright, A. “Public Opinion and Attitudes on Climate Change.” in “The Sociology of Climate Change” (editors Riley Dunlap and Robert Brulle) accepted for press at Oxford University Press (under revision).

#### Articles Under Review

O’Neill, K., **Shwom, R.**, and Dowd, J. “Extraordinary and Ordinary watersheds: Theorizing U.S. watershed governance networks” submitted to *Environmental Management*

Jordan, R., **Shwom, R.**, Gray, S. and Nucci, M. “Bridging Science Education and Science Communication: Putting Trust, Authenticity, and Motivation in Context” submitted to *Journal of Research in Science Teaching* submitted 1/2014

Bruce, A. and **Shwom, R.** “Friend or Foe? What do non-profits consider when deciding to partner with business?” submitted to *Environmental Politics*

## Peer-Reviewed Conference Proceedings

Shwom, R. and Taylor, J. 2006. "Sociological Perspectives on Energy Efficiency Program Efforts to Encourage the Diffusion of Automated Technologies in the HVAC Technician Industry" *Proceedings of ACEEE 2006 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, CA.

[http://www.eceee.org/conference\\_proceedings/ACEEE\\_buildings/2006/Panel\\_7/p7\\_21/pape](http://www.eceee.org/conference_proceedings/ACEEE_buildings/2006/Panel_7/p7_21/pape)

Wilkinson, R., Wolf, G., Kost, W., and Shwom, R. 2006. "An Analysis of the Energy Intensity of Water in California: Providing a Basis for Quantification of Energy Savings from Water System Improvements" *Proceedings of ACEEE 2006 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, CA. <http://www.aceee.org/proceedings-paper/ss06/panel12/paper14>

Jacobs, P.J., Higgins, C., Shwom, R., 2004. "Upstream Strategies to Improve Commercial Rooftop Unit In-field Performance." *Proceedings of ACEEE 2004 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, CA, 2004.

[http://www.eceee.org/conference\\_proceedings/ACEEE\\_buildings/2004/Panel\\_6/p6\\_18](http://www.eceee.org/conference_proceedings/ACEEE_buildings/2004/Panel_6/p6_18)

Shwom, R., 2003. "Three Energy-Efficiency Program Uses of Commissioning: An Analysis of Strengths and Weaknesses" *Proceedings of the 11<sup>th</sup> National Conference on Building Commissioning*, Palm Springs, CA.

Lowinger, M., Rouleau, D., Holloman, B., Linn, J., Shwom, R. 2002. "Light Commercial Air Conditioning: Moving the Market Towards High Efficiency." *Proceedings of ACEEE 2002 Summer Study on Energy Efficiency in Buildings*, Pacific Grove, CA.

<http://aceee.org/proceedings-paper/ss02/panel06/paper16>

## Articles in Draft

Shwom, R. and Payne, C. "Public Participation and Norm Formation for Adaptive Governance of Solar Radiation Management"

Shwom, R., Oberg, A., Dowd, J. and O'Neill, K. "Community Governance Network Structure and Function in an Ordinary Watershed: An Exploratory Study of the Rahway River Watershed"

Shwom, R., Bidwell, D., Dietz, T., Dan, A. "Deliberation Lite: Do People Change their Opinions Through On-line Conversations?"

Shwom, R. and Lorenzen, J. "Social Institutions, Consumption Impacts, and Opportunities for Making Change Happen"

Shwom, R. Baralt, L. and MacKendrick, N. "Parental Status and Environmental Behaviors: Are mom's more green?"

Shwom, R., Oberg, A., Boschan, J. and Greene, N. "Assessing Tactical Choice and Outcomes in Environmental Movement Organizations: What do We Know?"

## **GRANTS**

PI with co-PI Cara Cuite and co-investigators William Hallman, Karen O'Neill, Steve Decker, Chris Obropta, and David Robinson. National Oceanic and Atmospheric Administration/New Jersey Sea Grant (January 2014 to May 2015). "Best Practices in Coastal Storm Risk Communication" (\$200,000)

PI with Co-PI Rebecca Jordan. National Socio Environment Synthesis Center: Education Theme Integrating Learning across the Social and Natural Sciences (2013-2015) "A Socio-Ecological Framework for Understanding Climate Change Mitigation and Adaptation" (\$66,000)

Consultant on developing survey. P.I. Amy Fitzgerald. Insight Development Program. Social Science and Humanities Research Council (2012-2014). "An exploration of the relationship between intimate partner violence and animal abuse in Canada and its impact upon help seeking behaviour among abused women." (\$20,222)

Sub-contractor with PI Clint Andrews. U.S. Department of Energy (2011-2012). "Greater Philadelphia Innovation Cluster for Energy Efficient Buildings: Subtask - Interaction of Human Behavior and Building Performance"(\$36, 000).

Co-investigator with PIs Joan Ehrenfeld and Karen O'Neill. National Science Foundation ULTRA-Ex Grant (2009-2014). "Connectivity Along Urban rivers: A Keystone Process for Urban Ecosystems" (\$290,000).

PI with Co-PI, Tom Dietz. National Science Foundation (2007-2011). "Between State and Profit: An Analysis of Changes in Nonprofit Interorganizational Networks and Tactics in the Energy Efficiency Field 1973-2006" (\$175,000).

## **AWARDS**

Dissertation Initiative for the Advancement of Climate Change Research, Selected Participant, DISCCRS VI Symposium. La Foret Conference Center, Colorado Springs, CO (Fall 2011)

INFORMS/Organization Science Dissertation Proposal Competition Finalist (Fall 2008)

Michigan State University Dissertation Completion Fellowship (Fall 2008)

Michigan State University Environmental Science and Policy Program Fellowship (Fall 2006 to Summer 2008)

Honorable mention American Association for the Advancement of Sciences, Student Poster Competition, Social Sciences Section, "Deliberation Lite: How Does Feedback Influence Public Climate Change Policy Support?" with David Bidwell (February, 2007)

National Academies Christine Mirzayan Science and Technology Policy Fellowship, National Research Council, Committee on Human Dimensions of Global Change, Washington, DC. (Fall 2006)

## INVITED PRESENTATIONS

*Rutgers Energy Institute Policy Seminar Series, March 7, 2014*

“Governing Risky Technologies: The Case of Climate Engineering”

*Sustainable Consumption Research and Action Initiative Conference “The Future of Consumerism and Well-being in a World of Ecological Constraints”, June 13, 2013, Clark University, Worcester, MA*

“The “Good Mother”: How Social Institutions Structure Environmental Consumption”

*Climate Mind and Behavior Symposium, Garrison Institute, June 10, 2013, Garrison, NY*

“The “Good Mother”: How Social Institutions Structure Environmental Consumption”

*GREEN Costa Rica Rutgers Study Abroad Program, May 3, 2013, New Brunswick, NJ*

“The Human-Energy System in Costa Rica”

*Legal and Policy Pathways for Energy Innovation, University of Minnesota Law School, April 24<sup>th</sup>, Minneapolis, MN*

"Learning from Energy Efficiency: Coordinating Regulatory and Non-Regulatory Approaches for Advancing Technology Innovation Goals"

*Sustainable Fuels IGERT Speakers Series, Rutgers University, March 27, 2013, New Brunswick, NJ*

“What Does an Energy Social Scientist Do?”

*National Environment and Climate Change Survey Workshop, Michigan State University, April 2012, East Lansing, MI*

Participant in round-table discussions identifying survey research needs and ability to link to other data sources.

*University of Colorado- Boulder, Renewable and Sustainable Energy Institute and Department of Sociology - “Big Energy Series”, March 2012, Boulder, CO*

"Change Is Inevitable, Except from a Vending Machine: The Dynamics of U.S. Energy Efficiency Politics and the Case of Residential Appliances."

<http://www.scivee.tv/node/46369>

*Garrison Institute, Climate, Mind and Behavior Symposium, February 2012, Garrison, NY*

“Prioritizing the Behavioral Wedge - Scaling Up to Get a Better Look”

[http://www.garrisoninstitute.org/index.php?option=com\\_content&view=article&id=989:rachael-shwom&catid=350&Itemid=1445](http://www.garrisoninstitute.org/index.php?option=com_content&view=article&id=989:rachael-shwom&catid=350&Itemid=1445)

*Washington State University’s Foley Institute’s Symposium on Structural Human Ecology, October 2011, Pullman, WA.*

“Social Theory and Energy Transitions”

*Rutgers University, Initiative on Climate and Society, Communicating About Climate Change: Research and Practice, March 2011, New Brunswick, NJ*

“Facts and Values in Climate Change Public Opinion”

<http://www.csp.rutgers.edu/events/past-events/105-communicating-climate-change>

*Sustainable Consumption Research Action Initiative’s “Socio-technical Transitions, Social Practices, and the New Economics: Meeting the Challenges of a Constrained World”*

April 2011, Princeton, NJ

Discussant on session on “Social Practices”

*American Sociological Association Annual Meeting, August 2010, Atlanta, GA*

“Understanding Organizational Processes in Ecological Modernization: Energy Advocacy Organizations’ Embeddedness and Partnering with Business”  
*Michigan State University, Climate Change Vulnerabilities and Opportunities: Michigan and Beyond*” April 2010, East Lansing, MI

“Understanding public opinion formation: Why do people reject or support climate change policies?”  
[http://espp.msu.edu/climatechange/symsession-shwom\\_rachael.php](http://espp.msu.edu/climatechange/symsession-shwom_rachael.php)  
*Behavior Energy and Climate Change*, November 2009. Washington, D.C.

“Green Splotches: Exploring Uneven Green Development in New Jersey”  
<http://www.stanford.edu/group/peec/cgi-bin/docs/events/2009/becc/presentations/2C%20Shwom.pdf>  
*Sustainable Consumption Research and Action Initiative*, October 2009, Worcester, MA

“Social Institutions, Consumption Impacts, and Opportunities for Change”  
*Behavior, Energy and Climate Change*, November 2008, Sacramento, CA

“Friend or Foe? The Evolution of Efficiency Advocates and Industry Relations 1973 to 2006”  
*Climate Change in the Great Lakes Region: Decision-Making Under Uncertainty*, March 2008

“What do Michiganders Think about Climate Change?”  
*Michigan K-12 Educators Workshop on Climate Change*, April 2007

“Understanding Climate Change: Insights from the Social Sciences”  
*Climate Change in the Great Lakes Region: Decision-Making Under Uncertainty*, March 2007  
 Poster Session, “What’s in the Public’s Mind? Rationales for Supporting or Rejecting Climate Change Policies” with Amy Dan, David Bidwell, and Thomas Dietz.

*American Association for the Advancement of Science*, February 2007, San Francisco  
 Poster for the Economic and Social Sciences Section  
 “Why does the Public Reject Climate Change Policies?” and "Deliberation Lite: How Does Feedback Influence Public Climate Change Policy?" with Amy Dan, David Bidwell, and Thomas Dietz

*Society for Human Ecology*, 2006, Bar Harbor  
 Session on Climate Change and Society  
 “The Nitty Gritty of Integrating Human and Natural Factors in Research: The Case of Human Dimensions of Global Change”

*American Sociological Association*, August 2006, Montreal  
 Applied and Clinical Sociological Research Session  
 “Power and the Politics of Information: A Critical Review of Globalization Measurement and Implications” with Brendan Mullan and Colleen Wilson

*American Council for an Energy Efficient Economy (ACEEE) Summer Study on Energy Efficient Buildings*, August 2006, Pacific Grove, CA  
 Session on Human Dimensions of Energy Use  
 “Sociological Perspectives on Energy Efficiency Program Efforts to Encourage the Diffusion of Automated Technologies in the HVAC Technician Industry”

*American Association for the Advancement of Science*, February 2006, St. Louis  
 Poster for the Economic and Social Sciences Section  
 “Who Supports Climate Change Policies?” with Amy Dan and Thomas Dietz

*American Sociological Association*, August 2005, Philadelphia  
 Environment, Society and Technology Section Roundtable  
 “Social Structural & Social Psychological Predictors of Climate Change Policy Support” with Amy Dan and Thomas Dietz

## **TEACHING**

### *Undergraduate*

Innovative Environmental Solutions (Spring 2013)  
Energy and Society (Fall 2009, 2010, 2011, 2012)  
International Environmental Policy (Fall 2010, Spring 2011)  
School of Arts and Sciences Signature Course on Energy & Climate Change (Fall 2011, Fall 2012)  
Politics of Environmental Issues (Spring 2009)

### *Graduate*

Human Dimensions of Environmental Change (Spring 2010)  
Organizing for Change: Theories of Civil Society Organizations in Environmental Management (Spring 2012)

## **GRADUATE STUDENTS**

Jessica Kelly, Department of Geography, Rutgers University

Justyna Nicinska, Department of Political Science, Rutgers University-Newark  
“Religious environmental groups and Global Climate Change Politics in the United States and the United Kingdom: What motivates Activism?” Dissertation defended 8/21/2013.

Ariele Baker, Department of Anthropology, Rutgers University

Danette Moulet, Department of Energy and Materials Research Group (EMRG)  
School of Resource and Environmental Management, Simon Fraser University

Elizabeth Hewitt, Bloustein School of Public Policy, Rutgers University  
“Leveraging Organizational Dynamics in Buildings to Help Change Energy Use Behaviors”

## **SERVICE**

### *To Profession:*

Panel Reviewer for National Science Foundation

Society for Human Ecology, Board Member (January 2014 - )

Garrison Institute, Leadership Council of the Climate, Mind, and Behavior Program (January 2013-2015).

Department of Energy, Energy Information Administration Advisory Committee (January 2013 to January 2015)

American Sociological Association Task Force on Climate Change (Fall 2011 – present)

External Reviewer for Environmental Protection Agency STAR Fellowships, 2011

External Reviewer for National Science Foundation, Decision Risk and Management Sciences

Organizing Panelist for Behavior Energy and Climate Change Conference, 2009

Reviewer for *Social Forces*, *Sociological Forum*, *Sociological Quarterly*, *Social Problems*, *Journal of Environmental Psychology*, *Environmental Conservation*, *Organization and Environment*, *Environmental Practice*, *International Journal of Public Opinion Research*, *Global Environmental Change*, *Rural Sociology*, *Human Ecology Review*, *Climatic Change*, *Behavior and Environment*, and *Ecological Economics*

*To University:*

Committee Member, George H. Cook Honors Program (Fall 2013-2015)

Co-convener with Marjorie Kaplan of Climate Change Education Workshop Planning Committee (Summer – Fall 2013)

Review Committee for Rutgers Internal Faculty Research Grant Program (Fall 2011)

Rutgers University, Climate and Environmental Change Initiative, Climate Research Symposium Technical Program Committee (Spring 2012)

Internal Advisor, Rutgers Climate and Society Initiative (since Fall 2012)

Outreach Committee Member, Rutgers Energy Institute (Since Spring 2011)

“Climate Vulnerability” Position, Search Committee, Department of Human Ecology 2010-2011

Department of Human Ecology, Organizer of Brown Bag Series on Climate Change, 2010-present

### **OTHER WORK EXPERIENCE**

Commercial Program Manager, January 2003 – August 2004

Commercial and Residential Program Associate, October 2001-December 2002

*Consortium for Energy Efficiency*, 98 North Washington St., Suite 101, Boston MA

Budget Analysis Intern, Summer 2000

*National Council for Science and Environment*, 1707 H Street, Ste. 200, Washington, DC

Policy Analysis Intern, Summer 1998

*National Center for Environmental Decision Making Research*, Knoxville, TN