

March 7, 2017

RE: Executive Director, Hanley Sustainability Institute

Isaacson, Miller
Jackie Mildner, Natalie Leonhard, and Brian Nwachukwu
Isaacson, Miller
1300 19th Street, N.W. Suite 700, Washington, DC 20036

Dear Search Committee,

I recently became aware of the Executive Director position at the Hanley Sustainability Institute (HSI) through an email and phone exchange with Brian Nwachukwu, which I found most intriguing. I am a professor at the University of Minnesota in the interdisciplinary fields of Sustainable Systems Management, Environmental Sciences, Policy and Management, and International Business, where I also direct an academic center focused on whole enterprise sustainability. While the work we have created at the NorthStar Initiative for Sustainable Enterprise (NiSE) has provided interdisciplinary insights into new and improved frameworks for scaling sustainability across production-consumption networks, I am increasingly interested in building upon my educational, research and administrative experiences within a larger and more impactful setting. The strong combination of past investments made at HSI, the thoughtful approach to its integration across the University, and an opportunity to work directly with University leadership to grow sustainability education, research and outreach appears to provide such a platform for making change both inside and outside the academy.

If provided the opportunity, I would seek to leverage UD's commitment to sustainability leadership toward the development of programs and initiatives that position UD students, faculty and external partners at the forefront of national and international efforts facilitating transitions to sustainable economies and communities. Success will undoubtedly require unprecedented integration across science, engineering, business and public policy, but it will also require new ways of interacting with nature and people which may best be approached through the arts, faith and social sciences helping to makes sense of the world around us. While no one person, or even one institution, could be expert enough in every field to solve the world's most vexing sustainability challenges, I am confident that my skills and experiences position me well to lead the talented faculty, staff and students of UD toward this vision. Specifically, I bring: (1) an extensive body of top-tier research that explicitly spans technical, economic and behavioral domains, (2) key relationships across corporate, NGO, governmental and academic communities influential to sustainability's progress, and (3) leadership capabilities to help implement and develop next generation sustainability education, research and engagement.

I hold degrees in finance (B.S., U. Colorado, Leeds – via Santa Clara University), business administration (M.B.A., Penn State, Smeal) and environmental sciences (Ph.D., Penn State, Forest Resources). Following the completion of my Ph.D., I worked for GTE Wireless (prior to mergers ultimately forming Verizon), leading market planning and analysis projects and contributing to the development of national quantitative models addressing customer churn and pricing strategy. I joined the University of Minnesota (UMN) in 1999 (tenured in 2005; Full Professor in 2016), with faculty affiliations in

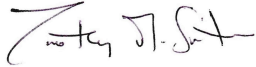
Bioproducts & Biosystems Engineering (BBE), Environmental Sciences, Policy & Management (ESPM), International Business (IBUS), and Innovation Studies (IS). I have also held faculty appointments at INCAE Business School, Costa Rica (Sustainable Development, 2007 & 2017) and Wageningen University, The Netherlands (Sustainable Entrepreneurship Chair, 2011). In addition to teaching and research duties, in December 2009, I launched and directed for eight years the NorthStar Initiative for Sustainable Enterprise (NiSE) at UMN's Institute on the Environment. NiSE is a network of scholars and practitioners focused on improving our understanding of sustainability challenges in production and consumption systems, developing decision tools to effectively act on these systems, and accelerating innovation and implementation. While stepping down from day-to-day directorship in February 2017, the initiative under my direction has helped secure more than \$50 million in total research funding, with nearly \$8.5 million directed to the University of Minnesota. The initiatives supported by NiSE are unique and innovative within the academic arena, in that they are stimulated by academic-practitioner dialogue and implemented through highly integrative, transdisciplinary "outcome-oriented" scholarship. Through these experiences, I have built ongoing relationships with major fortune 500 companies, influential international NGOs and governmental officials. I would build from these efforts at UD HSI to expand the reach and impact of HSI investments.

My personal scholarly research focuses largely on socio-technical approaches to assessing environmental performance associated with technology adoption, private governance of sustainability, and the integration of sustainability in operational decision-making. Given this breadth, my work has been published in top-tier journals across the multiple fields of management, public policy, and environmental sciences. Many of which are coauthored with postdoctoral fellows, graduate students and undergraduate students, of whom I have advised and mentored, and who have since gone on to significant positions in business and academia. With regard to teaching and curricular development, I have served on the faculty leadership councils shaping two interdisciplinary sustainability-focused undergraduate degree programs, Environmental Sciences, Policy & Management and Sustainable Systems Management, and have served on the faculty board for the Sustainability Minor program. I have taught courses in systems thinking, renewable energy and materials, sustainable development and corporate sustainability for the University of Minnesota, INCAE Business School and CATIE Graduate School, Costa Rica and Wageningen University, Netherlands. Student evaluations of my teaching are strong, and I have found great satisfaction in developing innovative extensions to case study and simulation pedagogies in many of these experiences. Administratively, I have served in a leadership and advising capacity at the Institute on the Environment since its inception and co-chair the campus-wide sustainability committee, along side of the Vice President of Facilities, where we implemented key energy management programs, ASHEE STARS reporting and living laboratories across campus. Each of these perspectives would be drawn upon at UD, as HSI's growth will be dependent upon the mutual understanding and engagement of key stakeholders across campus.

These efforts have been recognized through a number of awards and honors. Notably, I have been named/awarded: President's Engaged Scholar Award, Richard C. Newman Community Impact Award, UMN/CFANS Alumni Distinguished Faculty Award, AT&T Industrial Ecology Fellow, IonE Resident Fellow (first cohort), Marketing Science Institute Practitioner-Academic Collaborative Research award, Institute for the Study of Business Markets Fellow, and USDA National Needs Doctoral Fellow. In addition, I have advised the Environmental Protection Agency on sustainability standards and labels, the General Services Administration through their Greening the Federal Government Roundtable, the National Research Council's Committee on Certification of Sustainable Products and Services, the American National Standards Institute on sustainability standards in education, and have consulted numerous companies and organizations on supply chain sustainability and product-based policies.

I believe I could bring a complementary combination of interests, enthusiasm and practicality to lead HSI. I look forward to the opportunity to talk with you further and learning more about this exciting position. I can most easily be reached by email (tim.smith@incae.edu). Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy M. Smith". The signature is fluid and cursive, with the first name being the most prominent.

Timothy M. Smith
Professor & Founder
Visiting Professor of Sustainable Development, INCAE Business School

TIMOTHY M. SMITH

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Biographical Summary

Dr. Timothy M. Smith is director of the NorthStar Initiative for Sustainable Enterprise at the University of Minnesota's Institute on the Environment; and professor of sustainable systems management and International Business. His work focuses on policy and market adoption of technologies that enhance environmental performance, industrial ecology, public and private governance of sustainability, and sustainability systems modeling in decision-making. Dr. Smith has held the rotating chair in sustainable entrepreneurship at Wageningen University, Netherlands, served on the faculty at INCAE Business School in Costa Rica, and teaches International Business at the Carlson School of Management at UMN. He is a former AT&T Industrial Ecology Fellow and has advised the Environmental Protection Agency, General Services Administration, National Research Council's Committee on Certification of Sustainable Products and Services, and numerous companies and organizations on supply chain sustainability and product-based policies.

Academic Experience

UNIVERSITY OF MINNESOTA – Twin Cities Campus – Minneapolis/St. Paul, MN – Jul 99 - Present

- PROFESSOR, Sustainable Systems Management, Bioproducts & Biosystems Engineering - Sep 16 - Present
- DIRECTOR, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment - Sep 09 - Present
- ASSOCIATE PROFESSOR, Bioproducts & Biosystems Engineering - Sep 05 – Aug 16
- DIRECTOR, Center for Sustainable Enterprise Development, CFANS - Jan 08 – Aug 09
- ASSISTANT PROFESSOR, Bioproducts & Biosystems Engineering - Jul 99 – Aug 05
- DIRECTOR, Forest Products Management Development Institute, CNR - Sep 04 – Jun 07
- GRADUATE FACULTY APPOINTMENTS:
 - Bioproducts & Biosystems Science, Engineering and Management – College of Food, Ag. & Nat Resource Sciences
 - Natural Resources Science & Management, – College of Food, Ag. & Nat Resource Sciences
 - Liberal Studies & Innovation Studies, Continuing Education
- FACULTY AFFILIATIONS:
 - International Business, Carlson School of Management, UMN
 - Faculty Scholar, Center for Transportation Studies, UMN
 - Resident Fellow, First Cohort, Institute on the Environment, UMN

WAGENINGEN UNIVERSITY AND RESEARCH CENTER – Wageningen, Netherlands - May 11 – Dec 11

- ROTATING CHAIR (2011), Sustainable Entrepreneurship

INCAE BUSINESS SCHOOL – Alajuela, Costa Rica

- VISITING PROFESSOR, Sustainable Development - Jan 07 – Jun 07
- VISITING PROFESSOR, Sustainable Supply Chain Management – Jan 17 – Jun 17

THE PENNSYLVANIA STATE UNIVERSITY – State College, PA – Sep 95 – Jun 98

- USDA NATIONAL NEEDS FELLOW, Forest Resources, Agricultural & Biological Engineering

Education

THE PENNSYLVANIA STATE UNIVERSITY, State College, PA

- Ph.D., Forest Resources (Marketing & Economics) – May 1998
- M.B.A., Management Science & Information Systems, Marketing – May 1996

UNIVERSITY OF COLORADO – Boulder, CO

- B.S., Finance (Business Administration) – May 199

Awards & Honors

UNIVERSITY OF MINNESOTA AWARDS & HONORS

- President's Collegiate/System-Wide Community-Engaged Scholar Award, UMN (2016)
- Richard C. Newman Community Impact Award, UMN CFANS (2014)
- Alumni Society Distinguished Faculty Award, UMN CFANS (2013)
- First Cohort, Resident Fellow, Institute on the Environment, UMN (2009-present)
- President's Distinguished Faculty Mentor, Honors and Multicultural Affairs, UMN (2006)
- Recognized by Provost and Board of Regents for contributing to Community-University Partnerships - Experiment in Rural Cooperation, UMN (2002).

EXTERNAL AWARDS & HONORS

- Selected Expert, Governance Committee of U.S. Environmental Protection Agency, Pilot Testing EPA Guidelines for Environmental Performance Standards and Ecolabels (2015-2016)
- Lasswell Prize (with M. Fischlein), given annually to the article published in Policy Sciences that contributes most to theory and practice (2014).
- Invited Expert, Greening the Federal Government Roundtable, GSA (2010-2011)
- Invited Expert, Global CEO Forum project on sustainable packaging (2010).
- Invited Expert, National Research Council's Committee on Certification of Sustainable Products and Services (2010).
- Academy of Management, Organizations and the Environment "Best Reviewer" Award (2010)
- Young Energy Pioneer, Global Energy Basel, Switzerland (2008)
- Academy of Management's Best Dissertation Award in Organizations and the Natural Environment, Awarded to S. Molina (T. Smith, Major Advisor) (2007)
- AT&T Industrial Ecology Fellow, AT&T Foundation (2006)
- Finalist, MSI/JMR Practitioner-Academic Collaborative Research Competition (2005)
- ISBM Doctoral Fellow - finalist of the Institute for the Study of Business Markets Annual Doctoral Dissertation International Competition (1997)
- USDA National Needs Doctoral Fellow (1995-1998)

Research

CURRENT RESEARCH PROJECTS

- PI/Director - NorthStar Initiative for Sustainable Enterprise: User-Inspired Scholarship – UMN Foundation Gifts & External Sales \$490,000e – Jun 11 – Present
- PI (with E. Wilson) - INFEWS/T3: Reducing Household Food, Energy and Water Consumption: A Quantitative Analysis of Interventions and Impacts of Conservation – National Science Foundation (Michigan Technological University, Lead Institution) \$2,983,358 (Smith, \$519,000) – Oct 16 – Sep 21
- Co-PI (with D. Pennington) – Influence of Science-Based Standards and Certifications on Regional Social Investing in Central America – Rockefeller Foundation (in collaboration with Stanford University, WWF & Coca-Cola Co.) \$80,000 – Oct 16 – Jun 17.
- PI (with D. Pennington, A. Ramaswami, S. Shekhar) – Big Data Transparency in Global Food Supply – UMN Office of the Vice President of Research, Grand Challenge Exploratory Research & International Enhancement Initiatives \$96,000 – Sep 16 – Aug 18
- Co-PI (with J. Schmitt) - Smithfield Foods Organizational Life Cycle Assessment (OLCA): Supply Chain CO2 and Water Impacts – Smithfield Foods \$90,000 – Apr 16-Mar 17
- CO-PI (with J. Schmitt) – Supply Chain Water Risks of Niche Agricultural Inputs – Aveda/Estée Lauder Companies \$25,000 – Jun 16-Dec 16
- PI - FoodS³: Food Systems Supply-Chain Sustainability – Institute on the Environment \$450,000 – Jul 14 – Jun 17
- PI (with D. Becker & C. Moseley) - Regional Bioenergy Policy Effectiveness: Compatibility, Innovation, and Coordination across the Supply Chain - USDA AFRI \$349,996 – Jan 13 - Jun 16

- Co-PI (with E. Wilson) - Sustainable Energy Systems: Control Systems and Sensors to Link Rural Renewables and Demand for Sustainable Industrial Energy in Food Processing Systems - MNDrive Interdisciplinary Research Initiative \$500,00 (Smith, \$117,466)- Jul 14-Jun 16
- Co-PI (with N. Jordan) - Building Community-based Bioeconomies: Advancing Production, Resource Conservation, and Rural Community Vitality - MNDrive Interdisciplinary Research Initiative \$499,995 (Smith, \$93,768)- Jul 14-Jun 16
- PI (with V. Bhandari) - Implementation and the policy paradox: Conversations around Combined Heat and Power – Institute for Advanced Study \$6840 – Mar 15-Apr 16

COMPLETED RESEARCH PROJECTS

- Co-PI (with S. Sarkinen & M. Wolcott) - Northwest Advanced Renewables Alliance - USDA NIFA \$40,000,000 (Smith, \$421,301) – Aug 11 - Jul 16
- Co-PI (with L. Baker) - Waste Not: Closing the Loop on Organic Wastes - MNDrive Global Food Ventures \$672,972 (Smith, \$109,992)- Jul 14-Jun 16
- Co-PI (with P. Huelman) – Residential Ground Source Heat Pumps: A Comprehensive Assessment of Performance, Emissions, and Economics - MN Department of Commerce CARD \$780,816 (Smith \$100,218) – Sep 11 – Dec 15
- PI - NorthStar Initiative for Sustainable Enterprise, Phase I - Institute on the Environment, UMN \$1,200,000 – Jul 09 – Jun 14
- Co-PI (with E. Wilson) - Innovating for Sustainable Electricity Systems: Integrating Variable Renewables, Regional Grids, and Distributed Resources - Initiative for Energy and the Environment, UMN \$350,000 (Smith, \$120,000) – July 12 – Jun 14
- PI - Supply Chain Indicator Assessment Tool - Global Environmental Management Initiative \$89,900 – Aug 13 – Jul 13
- PI - Bioenergy Hotspot Assessments and Policy Integration - USDA McStennis \$30,000 - Oct 12 – Jun 13
- PI - Material Cycling, A focus on Plastics - Hennepin County Environmental Services, \$25,000 - Jan 12 – Dec 12
- PI: Identifying Sustainability Performance Drivers - The Sustainability Consortium, \$100,000 – Aug 11 – July 12
- Co-PI (with S. Benjaafaar) - Decarbonizing the Last Mile: Leveraging Social Media and Mobile ICT to Mitigate the Carbon Footprint of Online Shopping - Center for Transportation Studies, UMN \$25,000 (Smith, \$12,500) – Feb 11 – Jun 11
- Co-PI (with J. Davidson): Solar at Night: Solar Biomass Gasification - Initiative for Energy & the Environment, UMN \$750,000 (Smith, \$70,000) – Jul 09 – Jun 11.
- PI - Institute on the Environment Resident Fellow - Institute on the Environment \$60,000 - Jul 09 – Jun 12.
- Co-PI (with S. Taff,) - Low-carbon Fuel Study for Minnesota - MN Dept. of Commerce \$200,000 (Smith, \$45,000) – Aug 08 – Jun 10
- PI - Center for Sustainable Enterprise Development - BBE/CFANS \$50,000 – Jan 08 – Jun 09
- PI - Economic and Environmental Assessment of Emerging Ethanol Production Systems - Minnesota Pollution Control Agency \$30,000 – Jan 07 – Dec 07
- PI: An Integrated Approach to Communicating Environmental Assessment Information In the Industrial Supply Chain - AT&T Foundation \$25,000 - Jan 07 – Dec 07
- Co-PI (with Wilson, E.) - Institutional Considerations for Greenhouse Gas Reductions: Survey and Assessment of Conservation Improvement Programs in Minnesota - Consortium on Law and Values in Health, Environment & the Life Sciences \$32,850 - Jan 06 – Dec 06
- PI - A Systems Approach To Environmental Marketing Communications Effectiveness - North American Insulation Manufacturers Association \$19,980 - July 06 – Dec 06
- PI - Green Building Rating Systems: A Comparison Of The LEED And Green Globes Systems In The US - Western Council of Industrial Workers \$34,688 – Jul 06 – Jun 07
- Co-PI (with Huelman, P., Schmidt, E.): Innovative Technologies For Affordable Housing - Coalition for Advanced Housing and Forest Products Research \$80,000 (Smith \$15,000) – Jan 04 – Dec 04
- Co-PI (with Tschirner, U.): Yield Improvement and Energy Savings Using Phosphonates as Additives in Kraft Pulping. Department of Energy (AF&PA), \$496,933/\$130,000 (Awarded January 2002).
- PI - The Effect of Phytosanitary Standards on Wood Packaging Users - USDA \$ \$58,714 - Jan 02 – Dec 02
- PI - Minnesota Industries of the Future Program. DOE/MN DOC/IRRRA \$171,700 - Jan 02 – Dec -4
- PI - Market Perceptions of Rural Residential Heating Systems - MN DNR \$26,000 – Jan 00 – Dec 00

Publications

Description of multi-author Contributions: a) contributed substantially to the conception and design of the study; b) contributed to the acquisition of data; c) contributed to the analysis and interpretation of results; d) drafted major portions and provided critical revision; e) provided final approval of the version to publish; f) corresponding author. Underlined denotes advised student author.

REFEREED JOURNAL ARTICLES

1. Chen, L., Pelton, R.E.O., Smith, T.M. 2016. Comparative life cycle assessment of fossil and bio-based polyethylene terephthalate (PET) bottles, *Journal of Cleaner Production*, Volume 137, 20 November 2016, Pages 667-676, DOI:10.1016/j.jclepro.2016.07.094 (a, c, d, e).
2. Pelton, R.E.O., Li, M., Smith, T.M. 2016. Optimizing Eco-Efficiency Across the Procurement Portfolio, *Environmental Science & Technology*, 50 (11), 5908-5918, DOI: 10.1021/acs.est.5b06289 (a, c, d, e, f).
3. Eryilmaz, D., Smith, T.M., Homans, F. 2016. Price responsiveness in retail and wholesale markets: Implications for demand response in Midwest electricity markets, *Energy Journal* 38 (1) (a, c, d, e).
4. Nickerson, T.A., Hathaway, B.J., Smith, T.M., Davidson, J.H. 2015. Economic assessment of solar and conventional biomass gasification technologies: Financial and policy implications under feedstock and product gas price uncertainty, *Biomass and Bioenergy*, Volume 74 (3): 47-57 (a, c, d, e).
5. Pelton, R.E.O., Smith, T.M. 2015. Comparative Streamlined LCA Approaches for Green Supply Chain and Procurement Decision Making, *Journal of Industrial Ecology* 19(3) 427-440; (a, c, d, e).
6. Fischlein, M., Smith, T. 2013. Revisiting renewable portfolio standard effectiveness: policy design and outcome specification matter, *Policy Sciences*, Volume 46, No. 3, pp 277-310; (a, c, d, e).
7. Smith, T.M. 2013. Climate change: Corporate sustainability in the supply chain, Feature Article, *Bulletin of the Atomic Scientists*, 69(3) 43–52.
8. Suh, K., Smith, T., Linhoff, M. 2012. Leveraging Socially Networked Mobile ICT Platforms for the Last-Mile Delivery Problem, *Environmental Science & Technology* 46(17): 9481-90; (a, b, d, e, f).
9. Suh, K., Suh, S., Smith, T. 2011. Implications of corn prices on water footprints of bioethanol, *Bioresource Technology* 102 (7): 4747-4754; (c, d, e).
10. Smith T. and M. Fischlein. 2010. Rival Private Governance Networks: Competing to define the rules of the game for environmental and social performance, *Global Environmental Change* 20 (3): 511–522; (a, b, c, d, e, f).
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12. Smith, T.M., Miller, K., Lindenberg, J. 2009. Sustainable Biofuel Standards and Certification. *Swords and Ploughshares*, Vol. XVII , No. 2: 26-31; (a, b, c, d, e, f).
13. Molina, S. and Smith, T. 2009. Exploring the use of LCA-based information in corporate communications, *International Journal of Life-Cycle Assessment* 14(2): 184-194; (a, b, c, d, e, f).
14. Wilson, E.J., Plumber J., Fischlein, M., and Smith, T. 2008. Implementing energy efficiency: Challenges and opportunities for rural electric cooperatives and small municipal utilities. *Energy Policy* 36 (9): 3383-3397; (a, c, d, e).
15. Smith, T.M.; Gopalakrishna, S.; Chatterjee, R. 2006. A Three-stage Response Model of Integrated Marketing Communications at the Marketing-Sales Interface. *Journal of Marketing Research* Vol. XLIII (November), 564–579; (a, b, c, d, e, f).
16. Smith, T.M.; Gopalakrishna, S.; Chatterjee, R. 2006. Integrated Marketing Communications at the Marketing-Sales Interface. *Marketing Science Institute Report (06-102)*, Marketing Science Institute, Issue One, 06-.001, 45-68 (a, b, c, d, e, f).
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18. Molina-Murillo, S.A.; Smith, T.M.; Reichenbach, M. Smith, R. 2005. Impact Of International Phytosanitary Standards On Wood Packaging Material End Users: Pre-Implementation Assessment. *Forest Products Journal*, Sep2005, Vol. 55 Issue 9, p24-26; (a, c, d, e).
19. Smith, T.M., Srinath G., and Smith, P.M. 2004. The Complementary Effect of Trade Shows on Personal Selling. *International Journal of Research in Marketing* 21: 61-76; (a, b, c, d, e, f).

20. Molina Murillo, S.A. and Smith, T.M. 2004. International Trade Shows as a Source of International Market Information. *Journal of Forest Products Business Research* 1(4): 17pp.; (a, c, d, e).
21. Smith, T.M., Mike R., Molina-Murillo, S.A. and Smith, R. 2004. Potential Effect of International Phytosanitary Standards on Use of Wood Packaging Material. In: T.F. Shupe and W.R. Smith (eds.). *Pallet phytosanitation – Information for international trade*. ISBN: 0-9763632-0-8. USDA Forest Service; (a, c, d, e, f).
22. Smith, T.M., Hama, K. and Smith, P.M. 2003. The Effect of Successful Trade Show Attendance on Future Show Interest: Exploring Japanese Attendee Perspectives of Domestic and Offshore International Events. *Journal of Business and Industrial Marketing*, 18 (4/5): 403-418; (a, c, d, e, f).
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25. Smith, T.M. 2002. An Analysis of Northern Hardwood Lumber Buyers Use of Electronic Commerce. *Forest Products Journal*. 52(2): 1-7.
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NON-REFEREED ARTICLES, ESSAYS, OR BOOK CHAPTERS

31. Smith, T.M. 2016. Quantifying the social cost of firearms: a new approach to gun control. *The Conversation*, July 12, <http://theconversation.com/quantifying-the-social-cost-of-firearms-a-new-approach-to-gun-control-62148>.
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33. Smith, T.M., Molina Murillo, S.A., and Anderson, B. M. 2014. Implementing sustainability in the global forest sector: Toward the convergence of public and private forest policy. In *The Global Forest Sector: Changes, Practices, and Prospects*. E. Hansen, R. Panwar, and R. Vlosky (eds.). Taylor & Francis, CRC press, Boca Raton, 237-260.
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35. Schmitt, J., Smith, T.M. 2014. Meeting customer and societal demands. Why must supply chains collaborate to combat climate risk? CDP Video Communication, <https://www.cdp.net/en-US/pages/cdp-supply-chain-broadcast-2014.aspx>.
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37. Pickens, R., Smith, T.M. 2013. Material Cycling: A focus on Plastics. Report to Hennepin County, Department of Environmental Services, January, pp. 24.
38. Smith, T.M., Lohd, H., Olson, R. 2012. Identifying Sustainability Performance Drivers, Report to the Sustainability Consortium, Arizona State University, October, pp. 42.
39. Pickens, R., Smith, T.M. 2012. Recycling 2.0: Exploring Extended Producer Responsibility for Packaging and Printed Materials, May 2012, http://www.kab.org/site/DocServer/Recycling2.0_Symposium_2012_FINAL_Report.pdf?docID=8081&AddInterest=1001.
40. Smith, T.M., Rubenstein, G. 2012. Leveraging Shared Resources to Solve Today's Sustainability Challenges, Discussion

Brief, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu.

41. Fischlein, M., McComas, C., and Smith, T.M. 2011. Developing a blueprint for an energy efficiency asset class, Discussion Paper, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu.
42. Linhoff, M., Smith, T.M., and Suh, K.. 2011. Leveraging social media in the last mile of local delivery. Discussion Paper, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu
43. McComas, C., Fischlein, M.; Foecke, T.; and Smith, T.M, 2011. Informing an emerging energy efficiency asset class, Discussion Brief, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu.
44. Smith, T.M. 2011. Sustainability Metrics and Management: From what and why to how. Discussion Brief, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu.
45. Miller, K., Smith, T. 2010. Toward a typology of tradable mechanisms for environmental services, Discussion Brief, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu.
46. Smith, T.M. 2010. A Selective Primer on Energy Efficiency. Discussion Brief, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu.
47. Edwards, J., Smith, T. 2010. What is a Greener Choice? A functional equivalence method to defining greener products. Discussion Paper, NorthStar Initiative for Sustainable Enterprise, Institute on the Environment, University of Minnesota, www.northstar.umn.edu.
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49. Smith, T.M., Bae, Junghan, Miller, Kristell. 2009. Comparative Assessment of the Environmental Implications of a Low Carbon Fuel Policy in the state of Minnesota, MN Department of Commerce. November: pp. 58.
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52. Wilson, E, Plummer, J., Fischlein, M, Smith, T (2007). Demand side management in Minnesota municipal and cooperative utilities. Department of Commerce. March.
53. Smith, Timothy M., Miriam Fischlein, Sangwon Suh, Pat Huelman. 2006. Green Building Ratings: A Comparison of the LEED and Green Globes Systems in the US. The Carpenters Industrial Council, <http://fpmi.cfans.umn.edu/Projects/greenbuildingratings/index.php>. September: pp. 61.
54. Smith, Timothy M., Srinath Gopalakrishna, and Paul M. Smith. 2004. Trade Shows Keep On Giving: The marketing benefits of exhibiting continue well into the downstream selling effort. ISBM Insights, May.
55. Smith, T.M., Reichenbach, R., Molina-Murillo, S.A., and Smith, R. 2004. An End-User Perspective of International Phytosanitary Regulations for Wood Packaging Materials. In: T.F. Shupe and W.R. Smith (eds.). Pallet phytosanitation – Information for international trade. ISBN: 0-9763632-0-8. <http://www.agctr.lsu.edu/enr/palletsanitation/index.asp>. LSU AgCenter. Baton Rouge, LA. In cooperation with USDA Forest Service, Wood Education Research Center and Limestone Bluffs RC&D.
56. Reichenbach, Michael, Timothy M. Smith, Sergio Andres Molina-Murillo, and Robert Smith. 2004. Globalization and the Potential Effect of Treatment Standards for Solid Wood Packaging on Small Scale Forestry. Natural Resources Special Report, College of Natural Resources University of Minnesota Extension Service, May (NRSR-5), 7 pp.
57. Molina Murillo, Sergio A. and Timothy M. Smith. 2002. Ferias Internacionales: Una Poderosa Herramienta de Mercado (International Fairs: A Powerful Marketing Tool). Desde el Bosque, Año. 4, No. 10: 4-7.
58. Smith, T.M. 2001. Customer value-Opportunities for functional integration in supply chains of the hardwood lumber industry, In: Supply Chain Management for Paper and Timber Industries. K.Sjvstrvm, ed. ISBN 91-7636-302-3, Vdxjv University, School of Industrial Engineering and Timber Logistics, Helsinki, 105-116.

59. Smith, Timothy M. 2000. Integrating Ebusiness with Existing Selling Systems Provides Long-Term Advantages. www.paperhub.com. September.

REFEREED PROCEEDINGS OF CONFERENCES

60. Eryilmaz, D, Smith, T., Dhople, S., Wilson, E., Schmitt, J. 2014. Demand response for industrial-scale energy users in Midwest ISO: A dynamic programming approach for curtailing energy use. IEEE PES T&D Conference and Exposition, Chicago, IL, USA, 2014, pp. 1-4, doi: 10.1109/TDC.2014.6863332.
61. Eryilmaz, D. Smith, T.M., Homans, F.R. 2014. Price responsiveness in retail and wholesale markets: Implications for demand response in Midwest electricity markets. Proceedings of the World Congress on Environmental and Resource Economics, Turkey, June 2014.
62. Tschirner, U. and Smith, T.M. 2004. Phosphonates as Additives in Kraft Pulp. Proceedings of the TAPPI Paper Summit 2004 Spring Technical Conference & Environmental Conference, Atlanta, GA.
63. Smith, P.M., Carter, G.M., Smith, T.M. and Wolcott, M.P. 1999. Application Needs and Market Pull for Wood-Plastic Composites. In 33rd International Particleboard Symposium Proceedings. Washington State University, April 13-15.
64. Smith T.M. and Smith, P.M. 1997. Return on Trade Show Investment (ROTSI): A Methodological Approach. In Preparing for the 21st Century: Value Added Marketing for Value Added Wood Products. Proceedings from IUFRO & FPS Conferences, June: 73-80.

SOFTWARE DEVELOPMENT

65. FoodS³: Food Systems Supply-Chain Sustainability - 2015, Web-based analysis and visualization of U.S. corn- and Soy-intensive supply chains. Developed in collaboration with Environmental Defense Fund, www.foodscube.umn.edu.
66. Supply Chain Sustainability Tool - 2014, Open platform strategic sourcing and procurement tool developed with business intelligence provider Climate Earth and the financial support of the Global Environmental Management Initiative (GEMI) to assess and provide guidance toward sustainable procurement, Co-Chairs: Kraft Foods, FedEx, 3M, Smithfield Farms. Distributed by GEMI, www.gemi.climateearth.com.
67. Trip-Chain - 2014, Android mobile platform application developed with mobile solutions provider MobileAnalytiQ and the financial support of IonE/NiSE corporate sponsors to track real-time mobility of social networks toward distributed last-mile package delivery. Application available through NiSE and only for experimental purposes: <http://socialpackagedelivery.cfans.umn.edu>.

INVITED PRESENTATIONS AT PROFESSIONAL MEETINGS & CONFERENCES

68. Smith, T.M. Optimizing Eco-Efficiency Across the Supply Chain, WWF and The Coca-Cola Company Workshop: Mainstreaming Ecosystem Services into Biz Policies, November 29, 2016.
69. Smith, T.M., Becker, D., Moseley, C., Rivera, L., Abrams, J., Pelton, R.E.O., Kudra, J. Regional Bioenergy Policy Effectiveness: Compatibility, Innovation and Coordination Across the Supply Chain, USDA-NIFA AFRI Sustainable Bioenergy PD Meeting, New Orleans, LA – October 19, 2016.
70. Smith, T.M., Pelton, R.E.O, Li, M. Lyon, T.P. Optimizing Eco-Efficiency Across the Procurement Portfolio, 5th World Conference on Production & Operations Management, Havana, Cuba, September 6-9, 2016.
71. Smith, T.M., Pelton, R.E.O, Li, M. Lyon, T.P. Spatially Extending Eco-Efficiency Optimization in the Supply Chain, GEMI Summer Meeting, St. Paul, MN, July 27, 2016.
72. Smith, T.M., Goodkind, A., Kim, T., Schmitt, J., Pelton, R.E.O. Spatially Explicit, Firm-Specific Environmental Assessment of U.S. Agriculturally-Intensive Supply Chains, Invited Presentation, University of Arkansas Office for Sustainability, Fayetteville, AR, July 1, 2016.
73. Smith, T.M. Leveraging Socially Networked Mobile ICT Platforms for the Last Mile Delivery Problem, Symposium on the Sharing Economy, University of Minnesota, Minneapolis, MN, May 16, 2016.
74. Pelton, R.E.O, Smith, T.M., Kim, T. Impacts of Co-Product Operational Flexibility on Biofuel Environmental Performance, 2nd Northwest Wood-Based Biofuels & Co-Products Conference, Seattle, WA, May 4, 2016.
75. Smith, T.M. Sustainability in Procurement and Supply Chain Management, Association of Climate Change Officers 2016 Operation: Supply Chain Workshop, Loyola University, Chicago, IL, April 25-26, 2016.
76. Smith, T.M. Drivers in the Supply Chain: The Role of Retailer and Brand Owners in Agricultural Supply Networks, Seven Mile Creek New Ag Bioeconomy Project, St. Peter, MN, February 26, 2016.

77. Smith, T. Supply Chains at Food-Energy-Water Nexus. Symposia on The Nexus in Cities: Measuring Impact and Exploring Solutions. The Food-Energy-Water Nexus, 16th National Conference and Global Forum on Science, Policy and the Environment, Washington, DC. , January 20, 2016.
78. Smith, T. Sustainable Supply Chains. Business Sustainability Program, INCAE Business School, Costa Rica, January 12, 2016.
79. Smith, T.M. Supply Chain Coordination of Environmental Performance: Impacts on Farmers, National Farmers Union, St. Paul, MN (Webinar), November 24, 2015.
80. Smith, T.M. Food, Energy, Water Nexus in the age of Big Data, Sustainatopia, Boston, MA, November 16, 2015.
81. Smith, T.M. The Evolution of Environmental Management and Policy, Association for Public Policy Analysis and Management, Miami, FL, November 13, 2015.
82. Smith, T.M., Becker, D., Rivera, L, Policy Implication on State-Level Bioenergy Adoption, Denver, CO, November 4, 2015.
83. Smith, T.M., Sustainable Consumption, Fishbowl Panel, The Role of Cities in Advancing Sustainable Consumption, Urban Sustainability Directors Network Annual Meeting, Minneapolis, MN, October 25, 2015.
84. Schmidt, J., Smith, T. Integrating Spatially Explicit Feed Grain Impacts into Protein Industry Life Cycle Assessment Tools, National Pork Board, Oct. 14, 2015.
85. Smith, T.M., Pelton, R.E.O, Li, M. Optimizing Eco-Efficiency Across the Supply Chain, the 7th International Conference on Life Cycle Management, in Bordeaux, France, August 30 – September 02, 2015.
86. Smith, T.M. Eryilmaz, D. Dynamic Electricity Pricing: Modeling Manufacturer Response and an Application to Cement Processing, École des Hautes Etudes Commerciales de Paris, Paris, France, August 28, 2016.
87. Taylor, M. Smith, T.M. Schmidt, T., Spurlock, A. Environmental Governance and Technology: Opening the Black Box, 2015 Academy of Management Conference, August 7-11, 2015.
88. Eryilmaz, D., Aplan, J., Smith, T. Does Real-Time Pricing Have Economic and Environmental Benefits for Large Manufacturing Plants? Agricultural & Applied Economics Association Annual Meeting, San Francisco, CA, July 28, 2015.
89. Schmitt, J., Smith, T. Merging Carbon reporting and EEIO analysis for Scope 3 reporting metrics, International Society for Industrial Ecology Conference 2015, July 7-10, 2015.
90. Pelton, R.E.O, Smith, T.M., Chen, L. Sustainable Operations Management in Bio-refineries: Optimizing the profitability of the product portfolio while meeting the Renewable Fuels Standard, International Society for Industrial Ecology Conference 2015, July 7-10, 2015.
91. Li, M. Pelton, R.E.O. Smith, T.M. Optimizing Sustainable Supply Chain Management Across Organizations' Procurement Portfolio in the U.S., International Society for Industrial Ecology Conference 2015, July 7-10, 2015.
92. Smith, T.M., Schmitt, J., Goodkind, A. Firm-Specific Supply Chain Sustainability Measurement: Spatially Explicit Assessment of Corn-Intensive Supply Chains in the U.S., International Society for Industrial Ecology Conference 2015, July 7-10, 2015.
93. Chen, L., Smith, T. Environmental Life Cycle Assessment of PET Bottles from Cellulosic Feedstocks, Society for Wood Science & Technology 2015 Annual Convention, June 7-12, 2015.
94. Wilson, E., Smith, T.M. Seiler, P., Dhople, S. Managing Energy in a Renewable Rich World, 2015 Industry Studies Conference, May 26-29, 2015.
95. Smith, T. Mapping U.S. Corn-Intensive Supply Chains, Environmental Defense Fund, April 14, 2015.
96. Smith, T.M. Driving Progress on Sustainable Technology, Hewlett Packard Living Progress Exchange, Online GlobeScan Forum, March 17, 2015.
97. Smith, T.M. The Who, What & How of Supply Chain Sustainability, Keynote Address, The Conference Board, Product Stewardship and Regulatory Affairs Council, St. Paul, MN, February 23, 2015.
98. Smith, T.M. Supply Chain Sustainability: Three Stories & Three Questions. Center for Sustainable Business Practices, Lundquist College of Business, University of Oregon, Eugene, OR, February 5, 2015.
99. Smith, T.M., Gill, B., Erickson, C. Launch of the GEMI Supply Chain Sustainability Tool, webinar hosted by 2Degreesnetwork.com, January 25, 2015.
100. Smith, T.M. User-Inspired Scholarship Toward Sustainable Enterprise: Prioritization & Coordination of Sustainability across the Supply Chain, School of Natural Resources & Environment/Erb Institute, University of Michigan, Ann Arbor,

MI, November 13, 2014.

101. Smith, T.M., Mapping The Firm-Specific Corn Supply Chain, Environmental Defense Fund H.Q., Washington, D.C., October 30, 2014.
102. Smith, T.M., Erickson, C. GEMI Pilot Supply Chain Sustainability Tool: Assessing Upstream Impacts In The Supply Chain, Biogen Idec H.Q., Cambridge, MA, October 29, 2014.
103. Smith, T.M. Environmental Preferred Products from Biorefineries, 2014 NARA Annual Meeting, Seattle WA, September 15, 2014.
104. Smith, T.M. Knowing What You Don't Know: Assessing Upstream Impacts in the Supply Chain, 2014 Sustainable Packaging Coalition Advance Conference, Minneapolis, MN, September 10, 2014.
105. Smith, T.M. Pelton, R.E.O., Li, M. Sustainability and strategic sourcing: a portfolio assessment approach. Ashland Inc. Headquarters, Dublin, OH, June 25, 2014.
106. Smith, T.M. Sustainability across global manufacturing networks, First Industrial Sustainability Roundtable, Cambridge University, Oxon Hoath Estate, UK, June 2-4, 2014.
107. Smith, T.M. Life Cycle Assessment in Corporate Decision Making. MN Sustainability Practitioners Roundtable, Science Museum of Minnesota, St. Paul, MN, May, 2014.
108. Doshi, S., Chertow, M., Evans, S., Smith, T.M., Integrating Industrial Ecology and Applied Sustainability with Resilience Thinking, Invited Panel, Resilience 2014: Resilience and Development, Mobilizing for Transformation, Montpellier, France, May 4-8, 2014.
109. Smith, T.M. Bridging the Rigor-Relevancy Gap, Leopold Leadership Program, Engaging with the private sector for long-term impact, Stanford University, March 16-19, 2014.
110. Smith, T.M. Global Green Supply Chains: What Matters and What to do About It, Frontiers in the Environment Series, Institute on the Environment, U. of Minnesota, March 12, 2014.
111. Smith, T.M. Change inspired scholarship toward sustainable enterprise: applications in green supply chain management. EPSRC Centre for Innovative Manufacturing in Industrial Sustainability, University of Cambridge, UK, November 22, 2013.
112. Smith, T.M., Pelton, R.E.O., Li, M. A parameterized supply chain sustainability tool for paper packaging. FedEx Corporate Learning Center, Memphis, TN, November 12, 2013.
113. Smith, T.M. Sustainability in the supply chain: where to focus and what to do once you get there. Seoul National University, Seoul, Korea, June 21, 2013.
114. Smith, T.M., Sustainable Supply and Sourcing. Kraft Corporate Office & Headquarters, June 12, 2013.
115. Smith, T.M., Biopreferred and life cycle modeling of uncertain biorefinery production. Gevo Headquarters, Denver, CO, April 26, 2013.
116. Smith, T.M., Sustainability in Sourcing and Procurement, Global Environmental Management Initiative Annual Meeting, Tampa, FL, April 26, 2013.
117. Smith, T.M., Sustainable Supply Chain Management, Biomass Feedstocks: Supply Chain Risks and Rewards, American Chemical Society, Washington, D.C., November 29, 2012
118. Smith, T.M., Energy Management in the Supply Chain, Johnson Foundation at Wingspread, Racine, WI, October 23-24, 2012.
119. Smith, T.M., Sustainable Supply Chain Sourcing, Nanjing University, China, July 8, 2012.
120. Smith, T.M., Seminar on Engaged Scholarship (co-panelist, with Drs. Andrew Van de Ven, Christopher Lettl, and Maurizio Zollo), Bocconi University, Milan, Italy, May 15, 2012.
121. Lahd, H., Smith, T., Lyon, T. Toward a Sustainable Procurement Decision Support Tool, ConAgra Foods Corporate Headquarters, Omaha, NE, May 16, 2012.
122. Smith, T.M. Formalizing the Informal Economy: Mobile ITC Platforms for Last-Mile Distribution, INCAE Business School, Costa Rica, January 16, 2012.
123. Smith, T.M. Materializing Socially Networked Mobile ICT Platforms for Physical Distribution. Environmental and Resource Economics, Applied Economics Department, University of Minnesota, February 27, 2012.
124. Smith, T.M. and Pickens, B. The Authority Gap of Rival Private Governance Networks: The Case of Really New Technologies. Soft Law Governance Workshop, Sandra Day O'Connor College of Law, Arizona State University, March

5, 2012.

125. Smith, T.M. Quantifying Environmental Product Indicators, Green Products Roundtable, Plenary Meeting hosted by 3M, St. Paul, MN, February 25, 2011.
126. Suh, K., Smith, T.M. Defining Green. Materials Sustainability Survey, Brookings Institution, Washington D.C. February 24, 2011.
127. Smith, T.M. Sustainable Public Procurement: A Case for Biofuels and Bioproducts, School of Forest Resources, College of Agriculture, Penn State U., April 17, 2011.
128. Smith, T.M. Reflections on Sustainability: An Impact Assessment Perspective, 3rd Workshop of the Global Organizational Learning and Development Network, WU Vienna University of Economics and Business, Vienna, Austria, June 19, 2011.
129. Smith, T.M. Metrics Make Green Matter, NorthStar Members' Meeting, University of Minnesota, St. Paul, MN, June 28, 2011.
130. Smith, T.M., Suh, K., Olson, R. Environmental Indicators to Drivers. PE/Five Winds International Headquarters, Boston, MA, September 22, 2011.
131. Smith, T.M. Toward a Sustainable Procurement Tool: Rapid Identification of Product Environmental Drivers, Global Environmental Management Initiative, Annual Meeting, 3M, St. Paul, MN, October, 12, 2011.
132. Olson, R. & Smith T. LCA-based Indicator Hotspot Assessment: Avenues for Truncated LCA. American Center for Life Cycle Assessment (ACLCA) XI Conference, Oct. 4-6, 2011.
133. Smith, T.M. Private Sector Sustainable Water Initiatives, Minnesota Water Technology Export Roundtable, Minnesota Trade Office, DEED, University of Minnesota, St. Paul, MN, October 11, 2011.
134. Smith, T.M., Suh, K., Linhoff, M. Leveraging Socially Networked Mobile ICT Platforms for the Last-Mile Delivery Problem, BBE Seminar Series, October 25, 2011.
135. Smith, T.M., Suh, K. Virtually Bringing People Closer Together: Exploring Mobile Density. Accenture Innovation Labs, Chicago, IL, February 15, 2011.
136. Smith, T.M. A New Green Machine: The Future of Sustainable Enterprise. Frontiers in the Environment Lecture Series. Institute on the Environment, University of Minnesota. December 8, 2010.
137. Smith, T.M. Rival Private Governance Networks. International Workshop on the Dynamics of Interaction in Transnational Business Governance Regimes. Hennick Centre for Business and Law, York University, Toronto. October 22, 2010.
138. Smith, T.M. and Philips, C. Tying it All Together: The Latest Effort to Simplify the Eco-labeling Landscape. Sustainable Brands: Issues in Focus, Building Credibility - Avoiding Greenwash, Sustainable Life Media (on-line seminar). January 14, 2010.
139. Smith, T.M. Sustainable Product Standards Development Across the Supply Chain. Green Products Roundtable, Pew Foundation, Washington D.C., October 16, 2009.
140. Smith, T.M. Rules of the Game for Sustainable Products. MN PDMA and IDSA: Sustainability Design and Development Conference, 3M Campus, St. Paul, MN, October 15, 2009.
141. Smith, T.M. Challenges and Opportunities for Sustainable Biofuels in Transportation. MIT/Ford/Shell Research Workshop, Strategies for Market Transitions to Alternative Energy and Transportation Systems, Dearborn, MI, June 9, 2009.
142. Smith, T.M. The Next Generation of Sustainable Product Innovation. Key Note Speaker, 3M Earth Day Celebration Event, St. Paul, MN, April 22, 2009.
143. Smith, T.M. Sustainable Product Standards, Manufacturer Panel Discussant and Summary Panelist. ANSI/EPA Workshop: Product Standards for Sustainability, Arlington, VA, April 8-9, 2009.
144. Smith, T.M. Standards, Certifications & Eco-Labels: Winning the battle to determine the rules of the green building game. International Builders Show & Nextbuild, Las Vegas, NV, January 20, 2009.
145. Smith, T.M. Green Growth In The Dark: Opportunities in the Upper Mid-West. Small Business Development Center, U. of Wisconsin-Superior/Northland College. Ashland, WI, February 19, 2009.
146. Smith, T.M. LCA in Sustainable Product Standards. Certification of Sustainable Products and Services Workshop. National Academies of Science, Irvine, California, January 18-22, 2009.

147. Smith, T.M. Introduction to the Center for Sustainable Enterprise Development. BBE Advisory Board Meeting, U of M. April 24, 2008.
148. Smith, T.M. Competing Environmental Product Certifications: Is Reputation Enough? Minnesota Pollution Control Agency Product Stewardship Speaker Series. February 1, 2008.
149. Smith, T.M. Green Building and Certified Forest Products: May The Best “Aligned Network Of Stakeholders” Win. Green Building North: Developments in Sustainable Building, Chaska, MN, October 25, 2007.
150. Smith, T.M. The Current State of Biofuels in the Americas. Biofuels, Carbon & Trade, Minneapolis, MN October 22, 2007.
151. Smith, T.M.. Corporate Environmental Management: Doing (and Saying) the Right Thing. Minnesota Waste Wise Annual Meeting, St. Paul, MN, October 10, 2007.
152. Smith, T.M. The Role of the Customer in Sustainability Management: Consuming more, consuming less, and knowing the difference. Sustainable Management Program, INCAE, Alajuela, Costa Rica, June 21, 2007.
153. Wilson, E, Smith, T, Fischlein, M, Plummer, J. Munis and Co-ops in a Carbon Managed World, CDMC/CEIC EPP, Carnegie Mellon, May, 9, 2007.
154. Smith, T.M. An integrated approach to communicating environmental performance information. Arizona State University, Invited Presentation, Tempe, Arizona, October 12, 2006.
155. Smith, T.M. Customers And Corporate Environmental Strategy. Sustainability Management Program, INCAE, Campus Walter Kissling Gam, Allajela, CR. May, 2006.
156. Smith, T.M. Voluntary Market-Driven EMS. Sustainability Management Program, INCAE, Campus Walter Kissling Gam, Allajela, CR. May, 2006.
157. Smith, T.M.; Gopalakrishna, S.; Chatterjee, R. Invited panelist. Marketing Science Institute Conference, MIT, January, 2006.
158. Smith, T.M., Srinath G., and Chatterjee. R. A Three-stage Response Model of Integrated Marketing Communications with Dynamic Effects. Invited Presentation. The Marketing Science Institute conference on Practitioner-Academic Collaborative Research, Yale University, December 11, 2004.
159. Smith, T.M. Business Issues: An Initial Look At Fiber Costs. Invited Presentation. Minnesota Biofiber Consortium Meeting, St. Paul, MN, May 14, 2004.
160. Gopalakrishna, S. and Smith, T.M. Simultaneously Optimizing Marketing Communications and Sales Force Deployment. Invited Presentation, U. of Minnesota, Carlson School of Management, Nov. 21, 2003.
161. Smith, T.M., Reichenbach, M., and Smith, R. Customer Perspectives of International Wood Packaging Phytosanitary Standards. 2003 Northeast Utilization and Marketing Council Annual Meeting, Duluth, MN, June 15-19, 2003.
162. Smith, T.M. Enhancing Personal Selling Through Trade Show Attendance. Invited Presentation, University of Minnesota, Carlson School of Management Seminar Series, Dec. 7, 2001.
163. Smith, T.M. Forest Products Industry Consolidation: Implications for the Industry. TECO Industry Advisory Council Annual Meeting, Lake Geneva, WS May 16, 2001.
164. Smith, T.M. Integrating Business Communications: A Case for Dynamic Segmentation. Invited Presentation, Lincoln University, Christchurch, NZ, April 18, 2001.

CONTRIBUTED PAPERS PRESENTED AT PROFESSIONAL MEETINGS AND CONFERENCES

165. Smith, T.M. Achieving Those 2025/2030 Goals With Big Data: The Science Of Sustainability, First Annual Companies vs. Climate Change Conference, Ft. Lauderdale, FL, December 2, 2016.
166. Li, M., Smith, T.M. Spatio-Temporal Analyses on Demand Response in Large Industrial Facilities, Industry Association Conference, Minneapolis, MN, May 26, 2016.
167. Taylor, M. Smith, T.M. Schmidt, T., Spurlock, A. Environmental Governance and Technology: Opening the Black Box, 2015 Academy of Management Conference, August 7-11, 2015.
168. Pelton, R.E.O, Smith, T.M., Chen, L. Sustainable Operations Management in Bio-refineries: Optimizing the profitability of the product portfolio while meeting the Renewable Fuels Standard, International Society for Industrial Ecology Conference 2015, July 7-10, 2015.
169. Li, M. Pelton, R.E.O. Smith, T.M. Optimizing Sustainable Supply Chain Management Across Organizations’ Procurement Portfolio in the U.S., International Society for Industrial Ecology Conference 2015, July 7-10, 2015.

170. Smith, T.M., Schmitt, J., Goodkind, A. Firm-Specific Supply Chain Sustainability Measurement: Spatially Explicit Assessment of Corn-Intensive Supply Chains in the U.S., International Society for Industrial Ecology Conference 2015, July 7-10, 2015.
171. Chen, L., Smith, T. Environmental Life Cycle Assessment of PET Bottles from Cellulosic Feedstocks, Society for Wood Science & Technology 2015 Annual Convention, June 7-12, 2015.
172. Wilson, E., Smith, T.M. Seiler, P., Dhople, S. Managing Energy in a Renewable Rich World, 2015 Industry Studies Conference, May 26-29, 2015.
173. Smith, T.M., Eryilmaz, D. Real-Time Price Elasticity of Emissions: An Analysis for the Midwest Wholesale Market, Behavior, Energy & Climate Change Conference, Washington, DC., December 9, 2014.
174. Chen, L., Pelton, R.E.O, Smith, T. Comparative Life Cycle Analysis of GHG Emissions for Bio-PET Bottles, 2014 NARA Annual Meeting, Seattle WA, September 15, 2014.
175. Pelton, R.E.O, Chen, L., Smith, T. Co-Product Implications on the Environmental Preference of Bio-Jet Fuel, 2014 NARA Annual Meeting, Seattle WA, September 15, 2014.
176. Eryilmaz, D., Smith, T. Price Responsiveness in Retail and Wholesale Markets: Implications on Demand Response and Emissions in the Midcontinent ISO, 37th International Association for Energy Economics International Conference, New York, NY, June 17-19, 2014.
177. Schmitt, J., Smith, T. Supply Chains as an Institution for Global Action on Climate Change. Industry Studies Association 2014, Portland, OR, May 27-29, 2014.
178. Eryilmaz, D., Smith, T., Aplan, J. Demand Response for Industrial-Scale Energy Users: A Stochastic Dynamic Programming Approach for Curtailing Industrial Energy Use. Industry Studies Association 2014, Portland, OR, May 27-29, 2014.
179. Smith, T.M. Transitions for Corporate Sustainability: toward repeatable soft-landings. Resilience 2014: Resilience and Development, Mobilizing for Transformation, Montpellier, France, May 4-8, 2014.
180. Eryilmaz, D., Smith T.M., Dhople, S., Wilson, E. and Schmitt, J. Demand Response for industrial-Scale Energy Users in Midwest ISO: A Dynamic Programming Approach for Curtailing Energy Use. IEEE-Explore, Forum Session (best paper nominee), Chicago, April 2014.
181. Smith, T.M. Revisiting climate change: management's role in informing mitigation and adaptation strategies, AOM Conference, Orlando, FL, August 9, 2013.
182. Suh, K., Smith, T., Schmitt, J. A model for networked distribution of humanitarian aid, ISIE Conference, Ulsan, South Korea, June 24-26, 2013.
183. Pelton, R.E.O., T.M. Smith and H. Lahd. Streamlined Hotspot Approaches for Procurement and Supply Chain Management. Presentation at the 24th Annual Production and Operations Management Society Conference, Denver, CO, May 5, 2013..
184. Pickens, R.A., Smith, T.M. System Dynamics Model of Recycling Scenarios, Society of Women Engineers, Houston, TX, November 9, 2012.
185. Schmitt, J., Smith T.M. The Sharing Economy for Sustainable Development. SXSW Eco, Austin, TX, October 22-24, 2012.
186. Smith, T.M., Lahd, H., Olson, R. Using Life Cycle Assessment to Evaluate Ecolabel Claims, 23rd Annual POMS Conference: Socially Responsible Operations, Chicago, IL, April, 22, 2012.
187. McComas, C & Smith, T. Industrial Energy Efficiency Opportunities and Financial Tools that Drive Implementation. Midwest Industrial Energy Efficiency Summit, Chicago, Illinois, January 11, 2012.
188. Smith, T.M., Pickens, R. The Role of Private Governance in the Emergent Global Green Technology Policy Regime, Transnational Governance Interactions (TGI) – Theoretical Approaches, Empirical Contexts and Practitioners' Perspectives, Research Workshop, at the European University Institute in Florence, Italy, May 23, 2011.
189. Pickens, RA, Smith, TM, Emerging Green Patent Programs and Innovation Policy, American Institute of Chemical Engineers, Minneapolis, MN, September 17-21, 2011.
190. Smith, P.M., Smith, T.M., Easton, I. Environmentally Preferred Purchasing: A Research Agenda for NARA, NARA Kickoff Meeting, Spokane, WA, September 12, 2011.
191. Smith, T.M. Perspectives on Business Sustainability From a Sustainability Geek. 4th Workshop of the Global

- Organizational Learning and Development Network, Boston University, Boston, MA, November 19, 2011.
192. Fischlein, M., Smith, T. M. Incentive-based policy design and outcomes: assessing state renewable portfolio standards. Accepted for presentation at 2010 Academy of Management, Montreal, Canada, August 6-10, 2010.
193. Molina, S. A., Smith, T.M. The Greenwashing Sin of Substantiation? Exploring Complex Green Messages in Product Advertisements. Informing Green Markets: The Roles of Industry, NGOs and Government," U. Michigan, Ann Arbor, MI. June 17-19, 2010.
194. Smith, T.M.* and Hickle, G. Defining Sustainable Electronics: Implication for Product and Policy Design. Electronics & Sustainability: Design for Energy and the Environment, University of Illinois at Urbana-Champaign. February 23-24, 2010.
195. Fischlein, M. and Smith, T.M. Incentive-based policy design and outcomes at the organizational level: renewable portfolio standards in the American states. Thirty-second Annual APPAM Research Conference, Boston, MA, November 4-6, 2010.
196. Fischlein, M., Smith, T. M. Private Governance Networks: Competing to Define the Rules of Environmental Performance, Academy of Management Annual Meeting, Chicago, August 7-11, 2009.
197. Smith, T.M., Miller, K., Lindenberg, J. 2009. Emerging Sustainable Biofuel Standards. Sloan Industry Studies Conference, Chicago, IL, May 28-29, 2009.
198. Smith, T.M., Fischlein, M., Miller, K. Sustainable Biofuels Standards: Toward the Effects of Competing Private Governance. Sloan Meeting on Social Dimensions of Sustainable Biofuels: Global Issues and the Asian Context, University of Illinois at Urbana-Champaign, November 6, 2008.
199. Smith, T.M. Product Approaches to Sustainability, E3 2008, St. Paul River Center. November 18, 2008.
200. Smith, T.M.; Fischlein, M. If You Can't Join 'Em, Beat 'Em: An Institutional Approach Toward Competing Private Governance Initiatives. GRONEN Research Conference, Nicosia, Cyprus, May 28-30, 2008.
201. Fischlein, M. and Smith, T.M. A Race To The Middle: Toward An Evolutionary Framework Of Competing Private Environmental Governance Systems. EABIS 6th Annual Colloquium, Barcelona, Spain, September 21-22, 2007.
202. Molina-Murillo, S. A. and Smith, T. M. Environmental Communications with Life Cycle Information: An Exploratory Study within the Building Industry. 3rd Intl. Conference on Life Cycle Management. Zurich, Switzerland. August 27-29, 2007.
203. Smith, T.M. An integrated approach to communicating environmental performance information. International Expert Workshop "Sustainability Information in the Building Sector in different World Regions – Connecting Life Cycle Information with Market Impacts," Stuttgart, Germany, December 6, 2006.
204. Fischlein, M. and Smith, T.M. Private Environmental Governance: Dynamic Multiple Stakeholder Driven Environmental Standards. Association for Public Policy Analysis and Management Research Conference, Madison, WI, November 2, 2006.
205. Smith, T.M. Marketing Communications at the Marketing Sales Interface, ISBM Second Biennial Academic Conference, Kellogg School of Management, Northwestern University, August 4, 2006.
206. Smith, T.M.; Gopalakrishna, S.; Chatterjee, R. Integrated Marketing Communications at the Marketing-Sales Interface. Marketing Science Conference, Emory University, June 22, 2005.
207. Smith, T.M. and Molina, S. LCA Information in Marketing Communications: Communication effectiveness in the Building Materials Industry. UNEP's LCA-Initiative International Expert Workshop on "Sector-Specific approaches for communication of Life Cycle Information to different stakeholders", Pompeu Fabra University, Barcelona, Spain. September 18, 2005.
208. Molina, S. and Smith, T.M. How much is too much? Exploring Life Cycle Assessment information in environmental marketing communications. Presentation at the Risk and Self-regulation Professional Development Workshop (PDW). Academy of Management 2005 Annual Conference at Honolulu, Hawaii. August 5-10, 2005.
209. Molina, S. and Smith, T.M. The Use of Life Cycle Assessment (LCA) Information on Business Communications: The effects on product branding. Paper presentation at the 59th International Convention of the Forest Products Society, Québec City, Québec, Canada, June 19-22, 2005.
210. Smith, T.M., Srinath G., and Chatterjee. R. A Three-stage Response Model of Integrated Marketing Communications with Dynamic Effects. The Marketing Science Conference, Rotterdam, Netherlands, June 23-26, 2004.

211. Smith, T.M., Srinath G., and Chatterjee. R. An Integrated Marketing Communications Model for Efficient Resource Deployment: The Effects of Marketing Communications and Inter-Communication Time. Forest Products Society Annual Meeting, Grand Rapids, MI, June 29, 2004.
212. Molina-Murillo, S.A., Smith, T.M., Reichenbach, M. and Bush, R.L. Solid Wood Packaging Materials and the New International Phytosanitary Regulations. Forest Products Society Annual Meeting, Grand Rapids, MI, June 29, 2004.
213. Reichenbach, M.R., Smith, T.M., Sergio, Molina-Murillo, S.A. and Smith, R. Buyers Attitudes toward the Purchase of Treated Solid Wood Packaging. Proceedings of Human Dimensions of Family, Farm, and Community Forestry International Symposium, Pullman, WA, March 29-April 1, 2004: 255-258.
214. Tschirner, U. and Smith, T.M. Phosphonates as Additives in Kraft Pulping. TAPPI Paper Summit 2004 Spring Technical Conference & Environmental Conference, Atlanta, GA, May 5, 2004.
215. Smith, T.M., Gopalakrishna, S. Exploring the Effects of Marketing Communications and Sales Call Timing on Prospect Lead Conversion. The 25th Marketing Science Conference, College Park, MD, June 12-15, 2003.
216. Molina Murrillo, S.A. and Smith, T.M. Trade Shows and International Exchange in the Building Materials Industry. Forest Products Society Annual Meeting, Seattle, WA, June 22-25, 2003.
217. Smith, T.M. and Vlosky. R.P. Internet Adoption in the U.S. Hardwood Lumber Industry. Forest Products Society Annual Meeting, June 23-26, 2002.
218. Smith, T.M. Measuring the Effects of Marketing Communications Systems. NAMA Regional Meeting, Measuring communications value in a consolidating industry, Minneapolis, MN, Sept. 18, 2001.
219. Smith, T.M., Gopalakrishna, S., and Smith, P.M. An Integrated Approach to Business-to-Business Communications. ISBM/CBIM Joint Conference, Atlanta, GA, February 3, 2001.
220. Smith, T.M. Customer Value in the Hardwood Lumber Industry: The Emergence of E-Commerce as a Valued Service. Forest Products Society Annual Meeting, June 26, 2001.
221. Smith, T.M. Gopalakrishna, S., and Smith, P.M. Integrating Marketing Communications and Measuring the Results. Presented Forest Products Society Annual Meeting, June 20, 2001.
222. Smith, T.M., Gopalakrishna, S. and Smith, P.M. The Complimentary Effects of Trade Shows on Personal Selling Activities. The 1999 Marketing Science Conference, Syracuse, NY, May, 1999.
223. Smith, T.M. and Smith, P.M. Use of International Trade Shows by Woodworking Machinery Manufacturers and Buyers. Forest Products Society Annual Meeting, June 24, 1998.
224. Smith, T.M. and Smith, P.M. Measuring the Effectiveness of Trade Show Exhibition. Presented at the IUFRO World Congress International Conference on Forest Products Marketing, Tofino, British Columbia, CAN, June 20, 1997.
225. Smith, T.M. and Smith, P.M. Indirect Effects of a Trade Show on Channel Intermediaries. Marketing and Economics Technical Forum of the Forest Products Society Annual Meeting, June 26, 1997.

POSTERS AND EXHIBITIONS

226. Schmitt, J., Smith, T. Merging Carbon reporting and EEIO analysis for Scope 3 reporting metrics, International Society for Industrial Ecology Conference 2015, July 7-10, 2015 (accepted for Poster Presentation)
227. Becker, D., Moseley, C., Smith, T. Regional Bioenergy Policy Effectiveness, USDA-NIFA AFRI Sustainable Bioenergy Annual Project Director (PD) Meeting, Arlington, VA, October 30, 2014.
228. Pelton, R. and T. Smith. 2013. Environmental Preference of Fuel and Non-Fuel Co-Products. Poster presentation at the 2nd Annual NorthWest Advanced Renewables Alliance Conference, Corvallis, OR. Sept. 10, 2013.
229. Kim, T., Suh, K, Lee, J., Lee, S., Smith, T.M. Environmental and Economic Implications of Renewable Fuel Standard in South. ISIE Conference, Ulsan, South Korea, June 24-26, 2013.
230. Smith, T.M., Pelton, R.E.O. Environmentally preferable purchasing: biofuels and bioproducts, NARA Annual Meeting, Missoula, MT, September 13, 2012.
231. Pelton, R., Smith, T.M. 2011. Procuring Sustainable Products: A LCA Support Tool for Decision Makers. Oct. 4-6, 2011 11th Annual Conference of the American Center for Life Cycle Assessment (ACLCA), Chicago, IL.
232. Deringer, N. and Smith, T.M. New Product Adoption in the Building Materials Supply Chain. Forest Products Annual Meeting, Seattle, WA, June 22-25, 2003.
233. Deringer, N. and Smith, T.M. Wood-Plastic Adoption in the Building Materials Channel. 7th International Conference on Woodfiber-Plastic Composites (and other natural fibers), Madison, WI, May 19-20, 2003.

234. Rygg, B. and Smith, T.M. E-business Adoption in the North American Pulp and Paper Industry. Forest Products Society Annual Meeting, June 23-26, 2002.
235. Molina Murrillo, S.A. and Smith, T.M. International Trade Shows as an Outsourcing Tool for U.S. Exhibiting Companies: A Comparison of Latin American and European International Forest Products Trade Shows. Forest Products Society Annual Meeting, June 23-26, 2002.
236. Deringer, N. and Smith, T.M. Opportunities for Improved Utilization of Waste Wood Through a Broader Use of Outdoor Wood Furnaces in Residential Heating Applications. Forest Products Society Annual Meeting, June 23-26, 2002.
237. Smith, P.M., Hama, K., and Smith, T.M. Japanese Attendee Perspectives on Building Products Trade Shows. Presented at the Forest Products Society Annual Meeting, June 20, 2000.
238. Smith, T.M. and Smith, P.M. Trade Show Technology: A Study of Trade Show Effectiveness in the Woodworking Machinery Industry. Forest Products Society Annual Meeting, June 25, 1997.

MANUSCRIPTS IN PROGRESS

239. Eryilmaz, D., Smith, T.M. and Aplan, J. Is Demand Response a profitable option for cement industry? In progress, targeting Management Science.
240. Chen, L., Pelton, R.E.O., Smith, T.M. Comparative Life Cycle Assessment of the Green Bottle, targeting Intl. J. of Life Cycle Assessment.
241. Goodkind, A, Smith, T.M. Societal and Farm benefits and burdens across management regimes, in progress, targeting Natural Resources Economics.
242. Kim, T, Suh, S., Smith, T.M. Spatial assessment of corn-based ethanol's greenhouse gas emissions: implications on biofuels policy, in progress, targeting Environmental Science & Technology.
243. Schmitt, J. Smith, T.M. Supply Chains as Institutions for Collective Action, in progress, targeting Nature.

Teaching

COURSES TAUGHT

- Systems Thinking & Analysis (2015; SSM 2001)
- Sustainability & Corporate Social Responsibility (2014-2016; IBUS 3080)
- Environmental Management Systems & Strategy (2005-2014; ESPM/MGMT 3604/5604)
- Bioproducts & Bioenergy Markets (2007-2014; BBE 3503/5503)
- Sustainable Development, Costa Rica (2011-2014; IPFANS; CFAN 3501/5501)
- Sustainability and Sustainable Enterprise (2010, 2012; Master of Liberal Studies; MLS/IS 5100)
- Sustainable Entrepreneurship (2011, Wageningen, NL; M.S. & Ph.D seminars)
- Bioproducts Development & Management (2002-2009; BBE 4504)
- Marketing Research (2005; CSOM MBA)
- Sales Management (2000-2002; CSOM MBA & Undergraduate)

CURRICULUM DEVELOPMENT

- Developed an introductory "Systems Thinking and Analysis" course approved in Fall 2015 to support the Sustainable Systems Management degree program.
- Co-developed a 'Grand Challenge' course (with Anu Ramaswami) on Material-Energy Flows for a Sustainable Society to be offered Spring 2016, pending approval.
- Co-lead the ESPM Core Sequence Revision project, funded by CFANS (\$78,000) to integrate experiential and interdisciplinary components into the curriculum (with D. Becker and J. Knight, 2013-2014).
- Developed an upper division 4-credit Fall/Winter course, administered by the Carlson School of Management and offered to students across the University of Minnesota, focused on corporate sustainability and social responsibility with cooperation from the Rainforest Alliance in Costa Rica.
- Developed a daylong seminar, "Food System Supply Chains," (2013), administered through the Carlson School of Management's Center for International Business Education and Research (CIBER).

- An upper division undergraduate/Graduate experiential J-Term field seminar was co-developed (2011) with C. Messer (Tourism Center) to focus on major economic sectors of Costa Rica's economy (agriculture and tourism) and implications on energy and water resources, environmental and social implications of development, and policy and market mechanisms for sustainable development and decoupled growth.
- Developed two separate graduate seminars introducing the concept of sustainable entrepreneurship at Master and Ph.D. levels. Sustainable enterprise business plan "pitches" were required of M.S. student groups; Ph.D. seminar focused largely on literature review and theoretical underpinnings of this emerging field. – Offered at Wageningen University in 2011.
- Created a graduate-level partial semester offering to introduce key concepts of sustainability, systems thinking and social enterprise across a diverse set of applications. This course has attracted engineering, public policy, economics and fine arts students. Taught as part of the Masters of Liberal Studies curriculum at UMN.
- Developed course, "Environmental Management: Systems & Strategies" (ESPM/MGMT 3604/5604), offered for the first time in 2006 as part of core course requirements of the CEM/ESPM degree program.
- Developed online course, "Bio-based Products Development and Management," an upper-division course for biobased products and engineering students, developed in support of the Paper Science and Engineering Online Certificate Program (offered 2006-2008).
- Corporate Environmental Management (CEM) Representative on the Environmental Sciences, Policy & Management (ESPM) degree program Coordinating Council to create the major, a merged degree program of Environment and Natural Resources (ENR) major of the former College of Natural Resources and Environmental Science (ES) major of the former College of Agriculture, Food and Environmental Sciences degree programs. This effort brought significant curricula changes to all programs within the new ESPM major, including the development of new "integrated core," as well as changes to the CEM track to bring it in-line with the other tracks in the new major (2006-2007).

Graduate Students Advised

MASTER'S STUDENTS

- Rivera, Lloyd - The influence of U.S. state policy on wood energy demand, BBSEM 2015 (Advisee)
- Pinc, Shannon - LEED as a framework to assess operational & maintenance in an existing school building, BBSEM 2015 (Advisee)
- Ruberu, Tantarige Shanika - Market Analysis of Post-Consumer Plastics for HDPE Pipe in the U.S, BBSEM 2015 (Advisee)
- Jordan Kudrna - Assessing the woody biomass supply chain: Investigating policy as drivers of change, NRSM 2015 (Reviewer)
- Yang, Ziyi - A Bottom-up Methodology for Bulk Material Flow Analysis in China's Urban Infrastructure, HHH STEP 2015 (Reviewer)
- Stone, Richard - Hygrothermal Performance of Residential Cantilevered Floors, NRSM 2014 (Advisee)
- Pelton, Rylie - Hotspot LCA for supply chain sourcing decisions, NRSM 2013 (Advisee)
- Theodore, Jennifer - Impacts of discretionary time and income on consumption resiliency, NRSM 2013 (Advisee)
- Lahd, Holly - Environmentally-extended input-output approaches to green sourcing, APEC 2013 (Advisee)
- Kawale, Amey - Design and fabrication of a feedstock delivery system for a 3kw solar gasification reactor, ME/CSE 2013 (Reviewer)
- Li, Mo - Environmental and economic assessment of residential ground source heat pumps, NRSM 2012 (Advisee)
- Pickens, Rebecca - Policy analysis of green patent programs, HHH STEP 2012 (Advisee)
- Fischer, Simona - Selecting Sustainable Companies: Evaluating Building Products, DES/ARC 2012 (Reviewer)
- Puhl, Benjamin - Reputational effects of corporate sustainability reporting, NRSM 2010 (Advisee)
- Klapperich, John - Willingness of landowners to engage in forest management activities toward the generation of biomass for energy production, FR/CFANS 2010 (Reviewer)
- Schuweiler, Andrea - Sustainable Energy Solutions for Minnesota Resorts, FR/NRSM 2008 (Reviewer)
- Jones, Raelynn - The Eco-Palm Project: market perceptions of customer satisfaction, FR/NRSM 2007 (Reviewer)
- Wietecki, Michael - Regional parks for Minnesota's outstate urban complexes, FR/NRSM, 2007 (Reviewer)

- Molina Sergio - International trade shows as a source of market information, NRSM 2003 (Advisee)
- Loy, Jeremy - Adsorption fractionation in CaCO₃ scale inhibition of polydisperse sodium polyacrylate, PSE/NRSM 2003 (Reviewer)
- Guo, Jihui - Influence of Organic Additives on Calcium Carbonate Precipitation during Kraft Pulping, PSE/NRSM 2002 (Reviewer)
- Rai, Chandra Bahadur - The Rimu Furniture Industry in Canterbury, New Zealand: A Study of Consumer Preference for Alternatives, MKTG/Lincoln Univ. 2002 (Reviewer)
- Hama, Kazuyo - Return on international trade show investments; FR/PSU 2002 (Reviewer)

DOCTORAL STUDENTS

- Jung, Suhyun - Toward Efficient Land-Use Decisions: Impact of Economic Incentives on Ecosystem Services, ApEcon 2015 (Reviewer)
- Krohn, Brian - Switching to switchgrass: Pathways and consequences of bioenergy switchgrass, NRSM 2015 (Reviewer)
- Nickerson, Thomas - Value of bioenergy crops: spatial profitability, BBSEM 2014 (Advisor)
- Fischlein, Miriam - Policy Design Matters: Renewable Portfolio Standards, NRSM 2010 (Advisor)
- Molina, Sergio - How much is too much environmental information; NRSM 2007 (Advisor)
- Derya Eryilmaz -Essays on Electricity Markets and Policy: Renewable Electricity and Demand Response, ApEC 2015 (Advisor)
- Xi, Chen - Carbon Extended Efficient Order Quantity; ISYE 2014 (Reviewer)
- Dasmohapatra, Sudipta - Customer value assessment of bio-plastics; FR/PSU 2004 (Reviewer)
- Guo, Jihui - Limiting the impact of pressure sensitive adhesives on paper recycling, PSE/NRSM 2004 (Reviewer)
- Abhishek Khanna -, M.S., ARC (Member), anticipated completion 2015

GRADUATE STUDENTS IN PROGRESS

- Rylie Pelton, Ph.D., NRSM (Advisor), anticipated completion 2016
- Luyi Chen, Ph.D., BBSEM (Advisor), anticipated completion 2017
- Mo Li, Ph.D., NRSM (Advisor), anticipated completion 2017
- Lloyd Rivera, Ph.D., NRSM (Advisor), anticipated completion 2018
- Remya Rajasekharan, M.S. ISyE (Member), anticipated completion 2017
- Jason Nguyen, Ph.D., OMTG (Member), anticipated completion 2017
- Laura Eaton, Ph.D., NRSM (Member), anticipated completion 2017
- Milda Irhamni, Ph.D., ApEcon (Member), anticipated completion 2017
- Jaeseok Lee, Ph.D., ApEcon (Member), anticipated completion 2017
- Dana Boyer, Ph.D., STEP HHH (Member), anticipated completion 2017

POSTDOCTORAL FELLOWS & RESEARCH ASSOCIATES SUPERVISED

- Taegon Kim, Postdoc Fellow, NiSE, 2015-present
- Andrew Goodkind, NiSE, 2015-present
- Jennifer Schmitt, Postdoc Fellow/Research Associate, NiSE, 2011-present
- Rebecca Pickens, Senior Research Associate, NiSE, 2012-2013
- Mo Li, Senior Research Associate, NiSE, 2013-2014
- Kimberly Mullins, Postdoc Fellow (with J. Hill), 2014
- Kyo Suh, Postdoc Fellow, NiSE, 2011-2012
- Laura Babcock, Postdoc Fellow, NiSE, 2009-2011
- Jennifer Edwards, Senior Research Associate, NiSE, 2009-2011

Engaged Scholarship Meetings and Workshops Organized

As a major and concerted effort toward reinventing publicly engaged and user inspired scholarship at the University of Minnesota, the NorthStar Initiative for Sustainable Enterprise (NiSE) has facilitated an ongoing series of meetings, workshops and webinars to

engage stakeholders and integrated their interests and expertise into evolving research agenda addressing sustainability.

- NiSE Workshops: Sourcing Sustainability (in collaboration with the Global Environmental Management Initiative and The Sustainability Consortium)
 - Economic & Environmental Trade-Offs, HQ Ashland Chemical, Dublin, OH, June 23, 2014.
 - Parameterizing Sustainability Modeling, Headquarters of Georgia-Pacific, Atlanta, GA, March 5, 2014.
 - Understanding Strategic Sourcing: HQ Tennant, Minneapolis, MN, December 10, 2013.
 - System Boundaries and Hotspots, HQ FedEx, Memphis, TN, November 12, 2013.
 - Developing a Supply Chain Sustainability Tool, HQ Kraft Foods, Northfield, IL, June 12, 2013.
 - Initiatives inFocus, Procurement in Sustainability: from buying green products to creating green solutions, February 12, 2012.
- NiSE Workshops: Improving Material Cycling (in collaboration with Keep America Beautiful)
 - Initiatives inFocus, Material Cycling: Plastics and Plastic Packaging, November 16, 2012.
 - Recycling 2.0: Exploring EPR for Packaging and Printed Materials. Minneapolis, MN. May 2012.
- NiSE Workshops: Global Energy Management (in collaboration with Environmental Defense Fund and the Johnson Foundation)
 - Supply Chain Coordination and Global Energy Efficiency. Johnson Foundation at Wingspread, Racine, WI, November 2012.
 - Re-discovering Energy Efficiency. Johnson Foundation at Wingspread, Racine, WI, Nov. 2010.
- NiSE/GOLDEN Workshops: Organizational Strategy and Behavior (in collaboration with Global Organizational Learning and Development Network)
 - Ecosystems for developing large system innovation, MIT Sloan School of Management, October 11-12, 2012.
 - Coordinated & Engaged Case-based Research, Boston, MA, November 9-11, 2011.
 - Developing a Global Research Network and Protocol, Vienna, Austria, June 19-21, 2011
- NiSE (with Duke U. & Yale U.), Biomass Feedstocks: Supply Chain Risks and Rewards, Washington D.C., November 2012.
- NorthStar Consortium Meetings and Conferences:
 - Solutions Summit: Organizing for Sustainability. Minneapolis, MN. May 2012.
 - Metrics Matter, Saint Paul, MN, June 2011
 - Developing a Collaborative Research Incubator, Minneapolis, MN, May 2010
 - Inaugural Meeting, Minneapolis, MN, December 2009
- Bio-fuels, Carbon and Trade, Center for Sustainable Enterprise Development, Minneapolis, MN. October 2007.

Service

JOURNAL REVIEW ACTIVITY

- Senior Associate Editor, Organization & Environment - Impact Factor:2.650 | Rankings: Environmental Studies 18 out of 104, Management 35 out of 192, 2016-2018.
- Scientific Committee and Editorial Board, Revista de Ciencias Ambientales (Tropical Journal of Environmental Sciences), 2015-2018.
- Peer Reviewer: Energy Policy; Global Environmental Change; Journal of Cleaner Production; Journal of Industrial Ecology; Business & Society; Environmental Politics; Environment and Planning C: Government and Policy; Production and Operations Management; International Journal of Life Cycle Assessment; Regulation & Governance

BOARDS, COMMITTEES & REVIEW PANEL ASSIGNMENTS REVIEW ACTIVITY

- Governance Committee, U.S. EPA Pilot Guidelines for Environmental Performance Standards and Ecolabels, 2015-2016
- Advisory Committee, Building Collective Research Capacity, Network for Business Sustainability, 2014
- Guidance Committee, Valuing Social Capital Systematic Review, Network for Business Sustainability: South Africa, 2013-2014
- Advisory Council, Center for International Business Education and Research, CIBER CSOM, 2010-2014
- Leadership Board, GOLDEN for Sustainability, 2011-2013

- Co-Chair, Academy of Management, Professional Development Workshop (with Margaret Taylor, Stanford U.) on managing carbon risks and strategies, 2013
- Reviewer, General Mills Supply Chain Sustainability, with TruCost, 2013
- Reviewer, Council for Agricultural Science and Technology Issue Paper, "Energy Issues Affecting Corn/Soybean Systems: Challenges for Sustainable Production," 2012
- Referee, DuPont Sustainable Growth Award Program, Wilmington, DE, 2011
- Member, General Services Administration Greening the Federal Government Roundtable, 2010-2011
- Member, ANSI Education Committee, 2009-2011
- Advisory Board, Green Products Roundtable (currently the Sustainable Purchasing Leadership Council), 2008-2010
- Steering Committee, EPA/ANSI workshop on sustainable product standards. April 2009
- Deputy Coordinator, International Wood Logistics Research Network, Wood Logistics Research Network, University of Helsinki, Finland, 2003-2004
- Reviewer, USDA, National Research Initiative Competitive Grants Program, 2002-2004
- Reviewer, John A. Howard Dissertation Competition Evaluation, American Marketing Association's Premier Award for best Ph.D. dissertation in the field of marketing, 2003
- Program Reviewer, NAPFSC-NPC Forest Products Priorities for the Future, Forest Products Lab, Madison, WI, 2003
- Certification Action Team, Blandin Foundation - Vital Forests/Vital Communities Conference Series, 2003
- Advisory Board, Northwestern Lumber Association/Lumber Tech Group/University of Minnesota Industry Education Consortium, 2000-2002
- Scientific Committee of the Joint Conference, "Supply Chain Management for Paper And Timber Industries," Vaxjoe, Sweden, 2001.
- Advisory Panel, North Hennepin Community College Educational/Industrial Curriculum Development, 2000

UNIVERSITY, COLLEGE & DEPARTMENTAL SERVICE

- UMN University Senator (2013-present); UMN Faculty Senator (2013-present); OVPR Search Committee for IonE Director (2015); OVPR Strategic Planning Subcommittee on Reengineering Public-Private Partnership (2014-2015); IonE Leadership Council (2010-2014); Twin-Cities Campus Sustainability Committee, Co-Chair (2012-2013); Twin-Cities Campus Sustainability Committee, Member (2010-2011; 2014); ESPM Consultative Council, CEM Rep (2007-present); CFANS Faculty Oversight Committee, Member (2010-2011); CFANS Bio-economy Task Force (2007-2008); CNR Information Technology Committee (2002-2006); CNR Collegiate Faculty Consultative Committee (2002-2004, re-elected); CNR Collegiate Faculty Consultative Committee (2000-2002, elected); CNR Forestry Library Committee (2002-2004); CNR Prospective Student Advisory Committee (2002-2003); CNR Undergraduate Curriculum Review Committee (1999-2000); CNR Student Technology Fee, Vision and Oversight Committee (2000-2002).; CNR Computer Facilities Committee (2000-2002); CNR Student/Faculty Senate (2000-2003); BBSEM Graduate Programs, Member (2008-present); FPMDI Search Committee (2010-2011); BBE Scholarship Committee (2006-2009); BP Corporate Environmental Mgmt. Faculty Search Committee, Chair (2004); WPS BioProducts Mktg. & Mgmt. Curriculum Development, Chair (2003); WPS BioProducts Engineering Curriculum Development, Member (2003); WPS ENR CEM Curriculum Development, Chair/Member (2003); WPS NRES Exploratory Co-Leader (2000); WPS Recruitment Committee (1999-2000).

Professional Experience

FOUNDER & CEO

MARKET & RESOURCE MANAGEMENT – St. Paul, MN – 2001 - 2006

- Conducted consulting-based research for fortune 500 clients in areas of marketing research and developed integrated marketing communications deployment and allocation decision-support tools.

ADMINISTRATOR, MARKET PLANNING AND ANALYSIS

GTE WIRELESS – Nashville, TN – 1998 - 1999

- Developed and implemented quantitative and qualitative market research in the areas of product development, pricing and customer loyalty/migration/retention directly impacting over 5.5 million wireless communications

subscribers.

REPRESENTATIVE, SALES & SERVICE

BANK ONE - Colorado Springs, CO - 1993---1994

- Created new position to improve small business product sales and increase the Retail Banking Division customer base.

Selected Media & Policy Mentions

- Huffington Post, Quantifying the social cost of firearms, July 13, 2016 (http://www.huffingtonpost.com/the-conversation-us/quantifying-the-social-co_b_10966060.html) -- over 12,000 readers.
- KARE 11, Could K-Cups be banned in the U.S.? with Cory Hepola, March 21, 2016 (on air; <http://www.kare11.com/news/could-k-cups-be-banned-in-the-us/86568632>).
- KARE 11, True Savings of Daylight Saving time, with Kim Insley, March 11, 2016 (on air; <http://www.kare11.com/news/true-savings-of-daylight-saving-time/77371019>).
- WCCO, Earth Day broadcast with Jason DeRusha – What can we do on Earth Day, April 22, 2015 (on air).
- MPR News, 3M to go green on pulp, paper purchases, Elizabeth Dunbar, 5 March 2015 (on air).
- Energy Digital, How to create energy efficient supply chains, 18 March 2014.
- The Guardian, Corporate response to climate change is plateauing says new supply chain report, 21 January 2014.
- Supply Chain Management Review, Tracking climate change: a new supply chain challenge, March/April 2014
- The National Academies Press, Energy-Efficiency Standards and Green Building Certification Systems Used by the Department of Defense for Military Construction and Major Renovations, 2013.
- The Sustainable Supply Chain, GEMI Begins to Develop GEMI Supply Chain Sustainability Tool, 18 October 2013.
- Food Logistics, GEMI Develops Tool for a Sustainable Supply Chain, 15 October 2013.
- Environmental Leader, GEMI Develops Sustainable Supply Chain Tool, 14 October 2013.
- GreenBiz.com, Unlikely partnership identifies how to save more energy in supply chains, 12 August 2013.
- Minnesota Public Radio, Carbon-cutting firms should encourage suppliers to do the same, 8 August 2013 (on air).
- Energy Manager Today, Supply Chain Efficiency ‘Key’ to Cutting Carbon Footprint, 8 August 2013.
- Ensia, The Murky World of Green Marketing, 12 December 2012.
- Midwest Energy News, ‘Social’ package pickups could cut online shopping’s energy use, 26 November 2012.
- Environmental Leader, Socially Networked Pickup Systems Can Reduce GHGs Up To 98%, Study Finds, 27 August 2012.
- Minnesota 2020, Free Market Sustainability: Environmentally Sustainable? 18 July 2012.
- Finance & Commerce, ‘Unlikely partnerships’ work on sustainability issues, 23 May 2012.
- GreenBiz.com, My 5 Favorite Events of the Year, 13 December 2011.
- Minnesota Daily, U helps get vaccines to rural Africa, 30 November 2011.
- Star Tribune, A leap toward greener competition, 15 August 2011.
- Treehugger.com, Understanding Labels Part 2: Separating Green Building from Greenwash, 1 February 2011.
- Minneapolis/St. Paul Business Journal, Minnesota NISE brings together academic, business for sustainability effort, 20 June 2010.
- The Princeton Review’s Guide to 286 Green Colleges, 2010-2011.
- Philadelphia Business Journal, Green Globes certification rises as alternative to LEED, 20 August, 2007.
- Finance & Commerce, LEED rival looks to expand in Minnesota, 13 August 2008.
- St. Paul Pioneer Press, Beware the many shades of green in products' eco-friendly claims, 19 April 2008.
- Nashville Public Radio, Green Building Fight Brewing in State Legislature, 17 March 2008 (on air).