

Joseph Fiksel

Dr. Joseph Fiksel, Principal and Co-Founder of Eco-Nomics LLC, is an internationally recognized authority on sustainable business practices, including life cycle management, product stewardship, design for environment, and supply chain management. He has over

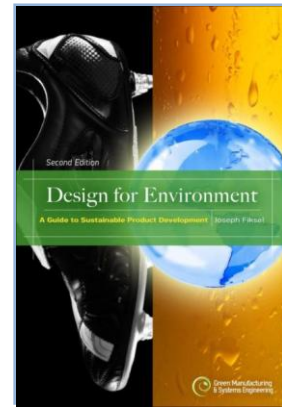


20 years of management consulting and research experience for corporations, industry associations, and government agencies. Joseph's corporate clients have included leading multi-national companies in the automotive, electronics, defense, chemical, pharmaceutical, agricultural, food and beverage, consumer products, glass, cement, and electric power industries.

A native of Montreal, Joseph began his career at DuPont of Canada, and then joined Arthur D. Little, Inc., where he led the Decision and Risk Management group. Later, he served as Vice President for Life Cycle Management at Battelle, where he directed the Responsible Care® product stewardship program.

In addition to his consulting activities, Joseph is the Executive Director of the Center for Resilience at The Ohio State University, and acts as Sustainability Advisor to the U.S. Environmental Protection Agency's Office of Research and Development.

Joseph has served on numerous advisory boards, including the U.S. Technical Advisory Group for ISO 14000 and the advisory boards for sustainable enterprise programs at both University of Michigan and University of North Carolina. He was an officer and founding member of the Society for Risk Analysis, and has testified on health risk analysis issues to Congressional and White House committees. He has published over 70 refereed articles and several books, and is a frequent invited speaker at business and professional conferences. His most recent book, *Design for Environment, Second Edition: A Guide to Sustainable Product Development*, was published by McGraw-Hill in 2009. Joseph holds a bachelor's degree from M.I.T., a doctorate in Operations Research from Stanford University, and an advanced degree in applied mathematics from La Sorbonne in Paris.



Experience

The following are highlights of Joseph's experience in recent consulting engagements.

Life Cycle Assessment. Directed life cycle assessment (LCA) studies in numerous industry sectors, including beverage containers, automobile tires, energy technologies, agricultural commodities, and home insulation. Served on several expert review panels for LCA studies conducted according to the ISO 14040 protocol. Helped to develop advanced Eco-LCA™ web-based software for streamlined LCA.

Climate Strategy. Utilized state-of-the-art methods, including LCA, to develop carbon footprint assessments and mitigation plans for company facilities and supply chain operations in the food processing, aviation, energy systems, and other industries; also directed urban-scale and state-wide carbon emission inventories and policy analyses.

Sustainable Materials Management. Developed a strategic approach to integrated management of global material life cycles, commissioned and published by the Organization for Economic Cooperation and Development (OECD). This work provided a basis for the ongoing OECD program in Sustainable Materials Management.

World Business Council for Sustainable Development. Oversaw a landmark \$2.5 million study of the global cement industry, commissioned by WBCSD and carried out by an international team of consultants. Developed recommendations for cement companies to pursue profitable growth in a sustainable manner, which were incorporated into the industry Agenda for Action announced at the Johannesburg Summit in 2002.

GEMI Sustainability Tools. Led the development of several major tools published by the Global Environmental Management Initiative (GEMI), a consortium of 40 leading U.S. companies, with the purpose of increasing shareholder value through excellence in sustainable development (SD). These tools include the computer-based *SD Planner*[™] system, the supply chain strategy tool *Forging New Links*, and *Clear Advantage*.

Corporate Sustainability Programs. For a number of Fortune 500 clients, provided expert advice for design, establishment and roll-out of corporate sustainability programs, working closely with internal cross-functional teams. These included leading companies in the materials, agricultural, electric utility, food, and real estate industries. Also assisted in successful applications for listing on the Dow Jones Sustainability Indexes.

Electronic Industry Code of Conduct. Worked with an international electronic industry consortium, including HP, IBM, and Motorola, to develop a standard code of conduct for environmental, health, safety, and ethics, along with a supplier self-assessment scheme.

EPRI Environmental Performance Measurement. Developed ISO 14001-compatible environmental performance measurement system for the electric utility industry, sponsored by the Electric Power Research Institute in Palo Alto, California. Provided customized implementation support directly to EPRI member companies.

Environmental Risk Management. Assisted numerous industrial clients in the establishment of risk management programs, including identification and ranking of potential hazards, probabilistic exposure and risk assessment, development of risk mitigation plans, and establishment of performance indicators for monitoring purposes.

Design for Environment (DFE). Developed DFE strategies, guidelines, metrics, and analysis methods for several leading U.S. manufacturers of electronic products, including Apple Computer and Sun Microsystems, resulting in cleaner production, improved product design, and certification under the German Blue Angel eco-label.

Supply Chain Stewardship. For The 3M Company, led a multidisciplinary project team in assessing potential exposure pathways throughout the product supply chain for a class of persistent chemicals and byproducts. Supported 3M's decision to voluntarily phase out of this class of chemistry, thus enhancing the company's product stewardship reputation.

Contact information

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Recent High-Visibility Publications (Partial List)

- Bakshi, B. and J. Fiksel, “The Quest for Sustainability: Challenges for Process Systems Engineering,” *AIChE Journal*, Vol. 49, No. 6, June 2003.
- Fiksel, J., “Designing Resilient, Sustainable Systems,” *Envir. Science & Tech.*, Dec. 2003.
- Fiksel, J., J. Low and J. Thomas, “Linking Sustainability to Shareholder Value,” *Environmental Management*, June 2004.
- Fiksel, J., D. Lambert, L. Artman, J. Harris, H. Share, “Environmental Excellence: The New Supply Chain Edge,” *Supply Chain Management Review*, July/August 2004, pp. 50-57.
- J. Fiksel, “A Framework for Sustainable Materials Management,” *J. of Materials*, Aug. 2006.
- J. Fiksel, “Sustainability and Resilience: Toward a Systems Approach,” *Sustainability: Science, Practice, and Policy*, September 2006.
- J. Fiksel et al., “EPA at 40: Bringing Environmental Protection into the 21st Century.” *Environmental Science and Technology*, 43 (23), pp 8716–8720, 2009.
- T.J Pettit, J. Fiksel and K.L. Croxton, “Ensuring Supply Chain Resilience: Development of a Conceptual Framework,” *International Journal of Business Logistics*, 2010.
- J. Fiksel, B.R. Bakshi, A. Baral, E. Guerra, B. DeQuervain, “Comparative Life Cycle Assessment of Scrap Tires,” *Clean Technology and Environmental Policy*, 2010.
- J. Fiksel, “Evaluating Supply Chain Sustainability,” *Chemical Engineering Progress*, 106 (5), pp. 28-38, May 2010.

Recent Invited Conference Presentations (Partial List)

- OECD: Sustainable Materials Management, Mechelen, Belgium, 2010
- Conference Board: Business and Sustainability, New York, NY, 2010
- Treading the Green Mile, Mumbai, India, 2010
- International Council on Sustainability Science & Engineering, Cincinnati, Ohio 2009
- Greener by Design 2009 Conference, San Francisco, California, 2009
- International Logistics & Supply Chain Conference, Madison, Wisconsin, 2008
- CIBER: Global Security Challenges & Opportunities, Washington, DC, 2008
- National Biofuels Conference, Jackson, Mississippi, 2008
- SINTEC International Logistics Forum, Mexico City, 2007
- Sustainable Innovation International Conference, Chicago, Illinois, 2006
- Institute for Supply Management Annual Conference, San Antonio, Texas, 2005
- U.S. Environmental Protection Agency, Millennium Lecture, Washington, DC 2005

Recent Speaking Engagements at Company or Industry Events (Partial List)

- The New Corporation: SAP Retreat for Global CEOs, Frankfurt, Germany, 2010
- Ohio Chemical Technology Council, Columbus, Ohio, 2009
- Hewlett Packard Sustainability Seminar, San Francisco, California, 2009
- Grocery Manufacturers Association Sustainability Summit, Washington, DC, 2008
- Owens Corning Global Environmental Conference, Nashport, Ohio 2007
- Procter & Gamble Supply Chain Analytics, Cincinnati, Ohio 2007
- Glass Manufacturing Industry Council, Board Meeting, Westerville, Ohio, 2006
- Cinergy Corporation, Sustainability Forum, Cincinnati, Ohio, 2005
- Eli Lilly, Global EH&S and Sustainability Conference, Indianapolis, Indiana, 2004