

**REID J. LIFSET**

Work:  
School of Forestry & Environmental Studies  
Yale University  
195 Prospect Street  
New Haven, CT 06511-2189 USA

Home:  
228 Everit Street  
New Haven, CT 06511-2189 USA

Tel: +1-203-432-6949  
Fax: +1-203-432-5912  
Email: reid.lifset@yale.edu  
Web: <http://environment.yale.edu/profile/lifset>

**EDUCATION**

**Yale School of Organization and Management** New Haven, Connecticut  
Master's Degree in Public and Private Management (MPPM), 1989.

**Massachusetts Institute of Technology** Cambridge, Massachusetts  
MS, Political Science, 1987. Concentration in political economy, public policy, and politics of science and technology. Thesis: "Sacred Cows and Cash Cows: The Political Economy of Commercial Activities of Nonprofit Organizations." Completed field exams with distinction for doctoral program in political science.

**Swarthmore College** Swarthmore, Pennsylvania  
BA with Honors in Philosophy and History, 1979.

**EMPLOYMENT**

**Yale University** New Haven, CT (1996-present)  
*Editor-in-Chief, Journal of Industrial Ecology*,  
Plan, launch, and manage international peer-reviewed bimonthly on industrial ecology headquartered at Yale School of Forestry and Environmental Studies. Responsible for all intellectual and managerial aspects of journal including editorial direction, peer-review policy, market strategy, recruitment of editors, supervision of refereeing, fundraising and financial management.

**Yale University** New Haven, CT (1993 - present)  
*Research Scholar*  
*Associate Director*, Industrial Environmental Management Program  
*Resident Fellow in Industrial Ecology*  
Co-direct teaching and research program within School of Forestry and Environmental Studies. Supervise secretariat for International Society for Industrial Ecology (ISIE). Direct annual lecture series on business and environment. Editor, *Yale Working Papers on Solid Waste Policy*.

**Cal Recovery Systems** New Haven, CT (1989 - 1992)*Consultant*

Perform economic, technical and policy analyses of solid waste management needs for public and private sector clients. Projects include source reduction plan for the City of New York and plastics recycling plans for New Haven.

**Rand Corporation** Santa Monica, California (1984)*Consultant, Program on Communications Policy*

Member of team developing research design to evaluate the restructuring of the Federal Telephone System. Supervised survey of technical and industry literature.

**National Public Radio and NPR Ventures** Washington, D.C. (1979-1983)*Planning Associate, Strategic Planning Department*

Monitored and assessed regulatory, technological, and marketplace developments in telecommunications affecting NPR's commercial ventures. Developed and implemented a management information system for public broadcasting system statistics. Prepared Congressional testimony for NPR executives.

**HONORS, AWARDS AND RECOGNITION**

Keynote speaker. Third decade of EPR. Symposium, International Institute for Industrial Environmental Economics, Lund University, Lund, Sweden, October 10, 2016.

Society Prize, International Society for Industrial Ecology, 2015

Lecturer, Distinguished Speaker Series, David O'Brien Centre for Sustainable Enterprise, John Molson School of Business, Concordia University, 2012.

Chair, Gordon Research Conference on Industrial Ecology, Colby-Sawyer College, 2010.

Keynote speaker, Gordon Research Conference, Oxford University, Oxford, UK, 2006.

Keynote speaker, Frontiers of Research in Industrial Ecology, University of Lausanne, Lausanne, Switzerland, 2006.

Keynote speaker, Producer Responsibility for Waste Electrical and Electronic Equipment: Future Waste and Incentives for Design, INSEAD WEEE Directive Series, INSEAD, Fontainebleau, France, November 30, 2006.

Plenary speaker, International Conference on Zero Emissions in Industrialized Society, United Nations University, Tokyo, 1999.

Keynote speaker, OECD International Workshop on Extended and Shared Responsibility for Products, Washington, D.C., 1998.

Keynote speaker, ConAccount [EU Network for Materials Flow Analysis] Conference on Ecologizing Societal Metabolism, The Netherlands, 1997.

Javits Fellow, U.S. Department of Education National Graduate Fellowship for study in the social sciences, 1985-1986

John D. Rockefeller III Fellow, Program on Nonprofit Organizations, Yale University, 1986.

Graduate Fellow, Program in Science, Technology and Society, Massachusetts Institute of Technology, 1984-1987

Honorable Mention, National Science Foundation Graduate Fellowship, 1984

## **PUBLICATIONS**

### Book Chapters

- Lifset, R., S. Ali, T. Makov, and J. Kulczycka. In press. Review of Material Efficiency Policies for Climate Change Mitigation. In IRP. *Resource Efficiency and Climate Change: Material Efficiency Strategies for a Low-Carbon Future*. Hertwich, E., Lifset, R., Ali, S., Pauliuk, S., Heeren, Tu, Q. A report of the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya.
- Hertwich, E. R. Lifset, S. Pauliuk, and N.Heeren 2019. Bridging the gap: enhancing material efficiency in residential buildings and cars. In United Nations Environment Programme. *Emissions Gap Report 2019*. UNEP, Nairobi, Kenya.
- Chertow, M., R. Lifset, and T. Yang. 2018. Industrial ecology. In *Oxford Bibliographies in Ecology*. Edited by D. Gibson. New York: Oxford University Press.
- Graedel, T. and R. Lifset. 2016. Industrial Ecology's First Decade. In *Taking Stock of Industrial Ecology*, edited by R. Clift and A. Druckman. Springer International.
- Lifset, R. 2016. The role of government in extended producer responsibility: A discussion of selected governance issues. In *Extended producer responsibility: Updated guidance for efficient waste management*. Paris: Organisation for Economic Cooperation and Development.
- Lifset, R. and T. E. Graedel. 2015. Industrial ecology. In *International encyclopedia of the social & behavioral sciences (2nd edition)*. Edited by J. D. Wright. Oxford: Elsevier.
- Lifset, R. and F. Boons. 2011. Industrial ecology: Business management in a material world. In *Oxford Handbook on Business and Environment*. Edited by P. Bansal and A. Hoffman. Oxford, UK: Oxford University Press.
- Ashton, W. and R. Lifset. 2011. Industrial ecology. In *Encyclopedia of Sustainability*, Vol. 4: Natural Resources and Sustainability. Edited by D. Vasey, K. Christensen, L. Shen, & S. Thompson. Great Barrington, MA: Berkshire
- Lifset, R. 2010. Industrial ecology in the age of input-output analysis. In *Handbook of Input-Output Analysis in Industrial Ecology*, Edited by S. Suh. New York: Springer.
- Lifset, R. and T.E. Graedel. 2002. Industrial ecology: Goals and definitions. Opening chapter in *Handbook of Industrial Ecology*, Edited by R. Ayres and L. Ayres, Cheltenham, UK: Edward Elgar, Inc.
- Lifset, R. 1989. Sacred cows or cash cows: The politics of the commercialization movement," In *The Future of the Nonprofit Sector*, Edited by Virginia Hodgkinson. San Francisco: Jossey-Bass.

### Refereed Articles

- Tong, X., D. Tao, and R. Lifset. 2018. Varieties of business models for post-consumer recycling in China. *Journal of Cleaner Production* 170(Supplement C): 665-673.

- Kellens, K., M. Baumers, T. G. Gutowski, W. Flanagan, R. Lifset, and J. R. Duflou. 2017. Environmental Dimensions of Additive Manufacturing: Mapping Application Domains and Their Environmental Implications. *Journal of Industrial Ecology*. 21: S49-S68. doi: 10.1111/jiec.12629
- Kalimo, H. and R. Lifset. 2015. Thinking under the box: Public choice and constitutional law perspectives on city-level environmental policy. *William and Mary Environmental Law and Policy Review*. 40(1): 200-234.
- Mayers, K., R. Lifset, K. Bodenhofer, and L. N. Van Wassenhove. 2013. Implementing individual producer responsibility for waste electrical and electronic equipment through improved financing. *Journal of Industrial Ecology* 17(2): 186-198.
- Lifset, R. and M. Eckelman. 2013. Material efficiency in a multi-material world. *Philosophical Transactions of the Royal Society, A: Mathematical, Physical & Engineering Sciences* 371:20120002.
- Kalimo, H., R. Lifset, C. van Rossem, L. van Wassenhove, A. Atasu, and K. Meyers. 2012. Greening the economy through design incentives: Allocating extended producer responsibility. *European Energy and Environmental Law Review* December, 21(6):274-305.
- Lifset, R., M. Eckelman, E. M. Harper., Z. Hausfather, and G. Urbina. 2012. Metal lost and found: Dissipative uses and releases of copper in the United States, 1975–2000. *Science of the Total Environment* 417–418:138-147.
- Eckelman, M., R. Lifset, I. Yessios and K. Panko. 2011. Teaching industrial ecology and environmental management in Second Life. *Journal of Cleaner Production* 19:1273-1278.
- Johnson, J., E. M. Harper, R. Lifset, and T. E. Graedel. 2007. Dining at the periodic table: Metals concentrations as they relate to recycling. *Environmental Science & Technology* 41(5): 1759-1765.
- Tong, X. and R. Lifset. 2007. International copper flow network: A blockmodel analysis. *Ecological Economics* 61(2-3): 345-354.
- Johnson, J., J. Jirikowic, M. Bertram, D. van Beers, R. B. Gordon, K. Henderson, R. J. Klee, T. Lanzano, R. Lifset, L. Oetjen, and T. E. Graedel. 2005. Contemporary anthropogenic silver cycle: A multilevel analysis. *Environmental Science & Technology* 39(12): 4655-4665.
- Graedel, T. E., D. van Beers, M. Bertram, K. Fuse, R. B. Gordon, A. Gritsinin, E. M. Harper, A. Kapur, R. J. Klee, R. Lifset, L. Memon, and S. Spatari. 2005. The multilevel cycle of anthropogenic zinc. *Journal of Industrial Ecology* 9(3): 67-90.
- Graedel, T. E., D. van Beers, M. Bertram, K. Fuse, R. B. Gordon, A. Gritsinin, A. Kapur, R. J. Klee, R. J. Lifset, L. Memon, H. Rechberger, S. Spatari, and D. Vexler. 2004. Multilevel cycle of anthropogenic copper. *Environmental Science & Technology* 38(4): 1242-1252.
- Thomas, V., T. Theis, R. Lifset, D. Grasso, B. Kim, C. Koshland, and R. Pfahl. 2003. Industrial ecology: Policy potential and research needs. *Environmental Engineering Science* 20(1): 1-9.
- Gordon, R. B., T. E. Graedel, M. Bertram, K. Fuse, R. Lifset, H. Rechberger, and S. Spatari. 2003. The characterization of technological zinc cycles. *Resources, Conservation and Recycling* 39(2): 107-135.
- Graedel, T. E., M. Bertram, K. Fuse, R. B. Gordon, R. Lifset, H. Rechberger, and S. Spatari. 2002. The contemporary European copper cycle: The characterization of technological copper cycles. *Ecological Economics* 42(1-2): 9-26.

- Lifset, R., R. B. Gordon, T. E. Graedel, S. Spataro, and M. Bertram. 2002. Where has all the copper gone: The stocks and flows project, Part 1. *JOM* 21-26.
- Godbey, G., R. Lifset, and J. Robinson. 1998. No time to waste: An exploration of time use, attitudes toward time, and the generation of municipal solid waste. *Social Research* 65(1): 101-140.
- Lifset, R. 1993. Take it back: Extended producer responsibility as a form of incentive-based policy. *Journal of Resource Management and Technology* 21(4): 163-175.
- Lifset, R. 2000. Industrial ecology: Building a framework for eco-design and life cycle assessment. *Journal of the Japanese Institute of Electronics Packaging* 3(5):403-407.
- Lifset, R. 1986. The politics of risk assessment: Deliberate release of genetically-engineered microorganisms. *Technology in Society* 8: 299-318.

### Editorials and Columns in the *Journal of Industrial Ecology*

- Lifset, R. 2019. Taking the circular economy and the *Journal of Industrial Ecology* to the next level. *Journal of Industrial Ecology*. 23(1): 23(1): 6– 11. [doi.org/10.1111/jiec.12841](https://doi.org/10.1111/jiec.12841)
- Hertwich, E., Heeren, N., Kuczenski, B., Majeau-Bettez, G., Myers, R. J., Pauliuk, S., Stadler, K. and Lifset, R. 2018. *Nullius in verba*: Advancing data transparency in industrial ecology. *Journal of Industrial Ecology*. 22(1) : 6-17. doi:10.1111/jiec.12738
- Gloria, T., Guinée, J., Kua, H. W., Singh, B. and Lifset, R. 2017. Charting the future of life cycle sustainability assessment: A special issue. *Journal of Industrial Ecology*. 21(6): 1449–1453. doi:10.1111/jiec.12711
- Baumers, M., J. R. Duflou, W. Flanagan, T. G. Gutowski, K. Kellens, and R. Lifset. Charting the environmental dimensions of additive manufacturing and 3D printing. 2017. *Journal of Industrial Ecology* 21: S9-S14. doi: 10.1111/jiec.12668
- Lifset, R. 3D Printing and Industrial Ecology. 2017. *Journal of Industrial Ecology*. 21: S6-S8. doi: 10.1111/jiec.12669
- Brattebø, H. and Lifset, R. 2017. Winners of the 2016 Graedel Prizes: The Journal of Industrial Ecology Best Paper Prizes. *Journal of Industrial Ecology*. 21(6): 1446-1448. doi:10.1111/jiec.12712
- Brattebø, H. and R. Lifset. 2016. Winners of the 2015 Graedel Prizes: The JIE Best Paper Prizes. *Journal of Industrial Ecology* 20(6): 1256-1259.
- Brattebø, H. and R. Lifset. 2015. Winners of the 2014 Graedel Prizes: The JIE Best Paper Prizes. *Journal of Industrial Ecology* 19(4): 521-523.
- Brattebø, H. and R. Lifset. 2015. Introducing First Winners of the Graedel Prize: The JIE Best Paper Prizes. *Journal of Industrial Ecology* 19(2): 185-188.
- G. P.J. Dijkema, M. Xu, S. Derrible, R. Lifset. 2015. Complexity in industrial ecology: Models, analysis, and actions. *Journal of Industrial Ecology*. 19(2): 189-194.
- Herrmann, C., M. Hauschild, T. Gutowski, and R. Lifset. 2014. Life Cycle Engineering and Sustainable Manufacturing. *Journal of Industrial Ecology* 18(4): 471-477.
- Anex, R. and R. Lifset. 2014. Life cycle assessment: Different models for different purposes. *Journal of Industrial Ecology* 18(3): 321-323.
- Lifset, R. 2014. Frontiers in footprinting. *Journal of Industrial Ecology* 18(1): 1-3.
- Lifset, R. and E. Gordon. 2013. Open access and the *Journal of Industrial Ecology*. *Journal of Industrial Ecology* 17(6): 793-795.
- Lifset, R., A. Atasu, and N. Tojo. 2013. Extended producer responsibility. *Journal of Industrial Ecology* 17(2): 162-166.

- Lifset, R. 2013. Raising the bar for symbiosis, life cycle assessment, and material flow analysis case studies. *Journal of Industrial Ecology* 17(1): 1-1.
- Lifset, R. 2012. Toward meta-analysis in life cycle assessment. *Journal of Industrial Ecology* 16: S1-S2.
- Lifset, R. 2012. Indications of progress. *Journal of Industrial Ecology* 16(1): 1-1.
- Lifset, R. 2011. Moving beyond eco-efficiency. *Journal of Industrial Ecology* 15(5): 639-640.
- Lifset, R. 2011. CrossCheck. *Journal of Industrial Ecology* 15(3): 337-338.
- Lifset, R. and E. Gordon. 2010. Setting out and sorting out boundaries in the *Journal of Industrial Ecology*. *Journal of Industrial Ecology* 14(6): 863-865.
- Nzihou, A and R. Lifset. 2010. Waste valorization, loop-closing, and industrial ecology. *Journal of Industrial Ecology* 14(2): 196-199.
- Lifset, R. 2010. The least publishable unit: Dealing with salami publishing. *Journal of Industrial Ecology* 14(2): 183-184.
- Lifset, R. 2009. An embarrassment of riches. *Journal of Industrial Ecology* 13(6): 837-838.
- Anex, R. and R. Lifset. 2009. Postscript to the corn ethanol debate. *Journal of Industrial Ecology* 13(6): 996-999.
- Anex, R. and R. Lifset. 2009. Assessing corn ethanol. *Journal of Industrial Ecology* 13(4): 479-482.
- Lifset, R. and R. Anex. 2009. The indirect effects of industrial ecology. *Journal of Industrial Ecology* 13(3): 347-349.
- Lifset, R. 2009. Beyond the green bubble. *Journal of Industrial Ecology* 13(1): 1-3.
- Lifset, R. 2008. Good news, sad news, and more transitions. *Journal of Industrial Ecology* 12(4): 495-496.
- Lifset, R. 2008. The quantitative and the qualitative in industrial ecology. *Journal of Industrial Ecology* 12(2): 133-135.
- Lifset, R. 2008. Metamorphosis of the *Journal of Industrial Ecology*. *Journal of Industrial Ecology* 12(1):1-2.
- Lifset, R. and T. Lindhqvist. 2008. Producer responsibility at a turning point? *Journal of Industrial Ecology* 12(2): 144-147.
- Lifset, R. 2007. Cement, yogurt and mercury. *Journal of Industrial Ecology* 11(3):1-3,
- Lifset, R. 2007. Reaching out but staying connected. *Journal of Industrial Ecology* 11(1): 1-3.
- Lifset, R. 2006. Differing approaches to energy flow accounting. *Journal of Industrial Ecology* 10(4): 149-150.
- Lifset, R. 2006. Good news. *Journal of Industrial Ecology* 10(1-2): 1-3.
- Lifset, R. 2005. Industrial ecology and public policy. *Journal of Industrial Ecology* 9(3): 1-3.
- Lifset, R. 2005. Conserving scholarly resources. *Journal of Industrial Ecology* 8(4):1-2.
- Tong, X., R. Lifset and T. Lindhqvist. 2005. Extended producer responsibility in China: Where is "best practice"? *Journal of Industrial Ecology* 8(4): 6-9.
- Lifset, R. 2004. Probing metabolism. *Journal of Industrial Ecology* (2004): 8(3):1-3.
- Lifset, R. Seven years and still growing. *Journal of Industrial Ecology* 7(2):1 – 2.
- Lindhqvist, T. and R. Lifset. 2003. Can we take the concept of individual producer responsibility from theory to practice? *Journal of Industrial Ecology* 7(2): 3-6.
- Lifset, R. 2002. Leveling the playing field: Making interdisciplinary environmental research accessible. *Journal of Industrial Ecology* 6(3-4):1-3.
- Lifset, R. 2002. Patterns and paradoxes. *Journal of Industrial Ecology* 6(1):1-3.
- Lifset, R. 2001. Closing the loop and honing our tools. *Journal of Industrial Ecology* 5(4):1-2.
- Lifset, R. 2001. Save a tree, grow a journal. *Journal of Industrial Ecology* 5(2):1-2.
- Lifset, R. and T. Lindhqvist. 2001. Trust, but verify. *Journal of Industrial Ecology* 5(2):9-12.
- Lifset, R. 2000. Moving from mass to what matters. *Journal of Industrial Ecology* 4(2):1-3.

- Lifset, R. 2000. Moving from products to services. *Journal of Industrial Ecology* 4(1):1-2.
- Lifset, R. 1999. A lively and productive ferment. *Journal of Industrial Ecology* 3(4): 1-2.
- Lifset, R. and T. Lindhqvist. 1999. Does leasing improve end of product life management? *Journal of Industrial Ecology* 3(4): 10-13.
- Lifset, R. 1999. Transitions and appreciation. *Journal of Industrial Ecology* 3(1): 1-1.
- Lindhqvist, T. and R. Lifset. 1998. A Glimmer of Success EPR and the Electronic Data Log. *Journal of Industrial Ecology* 2(4): 10-12.
- Lifset, R. 1998. Making connections. *Journal of Industrial Ecology* 2(4): 1-3.
- Lifset, R. 1998. On becoming an industrial ecologist. *Journal of Industrial Ecology* 2(3): 1-3.
- Lifset, R. 1998. Setting the boundaries? *Journal of Industrial Ecology* 2(2): 1-2.
- Lindhqvist, T. and R. Lifset. 1998. Getting the goal right: EPR and DfE. *Journal of Industrial Ecology* 2(1):6-8.
- Lifset, R. 1998. Taking stock and improving flow. *Journal of Industrial Ecology* 2(1): 1-2.
- Lifset, R. 1997. Why industrial ecology? *Journal of Industrial Ecology* 1(4): 1-2.
- Lifset, R. 1997. Examining the industrial ecology of a renewable resource. *Journal of Industrial Ecology* 1(3): 1-2.
- Lifset, R. 1997. Introduction to the roundtable on the industrial ecology of pulp and paper. *Journal of Industrial Ecology* 1(3): 13-14.
- Lindhqvist, T. and R. Lifset. 1997. What's in a name: Producer or product responsibility? *Journal of Industrial Ecology* 1(2):6-8.
- Lifset, R. 1997. Relating industry to ecology. *Journal of Industrial Ecology* 1(2): 1-2.
- Lifset, R. 1997. A metaphor, a field, and a journal. *Journal of Industrial Ecology* 1(1): 1-3.

#### Other Journals and Professional Magazines

- Lifset, R. 2006. Industrial ecology and life cycle assessment: What's the use? *International Journal of Life Cycle Assessment* 11(1): 14-16.
- Lifset, R. 2000. Industrial ecology and forestry. *Journal of Forestry* 98(10):12.
- Lifset, R. 2000. Full accounting. *The Sciences* 40(3): 32-37.
- Lifset, R. 1999. Linking source reduction and extended producer responsibility. *Warmer Bulletin* 68:14-15.
- Lifset, R. 1993. Hierarchy debate continues. *MSW Management*: 18.
- Lifset, R. 1992. Waste prevention. *MSW Management* 2(6):46-50.
- Lifset, R. 1991. Greener than thou: Raising the ante for life cycle analyses. *BioCycle* 32:76-77.
- Lifset, R. and M. Chertow. 1990. Changing the waste makers: Product bans and the new politics of garbage. *The American Prospect* 3:83-88, 1990.
- Lifset, R. 1990. NIMBY and the politics of garbage. *The Livable City* 14:5.
- Lifset, R. and M. Chertow. 1990. Pay-as-you-throw is the solution to the waste management crisis. *Governing* 3:74.
- Chertow, M and R, Lifset. 1990. The politics of product bans. *The Environmental Forum* 7(2):12-14.
- Lifset, R. and M. Chertow. 1990. The diaper wars. *BioCycle* 31:66-67, 1990.

#### Conference Papers

- Thinking like an ecosystem. *Turning the Ship: Environmental Transformation of the U.S. Economy* February, 2007.
- The multi-level cycle of copper. (with T.E. Graedel and R. B. Gordon) *Proceedings of the Fifth International Conference on EcoBalance*, Tsukuba, Japan, Nov. 6-8, 2002.

- Accounting for temporal effects in waste generation and prevention: Materials flow analysis and some implications for waste prevention indicators. Paper for the Organization for Economic Cooperation and Development (OECD) International Workshop on Waste Prevention Indicators, Paris, October, 2001.
- Industrial ecology and natural resources. Plenary Presentation to International Conference on Zero Emissions in Industrialized Society, United Nations University, Tokyo. 8 November 1999.
- Extended producer responsibility and leasing: Some preliminary thoughts. *Proceedings of the International Seminar on Extended Producer Responsibility as a Policy Instrument*. International Institute for Industrial Environmental Economics, Lund University, Sweden, May 1998.
- Who should pay? And why? Some thoughts on the conceptual foundations for the assignment of extended producer responsibility. (with D. R. Lombardi), Presentation to the Organization for Economic Cooperation and Development International Workshop on Extended Producer Responsibility, Ottawa, Canada, December, 1997.
- Ecologizing societal metabolism in the US: Materials flow accounting and industrial ecology. *Proceedings of the ConAccount Workshop on Ecologizing Societal Metabolism*. Amsterdam, Netherlands, November 21, 1997.
- Extending producer responsibility in North America: Progress, pitfalls, and prospects. *Proceedings of the University of Tennessee Symposium on Extended Producer Responsibility*, Washington, D.C., November, 1994.
- Packaging and product-oriented environmental policy" *Proceedings of the International Workshop on Product-oriented Environmental Policy*, Dutch Ministry of Housing, Physical Planning and the Environment, The Hague, Holland, September, 1993.
- Extended producer responsibility: Rationales and practices in North America. *Proceedings of the Expert Invitational Seminar on Extended Producer Responsibility* Lund University Department of Industrial Environmental Economics in the framework of the UNEP/IPO Cleaner Production Programme, 1992.

### Monographs and Reports

- IRP. 2019. *Resource Efficiency and Climate Change: Material Efficiency Strategies for a Low-Carbon Future*. Hertwich, E., Lifset, R., Ali, S., Pauliuk, S., Heeren, Tu, Q. A report of the International Resource Panel. United Nations Environment Programme, Nairobi, Kenya.
- Lifset, R. 1995. An assessment of solid waste management and policy in the U.S.: Implications for a grantmaking strategy. Report to the Pew Charitable Trusts. January 1995.
- Lifset, R. 1980. *Public Radio and State Governments*, 2 vols., Washington, D.C. Public Telecommunications Press.

### Book reviews

- Lifset, R. 1994. Defending the 'Inevitable Residue of Commerce.' *Forum for Applied Research and Public Policy*. 9:2(Summer):150-151.
- Lifset, R. 1992. God recycles, the devil burns. *Journal of Policy Analysis and Management*. 11(Winter):137-141.

### Other publications



Financing recycling with tax-exempt debt. Yale Law School, unpublished manuscript, 1989.  
Coalitions, defections and enforcement: Siting an incinerator in Connecticut; A game theoretic analysis. Yale School of Organization and Management, unpublished manuscript, 1988.  
Testimony Submitted to the Subcommittee on Oversight of the House Committee on Ways and Means for the Hearings on Unrelated Business Income Tax, 1987.

## **SELECTED PRESENTATIONS**

Resource Efficiency and Climate Change Mitigation (RECC): Status and Findings. International Resource Panel Meeting, Bled, Slovenia, November 7, 2019.  
Systems analysis for resource efficiency and sustainability. UN High Level Political Forum on Sustainable Development, New York. July 12, 2018  
The circular economy and industrial ecology: New approaches? New opportunities? Air & Waste Management Conference, Hartford, CT. June 27, 2018  
Extended producer responsibility in the age of the circular economy. Circular Economy 2017, Aarhus University. October 12, 2017.  
Addressing packaging waste in Connecticut, Testimony before Connecticut Legislative Packaging Taskforce, Hartford, CT. July 19, 2017  
A global perspective on EPR. Waste360 Recycling Summit, Austin, Texas. September 20, 2016.  
Extended producer responsibility: Status and recent research. ISIE Americas. May 26, 2015, Bogota, Colombia  
Show me the data: Voluntary approaches to EPR. The Roles of Government and Industry in Attaining High Performing Product Stewardship Programs, Webinar organized by the Product Stewardship Institute, November 27, 2013.  
Extended producer responsibility: A global overview. International Conference on WEEE Management and EPR Principle, Beijing, May 25, 2013.  
Industrial ecology: Status and prospects. Tsinghua University, Beijing, May 22, 2013.  
From oxymoron to interdisciplinary field: The origins and prospects for industrial ecology. Distinguished Speaker Series, John Molson School of Business, Concordia University, Montreal, February 15, 2013.  
Industrial ecology: An introduction. 40th Annual Conference, Israel Society of Ecology and Environmental Science, Tel Aviv, October 18, 2012.  
Industrial ecology: Tools for sustainable cities. Environment and Sustainable Development Leadership Program, New Haven, CT, June 11, 2012  
Grappling With materials efficiency in a multi-material world Presentation. Royal Society Scientific Meeting on Material Efficiency, London, UK, January 30-31, 2012.  
Dissipative copper releases in the United States. Presentation, International Society for Industrial Ecology, Berkeley, CA, June 8, 2011.  
Touring a facility in your pajamas: Industrial ecology in Second Life. Presentation, International Society for Industrial Ecology, Berkeley, CA, June 8, 2011 (with Matthew Eckelman).  
Teaching environmental management using new media: Virtual facility tours of the Elihu Pulp & Paper Mill. Presentation, Yale University School of Forestry & Environmental Studies Seminar Series, November 2, 2011 (with Matthew Eckelman).

- Sustainable materials management. Funders Workgroup for Sustainable Production and Consumption Conference, Airlie Conference Center, Warrenton, Virginia, May 17, 2011.
- Collaborative industrial ecology in Asia, 2002-2006. Presentation, The Environment and Higher Education: Past, Present and Future. Brown University, November 5, 2010.
- Take it back? Product policy, extended producer responsibility & cities. Presentation, Environment & Sustainable Development Leadership Program, Yale University, May 10, 2010.
- Product stewardship – Is it meeting its promise? Presentation, 2009 Spring Networking Conference Call. Product Stewardship Institute, April 1.
- The pursuit of a systems perspective: Reflections from industrial ecology. Toxic Use Reduction Institute, University of Massachusetts-Lowell, March 11, 2009.
- Individual producer responsibility for WEEE. Research Workshop presentation, INSEAD WEEE Directive Series, INSEAD, Fontainebleau, France, January 25, 2008.
- Reflections on the Harbor Project. New York Academy of Sciences, Workshop on the Harbor Consortium's Findings, April 3, 2008.
- Consumption and the Environment, Foresters Becoming Executives, New Haven, CT, April 19, 2007, April 14, 2008.
- Prospects for extended producer responsibility. Seminar in Ecological Economics, Rensselaer Polytechnic Institute, Troy, N.Y., April 16, 2007.
- Finding the killer app for industrial ecology. Keynote presentation, Gordon Research Conference, Oxford University, Oxford, UK, August 6, 2006.
- New developments in industrial ecology: Implications for business and policy. Presentation for the Troyes Chair in Industrial Ecology, Electricité de France, Paris, November 27, 2006.
- What next for industrial ecology? Keynote presentation, Frontiers of Research in Industrial Ecology, University of Lausanne, Lausanne, Switzerland, November 28, 2006.
- Putting EPR and IPR in context. Keynote presentation, Producer Responsibility for WEEE: Future Waste and Incentives for Design, INSEAD WEEE Directive Series, INSEAD, Fontainebleau, France, November 30, 2006.
- Industrial ecology: Implications for architecture & construction. Skidmore Owings and Merrill Building Science & Design Research Symposium, New York, NY, November 19, 2005.
- New leverage for environmental problem solvers: The potential of industrial ecology. New York Academy of Sciences, New York, NY, September 27, 2005.
- A long(er) term perspective on EPR. General Electric, Worldwide EH&S Managers Meeting, Fairfield, CT, June 17, 2004.
- Industrial ecology: An introduction and update. College of Environmental Sciences, Peking University, Beijing, China, November 11, 2004.
- Industrial ecology: The basis for industrial symbiosis. Tianjin Environmental Protection Bureau, Tianjin, China, November 15, 2004.
- Industrial ecology: Paradigm, practice, policy and prospects. U.S. EPA Region 2, Innovations Exchange Network, New York, New York, July 31, 2003
- Industrial symbiosis and eco-industrial parks. 2<sup>nd</sup> International Workshop for Eco-Industrial Development, Rayong, Thailand, March 7, 2004.
- Challenges to eco-park industrial development. 2<sup>nd</sup> International Workshop for Eco-Industrial Development, Rayong, Thailand, March 7, 2004.
- Plenary panel on Eco-Industrial Development: A Model for Sustainable Development. 2<sup>nd</sup> International Conference for Eco-Industrial Development, Bangkok, Thailand, March 12, 2004.

Responsible design and industrial ecology. ThinkSource, New York, New York, May 20, 2004.  
 Worldwide material flows. ConAccount [EU Network for Materials Flow Analysis]  
 Conference on Economic Growth, Materials Flows and Environmental Pressure,  
 Stockholm, Sweden, 26 April 2001  
 Chair, Session on Integrated Product Policy, 7<sup>th</sup> European Roundtable on Cleaner Production,  
 Lund, Sweden, 2 May 2001.  
 Concepts of industrial ecology. Annual Meeting of College & University Recyclers, New  
 Haven, 13 March 2001.

### Interviews

*National Public Radio, Texas Tribune, Time Magazine, New York Times, Business Week,  
 Chronicle of Higher Education, Connecticut Public Radio, Fortune Small Business, Milwaukee  
 Journal Sentinel, New Haven Register*

### **GRANTS AND SUPPORT**

- 1999 Pitney Bowes, Education in Industrial Ecology, \$5,000
- 2000 National Environmental Education and Training Foundation, Education in Industrial Ecology, \$14,895
- 2000 AT&T, the Environmental Research and Education Foundation, the Lounsbery Foundation, and the Norwegian University of Science & Technology, Support for the International Society for Industrial Ecology, \$168,650.
- 2000 AT&T, *Journal of Industrial Ecology*, \$25,000
- 2001 Luce Foundation, Collaborative Industrial Ecology in Asia, \$1,200,000
- 2001 National Institute for Standards & Technology, *JIE* publications on bio-materials, \$149,296
- 2001 AT&T, Education in Industrial Ecology, \$10,000
- 2003 National Science Foundation, Assessing the Sustainability of Bio-based Products, \$8,339
- 2003 Garfield Foundation, *JIE* issue on sustainable consumption, \$10,114
- 2003 ThermoRetec, *Journal of Industrial Ecology* general support, \$3,506
- 2003 UN Environment Program, *JIE* issue on sustainable consumption, \$5,000
- 2004 Xerox, *Journal of Industrial Ecology* general support, \$10,000
- 2005 Johnson Family Foundation, *Journal of Industrial Ecology* general support, \$10,000
- 2005 Leiden University/Ebara Corporation, *Journal of Industrial Ecology* general support, \$14,000
- 2005 Norwegian University of Science & Technology, *Journal of Industrial Ecology* general support, \$3,443
- 2006 Institute for Global Environmental Strategies, *JIE* issue on Global Impact of Cities, \$10,000

- 2006 Hamilton Sunstrand, 10<sup>th</sup> anniversary of the *Journal of Industrial Ecology*, \$5,000
- 2006 Educational Foundation of America, *JIE* issue on Nanotechnology & the environment, \$60,800
- 2007 Woodrow Wilson International Center for Scholars, *JIE* issue on Nanotechnology & the environment
- 2007 National Science Foundation, *JIE* issue on Applications of Material Flow Analysis, \$23,979
- 2007 Heinrich Jessen, *JIE* general support, \$5,000
- 2007 US EPA, *JIE* issue on Applications of Material Flow Analysis, \$14,994
- 2009 Wege Foundation, *JIE* Series on Education in Industrial Ecology, \$30,000
- 2009 Computer Sciences Corp, *JIE* special issue on Application of Information Technology, \$75,000
- 2011 Heinrich Jessen, *JIE* general support, \$5,000
- 2011 Nestle Waters North America, Lecture Series & EPR Special Issue, \$40,000
- 2013 Reverse Logistics Group, *JIE* issue on EPR, \$5,000
- 2014 Alcoa Foundation, Leadership in Municipal Recycling, \$150,000
- 2014 OECD, EPR Literature Review, \$15,000
- 2014 European Recycling Platform, EPR Database, \$15,755
- 2015 A-1 Recycling, ATT, GE, Nickel Inst., Graedel Prize, \$7,500,
- 2015 Richard Lounsbery Foundation, *JIE* issue on Additive Manufacturing Issue, \$51,845
- 2016 UN International Resource Panel, Open Access for *JIE* special issue, \$24,000
- 2016 European Union DESIRE project, Open Access for *JIE* special issue, \$24,000
- 2016 US DOE, *JIE* issue on Additive Manufacturing Issue, \$66,512
- 2016 General Electric, *JIE* issue on Additive Manufacturing Issue, \$7,500
- 2016 Heinrich Jessen, *JIE* general support, \$2,000
- 2016 Eileen Fisher, Inc., & Fnd. *JIE* issue on Circular Economy, \$11,000
- 2016 Waste Management, Inc., EPR reference database, \$5,000
- 2016 Deloitte, Inc. *JIE* issue on Circular Economy, \$10,000
- 2016 Tetra Pak, EPR reference database, \$10,000
- 2018 Bay and Paul Foundations, *Journal of Industrial Ecology*; EPR reference database, \$10,000
- 2018 Alfred P. Sloan Foundation, Digital Economy, Energy and Environmental Implications of the Digital Economy, \$550,000/\$17,414
- 2018 Alfred P. Sloan Foundation, Special Issue of the *Journal of Industrial Ecology*, LCA for Emerging Technologies, \$20,000
- 2018 Nickel Industry Association, Graedel Best Paper Prize, \$2,500

**APPOINTMENTS AND MEMBERSHIPS**

Member, Editorial Advisory Board, Routledge *Encyclopedia of Sustainability*, 2018-

Editor-in-chief, *Journal of Industrial Ecology*, 1996-present

Editorial board, *Waste and Biomass Valorization*, 2013-present

Editorial advisory board, *American Journal of Science*, 2004-present

Member, International Scientific Board, Institut De Ciencia I Tecnologia Ambientals, Universitat Autònoma de Barcelona, 2017-present.

Member, Environmental Advisory Board, *Good Housekeeping*, 2011 - present

Chair, Gordon Research Conference on Industrial Ecology, 2010

Faculty, NVMP-StEP E-waste Summer School, Eindhoven, NVMP, 2009

Vice Chair, Gordon Research Conference on Industrial Ecology, 2008

Member, Editorial Advisory Board, book series, "Eco-efficiency in Industry & Science", Springer Publishing, 2001-2014

Member, Science Advisory Board, New York Academy of Science Project, Industrial Ecology of the New York Harbor, 1999-2008

Member, Luce Foundation Advisory Board for the Program in Public Policy and the Environment, 2001-2007

Member, U.S. EPA Science Advisory Board, Environmental Engineering Committee, 2003-2009

Member, U.S. EPA Science Advisory Board, Scientific and Technological Achievements Awards Committee, 2010-2012.

Member, governing council, International Society for Industrial Ecology, 2001-present

Advisor, Q Collection, New York, New York (environmental design and furnishings firm), 2004 - 2011

Member, Committee of Recommendation of the Dutch Interuniversity Masters of Science Program in Industrial Ecology, 2004- present

Member, International Advisory Board, 7<sup>th</sup> International Conference on EcoBalance, Tsukuba, Japan, October 2007

Member, International Advisory Board, 6<sup>th</sup> International Conference on EcoBalance, Tsukuba, Japan, October 2004

Member, Scientific Advisory Board, International Eco-Efficiency Conference, Eco-Efficiency for Sustainability, Quantified Methods for Decision Making, Leiden, the Netherlands, 2003

Advisor, Green Order, New York, New York (environmental procurement services firm), 2003

Member, Scientific Advisory Committee, Material Flow Analysis for Sustainable Resource Management (MFAStoRM), Scientific Committee on Problems of the Environment (SCOPE), 1998-2003

Member, Review Committee on Environmental Science, Association of Universities in the Netherlands (VSNU) and Royal Dutch Academy of Sciences (KNAW), 2000

External Examiner, Environmental Policy & Law, International Institute for Industrial Environmental Economics, Lund University, Sweden, April 1996, May 1998, May 2001

## **REVIEWER**

### Tenure and promotion candidates at:

Autonomous University of Barcelona (UAB)  
Carnegie Mellon University  
Leuphana University Lüneburg  
Massachusetts Institute of Technology  
Oak Ridge National Laboratories  
Stanford University  
Swiss Federal Institute of Technology  
University of Manchester  
University of Maryland  
University of Washington

### Peer reviewer for journals:

*Ecological Economics*  
*Environmental Management*  
*Environmental Science & Technology*  
*International Journal of Life Cycle Assessment*  
*Journal of Environmental Economics & Management*  
*Journal of Cleaner Production*  
*Journal of Policy Analysis & Management*  
*Journal of Risk Research*  
*Resources, Conservation & Recycling*

### Reviewer for book manuscripts

Edward Elgar Publishing  
Lewis CRC Publishing  
Routledge  
MIT Press  
Springer

### Other Reviews

Oxford University Press, Science, Technology and Innovation for Meeting Sustainable Development Goals, 2018.

CIRP 2018, 2019 Life Cycle Engineering conference, conference submissions  
 Gordon Research Conference on Industrial Ecology, 2018, poster competition.  
 International Society for Industrial Ecology, 2017 global biennial conference, abstracts  
 Global Research Forum on Sustainable Production and Consumption, conference submissions.  
 WasteEng 2014: 5th International Conference on Engineering for Waste and Biomass  
 Valorisation, conference submissions.  
 MacArthur Foundation, candidate assessment.  
 Occupational Information Network (O\*NET), U.S. Dept. of Labor, occupational description.  
 AvniR LCA Conference, conference submissions.  
 Alliance for Research on Corporate Sustainability, conference submissions.  
 National Science Foundation, grant panels.  
 King Abdulla University of Science and Technology (KAUST), research fellowship.  
 U.S. Environmental Protection Agency, agency and contractor reports.  
 Swedish Environmental Protection Agency, grant proposals.  
 Academy of Finland, research fellowship.  
 Nonprofit Ventures Business Plan Competition, proposals.  
 GreenBlue Institute, design competition.  
 International Society for Industrial Ecology conferences, Leiden, Stockholm, poster  
 competitions.  
 Innovations in American Government (Ford Foundation and Kennedy School of Government),  
 site evaluator.

## **DEPARTMENTAL AND UNIVERSITY SERVICE**

FE&S: Chair, Industrial Environmental Management program lecture series, 1994-2014,  
 Member, Environmental Stewardship Committee, 2003-2008, Information Management  
 Committee, 2005, Space Committee, 2003-2007.

Yale University: Integrated Waste & Discard Management Committee, 2004-2006.

## **TEACHING**

### Yale Graduate Teaching

Advanced Seminar in Industrial Ecology: Waste Management and the Circular Economy, 2019.  
 Waste and Materials Management: Fundamentals and Frontiers (with M. Chertow), 2017, 2018  
 Directed Reading, Municipal Solid Waste Management, 2014

Lectures in Industrial Ecology, 1999-2018; Global Resources & the Environment, 2005;  
 Advanced Industrial Ecology Seminar, 2006, 2010-11 Greening Business  
 Operations/Environmental Aspects of a Technological Society, 1997-2008; Seminar in Forest  
 Carbon Science, 2008.

Supervision of Masters Projects/Independent Study

Deanna Lekas, Diana Dimitrova, 2006

Benson Gabler, Sharon Siart, 2009

Benjamin Morelli, 2014

Harris Feldman, 2019

**ADVISING**F&ES Masters Students

TingTing Chen; Meleah Houseknecht; 2006-7.

David Owen; Alisha Eisenstein; Adrian Horoton; Tara Parthasarathy; Trisha Shrum; Jude Wu; Xioating Hu; 2008-09.

Alisha Eisenstein; Man-Yu Yang; 2009-10.

Michael Carroll; Cope Healy; James Brian Lamas Bregante; Eduardo Raul; Joe Teng; Erica Barth; 2010-11;

Lara Burmeister; Ankur Garg; Thomas Hayes; Natalie Nava; Charissa Rujanavech; Taís Pinheiro; Maximilian Tattenbach; 2011-12.

Marissa Galizia; Mark Greenlee; Andrew Veysey; Mark Woloszy; Niancen Miao; 2012-13.

Yaping Cheng; Kenneth Cloft; Geeta; Emily Grady; Victoria Montanez; 2013-14.

Tristan Davis; Cory Nestor; Wan-Yu Sung; 2014-2015.

Abdul-Majeed Ibrahim; Yanin Kramsky; 2015-16.

Diane Boston; Siwei Fan; Andrew Greaves; Shannon Dulaney; 2016-2019.

Qiyang Kuang; Harris Feldman; Leah Yablonka; 2017-18.

Paige Curtis; Kareem Hammoud; Katryn Logan; Frenzi Ritter; 2018-2019.