

Selected Bibliographies

from the Technology Transfer Center

Cleaner Production

Part A - Suggested Titles

Part B - General Titles

1. Concepts and Policies
 - History and Concepts
 - Policies
 - Demonstration Projects
 - Visions of a Sustainable Society
 - Right-to-Know and Eco-labels
2. Tools
 - Process Management Systems
 - Life Cycle Assessment
 - Design for Environment
 - Industrial Ecology
 - Sustainability Indicators and Material Flows
 - Closing the Materials Cycle

Part A - Suggested Titles

Becker, M., Geiser, K., and Keenan, C, "Massachusetts tries to cut toxic chemical use," *Environmental Science and Technology News*, Vol. 31, No. 12, December 1997, pp. 564-567

The Massachusetts Toxics Use Reduction Act (TURA) is seen by many as a potential model for a federal materials accounting program aimed at cutting toxic chemical use. A tough system in effect since 1990, TURA requires its nearly 600 companies to publicly report toxic chemical use, develop biennial use reduction plans, and pay an annual fee to fund the program. Although some firms are finding toxics use reduction difficult, many firms are clearly making good progress.

Fisher, K. and Schot, J., *Environmental Strategies for Industry: International Perspectives on Research Needs and Policy Implications*, 1993, 389p

Environmental Strategies for Industry provide case studies that explore the recent patterns and trends in firm behavior. Included are theoretical perspectives to study and explain how companies are dealing with environmental challenges; data compiled with large surveys on the company behavior and forces behind change; an analysis of three major driving forces -- the public, the government, and the industrial market -- and their influence on companies' business strategies. This book improves our understanding of the way large firms make decisions on environmental issues and is an important contribution to the literature on industrial compliance and environmental business strategies.

Geiser, K. and Greiner, T., *Cleaner production: a study of innovation and adoption*, TURI, UMASS Lowell, Sept. 1997, 16p

This study examines the innovation process and how pollution prevention and cleaner production innovations occur and how such technologies are adopted in the market. We begin discussing the process by which cleaner production technologies are adopted in the market. Particular attention is paid to obstacles faced by cleaner production technologies when competing with established end-of-pipe pollution

control technologies. Following this discussion, we present three cleaner production process equipment innovation case studies and end with a summary of our findings and suggestions for further research.

Geiser, K., *Has the Pollution Prevention Revolution Failed?*, TURI, April 1997, presented at NPPR, 6p

Hundreds of people work on pollution prevention, and hundreds of firms have pollution prevention programs. However, pollution prevention remains a marginal part of the broader environmental protection work. Pollution prevention has faced tough challenges and only partial victories. There have been limitations to overcome and then there have been outright resistance. Therefore, the pollution prevention movement would need to be more visionary in its goals and more aggressive in its tactics.

Hawkin, P., *Taking the Natural Step, In Context*, Summer, 1995, 5p

The Natural Step is an affiliate of the Swedish organization founded in 1989. The purpose of the Natural Step is to teach and support environmental systems thinking in corporations, cities, government, unions, and academic institutions through an easily understood dialogue process rooted in fundamental science. The US Natural Step will focus on creating a defined training that can be licensed to other organizations. Also, the US Natural Step will offer all its participants a database that cross-indexes the resources available from these organizations, institutions, and businesses.

Jackson, T., *Clean Production Strategies: Developing Preventive Environmental Management in the Industrial Economy*, 1993, 400p

This book aims first to set out the underlying basis for the preventive environmental paradigm, next to identify the specific operational features which arise from the preventive approach and to illustrate these features in some detail with reference to actual operational practices, and finally to provide an overview of a policy context appropriate to the emergence in practice of clean production strategies.

Leach, M. et. al., "A systems approach to materials flow in sustainable cities: a case study of paper," *Journal of Environmental Planning and Management*, November 1997, 16p

This study develops a modeling framework within the effects of technology choice and policy on the sustainability of cities may be assessed. A life cycle accounting system for environmental impacts is combined with systems analysis, to represent the flows of resources into cities, the wastes and pollution generated and the technological choices available in an urban environment. The approach is demonstrated through a case study of the demand for paper and management of wastepaper.

Thorpe, N., "The role of the NGOs and the public to promote CP," *Journal of Cleaner Production*, Vol. 2, No. 3-4, 1994, pp.153-162

This paper examines some of the contributions by the public and non-governmental organizations (NGOs) to the promotion of clean production. It examines the need for public participation within the 'precautionary approach,' the benefits of actively disseminating company emission and toxic use data to local communities and the importance of international NGO networking and campaigning.

"UNEP launches CP Declaration," *Business and the Environment*, November 1998, pp.11-12

On 1 October, the United Nations Environment Program (UNEP) launched a new "International Declaration on Cleaner Production," which commits signatories to adopting a preventive strategy and environmental performance targets, as well as to reporting on their achievements. The six-point declaration commits its signatories to leadership, awareness, education, and training and calls for the integration of preventive strategies into all levels of an organization and within environmental management systems.

van Berkel, C., "PRIMA: a Dutch initiative for environmental improvement of retail assortments," *Journal of Cleaner Production*, Vol.2, No.3-4, 1994, pp.207-215

This paper summarizes the results and experiences of the first phase of the Dutch PRIMA project. PRIMA is a research and demonstration project aiming at Environmental Improvement of Retail Assortments (EIRA). The practical experiments have been used for the development of a generalized working methodology for retail companies.

White, M. and Wagner, B., "EcoBalance: A Tool for Environmental Financial Management," *Pollution Prevention Review*, Spring 1996, pp.31-43

This article discusses the use of the German "ecobalance" as a managerial tool for pollution prevention and environmental financial management. The article first provides a brief historical review of the ecobalance approach and differentiates it from other instruments used for similar purposes. It then details how to conduct an ecobalance analysis and discusses various methods for interpreting the results. The article concludes with reflections on the usefulness of the ecobalance to American firms.

This bibliography is edited by Soonsil Lee, a graduate student in Cleaner Production and Pollution Prevention program in Department of Work Environment, University of Massachusetts Lowell. These materials are in our research library. You are welcome to visit us any weekday from 9:00am to 5:00pm 5/99

Part B - General Titles

1. Concepts and Policies

History and Concepts

Baas, L. W., "An Integrated Approach to Cleaner Production," *Clean Production: Environmental and Economic Perspectives*, ed. K. B. Misra, New York, Springer Verlag

Brattebo, H., "Industrial Production and Sustainability (block 6)," *European Environmental Science; Towards Sustainability*, Heerlen, Netherlands: European Open University Network (EOUN) course, 1995

Chadwick, M. and Nielson, J., "Environmental Quality Objectives," in Jackson, T., *Clean Production Strategies: Developing Preventive Environmental Management in the Industrial Economy*, Ch.2, 1993, pp.41-62

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Jackson, T., "Principles of Cleaner Production," in Jackson, T., *Clean Production Strategies: Developing Preventive Environmental Management in the Industrial Economy*, Ch.8, 1993, pp.143-164

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Olson, M. H., "Charting a Course for Sustainability," *Environment*, (38) 4; May 1996, pp.11-15, 30-36

Scruggs, P. ed., "Chapter One: Definitions and Principles," *Guidelines for State Level Sustainable Development*, USA: Center for Policy Alternatives, 1993, pp.3-14

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Policies

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Greer, L. and van Loben, C., "When Pollution Prevention meets the bottom line," *Environmental Science and Technology News*, Vol. 31, No. 9, 1997, pp.418-422

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Ikwue, T. and Skea, J., "Business and the Genesis of the European Community Carbon Tax Proposal," *Business Strategy and the Environment*, Summer 1994, pp.1-10

"ISO 14001: An Uncommon Perspective: Policy Question for Proponents of the Proposed ISO Standards on Corporate Environmental Management," Benchmark Environmental Consulting, *Environmental Law Network International Newsletter*, 1, 1996, pp.33-37

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Right-to-Know and Eco-labels

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2. Tools

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Design for Environment

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Lenox, M. and Ehrenfeld, J., "Design for Environment: A New Framework for Strategic Decisions," *Total Quality Environmental Management*, Summer 1995, pp.37-51

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Sustainability Indicators and Material Flows

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Closing the Materials Cycle

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