Selected Bibliographies
from the Technology Transfer Center

Sustainability Indicators

Part A - Suggested Titles
Part B - General Titles

Part A - Suggested Titles

Allenby, B. et. al, "Ecometrics' Stakeholder Subjectivity: Values, Issues, and Effects," *Environmental Quality Management*, Vol. 8, No. 1, Autumn 1998, pp.11-19

This article summarizes four plenary lectures given at ECOMETRICS '98 in Lausanne, Switzerland. The workshop involved forty participants from industry, academic and government organizations representing seven countries and three continents.

Bennet, M. and James, P., "ISO 14031 and the Future of Environmental Performance Evaluation," *Greener Management International, The journal of Corporate Environmental Strategy and Practice*, Spring 1998, pp.71-85

The International Standards Organization (ISO) is currently finalizing a guidance document on environmental performance evaluation (EPE). When the final version is published, it will have considerable impact on business. Many assessors will take it into account when considering the EPE activities of those seeking accreditation to the environmental management system standard, ISO 14001.

Dennis, P., *Quality, Safety, and Environment: Synergy in the 21st Century*, 1997, 213p

The central theme of this book is that industry require a new approach to managing safety and environment. This book is written for: Managers responsible for quality, safety, or environmental performance; Quality, safety, and environment professionals; Executives and senior managers with a strategic interest in the future direction of quality, safety, and environmental management; Lay readers interested in the history of quality, safety, and environmental management and possible future directions; and Students interested in a career in these fields.

Ditz, D. and Ranganathan, J., *Measuring Up: Towards a Common Framework for Tracking Corporate Environmental Performance*, World Resources Center, Washington, DC., 1997, 40p

The report demonstrates that the full potential of such corporate environmental performance indicators (EPIs) is realized only when they serve decision - makers both inside and outside company walls. EPIs can provide the information necessary to measure and motivate progress towards environment goals.

Ditz, D. and Ranganathan, J., "Global Developments on Environmental Performance Indicators," *Corporate Environmental Strategy*, Vol. 5, No. 3, Spring 1998, pp.47-52

Many countries now require firms to publicly report on EPIs that should be standard indicators. Firms are also volunteering information on their environmental performance through corporate environmental reports, adherence to various codes of practice, and participation in environmental management standards.

Ehrenfeld, J. R., *Integrated Environmental Management: Strategies for the Sustainable Firm*, Symposium on Adaptive Strategies for Future-Oriented Techno-Industries, Kon-Kuk University, Seoul, Korea, September, 1996, 21p

This material includes: the evolution in the context that shapes corporate environmental practice; a new set of concerns around sustainability that has significant implications for business and product strategies; and

a short discussion of a few specific tools that can be used to achieve future-oriented strategic objectives and visions.

Farrell, A. and Hart, M., "What does sustainability really mean?," *Environment*, November 1998, pp.5-31

This article explores the concept of sustainability and the derivation of sustainability indicators, focusing on some of the more prominent efforts in this area to date. There is still a long way to go to reach consensus on how to measure sustainability. However, the ongoing efforts of many organizations are helping to change sustainability from a buzz word to a meaningful concept that is understandable to the lay public and that may become useful for decision-makings.

Hart, S., "Beyond Greening: Strategies for a Sustainable World," *Harvard Business Review*, January-February, 1997, pp.67-76

The rapid growth in emerging economies cannot be sustained in the face of mounting environmental deterioration, poverty, and resource depletion. In the coming decade, companies will be challenged to develop clean technologies and to implement strategies that drastically reduce the environmental burden in the developing world while simultaneously increasing its wealth and standard of living.

Krut, R. and Munis, K., "Sustainable Industrial Development: Benchmarking environmental policies and reports," *Greener Management International*, Issue 21, Spring 1998, pp.87-98

This paper summarizes a modest attempt to 'operationalise' the concept of sustainable development. The paper concludes that a benchmark tool to evaluate corporate policies and reports has value for corporate practitioners or potential practitioners, for regulators and for members of the public.

Lawrence, G., "Indicators for Sustainable Development," Ch. 15 in Dodds, F., *The way forward: Beyond Agenda 21*, Earthscan Publications Ltd., 1997, pp.179-189

This report is draws some conclusions from effors to date and suggests ways in which one might approach a goal of making 'everyone a user and provider of information'. Sustainability indicators can be an important tool for helping individuals, institutions, communities and societies make different and better choices about their futures.

Nash, J. and Ehrenfeld, J., *Codes of environmental management practice: assessing their potential as a tool for change*, Annual Review of Energy and Environment, forthcoming, 54p

This review examines five codes of environmental management practice: Responsible Care, ISO 14000, the International Chamber of Commerce Business Charter for Sustainable Development, the Coalition for Environmentally Responsible Economies (CERES) Principles, and Natural Step.

Tyteca, D., "On the measurement of the environmental performance of firms - a literature review and a productive efficiency perspective," *Journal of Environmental Management*, vol. 46, 1996, pp.281-308

In this article, environmental performance indicators are defined as analytical tools that allow one to compare various firms in a firm, or various firms in an industry, with each other and with respect to certain environmental characteristics.

van der Werf, W., "Environmental Performance Indicators at Unox: An Advance towards Sustainable Development", *Greener Management International*, Issue 21, Spring 1998

Unilever's environmental policy addresses the complex and challenging concept of sustainable development. One stipulation of the policy is that every Unilever company must define a set of environmental parameters that relate to a target of sustainable development. To this end, Unox, a Unilever subsidiary, has developed the EPI (Environmental Performance Indicator) model. Through a process of simplification, quantification and communication, the EPI model enables evaluation and prioritisation of projects and policies.

White, A. and Zinkl, D., *Green Metrics: A Global Status Report on Standardized Corporate Environmental Reporting*, CERES Annual Conference, Boston, MA, Tellus Institute, April 15-16, 1998, 49p

This report provides an overview of the status of standardized corporate environmental reporting. First, there is a brief review of environmental reporting to date, then turn to the question of why standardization

is important. Next, the wide spectrum of industry, non-governmental, and governmental initiatives are examined. Finally, the Global Reporting Initiative is introduced.

Young, C. W. and Welford, R. J., "An Environmental Performance Measurement Framework for Business," *Greener Management International, The journal of Corporate Environmental Strategy and Practice*, Spring 1998, pp.30-49

This paper presents an Environmental Performance Measurement Framework (EPMF) following field trials in the UK. The EPMF is a generic internal management tool, consisting of three measurement areas: environmental policy; environmental management; and processes, products and services. These measurement areas contain qualitative, quantitative economic, quantitative non-economic, absolute, relative, and aggregated indicators. This paper presents the improved EPMF field trials and lessons in using environmental performance indicators.

This bibliography is edited by Vesela Veleva and Soonsil Lee, graduate students 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

ANPED Working Group on Changing Consumption and Production Patterns, *Ecological Footprints and Ecological Rucksack*, 65p

Elkington, J., Niklas Kreander, and Helen Stibbard, *The Third International Survey on Company Environmental Reporting: The 1997 Benchmark Survey*, Greener Management International, Spring 1998, pp.99-111

Fehsenfeld, T., *From Corporate Indicators to Community Benchmarking - How Can We Make the Transition?*, Paper presented at Greening of Industry Network Conference, Santa Barbara, California, USA, November, 1997

Hinterberger, F., et al., *Increasing Resource Productivity Through Eco-Efficient Services*, Wuppertal Institute, 1994, 23p

Holmberg, J. and Robert, Karl-Henrik, *The System Conditions for Sustainability-A Tool for Strategic Planning*, Draft manuscript by the Natural Step and the Natural Step newsletter, 12p

International Organization for Standardization, *Draft International Standard ISO/DIS 14031*, 1998

Kissler, G. et. al., *Oregon Shines II: Updating Oregon's Strategic Plan*, January, 1997

Moser, A., "Ecotechnology In Industrial Practice: Implementation Using Sustainability Indices And Case Studies," *Ecological Engineering*, Vol. 7, 1996, pp.117-138

Multi-State Working Group on Environmental Management Systems, *Environmental management Systems Voluntary Project Evaluation Guidance*, U.S. Department of Commerce, National Institute of Standards and Technology, February 1998

OECD, *Towards sustainable development. Environmental Indicators*, 1998

Social Venture Network, *Implementing Corporate Social Responsibility*, 1997

Sustainable Development Indicators Group, *Sustainable Development in the United States: an Experimental Set of Indicators*, 1998

Veleva, V., *Development of Environmental Sustainability Indicators for Use in Environmental Impact Assessment*, M.Sc. thesis, University of Manchester, UK., 1994

Veleva, V. and Crumbley, C., *Indicators of sustainable production: issues in measuring and promoting progress*, paper presented at CITA annual conference, October 1998

Wernick, I. and Ausubel, J., "National Materials Flows and the Environment," *Annual Review of Energy and Environment*, Vol.20, 1995, pp.463-492

World Resources Institute, *Resource Flows: The Material Basis of Industrial Economies*, 1997, 31p

Web Site

CERES web site, http://www.ceres.org/, 1998

Department of Primary Industries and Energy Network Australia (DPIENA), A survey of work on sustainability indicators, http://www.dpie.gov.au/

Hart, M. Sustainable Community Indicators, http://www.subjectmatters.com/indicators/

OECD, *OECD work on Sustainable Development*, A discussion paper on work to be undertaken over the period 1998-2001, 1998, http://www.oecd.org/subject/sustdev/oecdwork.htm

UNEP/SustainAbility WebSite, http://www.sustainability.co.uk

This bibliography is edited by Vesela Veleva and Soonsil Lee, graduate students 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