

## ECOLOGICAL ECONOMICS

A parallel stream of critiques focuses largely if not entirely on the neglect of environmental concerns. Several general overviews deserve mention at the outset. \*[The Bridge at the End of the World: Capitalism, the Environment, and Crossing from Crisis to Sustainability](#) by James Gustave Speth (Yale UP, March 2008/295p), former head of the World Resources Institute and Dean of the Yale School of Forestry and Environmental Studies, passionately argued that our market economy operates on “wildly wrong market signals” and lacks correcting mechanisms; advocates real growth that promotes well-being of people and nature (as measured by ISEW), and ecological economics not as the end of the world by the beginning of a new one. \*[Natural Capitalism: The Next Industrial Revolution](#) by Paul Hawken, Amory B. Lovins, and L Hunter Lovins (10<sup>th</sup> Anniversary Edition, Earthscan, June 2010/416p) criticizes regulatory failures and “free market fantasies” that assume perfect information; advocates radical resource productivity, biomimicry, and saving energy as less costly than buying it. \*[State of the World 2008: Innovations for a Sustainable Economy](#) edited by Gary Gardner and Thomas Prugh of the Worldwatch Institute (W.W. Norton, Jan 2008) calls for reforming economics in seven areas: shifting focus from growth to well-being, making prices tell the ecological truth, accounting for nature’s contribution, applying the precautionary principle, adjusting economic scale, valuing women’s work, and revitalizing commons management. [Prosperity Without Growth: Economics for a Finite Planet](#) by Tim Jackson of U of Surrey (Earthscan, Dec 2009/264p) updates Jackson’s 2003 [Redefining Prosperity](#) report to the UK Sustainable Development Commission, proposing “a different kind of macroeconomics” that does not rely on ever-growing consumption and growth, where economic activity remains within ecological scale.

[A New Blueprint for a Green Economy](#) by Edward Barbier of the U of Wyoming and Anil Markandya of the Basque Center for Climate Change (Earthscan/Routledge, Sept 2012/192p), updates the original 1989 version, urging progress in three key areas: valuing the environment, accounting for the environment, and incentives for environmental improvement. [Capitalizing on Nature: Ecosystems as Natural Assets](#) by Edward Barbier (Cambridge UP, Oct 2011/336p) addresses key issues in the unfolding “Age of Ecological Scarcity” the central challenge of environmental economics. [Our Choice: A Plan to Solve the Climate Crisis](#) by Al Gore (Rodale Press, Nov 2009/416p) synthesizes 30 “Solutions Summits” convened by the former US Vice President, including changing the GDP system of national accounts (never intended as a measure of well-being when created in the 1930s) and the way we think about the true cost of carbon (several trillion dollars of subprime carbon assets depend for their valuation on a zero price for carbon emissions).

[Economic Thought and U.S. Climate Change Policy](#) edited by David M. Driesen of the Syracuse U College of Law (MIT Press, June 2010/356p) questioned the unyielding neoliberal stance that embraces free markets, the many errors of cost-benefit analysis of climate change, and overestimates of the cost of abating pollution and reducing greenhouse gases. \*[The Economics of Climate Change: The Stern Review](#) by Sir Nicholas Stern (Cambridge UP, Jan 2007/712p), described climate change as “the greatest market failure the world has ever seen,” and urged policy to promote strong market signals. [Twenty-First Century Macroeconomics: Responding to the Climate Challenge](#) edited by Jonathan M. Harris and Neva R. Goodwin of Tufts U (Edward Elgar, June 2009/352p) challenges conventional assumptions about economic growth and urges an economics that accounts for environmental and generational impacts of climate change, and reorienting investment to new economic development paths.

[\*\*The Economics of Biodiversity: Ecological and Economic Foundations\*\*](#) edited by Pushpam Kumar of U of Liverpool (Earthscan, Nov 2010/400p) describes The Economics of Ecosystems and Biodiversity Project (TEEB) set up in 2007 and led by the UN Environmental Programme to globally assess the economic aspects of ecosystem services provided by nature. This resulted in [\*\*The Economics of Ecosystems and Biodiversity: TEEB for Local and Regional Policymakers\*\*](#) (UNEP, Jan 2011/208p) and [\*\*The Economics of Ecosystems and Biodiversity in National and International Policymaking\*\*](#) (UNEP, June 2011/494p), which highlights the growing costs of biodiversity loss and ecosystem degradation, the benefits of investing in natural capital, and the need to integrate the values of nature across policy sectors. [\*\*Biodiversity and Ecosystem Insecurity: A Planet in Peril\*\*](#) by Ahmed Djoghlof and Felix Dodds (Routledge, June 2011) emphasizes the need to place a realistic value on nature and the services that ecosystems provides. [\*\*Valuing the Environment: Economics for a Sustainable Future\*\*](#) by David Glover of the International Development Research Centre in Ottawa (IDRC, May 2010/120p) shows how poorly functioning markets, incomplete property rights, and misguided policies are harmful to the environment and future generations. [\*\*Ecosystem Services from Agriculture and Agroforestry: Measurement and Payment\*\*](#) edited by Bruno Rapidel *et al.* (Earthscan, May 2011/320p) shows viable mechanisms to compensate agricultural systems for the environmental services they provide. [\*\*Valuing Ecosystem Services: The Case of Multi-Functional Wetlands\*\*](#) by R. Kerry Turner *et al.* (Earthscan, May 2011, 23p) underscores the importance of ecosystem services valuation from a policy and project appraisal perspective. [\*\*The Law and Policy of Ecosystem Services\*\*](#) by J.B. Ruhl *et al.* (Island Press, 2007/345p) argues that natural capital is no longer generally in surplus, so the economic playing field must be adjusted into an ecological-economic playing field, with government regulating natural capital and viewing ecosystem services as public goods. Similarly, [\*\*The New Economy of Nature: The Quest to Make Conservation Profitable\*\*](#) by Gretchen C. Daily of Stanford U and Katherine Ellison (Island Press, 2002/260p) argues that it was once reasonable to think of ecosystem services as free when natural capital was abundant and human activities limited; today, when nature everywhere is under siege, externalities must be considered. [\*\*You Can't Eat GNP: Economics As If Ecology Mattered\*\*](#) by Eric A. Davidson of Woods Hole Research Center (Perseus Books, 2000/247p) seeks to displace outmoded GNP thinking that ignores the value of natural resources.

[\*\*The Economics of Nature and the Nature of Economics\*\*](#) edited by Cutler J. Cleveland, David I. Stern, and Robert Costanza (Edward Elgar, 2001/293p) discusses the evolution of ecological economics, green national accounting, a green GNP, the need for a new growth paradigm, and formation of ISEE in 1987 (see APPENDIX #7). [\*\*An Introduction to Ecological Economics\*\*](#) by Robert Costanza, John Cumberland, Herman Daly, Robert Goodland, and Richard Norgaard (St. Lucie Press/ISEE, 1997/275p) covers the historical growth of economic and ecology, principles of ecological economics, institutions, and instruments. [\*\*Environmental Economics\*\*](#) by Clem Tisdell of U of Queensland (Edward Elgar, 1993) considers externalities, pollution control policies, cost-benefit analysis, intergenerational economic welfare, risk-taking, etc. [\*\*Economic Values and the Natural World\*\*](#) by David W. Pearce of University College London (MIT Press, 1993/129p) considers national priorities, modifying GNP, and applying economic valuation to project appraisal. [\*\*World Without End: Economics, Environment, and Sustainable Development\*\*](#) by David W. Pearce and Jeremy J. Warford of the World Bank (Oxford UP/World Bank, 1993/440p) covers environmental economics, choice of discount rate, evaluating environmental damage and benefits, carrying capacity, market failure, pricing for cost recovery, etc. [\*\*\\*Choosing a Sustainable Future: The Report of the National Commission on the Environment\*\*](#) chaired by Russell E. Train (Island Press, 1993) focuses on the goal of sustainable development as the primary goal of economic policy, an end to price-distorting subsidies, revising GNP, and taxing environmentally harmful activities. [\*\*The Natural Wealth of Nations: Harnessing the Market for the Environment\*\*](#) by David Malin Roodman of the Worldwatch Institute (W.W. Norton, 1998/303p) focuses on prices that do not tell the

environmental truth, shifting taxation to activities that hurt the environment, and trading of permits for pollution and resource depletion.

Still more excellent books from the 1990s deserve consideration, especially because ecological economics and environmentalism *appears* to have recently lost its momentum (perhaps eclipsed by the Great Recession). \***Taking Nature into Account: Towards a Sustainable National Income. A Report to the Club of Rome** edited by Wouter van Dieren of the Netherlands Institute for Environment and Systems Analysis (Copernicus/Springer-Verlag, 1995/332p) argued that economics is not a science but a set of theories and choices; we must rid our economies of hypocrisy, the main hypocrisy being the System of National Accounts employed for nearly half a century. **Real Value for Nature: An Overview of Global Efforts to Achieve True Measures of Economic Progress** by Fulai Sheng of WWF (World Wildlife Federation, 1995/158p) critiqued the UN System of National Accounts for failing to consider natural resources and environmental services, while including costs of reparative measures. **Investing in Natural Capital: The Ecological Economics Approach to Sustainability** edited by Ann-Mari Jansson, Monica Hammer, Carl Folke, and Robert Costanza (Island Press, 1994/504p), derived from the 1992 ISEE second conference in Stockholm (see APPENDIX #7), considers a natural capital depletion tax, investing in cultural capital for sustainable use of natural capital, mitigation strategies for sea-level rise, etc. **Ecological Economics: The Science and Management of Sustainability** edited by Robert Costanza (Columbia UP, 1991, 525p), derived from the 1990 ISEE first meeting in Washington (see APPENDIX #7), includes essays by Kenneth Boulding, Herman E. Daly, Garrett Hardin, Mary E. Clark, and Juan Martinez-Alier. \***The Gaia Atlas of Green Economics** by Paul Ekins *et al.* (Anchor Books/Doubleday, 1992; foreword by Robert Heilbroner) urged a four-capital model of wealth creation (ecological, human, manufactured, social), economic accounting for the environment, the Adjusted National Product as superior to GNP, creating eco-capital, etc.