

# A Theory of the Environment and Economic Systems

## A Unified Framework for Ecological Economic Analysis and Decision Support\*

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Edward Elgar Publishing, Cheltenham, 2001 (<http://www.e-elgar.co.uk>), Hardbound, 352 pp., 64.95 GBP / 100.00 USD; ISBN 352-1-84064-643-8

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A number of tools for environmental analysis and decision support have been developed over time, including life-cycle assessment, substance-flow analysis, environmental impact and risk assessment. Many of these tools have different economic sys-

tems – a product, a regional substance-flow, a factory or emission pattern etc. – as their object. This book aims to reconcile and unify the many different tools for environmental analysis and decision-support into one meta-tool.

The subject of this study revolves around two problems: the attribution problem – which environmental problems are to be attributed to which economic activities; and the position problem – what is the relative position of a number of the various tools for environmental decision-support? Both these problems can be resolved by the construction of a general framework and specific methodological steps within the framework. The main focus of this study is on the methodology.

By providing a common framework for topics often treated in isolation this book enables experts from many fields, including scholars of environmental, resource and ecological economics, environmental science as well as researchers and professionals within industrial ecology, to understand the full depth and range of the material.

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\* Heijungs, R.: Economic Drama and the Environmental Stage. Formal derivation of algorithmic tools for environmental analysis and decision-support from a unified epistemological principle. Proefschrift. Leiden 1997 [see also Int J LCA 2 (4) 195–196 (1997)]