

Book review

Folmer H, Gabel HL: **Principles of environmental and resource economics: A guide for students and decision-makers**, 2nd ed. Cheltenham, UK: Edward Elgar 2000.

784 pp., 13 boxes, 90 figures, 35 tables. ISBN 1-85898-944-2

This book consists of 22 contributed chapters that provide an excellent introduction to important topics in the field of environmental and resource economics. The contributors consist of many leading scholars in the field. The book is explicitly targeted as a teaching tool for upper-level undergraduates as well as a reference for practitioners and researchers. In my view, another niche for which the book is particularly suited is graduate programs in environmental policy, business administration, or combinations of both. The book is organized into three parts: *General environmental economics*, *Business environmental economics*, and *Selected topics*.

The first part, General environmental economics, covers fundamentals of the field. Chapter one sets the stage for environmental problems with a discussion of markets and market failure. Correcting these failures inevitably involves economic valuation. Accordingly, the next two chapters address theoretical and empirical issues related to valuing the environment. How then are actual policy decisions made? A chapter on benefit-cost analysis provides some guidance, while another chapter on principles of environmental policy shows how the answer involves consideration of effectiveness and equity, in addition to efficiency. It is argued, nevertheless, that economic analysis provides an important and influential guide for policymakers. The next chapter shows this with a comparison of different policy instruments, such as standards, taxes, and tradable permits. The final chapter demonstrates how economy-wide models are useful for forecasting economic impacts of different environmental policies.

A collective strength of these chapters is an appreciation for the role of economic analysis in forming environmental policy. Indeed, the economic approach is central to environmental policy, but in the real world, it is not the only approach. Many of the authors discuss their subject matter with this context in mind. Examples range from ethics and benefit-cost analysis to questioning whether economists even contribute to environmental-policy debates. The result of this approach is a reflective perspective on fundamentals of the discipline that is rarely found in other texts.

The second part, *Business environmental economics*, truly distinguishes this book from others. The first chapter makes the important point that firms do not simply react to exogenous changes in environmental policy; rather, firms play an important role in the policy-making process. Whether firms lend support or generate opposition, the authors demonstrate how understanding incentives and behaviors of firms is essential for understanding policy formation, in addition to policy consequences. Even outside the

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regulatory environment, subsequent chapters emphasize the need for a deeper understanding of what goes on inside firms. Specific topics include corporate responses to environmental concern, implementing environmental programs through operations strategies, the need for environmental information systems, incentives for technology development and adaptation, and the relationship between environmental marketing and public policy. Another chapter covers the assessment, allocation, and control of major technological risks. The final chapter provides more detail on one particular approach to dealing with such risks – legal liability for environmental damages.

I am unaware of any other source that covers all these topics, for many of them are not considered part of the core in environmental and resource economics. With this book as an example, however, their integration is only a matter of time. The universe of environmental policy instruments is expanding beyond traditional approaches, such as standards, regulations, and even market-based instruments, to encompass things like voluntary agreements and information-based strategies. The increased decentralization of these new approaches elevates the importance of understanding business-environment relationships. The second part of this book provides a valuable step in this direction.

The third part, *Selected topics*, covers a range of subjects, many of which are active areas of research and policy formation. The specific topics covered are international environmental problems, trade and the environment, green taxation, social accounting and national welfare measures, economic growth and the environment, natural resource utilization, and waste management. Someone looking for a concise overview of one or more of these topics would not be disappointed after referring to this book. Each chapter provides a good summary of the important concepts in its topical area. It should be noted, however, that the average level of discussion in these chapters is quite a bit more technical than previous parts of the book. Unfortunately, this could make some sections inaccessible to many of the readers who would find this book most useful.

One challenge that any text based on contributed chapters must overcome is not reading like a collection of disjointed essays. This book meets the challenge, especially in the first two parts. Questions raised in one chapter often provide the starting point for the next. The book is also rich with many empirical examples from both the United States and Europe, which is home to most of the authors. One shortcoming of the book, however, is whether it completely delivers on its claim to principles of environmental *and* resource economics. Readers interested in what is traditionally referred to as "resource economics" will find relatively little in this book, as only one chapter is devoted to resource utilization.

In conclusion, this book is not just another text among the increasing number of books on environmental and resource economics. It has two distinct comparative advantages. First is the authors' appreciation for the important, yet sometimes limited, role of economics analysis in environmental policy. Second is the originality and increasing importance of the chapters on *Business environmental economics*. For these reasons, this book

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could prove especially useful for introducing environmental and resource economics to graduate programs in environmental policy and business administration. These same reasons also make the book appealing as a reference for undergraduates, practitioners, and researchers working in the field.

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