BOOK REVIEW

Environmental Principles and Policies: An Interdisciplinary Approach

S. Beder. 2006
University of New South Whales Press Ltd, Sydney
Xiii, 304 pp., ISBN 0868408573
RRPAUD $54.95

DALE GRAEME NIMMO[1]

In recent years, debate over the most efficient means of dealing with environmental problems has heightened. This is particularly true for issues such as habitat loss and climate change, whose environmental ramifications are of global significance. In the past two decades much of this debate has centered on so called "economic instruments" for environmental protection, such as tradable permits, quota systems, environmental taxes and conservation banks. The recent emphasis on instruments signifies a departure from traditional environmental policy, which focused almost exclusively on legal regulation (i.e., so called "command and control" regulations). Ostensibly, the purpose of economic instruments is to protect the environment in the most economically efficient manner, by turning a "zero sum game" into a situation where environmental and social costs are integrated into market processes to find "optimal" levels of environmental degradation. It is within this intellectual mine-field that Sharon Beder launches her recent publication, *Environmental Principles and Policies: An Interdisciplinary Approach*.

The title of this book is somewhat misleading. Beder does not simply outline environmental principles and policies, but uses six key principles (ecological sustainability; the polluter pays principle; the precautionary principle; equity; human rights; and, public participation) to critically analyse the theory and practice of economic instruments. Due to its polemical nature, the tone and content of this book more closely parallels Hamilton's *Growth Fetish* than it does a typical environmental-policy text.

Beder sets the scene for the modern debate in the first chapter, with a historical overview of major developments related to environmental sustainability (such as the "limits to growth" debate), which are of overarching importance to the rest of the book. In the first half of the book, Beder summarizes the six principles, including their development and integration into environmental policy world-wide. The main virtue of this section is the many examples of environmental policies that have implemented these principles. This applied approach continues in the second half of the book, which documents numerous examples of economic-instruments in-practice, drawing mainly from Australia and the United States.

Beder offers a thorough and well-written synthesis of arguments against the use of economic instruments, which are complemented by her own analyses. These arguments are well-developed, convincing and complemented by an exhaustive reference to real-

world examples. This section should bring caution to the most fervent advocates of economic instruments, and invite policy makers to re-examine how economic instruments are designed and implemented.

This text does, however, have a few shortcomings. In a book entitled *Environmental Principles and Policy*, one would expect a lengthy discussion of traditional regulations, given their role in environmental protection world-wide. This is notably absent, leaving a critical gap in the book. Because of this omission, regulations are not scrutinized in the same manner as economic instruments. This lack of criticism gives the impression that regulations are not subject to the same (or similar) limitations as economic instruments — this is not the case. In fact, in many instances the inadequacies of economic instruments parallel those of traditional regulations. For example, while the author points out that some economic instruments have the potential to favour large firms over smaller ones, the same is true for many traditional regulations. Small firms with smaller profits may have more difficulty implementing enforced regulatory changes than larger ones, which have more capital to spare.

Beder also criticizes environmental charges as often being "regressive" in that costs are often passed onto consumers at a fixed rate (in fact, this depends largely on *price elasticity of demand*). However, when regulations cause additional production costs, there is no reason why those costs would not be passed forward in the same manner. Furthermore, if revenue from a tax is reinvested in a service disproportionately utilized by low-income earners, then the tax effectively becomes progressive (see Jacobs 1995).

Given these considerations, the central premise of the book (that economic instruments are a flawed means of environmental protection because of their focus on economic efficiency rather than environmental protection) seems difficult to sustain. As Jacobs (1995) notes, instruments are only a *means* of arriving at a pre-determined environmental outcome, decided upon by government, which ought to reflect the collective opinions of its constituents — *the decision on how to arrive at the predetermined outcome is largely empirical*. Once an acceptable *scale* of production is agreed upon (i.e., "how much" is produced), another decision concerning distribution of costs and benefits must be made. Once again, this takes place in the political arena, *not* the economic arena. If an economic instrument fails to achieve a pre-determined outcome, it is often due to inadequate implementation of the instrument (or the implementation of the *wrong* instrument, or an incorrect combination of instruments); not some universal characteristic inherent in the instruments themselves. A Pigouvian tax might not be high enough to change firm-behavior (i.e., it has inaccurately incorporated the true social cost of production and hence fails to arrive at an "optimal" scale); in such a case the tax needs to undergo a process of iteration and refinement to reach the desired outcome. Legal regulation can also fail to achieve objectives due to a lack of information on behalf of regulators, and at a greater cost to society (i.e., less efficiently) (see Moran 1995).

Despite these limitations, *Environmental Principles and Policies* makes a valuable contribution to the debate about the best means of environmental protection in a commodity-economy. The many examples of instrument-failure will, hopefully, lead to further debate about the proper role and implementation of economic instruments, with positive environmental outcomes. I recommend this book to anyone with an interest in these issues, and to lecturers seeking texts for undergraduate courses in environmental and social sciences. However, I further recommend that it be complemented by texts which outline: the pros and cons of traditional regulation (e.g., Eckersleys' *Markets, The State and the Environment*); the "property rights" school-of-thought (e.g., Anderson and Leal's *Free Market Environmentalism*); and, ecological economics (e.g., Daly's *Ecological Economics and the Ecology of Economics*).

REFERENCES

Jacobs, J., 1995. Sustainability and "the market": a typology of environmental economics. Pp. 46–70 *in* Markets, the State and the Environment: Towards Integration ed by R. Eckersley. Macmillan Education Australia Pty Ltd, South Melbourne.

Moran, A., 1995. Tools for environmental policy: market instruments versus command and control. Pp. 73–87 *in* Markets, the State and the Environment: Towards Integration ed by R. Eckersley. Macmillan Education Australia Pty Ltd, South Melbourne.