Environment Policy and Technical Change

(Edward Elgar, UK, 1997)

A book by René Kemp

Environmental Policy and Technical Change assesses the impact of environmental policy on technical change in cleaner technology. It focuses in particular on the possibility of inducing radical change in technology – a topic that has moved to the centre of the policy debate as people discover that incremental changes are not enough to achieve environmental sustainability.

Book reviews

This book is worth reading (and understanding) for economists, politicians and students who are interested in learning about economics and the way it tries to contribute solutions to environmental conflicts. I found this a splendid approach for dealing with complex systems, which crosses scientific barriers and should make some of that science understandable to decision-makers.'

- Jörg Köhn, Environmental Values

This is an important book not only for students of environmental economics. Those already critical of their discipline's neglect of technological innovation will be attracted, others may want to discover how one branch of economic theory deals with issues of technical change and social learning.'

- Sonja Boehmer-Christiansen, Environmental Politics

'René Kemp's book is very important because it is one of the few attempts to engage in original empirical research [on the topic of environmental policy instruments and technical change]. The results are fascinating. . . . a stimulating and excellent contribution to a neglected issue in the literature on regulation and the environment.'

- David Pearce, The Economic Journal
- ... an innovative and necessary book, addressing the relationship between environmental policy and the whole process behind technical change development, innovation, diffusion, regime shift in a clear and comprehensible manner with illustrative empirical examples.' Marie Gaarder, Journal of Energy Literature
- ...of great value to researchers and environmental economists interested in issues of technical change. Technological development is a critical component of any strategy towards environmental sustainability, and this text provides well-constructed insights and guidance for creating effective public policies towards that end"
- --Marc E. Norman in Environmental Conservation)
- \dots a useful, thought-provoking work for students of energy, economic, and environmental technology development and diffusion policy.
- Arnold B. Baker, Journal of Energy and Development

Contents: 1. Introduction Part I: Theoretical Models of Innovation and Diffusion 2. A Critical Survey of Innovation Models in Pollution Control 3. New Models of Innovation in Pollution Control 4. An Interpretative Survey of Technological Diffusion Models 5. The Diffusion of Environmentally Beneficial Technological Innovations Part II: Empirical Studies of Environmentally Beneficial Technologies 6. The Diffusion of Biological Waste-Water Treatment Plants in the Dutch Food and Beverage Industry 7. The Diffusion of Thermal Home Insulation in the Netherlands 8. Case Studies of Cleaner Technologies 9. Technology Effects of Past Environmental Policies: An Overview Part III: The Problem of Technological Regime Shifts 10. Continuity and Change in Technological Regimes 11. Understanding

Technological Regime Shifts 12. The Transition from Hydrocarbons 13. Conclusions References Index

The book can be ordered from Edward Elgar http://www.e-elgar-environment.com/ \$117

