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Environmental Pricing

Studies in Policy Choices
and Interactions

Critical Issues in Environmental Taxation **VOLUME XVI**

Environmental Pricing

Studies in Policy Choices and Interactions

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CRITICAL ISSUES IN ENVIRONMENTAL TAXATION, VOLUME XVI



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Environmental Pricing

CRITICAL ISSUES IN ENVIRONMENTAL TAXATION

Series Editors: Larry Kreiser, *Cleveland State University, USA*, Hope Ashiabor, *Macquarie University, Australia* and Janet E. Milne, *Vermont Law School, USA*

The *Critical Issues in Environmental Taxation* series provides insights and analysis on environmental taxation issues on an international basis and explores detailed theories for achieving environmental goals through fiscal policy. Each book in the series contains pioneering and thought-provoking contributions by the world's leading environmental tax scholars who respond to the diverse challenges posed by environmental sustainability.

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- Volume XVI Environmental Pricing
Studies in Policy Choices and Interactions
Edited by Larry Kreiser, Mikael Skou Andersen, Birgitte Egelund Olsen, Stefan Speck, Janet E. Milne and Hope Ashiabor

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Editorial review board

The 15 chapters in this book have been brought to publication with the help of an editorial review board dedicated to peer review. The 19 members of the board are committed to the field of environmental taxation and are active participants in environmental taxation events around the world.

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Foreword

Over the last few decades, it has been proven that environmental taxes can be effective and efficient instruments for environmental policy. Environmental taxation contributes to environmental improvements by introducing a price signal that reduces the demand for environmentally harmful products or helps insure that polluters take into account the costs of pollution on the environment when they make production or consumption decisions. However, in spite of the many advantages of environmental taxes, their use has been relatively limited in many countries.

The limited use of environmental taxes as a policy instrument can partly be explained by the fact that policymakers often fear that environmental taxes have a negative impact on income distribution or on the international competitiveness of the domestic industry; typically the most polluting energy intensive sectors of the economy. In general, there are different ways to address such concerns without compromising the environmental benefits of environmental taxation, for example, imposing similar costs on foreign products through the use of Border Tax Adjustments which are duties charged at the border on imported products.

In practice, environmental taxes are seldom used in complete isolation. They are applied in combination with other regulatory instruments or packages of instruments. Thus, the current picture of national policies on climate change, energy transitions and the environment is often a patchwork of different policy instruments. In general, there is a critical lack of knowledge on how such different policy instruments interact and work together. Therefore, it is important to examine the impact of different policy mixes, including environmental taxation, in order to identify effective and efficient combinations of policy instruments.

Volume XVI of *Critical Issues in Environmental Taxation* gives a comprehensive discussion of these issues and of recent research on the environmental and economic impact of applying environmental taxes. In particular, it discusses the high potential for a wider use of environmental taxation in combination with other policy instruments, provided that such

environmental taxes are well-designed and that their potential impact on international competitiveness and income distribution are properly addressed.

Birgitte Egelund Olsen
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Preface

In recent comments regarding the ravages of climate change, Pope Francis stated that ‘humans have slapped nature in the face’. This does not have to be. High quality research on climate change, global warming and environmental sustainability can lead to changes in the way we interact with nature. High quality research on these issues is the mission of Critical Issues in Environmental Taxation.

Volume XVI of Critical Issues contains 15 chapters on environmental issues involving environmental pricing: studies in policy choices and interactions. These chapters have been prepared by environmental experts from around the world. We hope you find these studies to be enlightening and worthy of consideration by policymakers.

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Abbreviations

AB	Appellate Body
ARENA	Australian Renewable Energy Agency
BCA	border carbon adjustments
BEPS	Base Erosion and Profit Shifting
BTA	border tax adjustments
CCGT	combined cycle gas turbines
CCL	Climate Change Levy
CDS	clean dark spread
CFC	chlorofluorocarbon
CJ	Court of Justice
CPH	combined heat and power
CPI	climate policy integration
CSR	Corporate Social Responsibility
CSR	Country-Specific Recommendation
CSS	clean spark spread
CT	carbon tax
DPJ	Democratic Party of Japan
EAP	Environmental Action Programme
EC	European Commission
ECM	Environment-Competitive Matrix
EED	EU Energy Efficiency Directive
EFR	environmental fiscal reform
EHS	environmentally harmful subsidies
EPI	environmental policy integration
ERDF	European Regional Development Fund
ESF	European Social Fund
ET	environmental tax
ETD	EU Energy Taxation Directive
ETR	Environmental Tax Reform
ETS	emissions trading system
EU	European Union
FFS	fossil-fuel subsidies
FIP	feed-in premiums
FIT	feed-in tariffs

GATT	General Agreement on Tariffs and Trade
GBER	General Block Exemption Regulation
GC	green certificates
GDP	gross domestic product
GHG	greenhouse gases
HAP	hazardous air pollutant
IDMET	Integrated Domestic Market of Emissions Trading
IMF	International Monetary Fund
IPCC	International Panel on Climate Change
IPCEI	important projects of common European interest
IRENA	International Renewable Energy Agency
IVM	Institute for Environmental Studies
JVETS	Japan Voluntary Emissions Trading Scheme
kW	kilowatt
LDP	Liberal Democratic Party
MC	marginal costs
METI	Ministry of Economy, Trade and Industry
MFN	most-favoured nation
MoE	Ministry of the Environment
MRET	Mandatory Renewable Energy Target
MW	megawatts
NAS	National Academy of Sciences
NRC	National Research Council
NRP	National Reform Programme
OCGT	open cycle gas turbines
OECD	Organisation for Economic Co-operation and Development
PCA	principal component analysis
PLS	Pollution Levy System
PPA	power purchase agreement
PPP	polluter pays principle
PV	photovoltaic
RAE	National Regulatory Authority
RES	renewable energy sources
SA	South Australia
SAM	State Aid Modernisation
SCM	Subsidies and Countervailing Measures
SME	small to medium-sized enterprise
UNG	unconventional natural gas
WFD	EU Water Framework Directive
WTO	World Trade Organization

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