Economic Evaluation of Climate Change Impacts

Development of a Cross-Sectoral Framework and Results for Austria
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This volume deals with the multifaceted and interdependent impacts of climate change on society from the perspective of a broad set of disciplines. The main objective of the book is to assess public and private cost of climate change as far as quantifiable, while taking into account the high degree of uncertainty. It offers new insights for the economic assessment of a broad range of climate change impact chains at a national scale. The framework presented in the book allows consistent evaluation including mutual interdependencies and macroeconomic feedback. This book develops a toolbox that can be used across the many areas of climate impact and applies it to one particular country: Austria.

“This study is a landmark, setting a new standard for the assessment of the impacts of climate change. It stands out for the comprehensiveness of its coverage of potential impacts across different sectors of the economy and its methodological innovations, including tracing climate impacts to economic endpoints.”

*Michael Hanemann, Professor of Economics, Arizona State University and Professor of the Graduate School, University of California, Berkeley*

“This volume develops a consistent, bottom-up approach for a robust evaluation across the whole range of impact fields, acknowledging their macroeconomic feedbacks and budgetary implications.”

*Thomas Sterner, Professor of Economics, University of Gothenburg*

“The lasting value of this book will come from the methodology with its frameworks, consistent toolbox and comprehensive integration, as well as the lessons learnt and shared, exemplified through application in Austria.”

*Roger Street, Director of UK Climate Impacts Programme, University of Oxford*
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Preface

Our current actions determine future conditions. Beyond climate change, action and potential impacts, an appropriate response may entail a clear need for adequate information.

Climate change impacts are uncertain, with high degree of uncertainty, and a broad set of disciplines are involved.

In this volume, we show how climate change impacts can be estimated using a generation of information related to the potential scale of climate change. A tool box of methods for climate impact is developed.

Climate scenario analyses are associated with climate change. Likely values are surrounded by a range of uncertainties (and whether they will be in the future). Identification of potential impacts clarifies that several different pathways have socio-economic development and that greenhouse gas emissions should be determined how resilient societies and communities (and whether they will be increased resilience). For example, infrastructure in flood prone areas or to increase the urban heat islands (and whether people's homes are equipped for expected future ageing), whether transport, production processes, or crucial in determining a social...