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Elements in Public Economics

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BENEFIT-COST ANALYSIS OF AIR POLLUTION, ENERGY, AND CLIMATE REGULATIONS

Kerry Krutilla

Indiana University, Bloomington

John D. Graham

Indiana University, Bloomington



CAMBRIDGE
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Cambridge University Press & Assessment

978-1-009-18945-3 — Benefit-Cost Analysis of Air Pollution, Energy, and Climate Regulations

Kerry Krutilla, John D. Graham

Frontmatter

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Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre,
New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment,
a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of
education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009189453

DOI: 10.1017/9781009189460

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When citing this work, please include a reference to the DOI 10.1017/9781009189460

First published 2023

A catalogue record for this publication is available from the British Library.

ISBN 978-1-009-18945-3 Paperback

ISSN 2516-2276 (online)

ISSN 2516-2268 (print)

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Benefit-Cost Analysis of Air Pollution, Energy, and Climate Regulations

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DOI: 10.1017/9781009189460

First published online: May 2023

Kerry Krutilla

Indiana University, Bloomington

John D. Graham

Indiana University, Bloomington

Author for correspondence: Kerry Krutilla, krutilla@indiana.edu

Abstract: This Element offers a review and synthesis of the research on economic methods for evaluating regulations that improve air quality, save energy, and reduce climate risks. The intended audience is regulators and other constituencies interested in the nexus between scholarship and practice, analysts in government agencies and research organizations, and academic scholars and their graduate students. Topics include the evolution of regulatory impact assessment (RIA) in the OECD; cost estimation, including engineering, partial equilibrium, and general equilibrium approaches; benefit valuation, with an emphasis on the value of reducing risk of illness and premature mortality, and methods for pricing carbon emissions; discounting methods, and their relationship to carbon pricing; the distribution of regulatory costs and benefits; and uncertainty evaluation methods for addressing less and more fundamental uncertainty. A perspective on the relevance and limitations of current research is offered. This title is also available as Open Access on Cambridge Core.

Keywords: air pollution, general equilibrium, carbon pricing, social discount rate, RIA

JEL classifications: D58, D61, H23, H43, Q51, Q52, Q53, Q54, Q58.

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ISBNs: 9781009189453 (PB), 9781009189460 (OC)

ISSNs: 2516-2276 (online), 2516-2268 (print)

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