

CITIES AND THE GLOBAL POLITICS  
OF THE ENVIRONMENT

Series Editors: Michele Acuto,  
Joana Setzer and Elizabeth Rapoport

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LOW CARBON URBAN  
INFRASTRUCTURE  
INVESTMENT IN  
ASIAN CITIES

Edited by  
Joni Jupesta and  
Takako Wakiyama

**CITY**  
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# Cities and the Global Politics of the Environment

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### **Aims of the Series**

More than half of humanity lives in cities, and by 2050 this might extend to three quarters of the world's population. Cities now have an undeniable impact on world affairs: they constitute the hinges of the global economy, global information flows, and worldwide mobility of goods and people. Yet they also represent a formidable challenge for the 21st Century. Cities are core drivers not only of this momentous urbanisation, but also have a key impact on the environment, human security and the economy. Building on the Palgrave Pivot initiative, this series aims at capturing these pivotal implications with a particular attention to the impact of cities on global environmental politics, and with a distinctive cross-disciplinary appeal that seeks to bridge urban studies, international relations, and global governance. In particular, the series explores three themes: 1) What is the impact of cities on the global politics of the environment? 2) To what extent can there be talk of an emerging 'global urban' as a set of shared characteristics that link up cities worldwide? 3) How do new modes of thinking through the global environmental influence of cities help us to open up traditional frames for urban and international research?

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Joni Jupesta • Takako Wakiyama  
Editors

# Low Carbon Urban Infrastructure Investment in Asian Cities

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## FOREWORD

This book is the product of a two-year APN project, *Low-Carbon Urban Infrastructure Investment in Asian Cities: Shanghai, Jakarta and Yokohama*, which explored a new funding mechanism for urban infrastructure investment that engages multiple stakeholders in public-private partnerships. The project involved several researchers from UNU-IAS, the Institute for Global Environmental Strategies (IGES), Fudan University (China) and Bogor Agriculture University (Indonesia). This book aims to showcase the role that cities can play in the green growth agenda by making smart urban infrastructure investments in low-carbon buildings and other types of physical infrastructure, by using financial incentives and taxes, by fostering renewable energy supplies and by raising societal awareness of sustainable lifestyles.

This book covers a wide range of approaches to green investment that have been utilized in three cities, including risk analysis, cost-benefit analysis, integrated assessment modelling analysis and input–output analysis. An additional chapter describes the smart city initiative in Yokohama and explores the possibilities for technology transfer to slums in India.

As a think tank, one of the missions of UNU-IAS is to promote a more sustainable future through policy-oriented research focused on sustainability and particularly on sustainability's social, economic, and environmental

dimensions. This book is in line with this mission and serves the international community by making valuable and innovative contributions to high-level policymaking and by informing debates within the UN.

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## SERIES EDITORS' PREFACE

One of the core rationales for establishing *Cities and the Global Politics of the Environment* was that of inspiring greater collaborative work on the impact of cities on national, regional, and international affairs. Jupesta and Wakiyama's *Low Carbon Urban Infrastructure Investment in Asian Cities* does just that. This collection looks across complex regional boundaries such as those of Southeast and East Asia, and provides a concerted effort towards a better appreciation of the governance of a low-carbon infrastructure for cities in Japan, China, Indonesia, and beyond.

Issues of low-carbon investment, smart city developments, and impact assessments on the political-economic dynamics underpinning low-carbon transitions have become increasingly crucial in the past years. Jupesta and Wakiyama's collection is in this sense timely and well placed to speak to the growingly critical centrality of cities in sustainable futures. These questions have emerged even more centrally on the global governance agenda after the outcomes of the new Sustainable Development Goals (SDGs) in September, and the Paris climate negotiations at COP21 in December 2015. Critically, the collection reminds us, by looking between new and emerging powerhouses, as well as developed and fast-developing world, how the demands for sustainable infrastructure in the SDGs will apply universally, in diverse contexts like Yokohama and Jakarta, and call upon both policymakers and academics to further decentre our appreciation of urban policy and politics.

From this more "global" angle, once again key in the titles of this series, *Low Carbon Urban Infrastructure Investment in Asian Cities* asks us to look at global urban developments "from the East", remembering



the more-than-local impacts of unplanned infrastructure on the future of cities. As Jupesta and Wakiyama remind us at the outset of the book, cities now play a key role in green growth agendas and we cannot disregard how much of regional, international politics, not just local, will be played in the streets of urban settlements the world over.

Michele Acuto  
Joana Setzer  
Elizabeth Rapoport

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