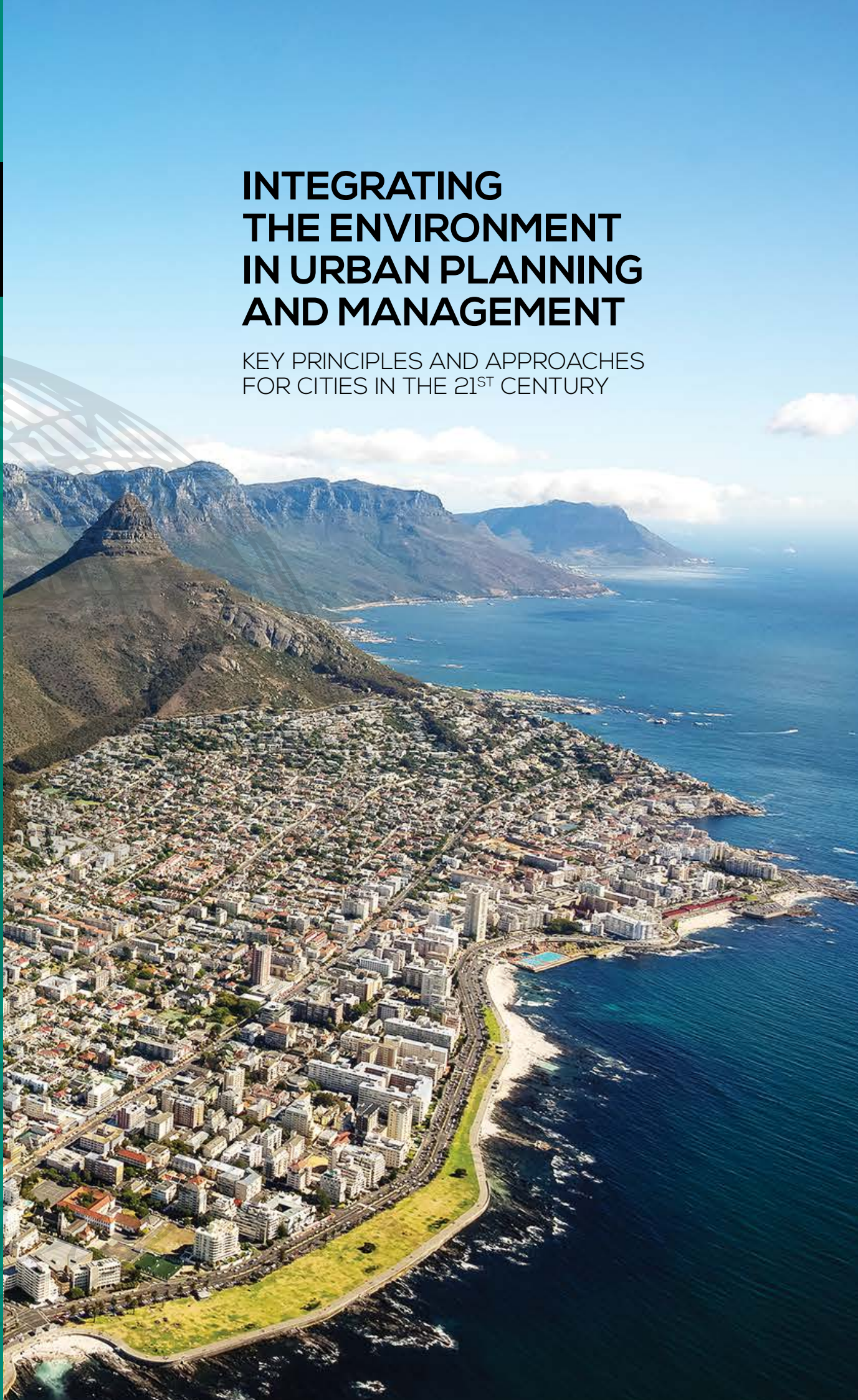




# INTEGRATING THE ENVIRONMENT IN URBAN PLANNING AND MANAGEMENT

KEY PRINCIPLES AND APPROACHES  
FOR CITIES IN THE 21<sup>ST</sup> CENTURY

UNITED NATIONS ENVIRONMENT PROGRAMME





# **INTEGRATING THE ENVIRONMENT IN URBAN PLANNING AND MANAGEMENT**

KEY PRINCIPLES AND APPROACHES  
FOR CITIES IN THE 21<sup>ST</sup> CENTURY

David Dodman, Gordon McGranahan and Barry Dalal-Clayton  
International Institute for Environment and Development (IIED)



# Acknowledgements

## CREDITS

### Director of Publication:

Nick Nuttall

### Supervision and coordination:

Arab Hoballah, UNEP  
Soraya Smaoun, UNEP

### Lead authors:

David Dodman, Barry Dalal-Clayton, Gordon McGranahan, International Institute for Environment and Development (IIED)

### Technical support:

Sharon Gil, UNEP Consultant

### Design & Layout:

William Ortale

### Printing:

UNON/Publishing Section Services, Nairobi/ISO 14001:2004-certified

### Contributions and peer reviews:

We would like to thank the following for their valuable inputs in the peer review process:

Carmen Vogt (GIZ), Sarah Birch (ICLEI), Philip Monaghan (Infrangilis), Raf Tuts (UN-Habitat), Rene Hohmann (Cities Alliance), Robert Kehew (UN-Habitat), Ruperto de Jesus (UNEP DTIE Gender Focal Point), Sara Hoefflich (United Cities and Local Governments), Saskia Ruijsink (Institute for Housing and Urban Development Studies), Sean O'Donoghue (eThekwin Municipality), Shuaib Lwasa (Makerere University, Kampala, Uganda), Stefanos Fotiou (UNEP ROAP)

We would like to thank the following for their valuable technical inputs and support in the organization of the workshops held in Ghana, the Philippines, and Uganda: Christopher Hanna Pablo (Philippines), Ella Antonio (Philippines), Violeta Seva (Philippines), Shuaib Lwasa (Uganda), Samuel Mabala (Uganda), Kwadwo Ohene Sarfoh (Ghana), Raymond Kasei (Ghana).

**ISBN:** 978-92-807-3350-1

DTI/1717/PA

© United Nations Environment Programme, 2013

*The contents of this book do not necessarily reflect the views or policies of UNEP or the editors, nor are they an official record. The designations employed and the presentation do not imply the expressions of any opinion whatsoever on the part of UNEP concerning the legal status of any country, territory or city or its authority or concerning the delimitation of its frontiers or boundaries.*

\* All dollar (\$) amounts refer to US dollars.

This publication is prepared as part of the Joint Work Programme between UNEP and Cities Alliance on "Mainstreaming environment in Cities Alliance activities". The Joint Work Programme is financially supported by Cities Alliance and implemented by the United Nations Environment Programme.

UNEP promotes environmentally sound practices globally and in its own activities. This report is printed on paper from sustainable forests including recycled fibre. The paper is chlorine free and the inks vegetable-based. Our distribution policy aims to reduce UNEP's carbon footprint.

# Contents

<b>FOREWORD</b>	6
<b>EXECUTIVE SUMMARY</b>	7
<b>GLOSSARY</b>	8
<b>1. INTRODUCTION</b>	10
1.1 The context for the report	12
1.2 Urbanization in global perspective	15
1.3 Methodologies and initiatives for urban environmental management	17
<b>2. RELEVANT ENVIRONMENTAL ISSUES FOR CITIES</b>	20
2.1 Conceptualising the urban environment	22
2.2 Local environments and climate change	25
2.3 Global benefits of integrating the environment in urban planning and management	30
<b>3. STRATEGIES FOR INTEGRATING THE ENVIRONMENT IN URBAN PLANNING AND MANAGEMENT</b>	34
3.1 Lessons from the city development strategy (CDS)	36
3.2 Green urban economy approach	43
<b>4. CONCLUSION: PRINCIPLES FOR INTEGRATING THE ENVIRONMENT IN URBAN PLANNING AND MANAGEMENT</b>	52
4.1 Participation, politics and political commitment	55
4.2 Harmonization and multi-level governance	56
4.3 Identifying and overcoming gaps and challenges	58
<b>APPENDIX I</b>	60
AI.1 Mainstreaming the environment in urban areas in Ghana	62
AI.2 Mainstreaming the environment in urban areas in Uganda	64
AI.3 Mainstreaming the environment in urban areas in the Philippines	66
<b>APPENDIX II</b>	69
Environmental mainstreaming diagnostic for urban areas	69
More information on environmental mainstreaming	71
(A) Mainstreaming in city administrations	71
(B) Project-level mainstreaming	78

# FOREWORD

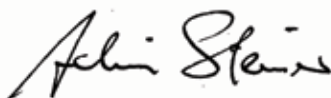
The world is becoming increasingly urbanized, and with this accelerating process comes a host of challenges. Urban areas now contain more than 50 per cent of the world's population, occupy just two per cent of the world's terrestrial surface, and consume up to 75 per cent of natural resources. In addition, 90 per cent of urban growth is taking place in developing countries and experts believe that by 2030 towns and cities in Asia, Africa, and Latin America will hold 80 per cent of the global urban population.

These growing cities can have an impact on the surrounding sensitive ecosystems—such as wetlands, forests, mountain ecosystems—and need increasing amounts of resources, which could result in over-exploitation. However, the unprecedented rate of urban growth represents a unique opportunity to build more sustainable, innovative and equitable towns and cities.

It is clear that the decisions and actions needed to move society towards more sustainable patterns of consumption and production will need to focus on and be delivered in cities. The United Nations Environment Programme (UNEP) aims to produce reports that help city leaders make critical decisions at the local level. In 2007, UNEP and its partners published *Liveable Cities: the Benefits of Urban Environment Planning*, which brought together case studies from cities around the world. That report presented the experiences of 12 urban areas in different contexts to offer options for integrating environmental concerns in city planning. Building on the *Liveable Cities* report and drawing on the documentation from 15 cities and three workshops, the authors of this publication carried out an in-depth review of one widely used planning tool, the City Development Strategy, and describe how city planning processes can mainstream environment concerns.

Cities are well-placed to play a major role in decoupling economic development from resource use and environmental impacts, while finding a better balance between social, environmental and economic objectives. Resource-efficient cities combine greater productivity and innovation with lower costs and reduced environmental impacts, offering at the same time financial savings and increased sustainability. Compact, relatively densely populated cities, with mixed-use urban form, are the most resource-efficient settlement pattern with similar levels of economic output; although less-dense, more-spread out development also offers options for enhanced resource efficiency.

This publication provides a refreshing perspective to the urban environmental discourse. It recognizes that cities are human creations and so are shaped according to the principles and approaches that our societies are founded upon. In order to build more resource-efficient cities, a change to global thinking on urbanization is needed.



**Achim Steiner**  
Executive Director, UNEP

# EXECUTIVE SUMMARY

Cities can use a range of principles and approaches to integrate the environment in urban planning and management. This report is intended to encourage and support urban decision-makers in this process. It starts with recognizing that action taken in towns and cities is essential for addressing global environmental problems. It accepts that, with an increasing proportion of the world's population living in urban areas in low- and middle-income countries, these are important sites for engaging with the environment. The report describes the social and economic benefits that can be generated by addressing environmental challenges, and provides convincing evidence to support engagement with these issues.

**Cities are important sites for engaging with environmental issues.** More than half of the world's population now lives in urban areas. By 2050 more than half of Africa and Asia's population, will live in towns and cities. Substantial international programmes have been implemented to support urban environmental management. These have contributed to a growing "green" awareness in towns and cities – although there is much more that can still be done.

**Activities in towns and cities affect the environment locally, regionally and globally – in both negative and positive ways.** Although localised issues of public health, sanitation, and waste management are very visible in low-income cities, high levels of consumption can generate far-ranging environmental consequences through the use of raw materials and energy in distant locations to produce goods and services. At the same time, urbanization provides a range of opportunities for addressing social and environmental burdens. These 'sustainability multipliers' include lower costs per capita for providing services in densely populated areas, greater options for recycling, and better opportunities for the use of public transport. Cities can therefore contribute substantially to achieving higher levels of resource efficiency.

**A range of strategies can be used to integrate the environment in urban planning and management.** City Development Strategies (CDSs) have shown how to integrate environmental concerns in long-term city visioning exercises. These strengthen relationships between stakeholders, but need to take nationally mandated planning cycles into account. Environmental mainstreaming can help to incorporate relevant environmental concerns into the decisions of institutions, while emerging ideas about the green urban economy show how density can generate environmental and social opportunities (including through green urban infrastructure) and can foster environmental and social innovation and competition.

**Environmental strategies for urban areas need to be supported by key underlying principles.** Political support and commitment are vital, as is broad-based enthusiasm from urban residents. The strategies need to be underpinned with governance structures that facilitate integration of environmental concerns in the planning process. Therefore, financial limitations have frequently impeded meaningful environmental action, the report not only identifies direct mechanisms for funding environmental activities, but also presents an economic case for the benefits of addressing environmental issues.

# GLOSSARY<sup>1</sup>

## › GLOSSARY

**Adaptation:** Adjustment in natural or human systems to a new or changing environment, including anticipatory and reactive adaptation, private and public adaptation, and autonomous and planned adaptation. In relation to climate change, refers explicitly to actions taken to reduce the consequences of future changes in the climate.

**Bus Rapid Transit (BRT):** A passenger traffic system that builds on the quality of rail transit and the flexibility of buses. The BRT combines intelligent transportation systems technology, priority for transit, cleaner and quieter vehicles, rapid and convenient fare collection, and integration with land use policy.

**City Development Strategy:** An action-oriented process, developed and sustained through participation to promote equitable growth in cities and their surrounding regions to improve the quality of life for all citizens.

**Climate change:** Any change in climate over time, whether due to natural variability or as a result of human activity. (The UN Framework Convention on Climate Change defines climate change as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.”)

**Ecosystem:** A dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit.

**Environmental Impact Assessment (EIA):** An environmental impact assessment (EIA) is an analytical process or procedure that systematically examines the possible environmental consequences of the implementation of a given activity (project). The aim is to ensure that the environmental implications of decisions related to a given activity are taken into account before the decisions are made.

**Environmental mainstreaming:** The informed inclusion of relevant environmental

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_9009](https://www.yunbaogao.cn/report/index/report?reportId=5_9009)

