

Contents

Foreword – Anne Hidalgo, Mayor of Paris and Chair of C40	ix
Foreword – Eduardo Paes, Former Mayor of Rio de Janeiro and Former Chair of C40	x
Foreword – James Nxumalo, Former Mayor of Durban	xi
Foreword – Joan Clos, Former Executive Secretary of UN-Habitat and Former Mayor of Barcelona	xii
Foreword – Christiana Figueres, Former Executive Secretary, UNFCCC and Vice Chair of the Global Covenant of Mayors	xiii
Preface	xv
Summary for City Leaders	xvii
Introduction	1
1 Pathways to Urban Transformation	3
2 Urban Climate Science	27
3 Disasters and Risk in Cities	61
Part I Cross-Cutting Themes	99
4 Integrating Mitigation and Adaptation: Opportunities and Challenges	101
5 Urban Planning and Urban Design	139
6 Equity, Environmental Justice, and Urban Climate Change	173
7 Economics, Finance, and the Private Sector	225
Part II Urban Ecosystems and Human Services	255
8 Urban Ecosystems and Biodiversity	257
9 Urban Areas in Coastal Zones	319
10 Urban Health	363
11 Housing and Informal Settlements	399
Part III Urban Infrastructure Systems	441
12 Energy Transformation in Cities	443
13 Urban Transportation	491
14 Urban Water Systems	519
15 Urban Solid Waste Management	553
Part IV Governance and Urban Futures	583
16 Governance and Policy	585

Contents

Conclusion: Transforming Cities	607
Annexes	
Annex 1: UCCRN Regional Hubs	609
Annex 2: Climate Projections for ARC3.2 Cities	613
Annex 3: Case Study Docking Station: Overview and Methods	629
Annex 4: Case Studies by Category	637
Annex 5: Case Study Annex	659
Appendices	
Appendix A: Glossary	775
Appendix B: Acronyms and Abbreviations	783
Appendix C: UCCRN Steering Group, ARC3.2 Authors, and Reviewers	787
Index	805