

*Springer Book Series:*

# RESILIENT CITIES: Re-thinking Urban Transformation **BOOK 7[BK7]**

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## TITLE

**CLIMATE CHANGE AND HEALTHY CITIES – APPROACHING TO A  
MORERE SUSTAINABLE, RESILIENT AND SMART CITY**

## KEY WORDS

Resilient cities, smart cities, sustainable cities, urban climate change, energy efficiency, urban transportation, urban water management

## SCOPE

In 2014, 54% of global population was living in urban areas and by 2050 is expected more than 66 % of the world population living in urban areas<sup>1</sup>. Cities are major contributors to climate change. UN Habitat report<sup>2</sup> mentions that even though cities only cover about 2% of global land area, they consume over 78% of global energy and emit over 60% of carbon dioxide and other greenhouse gases. Just the building sector is responsible for 40% of the world's energy consumption and one third of global greenhouse gas (GHG) emissions.

Climate change impacts are causing several relevant challenges in urban areas, ranging from heat islands in cities, floods, change in precipitation patterns, storms, extreme cold and hot temperature conditions and coastal urban centres also facing threat from increase in sea level rise.

Analytical and descriptive models, conceptual-based/literature reviews, empirical studies, case-based studies, and solution approaches that can effectively manage the complex challenges that cities of the future will face, with specific reference to health, are the focus of this book.

We encourage researchers and practitioners to build on the synergies of different disciplines to propose solutions that achieve a more healthy, resilient, sustainable and smart cities. The aim of this book is to publish a body of knowledge based on cutting-edge research that addresses in a comprehensive manner the different problems that the society will face - living in urban areas and cities that will host people, and the several organizations and companies that must provide appropriate services to each other. Since urbanization is threatening both the environment (too much asphalt leading to heat islands, water management issues as well as health implications...) and human health, this book will look at healthy and resilient cities from the lens of ecosystem as well as human wellbeing (and its interlinks).

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<sup>1</sup> United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, Highlights (ST/ESA/SERA/352) accessed from <http://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf>

<sup>2</sup> <http://unhabitat.org/urban-themes/climate-change/>

## TOPICS

Topics of interests to be considered, but not limited to these, are the following:

ID	TOPICS	DESCRIPTION
T1	<b>Energy saving and efficiency in a city</b>	Contributions addressing trends in methodologies and technologies, management and planning for energy saving and efficiency in urban areas are welcomed, specifically in relation with reduction of pollutants emission and its effects on human health.
T2	<b>Sustainable, resilient and smart public transportation for a more healthy city</b>	We invite researchers and professionals to address questions regarding how mobility of people living in urban areas are going to evolve in the future and how we can develop a more sustainable public transportation, in relation to better air quality and its effects on health, are some of the many challenges. In addition chapters addressing how public transport is going to react to an increasing mobility demand in urban areas and how to plan a smart public transportation capable to meet that demand and at the same time save energy and time for people.
T3	<b>Approaching to a smart waste management for a healthy, resilient and sustainable city</b>	Waste generation in urban areas is an increasing concern for urban community stakeholders and in particular for decision-makers, specifically in relation to human health. The impact of waste management could be reflected in many different issues such as energy generation, transportation demand, waste treatment systems, pollution issues, remanufacturing, re-use and recycling practices and economic aspects among others.
T4	<b>Challenges for a sustainable, resilient and smart urban logistics and transportation</b>	One of the major concerns related to urban population increase are people and merchandise transportation. How are going to develop transportation in a healthy, resilient and smart way that allows sustainable and resilient urban areas? How will people move in less time at the same time that population living in urban areas in increasing? What are the new ways to move goods in urban areas to reduce carbon emissions? How this new transportations are going to react to natural or non-natural catastrophic events, such as terrorism attacks, earthquakes, tsunamis or floods?
T5	<b>Servicing the people in the future: The role of public and private servicing organizations</b>	As people living in urban areas is expected to grow, demand for basic services such as electricity, mobility, clean water, sanitation, health, education among other is going to increase too. How we can re-think these services in order to minimize pollution, carbon emissions or waste at the same time that the quality of those services is improved?
T6	<b>Approaches to smart urban water</b>	Scarcity of water is one of the global main concerns; strategies to effectively management water consumption

	<b>management</b>	are essential in order to achieve sustainable urban areas. Papers addressing issues such as access to water, sanitation and basic needs even in semi urban areas, as well as disasters prevention for health and safety are welcomed.
<b>T7</b>	Urban food security and linkages between food security, health security and resiliency of cities.	Fast urbanization brings many challenges to researchers and practitioners interested in addressing risks in current and future cities. One of the consequences of more people living in urban areas is that more food and more goods and services must be provided. In addition, new methods of acquiring, preparing, eating and disposing off food are appearing. What consequences for people, and urban system result from inequality access to food, scarcity of food, poor quality of food, undernutrition or increasing health problems? What are the strategies to face these problems and to prevent them?
<b>T8</b>	Urban Disaster Management	As more and more people are living in urban areas consequences of natural disasters (such as earthquakes, tsunamis, floods) on the entire urban system will be worse. We invite researchers and practitioners interested in health issues related to emergency response and disaster risk management approaches focussed on urban areas to submit their contributions.

## **Editors**

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**Ernesto DR Santibanez Gonzalez**, Universidad de Talca, Chile and Universidade Federal do Sul da Bahia, Brazil

[santibanez.ernesto@gmail.com](mailto:santibanez.ernesto@gmail.com)