# Theodoros Zachariadis

# Climate Change in Cyprus Review of the Impacts and Outline of an Adaptation Strategy



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# Climate Change in Cyprus

Review of the Impacts and Outline of an Adaptation Strategy



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ISSN 2191-5547 ISSN 2191-5555 (electronic) SpringerBriefs in Environmental Science ISBN 978-3-319-29687-6 ISBN 978-3-319-29688-3 (eBook) DOI 10.1007/978-3-319-29688-3

Library of Congress Control Number: 2016930280

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# Chapter 1 Introduction

Abstract According to the current scientific consensus, warming of the global climate system seems to be unambiguous and is most likely due to anthropogenic emissions of greenhouse gases. Anthropogenic climate change has been characterised as 'the largest market failure' that mankind has ever been faced with. Mediterranean Europe is expected to experience the most adverse climate change effects compared to other European regions. Cyprus, an island state in the south-east Mediterranean, already has a semi-arid climate, with hot summers and mild winters, and the most severe water scarcity problem in Europe. The island is situated on a hot spot and is projected to face significant temperature increases and decline in precipitation levels. This book addresses in a complete yet concise manner the knowledge available by the end of 2015 about expected impacts from climate change in Cyprus and outlines the main ingredients of an adaptation strategy.

**Keywords** Climate adaptation  $\cdot$  Climate impacts  $\cdot$  Greenhouse gases  $\cdot$  South-east Mediterranean

According to the current scientific consensus, warming of the global climate system seems to be unambiguous and is most likely due to anthropogenic emissions of greenhouse gases (IPCC 2014). Anthropogenic climate change has been characterised as 'the largest market failure' that mankind has ever been faced with (Stern 2007). Climate science has made considerable progress in recent years, and the science of natural and economic impacts from climate change has also experienced noteworthy advances. There are still areas with moderate to large uncertainty; however, because of the long-term nature of the problem, governments, enterprises and citizens have to be aware of the latest scientific insights in order to prepare for and adapt to potentially adverse impacts on their welfare.

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