Foreword

By Megan Clark, CSIRO Chief Executive

CSIRO is committed to providing scientific advice on the major challenges and opportunities that face Australia. I commend to you this summary of the latest scientific knowledge on understanding, adapting to, and mitigating against changes in our climate.

Australia has one of the most variable climates in the world, and a history of adapting to the extremes that are part of this country is embedded in who we are. It is no surprise that our society is increasingly seeking information about the evidence and causes of our changing climate, and how we might adapt and respond to it. This book seeks to provide a bridge from the peer-reviewed scientific literature to a broader audience of society while providing the depth of science that this complex issue demands and deserves. The chapters cover what we have already observed in the global and Australian climate; how greenhouse gases affect climate; our modelling of the future; how we might adapt to and prepare for climate change and how we might mitigate to reduce greenhouse emissions. These aspects are all important as we seek a comprehensive response to climate change.

CSIRO is conducting research to help Australia and the world respond to the challenges and opportunities of climate change. For more than 50 years our scientists have been contributing to the growing body of global scientific knowledge about climate change and are now seeking and finding new ways in which Australian communities, industries, ecosystems, and economies can minimise the negative impacts of climate change and benefit from the opportunities.

We cannot do this important work without the numerous national and international deep partnerships, collaborations, and networks. We collaborate with Australian and international universities, industry groups, research organisations, government agencies, and governments at every level to undertake excellent science and find and implement practical, scientifically based solutions.

As your national science agency we will continue to provide scientific input and solutions to the community, industry, and government on understanding, adapting to, and mitigating against climate change.