

Foreword

Sir Robert T. Watson

One of the greatest challenges facing society is human-induced climate change. This challenge, which has been recognized by all governments in the world, led to the historic climate agreement in Paris in 2015. The Paris agreement called for holding the increase in global average temperature to well below 2 °C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels. The Paris agreement also called for an increase in the ability to adapt to the adverse impacts of climate change and foster climate resilience. It recognized the importance of developed countries providing financial assistance to developing countries to transition to a low-carbon economy and adapt to climate change.

The adverse effects of human-induced climate change on socio-economic sectors such as food and water security, human settlements, human health, and biodiversity and ecosystems have already been observed, and even if the 2 °C target is met, which is unlikely, then further adverse consequences will occur. Unless human-induced climate change is addressed urgently, many of the 17 Sustainable Development Goals will be undermined, especially in developing countries, which are most at risk owing to their limited technological and financial capability to adapt.

Understanding the synergies and trade-offs, the economic costs and benefits, and the social acceptability of climate adaptation and mitigation strategies is essential. What may be a beneficial policy for addressing climate change may be beneficial or detrimental to another issue such as biodiversity and ecosystems, or may lead to distributional effects, with one part of society benefiting while another part of society is adversely affected.

This book, *Building a Climate Resilient Economy and Society: Challenges and Opportunities*, is timely and identifies a range of options to adapt, reduce vulnerability and increase resilience to human-induced climate change for both terrestrial and marine systems. It addresses key sectors such as agriculture, fisheries, water quantity and quality, and coastal cities, and key issues such as terrestrial and marine biodiversity and small island

states. It also addresses key issues associated with mitigation, including carbon pricing, economic implications of climate policies, financing at local levels, and REDD+. I would like to congratulate the editors and authors for bringing out this book, which I am sure will receive wide attention.