

Climate Change 2022: Impacts, Adaptation and Vulnerability

Working Group II Contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

Edited by

Hans-Otto Pörtner
Working Group II Co-Chair

Debra C. Roberts
Working Group II Co-Chair

Melinda M. B. Tignor
Head of TSU

Elvira Poloczanska
Science Advisor to the
WGII Co-Chairs and TSU

Katja Mintenbeck
Director of Science

Andrés Alegría
Graphics Officer

Marlies Craig
Science Officer

Stefanie Langsdorf
Graphics Officer

Sina Löschke
Communications Manager

Vincent Möller
Science Officer

Andrew Okem
Science Officer

Bardhyl Rama
Director of Operations

With editorial assistance from Daniel Belling, Wolfgang Dieck, Sandra Götze, Tijama Kerscher, Philisiwe Mangele, Bastian Maus, Anka Mühle, Komila Nabiyeva, Maike Nicolai, Almut Niebuhr, Jan Petzold, Esté Prentzler, Jussi Savolainen, Hanna Scheuffele, Stefan Weisfeld and Nora Weyer

Working Group II Technical Support Unit



University Printing House, Cambridge CB2 8BS, United Kingdom
One Liberty Plaza, 20th Floor, New York, NY 10006, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India
103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of the University of Cambridge.
It furthers the University's mission by disseminating knowledge in the pursuit of education,
learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009325837

DOI: [10.1017/9781009325844](https://doi.org/10.1017/9781009325844)

© Intergovernmental Panel on Climate Change 2022

This work is in copyright. It is subject to statutory exceptions and to the provisions of relevant licensing agreements; with the exception of the Creative Commons version the link for which is provided below, no reproduction of any part of this work may take place without the written permission of Cambridge University Press.

An online version of this work is published at doi.org/10.1017/9781009325844 under a Creative Commons Open Access license CC-BY-NC-ND 4.0 which permits re-use, distribution and reproduction in any medium for non-commercial purposes providing appropriate credit to the original work is given. You may not distribute derivative works without permission. To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/4.0>

All versions of this work may contain content reproduced under license from third parties.
Permission to reproduce this third-party content must be obtained from these third-parties directly.
When citing this work, please include a reference to the DOI [10.1017/9781009325844](https://doi.org/10.1017/9781009325844)

First published 2022

Printed in the United Kingdom by TJ Books Limited, Padstow Cornwall

A catalogue record for this publication is available from the British Library.

ISBN – 3 Volume Set: 978-1-009-32583-7 Paperback

ISBN – Volume 1: 978-1-009-15790-2 Paperback

ISBN – Volume 2: 978-1-009-15799-5 Paperback

ISBN – Volume 3: 978-1-009-34963-5 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

The boundaries of the data and the designations used do not imply official endorsement, acceptance or the expression of any opinion whatsoever on the part of the IPCC or the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Use the following reference to cite the entire report:

IPCC, 2022: *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. Cambridge University Press, Cambridge, UK and New York, NY, USA, 3056 pp., doi:[10.1017/9781009325844](https://doi.org/10.1017/9781009325844).

Front cover artwork: *A Borrowed Planet - Inherited from our ancestors. On loan from our children.* by Alisa Singer www.environmentalgraphiti.org
© 2022 Alisa Singer