



© 2013 United Nations Environment Programme  
ISBN: 978-92-807-3344-0  
DEW/1686/NA

### **Disclaimers**

The content and views expressed in this publication are those of the authors and do not necessarily reflect the views or policies, or carry the endorsement of the contributory organisations or the United Nations Environment Programme (UNEP).

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of UNEP concerning the legal status of any country, territory or city or its authorities, or concerning the delimitation of its frontiers and boundaries.

Reference to a commercial company or product in this publication does not imply the endorsement of UNEP.

This publication may be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. UNEP would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or any other commercial purpose whatsoever without prior permission in writing from UNEP. Applications for such permission, with a statement of purpose and intent of the reproduction, should be addressed to the Director, Division of Communications and Public Information (DCPI), UNEP, P.O. Box 30552, Nairobi 00100, Kenya.

The use of information from this publication concerning proprietary products for publicity or advertising is not permitted.

This report has been produced by UNEP and SustainAbility Inc. with financial support from BP plc, Syngenta, The Walt Disney Company and Chevron Corporation (collectively "the supporters"). The statements and conclusions herein are those of SustainAbility Inc and/or UNEP and do not necessarily reflect the views of the supporters. The supporters makes no representations, guarantees or warranties, express or implied, as to the accuracy, quality, fitness for purpose or completeness of the information contained herein. Use of this document and the information contained herein is at your sole risk and the supporters have no duty of care or liability to you in connection with this document or its contents.

Cover Design: Jinta Shah/UNON  
Printing: UNON/Publishing Services Section, UNON, Nairobi, ISO 10041:2004-certified.

UNEP promotes environmentally sound practices globally and in its own activities. This report is printed on paper from sustainable forests including recycled fibre. The paper is chlorine free and the inks vegetable-based. Our distribution policy aims to reduce UNEP's carbon footprint.



# Acknowledgment

**Lead Author:** Dave Grossman (Green Light Group)

**Contributing Authors:** Jeff Erikson (SustainAbility); Neeyati Patel (UNEP)

**Peer Reviewers:**

**Clarissa Lins**, Brazilian Foundation for Sustainable Development (FBDS); **Diana Liverman**, University of Arizona; **Karen Wuestenfeld**, BP; **Juan Gonzalez-Valero**, Syngenta; **Beth Stevens**, The Walt Disney Company; **Kirsten Thorne**, Chevron; **Brian Sullivan**, International Petroleum Industry Environmental Association (IPIECA); **Sophie Depraz**, IPIECA; **Ros Taplin**, Australian Centre for Sustainable Mining Practices (ACSMP); **Maggie Comstock**, US Green Building Council; **Nigel Lucas**, expert; **Trevor Morgan**, Menecon Consulting; **Amos Bien**, Rara Avis; **Reinhard Joas**, International Support for Sustainable Products and Production (ISSPPRO); **Mary Otto-Chang**, Sustainable Development and Climate Change Consultant; **Graciela Metternicht**, University of New South Wales Institute of Environmental Studies; **Edward Cameron**, Business for Social Responsibility (BSR); **Sissel Waage**, Business for Social Responsibility (BSR); **France Bourgouin**, Business for Social Responsibility (BSR); **Dave Knight**, DNV Two Tomorrows; **Priti Nigam**, DNV Two Tomorrows; **Luigi Cabrini**, UN World Tourism Organization (UNWTO); **Norine Kennedy**, United States Council for International Business (USCIB); **Michael Allen**, United States Council for International Business (USCIB); **Birgit Engelhardt**, International Council for Chemical Associations; **Adriano Basanini**, Consultant; **Mark Lee**, SustainAbility.

**Project managers:** Garrette Clark (DTIE); Neeyati Patel (DEWA)

**UNEP DTIE:** Sylvie Lemmet, Kaveh Zahedi, Arab Hoballah, Elisa Tonda; Garrette Clark; Joni Pegram; Mark Radka, David Piper, Rob de Jong, Eric Usher, Nick Bertrand, Sonia Valdivia, Li Shaoyi, Tomas Marques, Curt Garrigan, Djaheezah Subratty, James Lomax, Helena Rey, Johanna Suikkanen, Pierre Quiblier, Yuki Yasui, Dean Cooper, Hilary French, Emily Werner, Seraphine Haeussling, Sophie Bonnard, Moira O'Brien-Malone

**UNEP DEWA:** Peter Gilruth, Fatoumata Keita-Ouane, Jason Jabbour, Andrea Salinas, Matthew Billot, Thierry de Oliveira

**UNEP DCPI:** Nick Nuttall, Bryan Coll, Kelvin Muinami Memia, Waiganjo Njoroge

**Design and layout:** Catherine Kimeu, Neeyati Patel

**Photo credits:**

p. 1: © vesilvio/Shutterstock	p. 22: © Patrick Poendl/iStock
p. 2: © Denise Kappa/Shutterstock	p. 23: © Christopher Kolaczan/Shutterstock
p. 6: © ruchos/iStock	p. 26: © Robert Churchill/iStock
p. 8: © ssguy/Shutterstock; © vintagerobot/iStock	p. 29: © Aleph Studio/Shutterstock
p. 9: © Volker Mütter	p. 32: © S. Kuelcue/Shutterstock
p. 11: © Kibae Park/UN Photo	p. 33: © sfam_photo/Shutterstock
p. 12: © Mary Terriberri/Shutterstock	p. 35: © Denise Kappa/Shutterstock
p. 13: © Stephen Gibson/Shutterstock	p. 36: © TebNad/Shutterstock
p. 14 (l-r): © Josemoraes/iStock; © TebNad/Shutterstock; © Adisa /Shutterstock; © BanksPhotos/iStock; © Mark Wragg/iStock; © George Clerk/iStock	p. 38: © Oleksiy Mark/Shutterstock
p. 15: © iurii/Shutterstock	p. 39: © Zxvisual/iStock
p. 16: © Klaas Lingbeek-van Kranen	p. 41: © Katie Dickinson/Shutterstock
p. 17: © akiyoko/Shutterstock	p. 42: © Ryan Lindsay
p. 18: © Toa55/Shutterstock	p. 44: © iStock/code6d
p. 20: © gyn9037/Shutterstock	p. 45: © Andrey tiyk/Shutterstock
	p. 46: © ssuaphotos/Shutterstock

# Table of Contents

Acknowledgment.....	ii
Foreword .....	iv
Executive Summary .....	2
<b>1. Introduction.....</b>	<b>6</b>
<b>2. Key Findings from GEO-5 Concerning the State and Trends of the Environment .....</b>	<b>8</b>
2.1 Key Drivers .....	8
2.2 Environmental Trends.....	9
<b>3. Sector-Specific Implications .....</b>	<b>14</b>
3.1 Building and Construction.....	15
3.2 Chemicals.....	18
3.3 Electric Power .....	20
3.4 Extractives.....	23
3.5 Finance.....	26
3.6 Food and Beverage .....	29
3.7 Healthcare.....	33
3.8 Information and Communication Technology.....	36
3.9 Tourism.....	39
3.10 Transportation.....	42
<b>4. Conclusion.....</b>	<b>45</b>
Endnotes.....	47

## Foreword



Environmental change, in large part driven by humanity's demand for resources, rising lifestyles and growing global population, is accelerating and generating new and emerging challenges but also opportunities for business.

Companies that face up to these realities are likely to be the ones that thrive and remain competitive in a rapidly changing world where factors such as climate change and dwindling availability of natural resources like water will shape future profit and loss and drive new markets.

This new report, GEO-5 for Business, is based on the flagship assessment by the UN Environment Programme (UNEP), the Global Environment Outlook 5, which was launched in advance of the Rio+20 Summit.

GEO-5 for Business outlines current and future impacts of environmental trends across a range of sectors from construction to food. It dovetails with other assessments such as those by the UNEP-hosted International Resource Panel that estimate consumption of natural resources will triple by 2050 unless urgent action is taken to decouple economic growth from natural resource use.

These trends are likely to not only impact and influence markets but also trigger technological innovation and change while stimulating regulatory and policy developments nationally and internationally, which in turn represent opportunities for business in respect to new kinds of goods and services.

Meanwhile as policy-makers, the public and investors become ever more aware of environmental change, they are likely to demand increasing transparency and more comprehensive corporate sustainability reporting – indeed this new push for sustainability reporting was among a range of outcomes from Rio+20.

GEO-5 for Business notes that not all opportunities glimpsed today may be opportunities tomorrow – as the Arctic melts many oil and gas companies are scrambling to exploit the opportunity, but may expose themselves to a range of other risks in a fragile environment.

GEO-5 for Business recommends that businesses conduct a deeper, company-specific analysis, taking a life-cycle approach using this report as a framework and guide.

Those who succeed may find that they not only can use the trends to their advantage, but can generate real and ever more transformative solutions to challenges already arising from a rapidly changing environment in a rapidly changing world.

A handwritten signature in black ink that reads "Achim Steiner". The signature is fluid and cursive.

Achim Steiner  
United Nations Under-Secretary General and Executive Director  
United Nations Environment Programme



# Executive Summary



Global environmental trends are creating new risks and new opportunities for businesses in every industry. Indeed the transition to a green economy, now in its early stages, will open up great opportunities for companies that understand the implications of these trends and account for them in their planning and business strategy. Conversely, companies that fail to understand the changes, or that act too slowly, will put value at risk.

GEO-5 for Business is written for business leaders who are responsible for ensuring that risks and opportunities are understood, addressed, and turned into long-term competitive advantage for their companies. The report assesses the operational, market, reputational, and policy implications of environmental trends on ten business sectors:

- Building and construction
- Chemicals
- Electric power
- Extractives
- Finance
- Food and beverage
- Healthcare
- Information and communication technology
- Tourism
- Transportation

The report describes business risks and opportunities based on information derived from existing science, business, policy, and other literature. It also includes brief real-world examples that illustrate the nature of some of these risks and opportunities. The report contains extensive citations throughout, allowing readers to easily access source documents that provide further details on specific trends and impacts.

GEO-5 for Business builds on the findings of UNEP's fifth Global Environment Outlook (GEO-5) report, released in June 2012. GEO-5 assessed the current state and trends of the global environment, in which population growth, economic

预览已结束，完整报告链接和二维码

<https://www.yunbaogao.cn/report/index/report?re>