

CCCC

KICK THE HABIT

A UN GUIDE TO
CLIMATE NEUTRALITY



UNEP



UNEP



This is a United Nations Environment Programme publication, written and produced by GRID-Arendal at the request of the Environment Management Group.

Copyright©2008 UNEMG, UNEP/GRID-Arendal
ISBN: 978-92-807-2926-9

Printed with plant-based ink on 100% recycled paper at PROGRESS PRESS LTD – MALTA

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

No use of this publication may be made for resale or for any commercial purpose whatsoever without prior permission in written form from the copyright holders. The use of information from this publication concerning proprietary products for advertising is not permitted.

UNEP promotes environmentally sound practices globally and in its own activities. This publication is printed on fully recycled paper, FSC certified, post-consumer waste and chlorine-free. Inks are vegetable-based and coatings are water-based. Our distribution policy aims to reduce UNEP's carbon footprint.

Disclaimer:

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the United Nations Environment Programme concerning the legal status of any country, territory, city or area or of its authorities, or concerning delimitation of its frontiers or boundaries. Mention of a commercial company or product does not imply endorsement by the cooperating partners. We regret any errors or omissions that may unwittingly have been made. Moreover, the views expressed do not necessarily represent the decision or the stated policy of the United Nations Environment Programme, nor does citing of trade names or commercial processes constitute endorsement.

CCCC

KICK THE HABIT

A UN GUIDE TO CLIMATE NEUTRALITY

WRITER Alex Kirby

UNEP/GRID-ARENDA EDITORIAL TEAM Jasmina Bogdanovic
Claudia Heberlein
Otto Simonett
Christina Stuhlberger

CARTO-GRAPHICS Emmanuelle Bournay

COPY EDITING Harry Forster, Interrelate Grenoble



A CLIMATE NEUTRAL BOOK...

The production and transport of each copy of this book has released about 5 kilos of CO₂ equivalent into the atmosphere. This value is comparable to the amount of CO₂ generated when burning 2 litres of petrol. Factors that have been taken into consideration for this calculation are shipping (40 per cent), staff and editorial board travel (20 per cent), paper (20 per cent), printing (13 per cent) and energy consumption for office and computer use (7 per cent).

The use of sustainably produced recycled paper and plant-based ink helped to lower the climate impact, whereas the transport of 500 copies to New Zealand for book launch is responsible for the biggest chunk of emissions.



In order to compensate the total amount of 26 tonnes CO₂ equivalent generated by the project, we purchased the according amount of carbon offsets with the help of the Swiss non-profit foundation myclimate. The money will be invested in the Te Apiti wind energy farm in New Zealand, a Gold Standard Joint Implementation project.

KICK THE HABIT

CCCC

11
INTRODUCTION

29
THE PROBLEM

45
THE ACTORS

53
THE REDUCTION CYCLE

58
COUNT AND ANALYSE

80
ACT

94
REDUCE

159
OFFSET

183
EVALUATE

Foreword

Addiction is a terrible thing. It consumes and controls us, makes us deny important truths and blinds us to the consequences of our actions. Our society is in the grip of a dangerous greenhouse gas habit.

Coal and oil paved the way for the developed world's industrial progress. Fast-developing countries are now taking the same path in search of equal living standards. Meanwhile, in the least developed countries, even less sustainable energy sources, such as charcoal, remain the only available option for the poor.

Our dependence on carbon-based energy has caused a significant build-up of greenhouse gases in the atmosphere. Last year, the Nobel Peace Prize-winning Intergovernmental Panel on Climate Change (IPCC) put the final nail in the coffin of global warming skeptics. We know that climate change is happening, and we know that carbon dioxide (CO₂) and other greenhouse gases that we emit are the cause.

We don't just burn carbon in the form of fossil fuels. Throughout the tropics, valuable forests are being felled for timber and making paper, for pasture and arable land and, increasingly, for plantations to supply a growing demand for biofuels. This further manifestation of our greenhouse gas habit is not only releasing vast amounts of CO₂, it is destroying a valuable resource for absorbing atmospheric CO₂, further contributing to climate change.

The environmental, economic and political implications of global warming are profound. Ecosystems – from mountain to ocean, from the Poles to the tropics – are undergoing rapid change. Low-lying cities face inundation,

fertile lands are turning to desert, and weather patterns are becoming ever more unpredictable.

The cost will be borne by all. The poor will be hardest hit by weather-related disasters and by soaring price inflation for staple foods, but even the richest nations face the prospect of economic recession and a world in conflict over diminishing resources. Mitigating climate change, eradicating poverty and promoting economic and political stability all demand the same solution: we must kick the carbon habit.

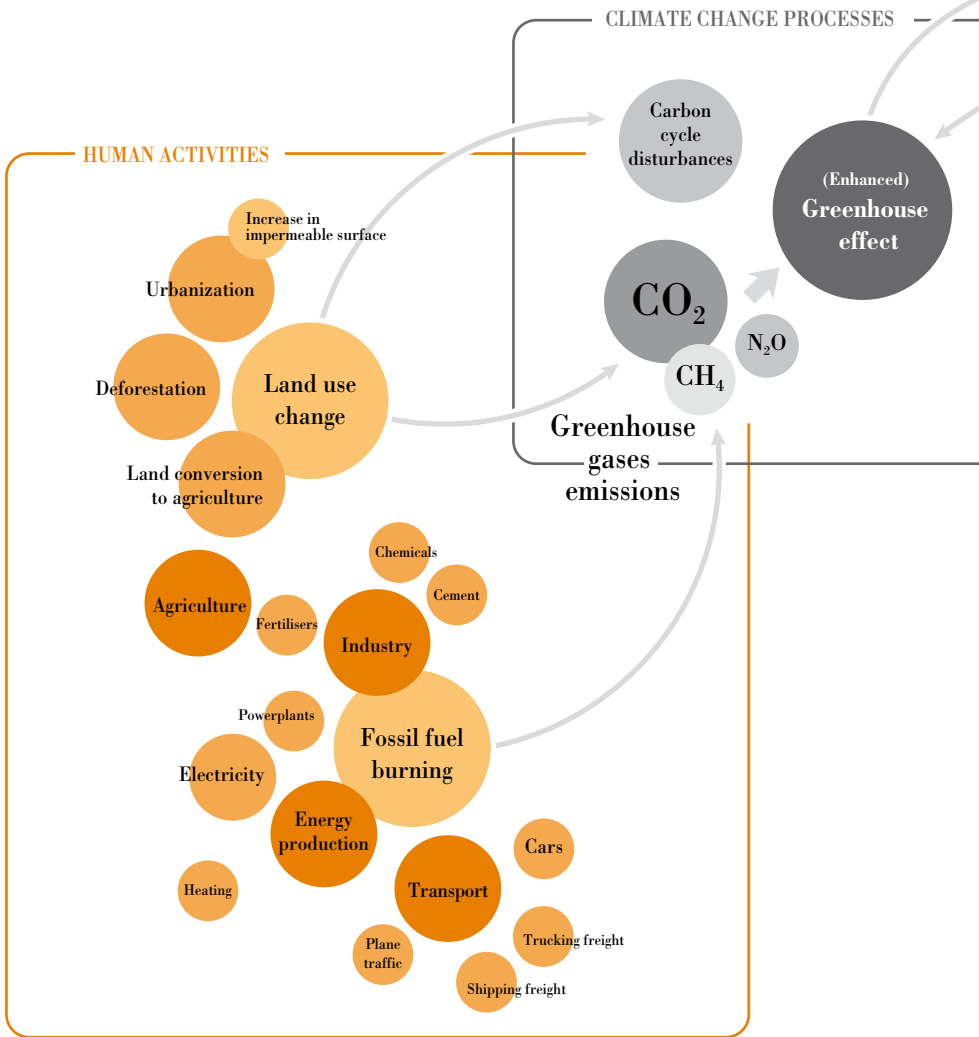
Kicking the habit is the theme of this book. Written in easy to understand language, but based on the most up-to-date science and policy, it is a guide for governments, organizations small and large, businesses and individuals who want to embark on the path to climate neutrality.

From reducing consumption and increasing energy efficiency, to offsetting emissions via the multitude of carbon trading schemes – including the Kyoto Protocol’s Clean Development Mechanism – the opportunities are plentiful.

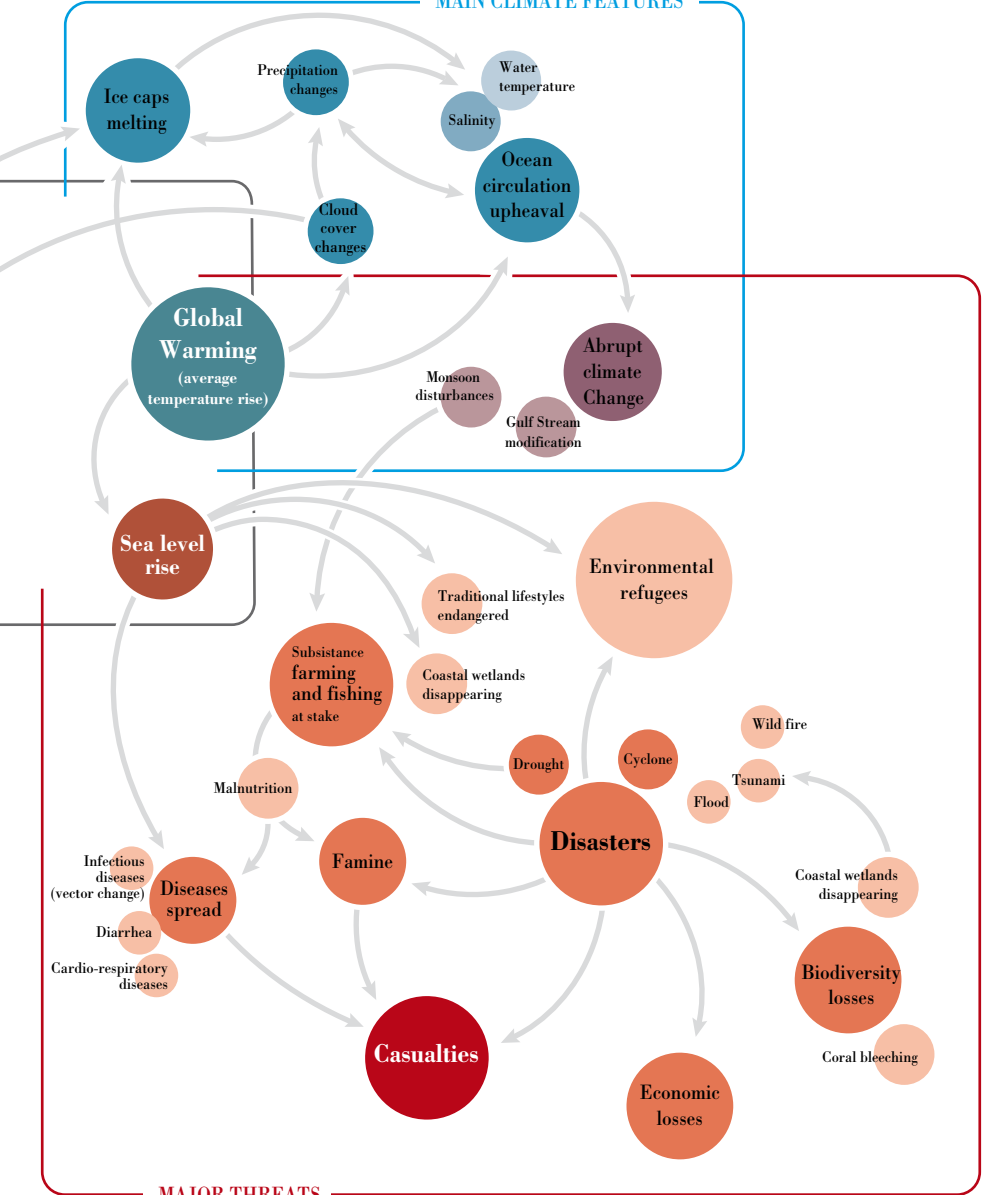
The fundamental message of “Kick the Habit – A UN Guide to Climate Neutrality” is that we are all part of the solution. Whether you are an individual, a business, an organization or a government, there are many steps you can take to reduce your climate footprint. It is a message we all must take to heart.

Ban Ki-moon
Secretary-General of the United Nations

Climate change global processes and effects



MAIN CLIMATE FEATURES



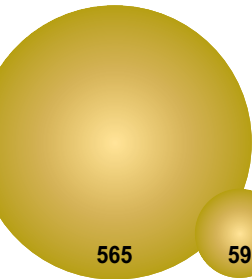
MAJOR THREATS

Yearly emissions of the average World Citizen

4 080

Examples of GHG emission amounts generated by different activities or goods are scattered across the book in the form of proportional bubbles (in kilograms of CO₂ equivalent).

Sources: ADEME, Bilan Carbone® Entreprises et Collectivités, Guide des facteurs d'émissions, 2007; US Environmental Protection Agency (www.epa.gov/solar/energy-resources/calculator.html); ESU-Services Consulting (Switzerland); World Wildlife Fund; Jean-Marc Manicore (www.manicore.com); Jean-Pierre Bourdier (www.x-environnement.org); fatknowledge.blogspot.com; www.actu-environnement.com; www.cleanair-coolplanet.org.



Running a TV for a year



Running a computer for 100 hours

Treating one cubic metre of **wastewater**
from **sugar production**

Treating one cubic metre of **wastewater**
from a **brewery**