Cover Design by Karen Moore

Nature Reports Climate Change**EDITORIAL OFFICE**

Editor: Olive Heffernan
 Production Editor: Alexandra Hardy
 Sub Editor: Rosalind Portman
 Art Editor: Karen Moore
 Web Designer: Miles Davies

MANAGEMENT OFFICE

Publishing Director: David Swinbanks
 Publisher: Jason Wilde
 Managing Production Editor: Donald McDonald
 Web Design Manager: Glennis McGregor
 Marketing: Katy Dunningham
 Editor in Chief, Nature Publications:
 Philip Campbell
 Advertising Manager, Physical Sciences:
 Simon Allardice
 Sponsorship: Emma Green

Nature - www.nature.com/nature
 The Macmillan Building, 4 Crinan St
 London N1 9XW, UK
 Tel: +44 (0) 20 7833 4000
 e-mail: nature@nature.com

VISIT NATURE REPORTS
 CLIMATE CHANGE ONLINE
 World Wide Web
<http://www.nature.com/reports/climatechange>

SUBSCRIPTIONS AND CUSTOMER SERVICES
 For UK/Europe (excluding Japan):
 Nature Publishing Group, Subscriptions, Brunel Road,
 Basingstoke, Hants, RG21 6XS, UK.
 Tel: +44 (0) 1256 329242.
 Subscriptions and customer services for
 Americas – including Canada, Latin America and the
 Caribbean: Nature Publishing Group,
 Subscription Department, PO Box 5161, Brentwood, TN
 37024-5161.
 Tel: (800) 524 2688 (US) or 615 850 5315
 (outside the US).

nature publishing group

nature REPORTS climate change

the news behind the science, the science behind the news

A PUSH FOR POLITICAL WILL

In his latest book *Cool It: The Skeptical Environmentalist's Guide to Global Warming*, statistician Bjorn Lomborg argues that rather than pouring billions of dollars into mitigating climate change, we would do more global good and get better return for our buck by focusing on immediate problems such as disease prevention and poverty reduction.

On the basis of the Copenhagen Consensus — an analysis of the world's greatest challenges and their most cost-efficient solutions — Lomborg tells us that a reduction in the toll of HIV/AIDS is first in the pecking order of global problems worth investing in and that tackling climate change through the Kyoto Protocol and carbon taxes are the last and least worthy. In the real world, we cannot possibly hope to solve all problems at once, argues Lomborg, and so we must prioritize investments.

However, it is also true that, in reality, such problems as disease, poverty and climate are not discrete phenomena, but are inextricably linked. Global warming poses the greatest threat to the world's poorest. According to the most recent projections from the Intergovernmental Panel on Climate Change, assuming moderate increases in carbon dioxide emissions, between 75 and 250 million people in Africa alone will experience increased water shortages due to climate change by 2020 and 200 million to 600 million will experience hunger by 2080.

Undeniably, we would see more immediate tangible benefits from preventing mass starvation than by cutting atmospheric carbon dioxide levels. And from a moral standpoint, it is more compelling to alleviate immediate suffering than potential future suffering. But there is also a moral imperative to avoid the more wide-reaching and irreversible consequences of global warming. As Sir Nicholas Stern pointed out in his report on the economics of climate change, "what we do in the next 10 or 20 years can have a profound effect on the climate in the second half of this century and in the next".

Global warming already has the ability to affect our prospects for achieving the Millennium Development Goal (MDG) to halve world poverty by 2015. If we fail to reduce emissions urgently, it may only be a matter of two to three decades before it becomes much harder for agricultural growth and poverty reduction to be achieved using existing approaches. Ensuring that as many people as possible reach the basic standard of living on more than one dollar per day is crucial if the world is to adapt to climate change. But efforts to avert worst-case climate change scenarios such as extreme drought and pervasive crop failure must run parallel to short-term efforts to alleviate poverty.

Already at their half way point, the West has not found the resolve to meet the MDGs, much less to reach the paltry emissions reductions targets agreed to in the Kyoto Protocol. As with putting an end to poverty, so too with climate change: only with political will can we hope for effective action to be taken to meet our past and future commitments.

This article is part of the Global Theme on Poverty and Human Development, organized by the Council of Science Editors. All articles from the Nature Publishing Group are available free at www.nature.com/povhumdev. The content from all participating journals can be found at <http://www.councilscienceeditors.org/globalthemeissue.cfm>

OLIVE HEFFERNAN, EDITOR

RESEARCH HIGHLIGHTS**80 Cryosphere**

Southern snowmelt
 Harvey Leifert

Atmospheric science

Wetter world
 Olive Heffernan

Ocean science

Cloud control
 Alex Thompson

Palaeoclimate

Stormy seas
 Alicia Newton

81 Atmospheric science

Tibetan dust bowl
 Alicia Newton

Biodiversity and ecology

Carbon balance
 Alex Thompson

NEWS FEATURE**82 Atlantic invaders**

Zoe Corby

COMMENTARY**85 Policing the voluntary carbon market**

Michael Gillenwater,
 Derik Broekhoff,
 Mark Trexler,
 Jasmine Hyman
 and Rob Fowler

BOOKS & ARTS**88 Promoting capitalism over Kyoto**

Jonathon Porritt

POLICY WATCH**90 Australia warms to climate change**

Emma Marris