

Stern advice for Copenhagen



BLUEPRINT FOR A SAFER PLANET

by Nicholas Stern

The Bodley Head: 2009. 256pp. £16.99

In this new book, economist Nicholas Stern makes a sweeping proposal for a global climate deal.

“The claim ‘We cannot afford it’ is not very different from ‘we are not sufficiently bothered to deal seriously with climate change’ — except that the latter view would clearly be reckless, says Nicholas Stern in his new book. Filled with the urgency of immediate action on climate change, *Blueprint for a Safer Planet* offers the exciting possibility of an affordable, effective global deal that could be adopted at the UN negotiations in Copenhagen in December.

A former chief economist at the World Bank, Stern has played a central role in climate policy debates since his 2006 review on the economics of climate change. Commissioned by the British government, the Stern Review argued that the risks of climate change under ‘business as usual’ emissions scenarios were intolerably large. Moreover, most of the threatened damage could be avoided through expenditures of roughly one per cent of the world’s economic output for several decades. Stern contended that a global agreement perceived as equitable by all was both possible and necessary to avoid such risks.

Stern’s latest offering updates his arguments from 2006. For a start, the science has grown even more ominous, prompting him to revise his recommendation for the upper limit at which we should aim to stabilize greenhouse gas concentrations. Now he says they should be held below 500 parts per million (p.p.m.) of CO₂-equivalent (roughly 450 p.p.m. of CO₂ alone) — compared to 550 p.p.m. CO₂-equivalent in the Stern Review — and then reduced further over time if necessary. Meanwhile, there is growing evidence that numerous technologies and options are available for emission reduction. Adaptation can help, but it is not, alone, a viable alternative to reducing emissions.

One of the high points of the new book is Stern’s response to some of his fiercest critics — economists who favour going slow on efforts to mitigate climate change. In non-technical language — using not a single graph, equation or acronym — Stern explains that the argument for acting later, rather than now, is based on two mistaken premises. It uses implausibly low assumptions about expected climate damages, together with a high ‘discount rate’, which in economic terms means that benefits in the far future are not important today. If near-term risks are small and the far future doesn’t matter, then the ‘justification’ for inaction follows directly. But as Stern points out, the choice of discount rates — and how much to value the future — is an ethical decision, not a technical one.

This book, however, is not fundamentally aimed at advancing knowledge of either science or economics. Rather, it uses what we know about those fields as the basis for a sweeping policy proposal. With the Copenhagen conference fast approaching, the book outlines a vision for a global deal that could be acceptable to all major parties to the negotiations.

Stern proposes six essential elements that are jointly required for adoption of a global agreement. On the issue of goals, he says that developed countries must immediately adopt binding targets to reduce greenhouse gases to at least 80 per cent below 1990 levels by 2050. Developing nations must take on binding targets no later than 2020 requiring that their emissions reach a peak and start to decline before 2030 — and sooner for the fastest-growing economies. In Stern’s proposal, national or regional carbon trading schemes would be integrated into a global system. International funding would be provided on two fronts, firstly to allow

developing nations to adapt to the early stages of climate damages and secondly to halt deforestation, one of the cheapest opportunities to reduce carbon emissions. Stern also calls for demonstration, sharing and further development of clean energy technologies.

The costs of all of this are perhaps one to two per cent of world output for some years to come. International funding required from rich countries might be around 0.3 per cent of gross domestic product — roughly ten per cent of current military spending, or one per cent of total government spending. There is no way to argue that this is unaffordable. Since the threat is real and devastating, protection at that price is a bargain.

The book has its ups and downs, and was produced on a tight schedule; some passages comment on the November 2008 election of Barack Obama, while others refer in the present tense to the high oil prices and weak US dollar of early 2008. The apparently obligatory chapter on local, private-sector and non-profit initiatives offers a bewildering collage of isolated activities with little sense of their relative importance. The United States has just completed an eight-year experiment studying whether local, private and non-profit initiatives can achieve significant emission reductions in the absence of national leadership; the answer turns out to be ‘no’.

Stern is unfailingly diplomatic, frequently referring by name to those he agrees with but almost never to those he disagrees with. One prominent American economist has mocked Stern’s “lofty” sentiments and intemperately attacked him for foisting the views of the “British Empire” on the world. Stern replies that “this statement was surprising as he is a scholar and a gentleman. He is simply misguided and misleading on the key

economic issues discussed in this chapter, as we shall show.”

My biggest question about Stern’s analysis is whether it understates the severity of the problem and the extent of the action required. Climatologist James Hansen, among others, has argued that stabilizing atmospheric carbon dioxide concentrations at 450 p.p.m. would leave them at a dangerously high level and has called for a safer limit of 350 p.p.m. Stern responds that his global deal, putting us on track to 450 p.p.m., is at the outer limits of what is politically feasible in the near term; achieving Stern’s

goals for 2050 would position us to revise global targets downward in the future, if needed.

Finally, there is a striking congruence between parts of the Stern proposals and parts of UK climate policy, although it is not clear which came first: earlier government policies may have shaped Stern’s sense of what is possible; conversely, the Stern Review has served as a basis for revisions of some government positions. Coming from a country that has done less on the issue than Britain to date, I don’t view this as a mark against either Stern or his government. The

British Empire was rarely so skilfully and persuasively served by its citizens and scholars.

Published online: 9 April 2009

doi:10.1038/climate.2009.34

Frank Ackerman

Frank Ackerman is an economist at the Stockholm Environment Institute-US Center at Tufts University in Medford, Massachusetts, and author of *Can We Afford the Future? The Economics of a Warming World* (2009).
e-mail: frank.ackerman@tufts.edu

natureCHINA

Your one-stop web portal, highlighting significant research from scientists in mainland China and Hong Kong. Visit www.nature.com/nchina

Research Highlights
A weekly selection of the best research published across all scientific disciplines plus a summary of the results.

Subject Archive
View archived research highlights covering the following areas:

- biotechnology
- cell & molecular biology
- chemistry
- clinical medicine
- developmental biology
- earth & environment
- ecology & evolution
- genetics
- materials
- neuroscience
- space & astronomy



Jobs
Keep informed about the latest job openings in cancer research at the AstraZeneca Innovation Center China (ICC)

Recommend
Interactive section to recommend high quality papers and vote/comment on those suggestions.

Supported by **AstraZeneca**
阿斯利康

www.nature.com/nchina

nature publishing group **npg**