STICK TO THE TARGET

BY MICHAEL GRUBB

The most recent attempt to undermine the Kyoto deal is strikingly inconsistent

JULY'S HOUSE of Lords committee report on climate change has been widely interpreted as backing President Bush in rejecting Kyoto-style emission targets in favour of technology-based solutions. Economists, in particular, greeted the report as a voice of reason in a politicised field. Dick Taverne's August *Prospect* essay, "Political Climate," also praised the report, and Taverne linked the Lords' criticism of the intergovernmental panel on climate change (IPCC)—the body established to provide governments with authoritative data on the issue—with the Copenhagen consensus, an analysis by some leading economists and scientists that attacks Kyoto and says climate change should be close to the bottom of a list of global concerns.

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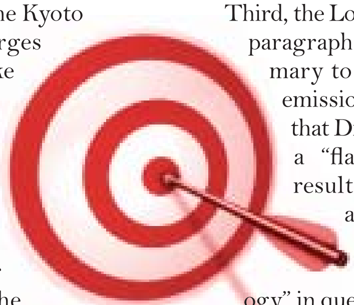
So are the 150 countries that have ratified the Kyoto treaty, and most climate scientists who back stronger action, wrong? Is the IPCC exaggerating the threat? And are the Kyoto targets doing almost nothing to tackle global warming—as the Lords report claims?

It seems unlikely. But what *is* clear is that the Lords report is marked by several glaring internal contradictions, and the Copenhagen consensus conclusion has been publicly disowned by one of the most senior economists associated with it.

The most striking inconsistencies within the Lords report are those between its summary—as promoted to the media—and its main text. The first concerns technology and the Kyoto protocol. The summary urges the government to "take the lead in exploring alternative 'architectures' for future protocols, perhaps based on agreements on technology and its diffusion." This was the source of the many newspaper headlines declaring that the Lords backed Bush's stance. How strange then to find in chapter five of their own report that they are "not confident" that governments can or should choose which technologies to back, and indeed that it is "far better that government sets the goal and the price signals to achieve that goal, leaving the market to select the technologies and their rate of diffusion through the economy." Setting goals and giving economic flexibility and price signals through emissions trading is just what Kyoto aims to do.



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The second inconsistency surrounds scientific uncertainty and the valuation of the damage caused by global warming. The report provides a welcome acknowledgement both of the scientific fundamentals, and the fact that future emissions, rates of temperature change and associated impacts are all very uncertain and currently unquantifiable. Yet the summary then criticises the IPCC for not quantifying the damage.

Economists have long been used to the idea of risk aversion in the face of uncertainty. Now an increasing number of scientists—the most notable recent contribution being a *Nature* paper taking a deeper look at the uncertainties surrounding aerosol effects—are concluding that the IPCC may have substantially *underestimated* the scale of climatic changes now looming. With deep uncertainties and only one planet upon which to perform the climate change experiment, the appropriate frameworks are about risk management and policy evolution. The latter requires commitment to sequential steps that can adapt to improving knowledge about costs and preferences and help to deter long-term, high-carbon investments. Kyoto's sequential target-based negotiations offer many of these things. To hinge everything upon demands to quantify things that the Lords report itself deems unquantifiable seems a dubious recipe for rational decision-making.

Third, the Lords report devotes two paragraphs of its one-page summary to attacking the IPCC's emission scenarios—a theme that Dick Taverne picks on as a "flawed methodology… resulting in a big, upward alarmist bias in projections of global warming.'" The "methodology" in question concerns the use of exchange rates. Most of the literature assessed by the IPCC used real exchange rates, to derive a global GDP which is then projected. There are many good reasons why using purchasing power parities is a better way of comparing international wealth, and for poorer countries these result in higher current GDP and lower growth projections. But the body of the Lords report itself admits the whole issue is largely irrelevant: "We cannot of course infer that errors in the emissions projections translate into comparable errors in the projections of greenhouse gas concentrations and rates of warming… any change in emissions due to changed economic assumptions will translate into a smaller effect on concentrations and an even smaller effect on temperature… it may mean that projections of warming are not themselves greatly affected."

What explains the Lords' apparent animosity to the IPCC? One fact that hasn't been mentioned is that the IPCC once tried to tackle the question of valuing climate damage itself, and it was David Pearce, the special adviser to the Lords report—a position that yields tremendous influence over the selection of witnesses and report drafting—who led the effort. And in 1996, he became the only IPCC convening lead author in history to have officially dissented from the governmentally negotiated summary of the chapter for which he was responsible.

That confrontation, too, concerned international comparisons, this time of the "value of statistical life"—the monetary value used by economists to evaluate the cost-benefit of projects that may change the risk of death in a society. Pearce argued, correctly, that any attempt to quantify damage (the subject of his chapter) had to use some such metric. The problem was that the number estimated by economists differed hugely between countries, reflecting their vastly differing wealth. In effect, that meant that in the global damage calculations, each Indian killed by climate change accounted for a tiny fraction of each American. Not surprisingly, the Indian government—and most others—rejected the methodology as ethically unacceptable.

Many of us think that the governments were basically right. The metric makes sense for determining how a given government might make trade-offs between its own internal projects. But the same logic fails when the issue is one of damage inflicted by some countries on others: why should the deaths inflicted by the big emitters—principally the industrialised countries—be valued differently according to the wealth of the victims' countries? But Pearce refused to budge, the negotiated summary implicitly disputed the chapter's approach, and the resulting confrontation came closer than anything else to wrecking the IPCC.

Most of the world's prominent climate sceptics were flown in to give evidence early in the Lords proceedings, which must have helped to influence the Lords' thinking before the IPCC representatives and other mainstream analysts (including this author) were brought in for questioning. Perhaps Pearce still bore the scars of the bruising encounter a decade earlier; certainly the summary, stripped of all the caveats entered by some of the committee members in the main text, appeared designed to inflict as much damage as possible on the institution that had rejected Pearce's approach to damage calculation a decade earlier.

Yet fear and loathing in the world of climate change economics runs even deeper. The Copenhagen consensus, convened by Bjørn Lomborg and the *Economist*, is resurrected in Dick Taverne's article as another bastion of reason in a sea of climate folly, for attacking Kyoto and apparently rating climate change as the last but one in the pecking order of global problems to worry about. The consensus has many problems, but the biggest one is that it is not a consensus. In addition, its conclusion on climate change was wholly unrelated to the evidence put to it. I was present at a major conference where the chairman asked Tom Schelling—one of the most luminous of the Copenhagen luminaries—to close the conference by explaining why they had rated climate change as such a lowly problem. We didn't, he replied: we were asked to rate priorities for spending US$50bn, and none of the contributors on climate change addressed that question—or indeed, Kyoto. Tom Schelling followed up in a separate communication confirming they were given no basis upon which to rank climate change, or Kyoto, and that in regard to it being placed near the bottom of the list he responded: "I wish I had objected more strongly."

> The economics of climate change have not advanced since the early 1990s

In the end, however, neither the Lords committee nor David Pearce can really be blamed for their incoherent report, nor the ideological and political uses to which others are putting it. For the simple fact is that the field itself is incoherent. The economics of climate change have scarcely advanced since the basic debates of the early 1990s led to the design of Kyoto around classical economic principles of negotiated targets implemented with emissions trading: it is in fact a treaty more strongly grounded in classical economic theory than almost any other save the WTO itself. If there is a better way, no one has yet come up with it. Of course the first-round targets were the result of political horse-trading—how else were governments supposed to set them when economics had nothing better to offer anyway?

The last ten years have seen major advances in some fields of economics, including behavioural economics, that yield some spin-off benefits for climate change in terms of understanding the economics of energy efficiency policies. Yet the decade since US economists first helped their government to formulate Kyoto's basic design, and since the IPCC governments rejected Pearce's approach to evaluating climate damage, has seen a severe lack of intellectual progress on how best to solve the most novel and complex global challenge of our time.

And as for Kyoto, my guess is that it will—and should—survive in its core. Not just because it has now entered into force, with 150 countries having debated through their national legislatures that it was the right thing to do. But because sequentially negotiated targets that deepen over time still offer the most plausible path forwards, and both governments and the general public have one basic insight that too many economists seem to have lost: if we balk at the first step, we will never make the journey. ■