



Sir Nicholas Stern,
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Dear Sir Nicholas,

Review of Climate Change Economics

Further to my letter of 15th December and enclosed evidence, and to my e-mail message of 11th February to Henry Derwent and Sir David King, copied to you and to Nick Rowley, I enclose herewith a later version of the Bilateral Partnerships proposal which omits mention of specific countries and includes (along with some diagrams overleaf) a final brief section as follows:

Why have policy-makers neglected this option?

Kyoto is based on the wrong model: CO₂ is not a pollutant. We are not trying to cut sewage emissions into a stream so as to equate the marginal damage from fish kill to the marginal cost of sewage treatment. Anthropogenic emissions are an addition to the 20 times greater natural biotic flux – like adding an extra stream of pure water into a lake, raising its level so as to risk flooding a lakeside city. In that situation it is sensible to look at all the inflows into the lake and also at how water gets out of the lake. That is what the holistic strategy does.

If that is correct then misapplied economics is the root cause of a vast misdirection of effort to achieve, by very costly and ineffectual means, what can hopefully be achieved (i.e. meeting the UNFCCC's Article 2 Ultimate Objective) by widely beneficial 'win-win' investments. That is to say, DFI by the oil industry in securing its future supplies of raw material through growing biomass under land use improvement schemes rather than by drilling for it. In that case the objective of climate policy should be to alter the 'vision' of oil industry management, e.g. taking 'Beyond Petroleum' seriously.

I said 'hopefully' because there will, until a great deal more climate science has been done, remain doubt as to whether effective management of greenhouse gas levels on a decadal time-scale, as is possible with the holistic greenhouse gas management strategy that I have developed, will be effective in preventing immensely damaging abrupt climate change. We can only hope so – certainly uncertainty is no reason for inaction.

Sir Nicholas, I believe it is urgently necessary for a highly authoritative economic voice to say plainly that the economics profession has egg on its face in relation to the climate change issue. I very much hope that your review will come to that view. I would be very glad to discuss this with you, or to give oral evidence to your review team if that is convenient, during my upcoming visit to London, which has been delayed for a week on medical advice. I now am arriving early on March 7th and departing on March 25th.

Yours sincerely

A handwritten signature in green ink, appearing to read "Peter Read".

Peter Read

Bilateral Bioenergy Partnerships

Peter Read, Massey University, New Zealand.

The Threat, a Vision, and Holistic Greenhouse Gas Management

The threat is that various disturbing aspects of the linked climate-biosphere system – noted in the bulk of the contributions to “Avoiding Dangerous Climate Change”, together with later news in 2005 of methane releases from Siberian tundra, shrinking Arctic sea-ice, slowing Gulf Stream, etc. – will prove to be precursors of large-scale abrupt climate change. Effective precautionary action is needed over the next decade and, fortunately, can be widely beneficial.

The vision is that the flow of oil and gas expenditure on exploration and development of new petroleum resources can be shifted over the next decade into the production of biomass raw material. A major early impact comes from the build-up of a strategic stock of biomass raw material in new forest plantations, along with the take-up of biofuels in the transport sector. This provides the basis for the expansion of the global bio-fuel market that is needed as the first stage in an effective precautionary strategy (with prospective linkage to CO₂ storage, as the second stage, if the scientific news continues bad). In turn this involves shifting the vision of the oil industry from drilling for oil to planting for biofuel feedstock.

The holistic strategy's investment in large scale land improvement enables Bio-Energy with Carbon Storage (BECS – a negative emissions energy system) to return CO₂ to pre-industrial levels by 2040 by increasing biotic CO₂ fixation globally, and by preventing the return of CO₂ to atmosphere when the biofuel is used. Raised CO₂ absorption, through co-production of large-scale supplies of biomass raw material along with food and/or timber, yields energy security, farm income support, and sustainable development, as well as control of CO₂ levels.

The present risk is that increased take-up of biofuels worldwide, driven by energy security concerns, will do more climate harm than good, e.g. the current sacrifice of tropical forest to palm oil plantations in Indonesia. The holistic strategy will use sustainable development conditionality to mainstream the Millennium Development Goals into bioenergy expansion.

Figure 1
overleaf

Figure 2
overleaf

What is involved in bilateral initiatives

It is proposed that individual developed countries each select a developing country partner to jointly implement biofuels trading to contribute to meeting a transport biofuel obligation. It is envisaged that such bilateralism would spread through the Global Bio-Energy Partnership, with diverse experience leading to eventual shared best practice to be embodied in a second UNFCCC Protocol, addressed under Article 3.3 at potential abrupt climate change.

Choice of partner would be based on grounds of effective governance, matched size, biome suitability, and human and institutional capacity. Obviously this would need to be negotiated in the context of benefits to the host/exporter and interest from alternative partners.

Obligations of importer would be to impose a growing bio-fuels obligation on transportation fuel wholesalers, including both a proportion in the fuel mix and support for an expanding strategic stock of plantation raw material, with first preference for imports from the partner country. To avoid problems of leakage, additionality, etc., the strategic stock must be based on an inventory of existing forest and be defined in terms of increasing total forest carbon.

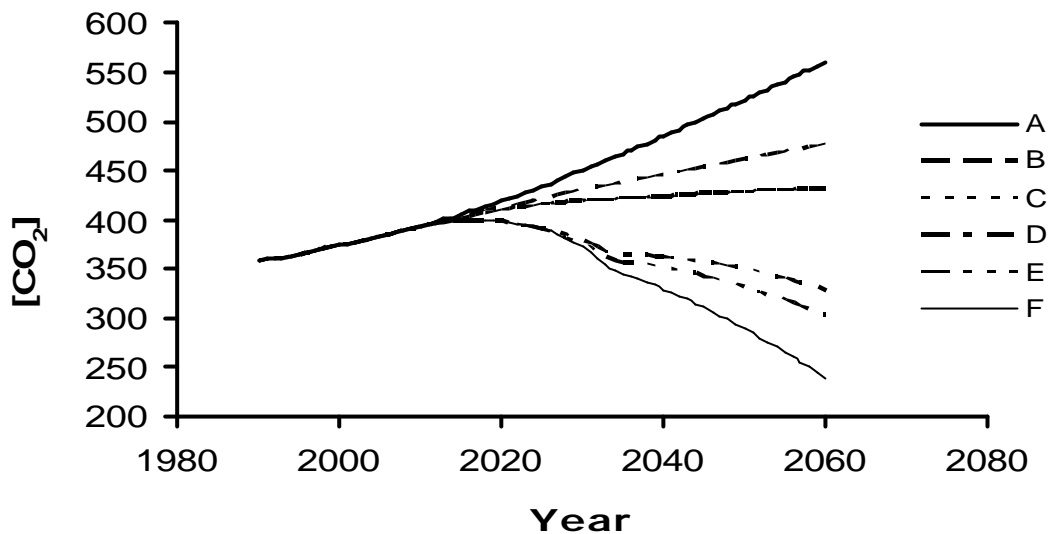
Obligations on the exporter/host would be undertake to accept negotiated socio-economic and environmental standards for bio-energy related sustainable development projects, within the MDG framework, and to support indigenous and international NGO's in the monitoring of these standards and the certification of exported biofuels.

Capacity Building: the partners would (as model for an eventual GEF funded programme) initiate urgent capacity building, through tertiary institution collaboration, to train 'barefoot entrepreneurs' to initiate and sustain community based bio-energy projects.

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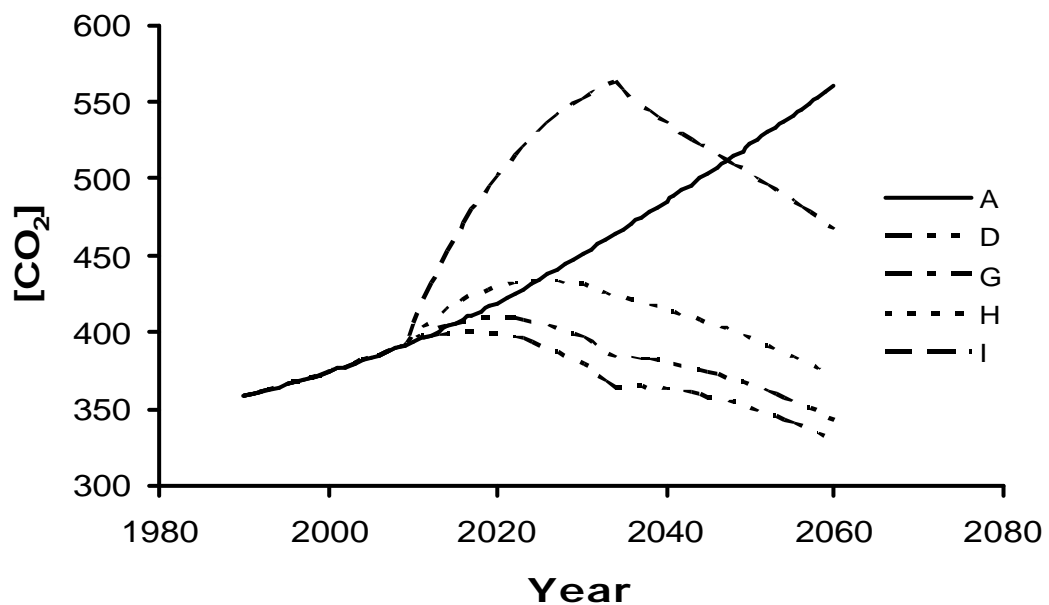
Figure 1: Bio-Energy with Carbon Storage (BECS) – impacts on level of atmospheric CO₂



Legend

- A SRES-A2
- B SRES-A2 with sugar cane land use improvement on 0.43 b. ha.
- C SRES-A2 with sugar cane and switch-grass land use improvement on 0.72 b. ha.
- D SRES-A2 with sugar cane, switch-grass and forestry land use improvement on 1.00 b. ha.
- E SRES-A2 with three land use change activities and low cost capture and storage (CCS) of fermentation CO₂
- F SRES-A2 with three land use change activities CCS of fermentation and flue gas CO₂

Figure 2: Bio-Energy with CO₂ release at time of land use change



Legend

- A SRES-A2
- D SRES-A2 with sugar cane, switch-grass and forestry land use improvement on a total 2.15 b. ha.
- G SRES-A2 with three land use change activities and 30 tC per ha released through land use change
- H SRES-A2 with three land use change activities and 90 tC per ha released through land use change
- I SRES-A2 with three land use change activities and 300 tC per ha released through land use change