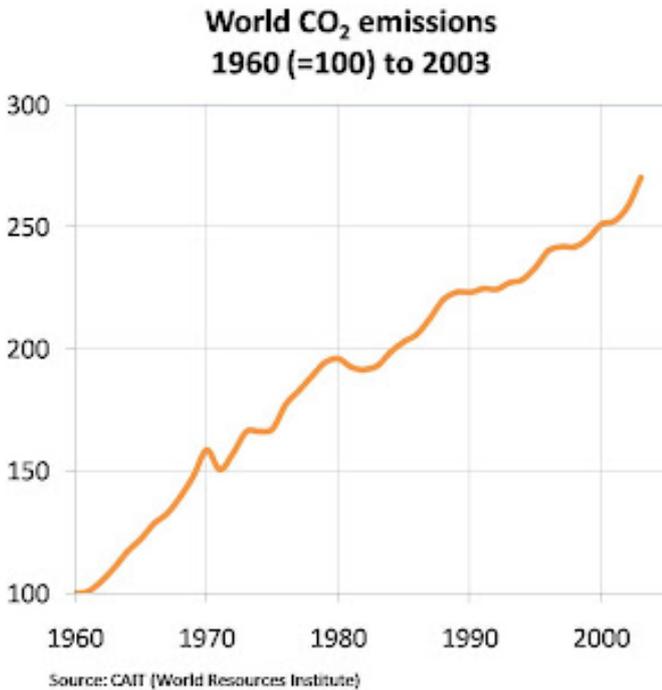


Do not ditch the Kyoto Protocol

written by Clive Bates | 25 October 2007



My otherwise peaceful morning slumber was disturbed by a [radio interview](#) announcing that social scientists Steve Rayner and Gwin Prins want to ‘ditch the Kyoto Protocol’. In a *Nature* commentary, [Time to ditch the Kyoto Protocol](#), they have a go at the Kyoto Protocol and claim that ‘political correctness’ is inhibiting proper criticism and unnamed Kyoto supporters insist that Kyoto must remain the only game in town, sternly admonishing any dissenters

to this orthodoxy. Luckily for us these fearless academics are ready to speak out. The trouble is, they have nothing much to say!

Yes, it is true that current efforts to control greenhouse gases are inadequate and that emissions are still rising and accelerating when they need to be slowing and falling - see chart [[data from CAIT](#)] - see also [BBC item](#). So we do have *prima facie* evidence of failure. Or more optimistically, it’s too early to see success in a multi-decade effort. But any failure so far is a reflection of insufficient political will and its wicked uncle, human short-termism, rather than the design of the Kyoto Protocol.

The authors “*believe that a radical rethink of climate policy should possess at least five central elements*”:

1. Focus mitigation efforts on the big emitters
2. Allow genuine emissions markets to evolve from the bottom up
3. Put public investment in energy R&D on a wartime footing
4. Increase spending on adaptation

5. Work the problem at appropriate scales

Their supposedly radical alternative proposals aren't radical or even alternative. But they would, if taken seriously, dissipate what political commitment already exists. Let's examine what they describe as this 'silver buckshot' approach in more detail...

Overall... I think they just don't quite get what Kyoto does

The authors say that Kyoto is based on the models used for tackling ozone, depletion, acid rain and nuclear arms, and that: *in practice, Kyoto depends on the top-down creation of a global market in carbon dioxide by allowing countries to buy and sell their agreed allowances of emissions.*

Overall, they have mis-characterised the Kyoto protocol (it isn't a single policy instrument designed to create a global trading system). Furthermore, they've not recognised the critical problem at the heart of climate change - it is an international, intergenerational [collective action problem](#) to be faced in conditions of uncertainty, distrust and short-termism. The Kyoto Protocol attempts to create a framework for negotiating a solution given that conceptualisation of the problem. The authors' emphasis on local, bottom and piecemeal approaches overlooks the problems of free-riding and the difficulty of getting anything much done, when people fear that others are not doing anything (ie. the collective action issue). The authors appear to take swipes at the Kyoto Protocol without realising that its function is limited to establishing major commitments between parties and organising co-operation. It does not specify policies, but what must be achieved. the choice of policies and the appropriate jurisdictional scale for action is up to the parties.

Let's look at the five specific proposals....

1. Focus on the big emitters

The idea is that the top 20 emitters account for 80% of emissions. Do a deal between them and *hey presto!*

But a 'C-20' is effectively happening *in parallel* with Kyoto, through the G8 and other fora, and is actually what happens in negotiations anyway - through a 'contact group' or other such negotiating device. There is lots of scope to find

consensus amongst big players outside the UN meetings, but to imagine this can replace a broader forum is wrong. Where this goes wrong is to ignore the value of a global agreement and how the agreement might change shape in the future: for example through global sectoral agreements (eg. for aluminium or aviation) or if the approach moves on to a 'policies and measures' agenda - eg. setting global product standards. It should also seek to involve all countries in cap and trade or harmonised carbon tax regimes. There is also the financing (CDM) and adaptation aspects of Kyoto. The other reason to have all countries involved is the moral pressure of those states that have most to lose (and gain). Note that the per capita emissions are very different. Note that

2. Allow genuine emissions markets to evolve from the bottom up

They want emissions trading markets to begin with small coverage as local initiatives, like all 'genuine markets'.

First of all, there isn't a global market - the emissions trading systems that do exist have been created to help particular parties, like the EU, meet their Kyoto commitments or by jurisdictions or groups of companies wishing to take action outside Kyoto (eg. in the US). So what does this supposedly radical proposal actually mean? A cap and trade system is only as good as its cap - the trading bit improves efficiency, not the environmental outcomes (unless you allow that trading facilitates agreement to tougher caps). Where do meaningful caps come? Certainly not from the free play of perceived corporate or national self-interest if the EU system is anything to go by. Does bottom up mean 'voluntary participation'? If so, who will join the system if they are a loser and have to buy emissions rights? If it not is not voluntary, some legislative body needs to compel the participants to join and to allocate or auction caps. Has anyone ever suggested that environmental taxes should evolve from the bottom up? Well emissions trading markets have much the same effect - they impose scarcity and force a price on carbon.

3. Put public investment in energy R&D on a wartime footing

The authors think that massive public sector R&D will increase the stock of low carbon technologies and point out that government R&D spend has fallen by 40% since 1980.

First, let me propose a thought experiment... if we only ever had the technology

available today, 25 October 2007, could we address the climate change challenge? I think we could go a long way... I think the real deficit is in *policy innovation* and political will - ie. that which causes the available low carbon technologies to be widely applied. You only have to look at the state of the existing building stock to realise that new technology is the least of the problems. The sort of wartime effort we need is not a Manhattan Project or dambusters development ending in new gee-whiz technologies, but more like the distribution of gas masks or Morrison shelters - effective bomb retardants based on the old-tech plasticity of metal.

Secondly, if the problem is cost, the answer is unlikely to be R&D but more likely to involve increasing scale through market support in some way (for example like the Renewable Obligation or feed-in tariffs). For technologies that are more distant, other mechanisms like prizes (as done for carbon capture and storage) might be the way ahead.

Thirdly, where is their evidence that government R&D spend will have the effect they hope for? Military R&D during total war is very different to civil innovation in an energy market. Actually, private sector R&D with carefully designed incentives from government will do the job better than thousands of men in white coats in government labs. But where do governments get the motivation to act provide market support or other incentives... from meeting targets, or from seeking to induce first-mover advantages in low-carbon markets that will be created by policies originating in the Kyoto Protocol.

4. Increase spending on adaptation

Yes, it is a good idea to spend more on adaptation. Mitigation at the very best will slow the warming trend and it won't start doing that noticeably until 2040. The interesting thing that has escaped many commentators is that adaptation is not a choice really - the impacts and risks will arise whether you expect and prepare for them or not. Mitigation is a choice, albeit an irresponsible one to duck. Governments will face the risks whatever they do, and so will have strong incentives to fund adaptation to deal with floods, sea level rise, droughts, super-storms, urban heat waves, exotic diseases etc. Most of this should be spending at national or local level - but there is scope for international co-operation.

So although more focus on adaptation is worthwhile, and in my view will

inevitably be driven by impacts, why does this justify 'ditching Kyoto'? Adaptation and mitigation are not mutually exclusive - they are just different risk management strategies which work over different time horizons. In fact, both the UNFCCC and Kyoto Protocol have adaptation provisions within them (see [UNFCCC](#) & [Kyoto Art 10 and 12.8](#)). Other than the fact that they are under-used, I don't see what is wrong with these. And they are an important part of the 'bargain' that encourages developing countries to participate in mitigation.

5. Work the problem at appropriate scales

The authors point out that policy innovation happens at more local levels.

Another misunderstanding... Kyoto provides the elements that are needed at the global and national levels - namely targets and commitments to co-operate between nations. Which localities are going to set demanding targets if they believe others will not? The whole point of the protocol is that targets are agreed and the parties work out how to meet the targets themselves - and they may devolve responsibility to a lower administrative level, for example to local government or cities. The authors' recommendation as framed is, of course, a banality - of course things should be done appropriate scales! But some things do need to be agreed at the top level - mainly targets and a system for co-operation and transfers between states. And that is exactly what is done in the Kyoto Protocol. There would be a problem if the Kyoto Protocol was all there is.... but it does only the job that is needed at global level.

And what is truly local, bearing in mind the industry lobbyists' dislike of local differences or, as they would have it, 'distortions'? Could you imagine the cap-setting trouble we would have if each EU member state set its own cap or carbon tax? What if each US state set different vehicle emissions standards etc. I think things like renewables policy, building rehabilitation, local transportation, spatial planning might be a good local thing. But its less obvious with economic instruments, large scale energy supply, product standards etc.

The silver buckshot approach - media-savvy academics rename something ordinary to gain extra publicity

This seems to mean having lots of different policy approaches and doing what works. I agree. It's how most countries are trying to meet their Kyoto commitments. I don't think they've added anything new or interesting with this

commentary, but they will have made some American climate sceptics and Kyoto detractors very happy.

Could the response to climate change be improved?

Most definitely... but not by ditching Kyoto. Here's six ideas for starters...

1. Global sectoral agreements (steel, aluminium, cement, oil, aviation, shipping) aiming to limit emissions worldwide
2. Global product minimum standards built into WTO rules - this would be like globalising the approach taken in the EU single market, or for food safety
3. Focus commitments on realising 'no-regrets' measures, especially in developing countries. This aims to get over the idea that commitments are always harmful - who can object to committing only to do those things that are otherwise beneficial?
4. Very large North-South transfers to buy-out carbon intensive development - these should be big enough to completely offset developed country emissions.
5. Demand-side measures aimed at tackling deforestation and promoting reforestation by reducing unsustainable dependence on forest products. We can't tackle deforestation simply by protecting particular areas... it just means other areas are cut
6. The strategic use of time - policies that build up gradually to give a large effect - eg. a \$200 /tCO₂ globally co-ordinated tax introduced over 40 years. I think we could do really huge things if we give them time and act with credibility and consistency. Trying to do big things quickly usually fails and a series of small piecemeal initiatives rarely achieves much.

Note - some of this first published on Caspar Henderson's [Grains of Sand blog](#) in response to a [posting](#) by him.