

After Copenhagen

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I need some basis for hope.

Negotiations are getting nowhere. Emissions will grow. Runaway warming may kick in. That's it. Is there no hope?

Developing countries will never overlook the industrialised world's responsibility for causing global warming: we have an obligation and must act on it. But not mix the obligation up with securing a future for the world as a whole. The rage over Iraq, Afghanistan, Palestine, Gaza and Guantanamo, to name but a few, has destroyed trust, particularly in the Islamic world. The West can be trusted only to feather its own nest. Without a modicum of trust there is no basis for negotiation.

There are, however, simple principles related to the climate cycle that could lead to a viable policy if separated from other aspects of global justice. I have used published figures; if you question the statements can you refine them?

Carbon and carbon dioxide do not have the same weight. 1 tonne of carbon = 3.7 tonnes of carbon dioxide. And it is usually stated that 1 tonne of carbon = 4.2 tonnes of carbon dioxide equivalent. GTC means billion tonnes of carbon.

- there are at present 800 GTC in the atmosphere.
- a safe amount of carbon in the atmosphere is 720 GTC¹.
- there are 650 GTC in plants and trees.
- there are 1,600 GTC in the soil (some say 3,200 GTC).
- every year fossil fuels add 8 GTC to the atmosphere.
- every year plants capture 58 GTC and the same amount is returned to the sky. This is the carbon cycle. It means that the full weight of carbon in the sky is circulated through plants and soil every 14 years.

The policy is to reduce the amount of emissions from burning fossil fuels and retaining more carbon in the soil.

- The simplest way to reduce emissions from burning of fossil fuels is to reduce the amount of coal, gas and oil taken from the ground. A global agency of the UN should auction permits for extraction and distribute the income from auction (less 20%) to countries in proportion to their population. The amount of permits would reduce annually, perhaps to 50% by 2030²?
- Improved agricultural practice can sequester

1 GTC a year by 2030 according to the IPCC (the Soil Association puts the figure at 1.5 GTC)³. Amazing Carbon reckons that up to 80% of carbon has been lost from most farmed soil in Australia, illustrating the huge potential for degraded soil to sequester carbon through organic farming.

- Forestation and reduced deforestation can sequester 4 GTC a year by 2030⁴.
- Biochar policies can sequester 7 GTC⁵.

The Carbon Maintenance Fee (funded from a Tobin tax), by which countries are rewarded for the carbon within their borders, seems to provide the best incentive for countries to increase land-based sequestration without the need for protracted negotiations.

Assume that, by 2030, atmospheric concentrations rise to 900 GTC, emissions from burning fossil fuels reduce to 4 GTC a year, and sequestration takes 12 GTC a year from the atmosphere. A net reduction of 8 GTC a year would bring concentrations down to a safe level in 23 years - by 2053.

Extraction permits can be enforced by dominant nations. I believe there are reasons why both the US and China, for different reasons, might wish to enforce them. However the move must be driven by motives of climate-survival rather than economic self-interest. The CMF can be introduced by nations that participate in financial trading.

This may seem far-fetched or unrealistic but at least it gives me some basis for hope.

References

1. Moving from concentrations of 387ppmv to 350ppmv implies a 10% reduction. Therefore, in terms of weight, this means reducing atmospheric concentration to 720 GTC.
2. Cap&share has the great advantage that it does not need global agreement. Ireland could adopt it, so could Europe or the USA. It should spread by example rather than imposition. Many countries object to being told how to handle finance within their borders so, whether their objections are valid or not is irrelevant, negotiations would be protracted and agreement would take years to reach, if ever. Also the assembly of permits would involve banks, and trust in banks has been shattered.
3. See Worldwatch Report 179, p25 and *Soil Carbon and Organic Farming* by the Soil Association, p4.
4. See Worldwatch Report 179, p25.
5. *ibid*, p15.