

Aubrey Meyer, the author of Contraction & Convergence - the global solution to climate change, believes the UK Government is edging towards a C&C framework to avert climate change disaster. As a musician he was drawn to Brazil in the late 80s in search of a subject for a musical. The experience changed his life. He spent the next decade contributing to the policy working group of the **Intergovernmental Panel on Climate** Change (IPCC) and campaigning at United Nations negotiations. He is **Director of the Global Commons** Institute, has been honoured internationally for his work, and in May he addresses Government experts about climate security.

By Aubrey Meyer

Prime Minister Tony Blair has again called for a concerted international effort to tackle global poverty and environmental degradation - particularly climate change. This time, introducing the Government's White Paper on energy and prompted by the Iraq crisis, Mr Blair compared damage from weapons of mass destruction with global poverty and environmental degradation saying these long-term issues are "just

as devastating in their potential impact, some more so. There will be no genuine security if the planet is ravaged by climate change." The urgency is palpable.

The reality is also inescapable. The big reinsurance companies have noted that damages – or 'uninsured economic losses' – from (un)natural disasters such as climate change – have been rising at up to four times the rate of economic growth for the past 40 years. (See diagrams on facing page). At this rate it is only a matter of time before the losses reach catastrophic proportions for the industry.

C&C first proposes a reviewable global greenhouse gas (ghg) emissions 'contraction budget' targeted at a safe and stable future level for atmospheric ghg concentrations

Trading up to

Mr Blair rightly described the Kyoto Protocol as, "not radical enough" and announced a Government target to reduce UK CO₂ emissions by 60% by 2050. He linked this to the report in 2000 by the Royal Commission on Environmental Pollution who, in and since that report, advocate the global "Contraction and Convergence" (C&C) approach.

The London-based Global Commons Institute (GCI) first proposed C&C in 1990. Since then GCI has refined the concept and with lobbying and imagery generated considerable international support for it (see www.gci.org.uk/consolidation).

2030 as in the example below).

This reduces the randomness and North/South rancour that has almost fatally flawed negotiations since 1992 over future emissions commitments/ entitlements. C&C resolves constitutionally this conflict between the GDP-growth or 'efficiency'-led approaches

within the budget timeline, after which

they remain proportional to an agreed

base year of global population (for example

favoured by the USA and those, such as the "Brazilian Proposal", that emphasise responsibility for the historic emissions that have caused the rise of atmospheric concentrations, temperature and damages.

(See the graphic, right).

Under the influence of Environment Minister Michael Meacher, Defra - the Government's lead agency on climate change - has increasingly engaged with C&C over recent years. Saying that their own methodology is based on C&C, there is still resistance. However, Defra has now indicated its intention to encourage discussion of this at the UN negotiations and has invited GCI to lead a seminar on this for civil servants in May. Here is the essence of that presentation:

280 ppm v atmosphere concentrations of CO2 in parts per misions by volume (ppm) 3.00pm v 0.5

OC 2 CO1 TRACTION for 450 ppm v 0.4

CO2 CO1 VERGENCE by 2030

O.1

OC 2 CO1 VERGENCE by 2030

O.3

OC 3 CO1 VERGENCE by 2030

O.4

OC 3 CO1 VERGENCE by 2030

O.5

OC 4 CO1 VERGENCE by 2030

O.6

OC 4 CO1 VERGENCE by 2030

O.7

OC 4 CO1 VERGENCE by 2030

O.7

OC 4 CO1 VERGENCE by 2030

O.7

OC 5 CO1 VERGENCE by 2030

OC 5 CO1 VERGE

The C&C methodology puts the objective and principles of the United Nations Framework Convention on Climate Change (UNFCCC) into a constitutional global calculus that is described by the Intergovernmental Panel on Climate Change (IPCC) as, "taking the rights-based approach to its logical conclusion".

To meet the objective of the UNFCCC in a precautionary way, C&C first proposes a reviewable global greenhouse gas (ghg) emissions 'contraction budget' targeted at a safe and stable future level for atmospheric ghg concentrations (for example 450 ppmv as in the example shown above). This also applies the UNFCCC principle of precaution. To embed the principle of equity, C&C then proposes internationally tradable shares in this budget that are calculated on the basis of 'convergence' from the starting point, where shares are broadly proportional to global income distribution, to a target date

Precaution recognises that the bigger the contraction budget the greater the risks. So, guided by scientific advice of the Intergovernmental Panel on Climate Change (IPCC), all governments or regional groupings of governments jointly and severally agree to observe such an atmospheric target. With such a target it is possible to calculate the total diminishing amount of greenhouse gases that the world can emit for each year in the coming century. Whatever the rate and subsequent revisions agreed, C&C views this event as a whole as "Contraction"2. The example shown limits the rise of atmospheric CO₂ concentration to 450 parts per million by volume or no more than 70% above the maximum preindustrial level.

On the basis of equity, convergence means that each year's ration of this global emissions (contraction) budget for each



climate security

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country or group of countries progressively converges on the same allocation per person by an agreed date, as shown by 2030 in the previous graphic. This recognises the principle of globally equal rights per capita to the 'global commons' of the atmosphere, but achieved by smooth transition.

Where country-groups do have a diversity of fossil fuel endowments and production/consumption patterns, C&C acknowledges this too by embracing the example of the European Union, which operates as a unit at the international level whilst creating its own internal convergence arrangements. The overall rate of convergence is negotiable independent of the rate on contraction; and can be 'accelerated' so as to provide a global mechanism whereby developing countries can redress the structural imbalance represented by the historic inequalities of consumption and emissions.

Permits created this way are considered tradable equity and only emissions in excess of the total of permits created under C&C are not permitted — sometimes called 'hot-air'. Countries unable to manage within their agreed shares would, subject to verification and appropriate rules, be able to buy the unused parts of the allocations of other countries or regions. Sales of unused allocations would generate purchasing power in low per capita emitting countries to fund development in sustainable zero-emission ways.

High per capita emitting countries would be paying over the odds as they adjusted but would gain a mechanism to mitigate the expensive premature retirement of their carbon capital stock. They would

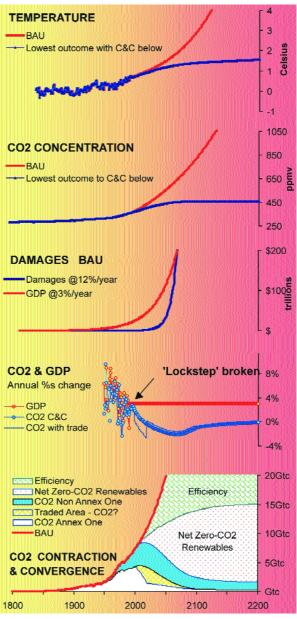
There will be no genuine security if the planet is ravaged by climate change

also benefit from the export markets for renewable technologies this restructuring would create. Most importantly, we all benefit from more rapidly avoided global damages as fossil fuel dependence is structurally inhibited and revenues from emission permit sales are recycled into the competitive diffusion of clean energy systems.

At present, as Tony Blair recognises, fossil fuel dependence and climate change increasingly augur chaotic political conditions and catastrophic economic losses. C&C pre-empts this by integrating the key features of global diplomacy, environment and economic development necessary for long-term prosperity and security. This integration can guide the global transition to a new growth and prosperity

based on zero carbon techniques and technologies. Without such an agreement we are radar-less and rudderless.

I hope GCI can persuade our civil service experts to make and win this argument at the UN. Unequal commitments by some countries – as with Kyoto – are a half-truth that aggravates climate change and conflict. Speaking to the whole truth of equal emissions entitlements under a global cap on emissions – Contraction and Convergence – creates the negotiating conditions that will win peace and prosperity with climate security. This



Source GCI (BAU - Business as usual)

- I. CCOptions will calculate any rates of Contraction & Convergence for all countries' CO₂
- 2. Diagram examples show global CO₂ emissions reduced to 40% of 1990 output value by 2100 giving a stable atmospheric concentration of 450 parts per million of CO₂ by 2100. Other contraction 'shapes' are possible for the same concentration outcome. Different rates of contraction are possible leading to different concentration outcomes but damages from climate change increase proportional to delay.

is the basis for Mr Blair's "Climate Covenant".

 Aubrey Meyer's book Contraction & Convergence is available from www.greenbooks.co.uk, tel 01803 863260.