CLIMATE CHANGE
WHAT CAN BE DONE?

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Contraction and convergence

One candidate for the comprehensive framework and overarching vision for climate change policy is "Contraction and Convergence", advocated by the Global Commons Institute.[1] If this approach were to be adopted, it would require considerably more far-reaching commitments than those developed within the Kyoto framework.[2] The key elements of contraction and convergence are outlined as follows by the initiator of the proposal, Aubrey Meyer:

„*essentially, it has three steps: (1) an international agreement is reached on how much further the level of carbon dioxide (CO2) in the atmosphere can be allowed to rise before the changes in climate it produces become totally unacceptable. Fixing this target level is very difficult, particularly as concentrations are too high already. (2) Once the ultimate overall limits to CO2 concentrations has been agreed, it is a simple matter to use an estimate of the proportion of the gas released which is retained in the atmosphere to work out how quickly we need to cut back on the current global emissions in order to reach the target. This cutting back is the Contraction part of Contraction and Convergence. (3) Once we know by what percentage the world has to cut back its CO2 emissions each year to hit the concentration target, we have to decide how to allocate the fossil fuel consumption that those emissions represent.*

The contraction and convergence approach says that the right to emit carbon dioxide is a human right there should be allocated on an equal basis to all of humankind. This might appeal to a majority of the countries of the world, but the over-consuming countries would have to be allowed an adjustment period in which to bring their emissions down before the Convergence on the universal level.[3]

In more detail, the essential proposition of contraction and convergence has four elements.

'After the initial agreement by countries for a reviewable global greenhouse gas emissions 'contraction budget' targeted at a precautionary, stable value for atmospheric greenhouse gas concentrations, the internationally tradable shares of this Budget are then agreed on the basis of convergence from the current situation; the shares should be broadly proportional to income. The convergence should be towards a target date in the budget timeline after which they remain proportional to an agreed base year of global population. Revenues from this trade can be directed to the deployment of zero emissions technology.

Contraction: on the basis of precaution, all governments collectively agree to be bound by such an atmospheric target. This makes it possible to calculate the diminishing amount of greenhouse gases that the world can release for each year in the coming century. Subject to annual review, this event is the contraction part of the process.

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[1] For more information see: http://www.gci.org.uk

[2] GCI documentation produced for the conference can be found at: http://www.gci.org.uk/refs/C&C.zip and http://www.gci.org.uk/refs/Wilton%200pening%20Pages.pdf . These are large files with sophisticated colour graphics. They can also be requested on CD from the Global Commons Institute (tel/fax +44 (0) 208 520 4742.

[3] Aubrey Meyer, *Contraction and Convergence: The Global Solution to Climate Change*, Green Books, Totnes, for the Schumacher Society, Bristol, 2000, p. 19.

Convergence: On the basis of equity, convergence means that each year's ration of this global emissions budget is shared out so that every country progressively converges on the same allocation per inhabitant by an agreed date, for example by 2030. It recognises the need for access rights to the Global Commons of the atmosphere with the fundamental principle of globally equal rights for per capita, to be achieved by smooth transition.

Emissions permit trading: Countries unable to manage within their shares would, subject to agreed rules, be able to buy the unused parts of the allocations are other countries. Sales of unused allocations would give the less developed countries the income to fund development in zero-emission ways. Industries in the developed countries would benefit from the export markets this restructuring would create.

Sustainable growth: Contraction and Convergence does not place a straitjacket on growth per se by its limitation on fossil fuels. Instead it averts catastrophic losses by promoting the development and growth of zero carbon energy technologies necessary for prosperity and sustainable development.[4]

The strength of this model, to quote the IPCC Third Assessment (2000), is that it represents „... the logical conclusion of a rights based approach". Most of the objections which can be made questioning the practicality of the model are, simultaneously, objections to any scheme radical enough to achieve a long-term stabilisation of greenhouse gas concentrations in the atmosphere. Taking standardised per capita emissions as the basis for calculation fulfils the equity criterion, but raises concerns that populous countries, in particular China and India, will increase their emissions at the same time as developed (OECD) countries have radically to decrease theirs. Proponents of the contraction and convergence thesis contrast it with the current and approach of „expansion and divergence" which is increasingly recognised as unsustainable. The fundamental dilemma of long-term climate change negotiations is that developed countries, and the main emitters among the industrialising nations of the South (particularly those with large populations including China, India and Brazil) are likely to resist signing up to targets which are sufficiently far-reaching to stabilise greenhouse gas concentrations at a sustainable level but, if these countries do not accept radical proposals for reductions to their emissions, the cumulative effects of global warming will continue. The impacts on all countries, but most obviously among developing countries (whose societies are more vulnerable) will be increasingly severe.

Much of the US opposition to the Kyoto Protocol approach has been focused around the argument that it is unfair for industrialised countries to have to cut their emissions while industrialising countries are under no such restriction. The Byrd-Hagel Resolution, passed 95-0 in the US Senate in 1997, expresses this concern , but in the framework of seeking a solution to global warming by determining which countries should limit and which should cut their emissions. The approach is consistent with Contraction and Convergence.

[4] Taken from "Contraction and Convergence" , GCI material distributed at the conference (WP 663 – "Climate Change: What needs to be done?".