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Contraction & Convergence – a Framework for Ethically Closing the Mitigation Implementation Gap

By [Rock Ethics Institute](#) on January 19, 2009 2:27 AM | [1 Comment](#)

Editor's Preface: The following is one of a series of posts that ClimateEthics.org is focusing on to encourage ethical analyses of post-Kyoto regime proposals that are getting attention in the international community. As ClimateEthics.org has argued in a recent post, all proposals to replace the Kyoto Protocol will need to satisfy two ethical criteria. See, [Minimum Ethical Criteria For All Post-Kyoto Regime Proposals: What Does Ethics Require of A Copenhagen Outcome](#), <http://climateethics.org/?p=50>. One, they must make sufficient reductions in global emissions to give the world hope that it can avoid catastrophic climate change. And second, the proposed regimes must put the world on pathway to equitable and just allocations of national emissions limitations. ClimateEthics.org now continues this analysis by looking at specific post-Kyoto regime proposals particularly in regard to how they satisfy the minimum acceptable ethical criteria of just national allocations. The following post is the first in this series on this theme. ClimateEthics.org will conclude these analyses by contrasting, comparing, and evaluating ethical claims made by each of these regime proposals.

I. Introduction The climate change problem is solved when we have stabilized atmospheric concentrations at a safe level. However, achieving this goal is time-dependent as the longer we wait to reduce emissions from burning fossil fuel (~70% of annual global emissions) and destroying terrestrial biosphere carbon stocks (~30% of emissions) the more difficult and expensive it becomes to solve the problem (IPCC 2007). Furthermore, the longer we wait the greater the consequences of our inaction as the more harm caused to people, other species, ecosystems, and future generations (Stern 2007). From this perspective, solving the climate change problem is as much an ethical challenge (i.e., public ethics in the sense of the imperative to give moral consideration to the consequences of our collective actions and inactions on others) as it is a technical or finance issue.

Currently, we face a growing and alarming mitigation implementation gap – emissions of greenhouse gases are increasing at a faster rate than mitigation efforts can counteract. International negotiations are bogged down in a complex agenda around issues concerning mitigation, adaptation, technology and finance. A key stumbling block to negotiations is interpretation of the principle of common and differentiated responsibilities (CDR) regarding the respective roles of developing versus developed countries. CDR is a legal principle recognized by the UNFCCC (UN Framework Convention on Climate Change) to help guide negotiations. However, there is ongoing debate about its interpretation and relevance to the practical problems that are the focus of the road to Copenhagen (Third World Network, 2008).

In this paper we first consider the meaning of CDR. We then we propose “Contraction and Convergence” as a negotiating framework, consistent with CDR, that can be used to ethically close the mitigation implementation gap in time to solve the climate change problem.

II. What Are Our Common And Differentiated Responsibilities (CDR)? Much of the CDR debate focuses on the meaning of “differentiated” with respect to the nation states of the Global North and South. However, we contend that these conflicts will only be resolved in the light of those responsibilities we have in common. It is therefore useful to take a step back and consider in the broader context of international negotiations precisely which responsibilities are held differently and which are held in common.

For the Global South, we can identify the following differentiated responsibilities that are of particular concern: (1) the right to development; (2) sovereignty over national resources; (3) transfer of resources; (4) transfer of technology; (5) poverty alleviation; (6) consumption patterns in the Global North; (7) foreign debts (that is, their write off/reschedule); (8) waste trade; (9) effective control over transnational corporations (codes of conduct); and (10) capacity building. For the Global North, we can identify the following differentiated responsibilities that of particular concern: (1) population stabilization in the Global South; (2) intellectual property rights; (3) forests in the Global South; (4) governance (rule of law); and (5) the promotion of democratic civil society.



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The following responsibilities can be considered of equal concern to both the Global North and South: (1) recognition of our ultimate interdependence and the concomitant need for a global partnership; (2) that respect and care for life in all its diversity is a sacred trust we hold for future generations; (3) our universal responsibilities to promote gender equality and equity, (4) the special needs of youth; (5) the rights of Indigenous peoples; and (6) access to nonviolent dispute avoidance/settlement.

If we only consider our differentiated responsibilities then mitigation negotiations will remain buried under those issues listed above that are (albeit a critical and legitimate) part of ongoing international deliberations regarding sustainable development and security. Similarly, if we only focus on common responsibilities in terms of nation's differentiated capacities to act, then negotiations will continue to grind away without resolution and the mitigation implementation gap will continue to grow.

The greatest harm to people, nature, and future generations will occur if the international community fails in its common responsibility to solve the climate change problem. This is not to place other differentiated responsibilities and capacities in a lower position. Rather, we need to acknowledge the simple physical reality that the human endeavour is embedded within and dependent upon a healthy Earth system and a stabilized planetary climate. If we fail in this task, then it will simply be impossible to address the other differentiated responsibilities and capacities.

III. C&C As An Ethical Negotiating Framework Contraction and Convergence (C&C) is a framework for mitigation negotiation that encapsulates the core elements of CDR in the context of climate change, namely (1) the common responsibility to protect and care for the community of life and (2) the differentiated capacities of nations to achieving this end. "Contraction" means reducing global green house gas emissions so that atmospheric greenhouse concentrations become stabilized at an agreed safe level. This safe level must be reached at a period of time which can be visualized as a contraction curve showing how emissions must be reduced over the specified time period. "Convergence" refers to distributing the permissible emissions under the contraction curve so that they are

equalized on a per capita basis globally by the specified time (see figure 1).

Figure 1. Visualization of "contraction and convergence" framed targets and timetable for global mitigation to stabilize CO₂ at 450ppmv. The top graph shows the permissible emissions and the lower graph their per capita distribution. Source: Global Commons Institute; http://www.gci.org.uk/kite/Carbon_Countdown.pdf

In its raw form, C&C raises ethical questions that must be answered including: what population levels at what time are used for the per capita allocation; will this differ for developed and developing countries; do we need to create a "development bubble" to allow for accelerated poverty alleviation in the short term; and of course the primary question of what is a safe level of atmospheric greenhouse gas concentrations? Such questions are part of the necessary negotiations around a C&C framed mitigation agreement. However, we argue that obtaining agreement on these C&C framework issues will provide the context and direction needed to successfully negotiate the myriad of implementation issues associated with adaptation, technology and finance. Climate change treaty negotiations are being overwhelmed by debate around implementation issues. Rather than continuing to negotiate on all matters in parallel, we argue they should be dealt with sequentially – first resolve the C&C framework issues, then deal with the implementation problems.

IV. Conclusions Solving the climate change problem is both a legal and ethical imperative. It is necessary in order to prevent and limit significant and irreversible harm to people, species, ecosystems and future generations. Furthermore, it must be done in ways that promote the Millennium Development Goals and that are consistent with accepted international norms (such as those articulated in the Earth Charter and the Universal Declaration of Human Rights). To be ethical, "means" must be both legal and consistent with the "ends". C&C in itself does not solve the climate change problem. However, it does provide an ethically framed approach to negotiating key framework issues which in turn will enable resolution of complex implementation problems. Solving the climate change problem is a common responsibility, whether we like it or not. C&C provides an approach to addressing the most fundamental questions in terms of a specified contraction curve with permissible emissions distributed on a per capita basis.

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This is useful contribution from Mackey and Hassan. They use C&C to both raise and answer the fundamental questions that are key.

However, in the references, I suggest substituting the Garnaut Report for the Stern Review. Ross Garnaut is the clearer thinker and recognises that proposals should add up to their stated outcome and that if they don't they should be rejected immediately. Taken seriously, this is the integrity of the C&C proposal - at different rates of sink-failure, the path integral of C&C adds up to its stated atmospheric outcome; see: - http://www.gci.org.uk/Animations/BENN_C&C_Animation.exe

While Lord Nicholas Stern stresses what he calls the 'simple arithmetic' of his - repeatedly changing - proposals, this point seems to have escaped him. Under his assertions, what he also calls 'the biggest market failure in history' is destined to worsen until he actually does the simple arithmetic.

When he does he will then have narrowed the gap between himself and reality, not to mention C&C/GCI and Professor Ross Garnaut,

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