THE INDEPEN One Western li Third World	to protest to leaders of the Intergov- emmental Panel on Climate Change (IPPC), the official body set up by world governments to assess the dan- gers of global warming. The documents have been prepared by economists in an IPPC working group and are expected to be approved by a plenary meeting of in PPC in Geneva on Tuesday. They say that, by the best estimates, a doubling of the that the cost of cutting emissions of the that the cost of cutting emissions of the that the cost of cutting emissions of the gas would be greater, this may be taken as justification for inaction. Europe But these calculations are partly based Lives in MORE hot and humid weather, with temperatu into the eightics, is expected over much of Brit week, writes <i>Glenda Cooper</i> . The current heat wave ended temporarily yeste a cold front finally broke the unpleasantly mug across the country. But the London Weather Ce said that heat and humidity were likely to be bs Tuesday with temperatures once more reaching 27 Celsius (80F). Temperatures today and tomo however, will be much more the seasonal norm around 21-22C (70-72F) in the south, and 182( 68F) further north. Last week temperatures as high as 30C (86F) v reported in Doncaster on Wednesday and 32C (	at Heathrow on Thursday, while high humidity
Land Al	LIVES in poor countries should be valued as worth 15 times less than those in the West, according to UN econo- mists calculating the possible cost to the world of global warming. Their calculations are in unpub- lished official documents, seen by the hudependent on Sunday, which are expected to be endorsed by the world's governments this week. The documents are designed to guide policymakers in deciding how to respond to potentially disastrous climate change. The calculations - which the docu- ments admit are "controversial" and "reflect discrimination against the less well off" are bound to create an international row just as evidence is mounting that global warming is taking hold. Research in both Britain and the United States shows that 1995 could be the hottest-ever year worldwide. Experts say that the huge disparity between the value placed on life in rich and poor countries minimises asses- ments of the damage that will be done by global warming and so will give governments an excuse to avoid taking action to combat it. Sir Crispin Tickell, the Prime Minis- ter's chief advisor on the environment	

# says UN report y Geoffrey Lean

ronment Correspondent

July 23rd 1995

ing lives in developing countries call for dramatic preventative action. and heart attacks brought on by ompared to £940,000 each in and North America.

the former Soviet Union are

warming could cut the world's wealth by sessment, produce estimates that global up to a quarter each year - which would figure in the West. Calculations which factors missing from the official as-

per cent figure as "ridiculously definite" they seem to endorse the economics of most of the deaths, mainly from Michael Grubb, head of the Energy And the governments are being asked to has made a special study of the costs of Environment Programme at the Royal global warming, describes the 1.5 to 2 a heat, would occur - at £62,500 Institute for International Affairs, who

# eat wave on its way

ain this

erday as a cold front finally broke the unpleasantly muggy spell around 21-22C (70-72F) in the south, and 1820C (64said that heat and humidity were likely to be back by Tuesday with temperatures once more reaching 26 to 27 Celsius (80F). Temperatures today and tomorrow, across the country. But the London Weather Centre however, will be much more the seasonal norm, at 68F) further north.

in centra' London, 30C at Gatwick Airport and 31C 8t centre reported temperatures of 29C (84F) on its roof at Heathrow on Thursday, while high humidity levels made the warm weather barely tolerable at times. On F) at Southend - comparable to Athens, Istanbul and reported in Doncaster on Wednesday and 32C (90F) Friday, the south remained stifling, and the weather Last week temperatures as high as 30C (86F) were

describes the calculations as "ludicrous"

and says they could discredit internaional attempts to evaluate the extent

08

climatic change. He has already written

and consequences of the threatened

spot in Europe, with Seville recording 44C (IHF). The recent high temperatures and humidity are thought to Hong Kong. But southern Spain provided the hottest have killed more than 800 people in America's Mid West, while Shanghai is experiencing its worst heat wave in 50 years.

ATHENS: Fires that burned more than 200 homes and Three fatal heart attacks in France and 12 in southern an eight-year-old boy was found drowned in his bath on Thursday after playing out in the sun all day. It is thought he may have suffered heatstroke and passed Spain have been blamed on the heat. In Doncaster, out, although a post-mortem examination proved inconclusive. An inquest will be held next week.

tal's few remaining forests were brought under partial other buildings and destroyed one of the Greek capicontrol yesterday, and officials hoped they would be put out by last night. The fires, fuelled by gale force winds, burned thousands of acres of forest around Mount Pendelikon, north-east of the capital.

mate. He says that it is so far impossible value all lives equally, and include other to make an accurate assessment, but the cost could range from virtually nothing valued at £180,000 each, one fifth of the and almost certainly a large underestiup to 25 per cent of world GDP.

Commons Institute, which has produced nothing. By placing such a low value on could provide an excuse for them to do similar figures, says: "The calculations the lives of most of the world's people, endorse are profoundly unreliable and Aubrey Meyer, director of the Global genocide."

gesting that global warming is resuming So far this year worldwide temperatures after a brief lull. The lull was caused by have equalled those in the first part of Pinatubo in the Philippines in the sumeruption took place 1991 was set to be even hotter than 1990 after six record-1990, the hottest year on record, sugphere, filtering out sunlight. Until the the huge volcanic eruption of Mount mer of 1991, which flung 20 million tons of sulphur high into the atmosbreaking years in the 1980s.

The sulphur has now dropped out of the it had not been for an exceptionally cold atmosphere and the hot years are returnever and would have been the hottest if January and February worldwide. Now ing. 1994 was the fourth warmest year 1995 is bidding for the record.

Decades of Countering the Economics of Genocide with C&C **DENT ON SUNDAY** fe is worth 15 in the

"*Contraction & Convergence"* [C&C] is an International Framework for the control of human source greenhouse gas emissions and countervailing "*Expansion & Divergence"* or the de facto *Economics of Genocide* causing dangerous rates of climate change.

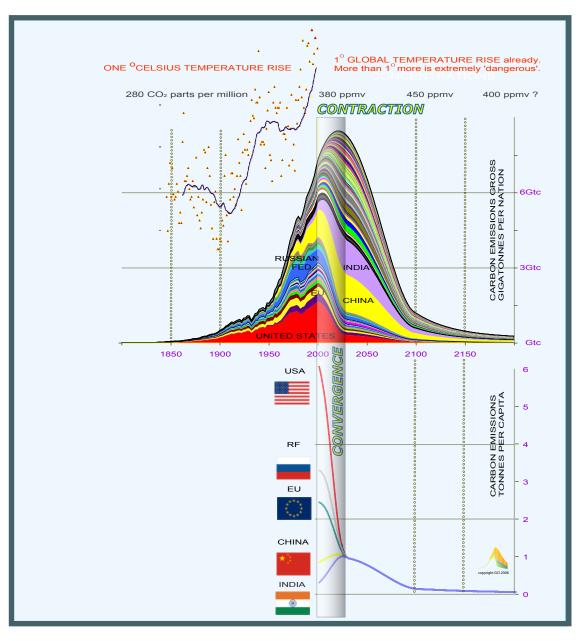
GCI has conducted a twenty year campaign to establish C&C. It is now accepted as the basis of the global agreement needed to avoid rates of climate change accelerating to the point after which climate change becomes 'runaway' due to the self-generating and further warming effects of positive feedbacks.

C&C simply assumed equal entitlements to future emissions globally subject to the overall limit that saves us and then created a model that would compute any rates of C&C.

However, between 1993 and 1995, GCI fought and won a battle against the economists in the policy section of the UN's Inter-governmental Panel on Climate Change who disagreed. Professors Nordhaus of the US and David Pearce of the UK led an effort refuting GCI's reasoning but their arbitrary and discriminatory valuation methods, once exposed, were rejected.

Economists regard human-induced climate change as an increasingly dangerous 'externality'. However, pandering to this, as they have done, is the 'economics of genocide' as it aggravates the double-jeopardy trends of globally asymmetric development and climate damages in which the global community is now increasingly trapped. This will not be 'corrected' through any institution or market unless a global framework for policies and measures is put in place to show that we are committed to solving the problem faster than we are creating it. That framework is C&C, now the most widely cited and arguably the most widely supported proposal in the debate.

#### Aubrey Meyer - Global Commons Institute



Two Decades of Countering the Economics of Genocide with C&C

A collection of materials for the workshop organised by the CRISIS FORUM at Southampton University 14 11 08

### CONTENTS

IoS on IPCC Economists Unequal Life Values	Cover
Fighting the Economics of Genocide	4 - 6
IPCC SAR WG3 Rejects Unequal Life Values	7 - 8
Indian Government Rejects Unequal Lives COP-1	9 -10
Indian Government Adopts C&C COP-1	11
Very Near Miss for C&C at COP-3 Kyoto 1997	
RCEP Adopts and Advocates C&C 2000	12 -13
Article on for FUTURE ENERGY	14 - 19
Stern's anti-C&C case gets [a] started	20
[b] more confused	22
[c] reversed	23
[d] resumed	24
GCI open letter to Mr. Stern about his U-Turns	25
<b>IPCC Contraction:Concentrations 1994 - 2007</b>	26 - 27
<b>GCI on IPCC Revised Contraction Rates</b>	28 - 29
Growing Support for C&C	30 - 35
DEFRA & APPGCC acknowledge C&C Integrity	36
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### Starting in 1989, the first fifteen years of GCI are documented in the Archive stored at: - www.gci.org.uk/Archive/Mega\_Doc\_1989\_2004.pdf

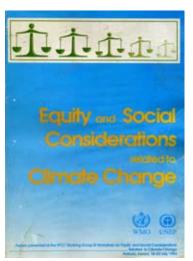
By 1990, GCI had established a presence at the UN climate change negotiations. Under the banner of *Equity and Survival*, the simple message was equal rights to the commons. As of 1993 we began an engagement with the 'neo-classical' economists who had arrived at the UN. Their mission was to conduct a 'global cost-benefit analysis' [G-CBA] of climate change so the famous climate-change-question of William Nordhaus *To Slow or not to Slow* could be answered. Professor Nordhaus already took the position that [1] all countries had or aspired to have the economic structure of the USA [2] agriculture was 2-3% of US GDP [3] if things got hotter due to global warming, they had air-conditioning and shopping malls.

As the IPCC prepared its Second Assessment Report [SAR] in 1993, Prof Nordhaus was appointed to be the convening lead author of the impending G-CBA. GCI was asked to contribute to the Equity and Social Considerations section of the SAR. However, GCI took the view that Prof Nordhaus appointment was not suitable and so we informed as many UN delegates to the negotiations as possible of his views and his impending appointment. Within a month he was stood down and replaced by Prof David Pearce of UCL UK.

David Pearce immediately instituted procedures to 'improve' on Nordhaus. These included the quickly notorious differential monetary value of lives to be lost due to climate change. In essence these were proportional to the income of the people who were to lose their lives this way - in a nutshell, fifteen dead Indians equalled one dead Englishman.

During the fight that began over that issue, Professor Nordhaus got wind of why he had been stood down and wrote the angry letter reproduced alongside. In it he assumed [rightly] that GCI's objections included the Dollar as the '*numeraire'* or the unitof-measurement in the G-CBA, and sarcastically offered the alternative of '*spotted-owl-equivalents'*.

GCI responded simply by asking



why, if a spotted owl equalled a spotted owl, a human didn't equal a human?



#### Yale University

Professor William D. Nordhaus Department of Economics P.O. Box 1972, Yale Station New Haven, Connecticut 06511-1972

Fax: 203-432-5779 Phone: 203-432-3587 Email: <u>NORDHAUS@ECON.YALE.EDU</u> February 28, 1994

Mr Richard Douthwaite Global Commons Institute

Dear Mr. Douthwaite:

I was recently sent an article you wrote that commented on some of my work (TWR, no. 40, p. 3). To begin with, you will be happy to know that I actually am not part of the IPCC process, so whatever errors I have broadcast will not be imposed by me. On a more serious note, I believe that you have not seen the most recent work, which will be published soon by MIT Press and which I include.

I believe the major difference of opinion between yourself and the "economic" point of view is whether it is appropriate to balance economic and ecological objectives. You say that the decisions "have to made on the basis of judgement alone," which suggests that you recognize that there is no way to avoid making choices, at least implicitly. The economic perspective in cost-benefit analysis attempts to condense the complex set of impacts over space, time and sectors by summarizing them in a scalar measure of value; others prefer to keep the measures in the original and undigested vectors of impacts. The fact that the scalar is in monetary units is not really crucial, it could be in "spotted-owl equivalents" if you preferred. Perhaps what you really object to is the test of whether your values about species diversity ecosystem preservation, and so forth are shared in the political and economic market place. I wonder if, by insulting and denigrating those who propose methods of constructing valuations of such things as species diversity you are really trying to protect your own views from careful scrutiny.

Sincerely yours (Signed William Nordhaus)

cc: D Pearce

No answer was offered.

Global Commons Institute [GCI] 1994 detailed submission to Working Group Three of the Second Assessment Report of the Intergovernmental Panel on Climate Change for the First Conference of the Parties [April 95 Berlin] to the United Nations Framework Convention on Climate Change is here: www.gci.org.uk/papers/Nairobi3b.pdf the final essay follows.

#### **CONCLUSION - Spotted Owls and Fighting the Economics of Genocide**

These allocation exercises show the scale of worsening maldistribution of resources globally since the war. The trend was increasingly inequitable and unsustainable. OECD countries - although they do not yet admit to it officially - are now on the defensive about this state of affairs. Their principal tactic has been to blame developing countries for future impacts, rather than accept responsibility for the past and present impacts of the industrial countries. No-one is advocating hair-shirt politics. However, it is unrealistic for the industrial countries to promote the future as an extension of the present unless this includes a willingness to become accountable over the massive structural advantage which they have developed globally whilst running up this global environmental debt on everyone's account.

Overall, this is not a complicated debate. The resources in question are global common property and vital to survival. The well-being of all people now and into the future depend on the integrity of these resources being maintained. There is a simple choice to be made; - either we *accept* that everyone has an equal right to be here and to share the benefits of these resources or we *reject* that everyone has equal rights in this. This is choosing for equity and survival or for increasing inequity and loss of sustainability. It is that simple.

As a matter of principle and of prudence, GCI accepts and affirms that everyone has an equal right to be here. We base our modelling and analysis on that acceptance, and present our analysis as an affirmation of that right. We note that rights to income should be accompanied by responsibilities for its impacts, which effectively rewards efficiencies. Contrarily, the Global Cost/Benefit Analysts (now in the IPCC Working Group Three (WG3)) do no affirm the equal right to be here. They appear not even to accept it either. Certainly - at least by default - they are rejecting this right, as the analysis presented by them so far, suggests that rights increase proportional to income. Advised by these very people, the World Bank has openly promoted the idea that the right to emit carbon dioxide should be proportional to income for example.<sup>2</sup> The policy measures for the mitigation of emissions proposed by many of these economists preparing material for WG3<sup>3</sup> are based on this formula of *"rights-by-income"*. Mitigating emissions is presented by these analysts as a *cost*, and the "damages-avoided" by mitigating emissions are presented by them as the *benefit*.

As intended, all this sounds professional and innocent. But it is conceptually skewed, factually inaccurate and politically devious. In reality it is a velvet glove for the iron fisted insistence on businessas-usual. At worst it is the economics of genocide. Faced with this fist, we should recognise how its grip is exerted; - the exercise fundamentally depends on the analysts converting all the costs and all the benefits associated with climate changes to *cash values*. One immediate example of this is the need to give cash values to the human lives which are going to be lost (a "damage cost"). In their analysis, if the overall damage costs are calculated as high (and higher than the cost of mitigating emissions), this makes the costs of mitigation bearable, and wins the case for mitigating the emissions. If, on the other hand, the damage costs are low (and below the costs of mitigating emissions), the case has been made for businessas-usual, and the damage costs (including the loss of life) become bearable. Clearly the damage cost (cash valuation) that is put on a human life in this context is crucial.

The key question which now also arises is this: - are all human lives *equally* valuable or not? Moreover, should economists employed by the nations responsible for causing the problems of climate change, have the job of valuing the lives which are going to be lost? And even more to the point, should they value the lives of the people who are not responsible for creating the climate changes, as less valuable than the lives of those responsible? Surely we all have a fundamentally equal right to be here: surely each person is equally valuable in this fundamental way? So far the global cost/benefit analysts say no, this is not the case.

<sup>&</sup>lt;sup>2</sup> World Development Report 1992, page 165

<sup>&</sup>lt;sup>3</sup> measures such as carbon taxes, tradable-emissions-permits and joint-implementation

Take for example the (UK-government-funded) Centre for the Social and Economic Research of the Global Environment (C-SERGE) based in the UK. David Pearce is one of its directors and he is also the IPCC's convening lead author on "Social Costs". C-SERGE has already published a valuation of the lives to be lost. In a recent research paper it stated that the cash value of a "statistical life" in the EC or the USA is \$1,500,000 per head, but in "poor" countries such as China, it is only \$150,000.<sup>4</sup> [The disparate figures are derived from peoples' ability-to-pay for damage insurance]. In global cost/benefit analysis, this means therefore these economists discard a real Chinese life ten times more easily than a real life in the EC or the USA. This an example of how you keep the damage costs below the emissions mitigation costs. You just quietly devalue the lives of the people who aren't in the EC and the USA and hope nobody questions "business-as-usual" with genocide written into the bottom-line. This approach is now formally embedded in the text of IPCC's Second Assessment Report (SAR) in the section prepared by the Western economists dominant in Working Group Three (WG3) on "Economic and other Cross-Cutting Issues". This approach is one of the great scandals of our times. It has now been dubbed "the Economics of Genocide" in some of the world's major media and an international protest campaign over this has been growing since it was launched by GCI in June 1994. (See overleaf)

The Godfather of these economists, William Nordhaus, has stated that "the economic perspective in global cost/benefit analysis attempts to condense the complex set of impacts over, space, time and sectors by summarising them in a scalar measure of value . . . the fact that the scalar is in monetary units is not really crucial: <u>it could be in spotted-owl equivalents</u>."<sup>5</sup> For GCI this is evidence of confusion in the reasoning of these economists at this fundamental level. On the one hand they say that monetary units are not crucial [spotted-owl equivalents will do just as well as money] and on the other hand they say that monetary units are crucial [peoples varied ability-to-pay - in money - determines their rights and their relative worth].

The question that haunts their confusion is this: why if one spotted owl equals one spotted owl, doesn't one human equal one human? In the twisted logic of global cost/benefit analysis, it turns out that people do not have an equal right to survive even though spotted owls do. This is another way of saying that people do not have an equal right to be here in the first place; your rights are proportional to your income. In terms of achieving sustainable development globally, this is nonsense. For practical as well as ethical purposes, each human being is - and must be recognised as - the fundamentally equal unit for measuring sustainability and this is the irreducible level of decision-taking.

At sub-global levels of 'economic' debate, this kind of wrangle is of a familiar vintage. It is the substance of the traditional left/right arguments where those without the money make "equity-for-equity's sake" (principle) arguments, whilst those with the money make "efficiency-for efficiency's sake" (practicality) arguments. Whatever the rights and wrongs of this approach, equity and efficiency are seen as being traded off against each other between the left and the right. Much of the history of our political economy is a story about this false dichotomy.

At a global level this kind of economic discrimination is simply suicidal. It is discriminatory on a greater scale than before. But it is also dangerous and different in a manner which is without precedent. First there is nowhere else to go. There isn't a global carpet under which the waste, the pollution and the "poor" can be swept and then ignored. The causes and the influence of these things in the system needs to fundamentally inform the analysis under-taken. This is true because large numbers of people are not going to accept being made the discards of a sub-system which values itself 10:1 over everyone else, let alone a system which hasn't demonstrated sustainable consumption patterns since industrialisation began.

The "Conference of the Parties to the Climate Convention" cannot succeed in its task if these issues are not faced head on. The 'Economics of Genocide' must be rejected now and for always.

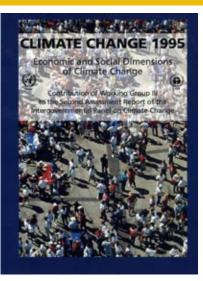
<sup>&</sup>lt;sup>4</sup> "Global Warming Damage Costs: Some Monetary Estimates" by Samuel Fankhauser (with input from Pearce and Nordhaus). Working Paper GEC 92-29 from C-SERGE, the UK's Centre for the Social and Economic Research of the Global Environment. Prof William D Nordhaus in a letter to GCI dated 28 2 94.

#### **IPCC WG3 SAR SOCIAL COSTS of CLIMATE CHANGE Chapter 6 Summary for Policy Makers** [publ. 1995].

7. The social costs of anthropogenic climate change: Damages of increased greenhouse gas emissions The literature on the subject in this section is controversial and mainly based on research done on developed countries, often extrapolated to developing countries.

There is no consensus about how to value statistical lives or how to aggregate statistical lives across countries.7 Monetary valuation should not obscure the human consequences of anthropogenic climate change damages, because the value of life has meaning beyond monetary valuation. It should be noted that the Rio Declaration and Agenda 21 call for human beings to remain at the centre of sustainable development.

The approach taken to this valuation might affect the scale of damage reduction strategies. It may be noted that, in virtually all of the literature discussed in this section, the developing country statistical lives have not been equally valued at the developed country value, nor are other damages in



developing countries equally valued at the developed country value. Because national circumstances, including opportunity costs, differ, economists sometimes evaluate certain kinds of impacts differently amongst countries. The benefits of limiting greenhouse gas emissions and enhancing sinks are: (a) the climate change damages avoided; and (b) the secondary benefits associated with the relevant policies. Secondary benefits include reductions in other pollutants jointly produced with greenhouse gases and the conservation of biological diversity. Net climate change damages include both market and nonmarket impacts as far as they can be quantified at present and, in some cases, adaptation costs.

Damages are expressed in net terms to account for the fact that there are some beneficial impacts of global warming as well, which are, however, dominated by the damage costs. Nonmarket impacts, such as human health, risk of human mortality and damage to ecosystems, form an important component of available estimates of the social costs of climate change. The literature on monetary valuation of such nonmarket effects reflects a number of divergent views and approaches. The estimates of nonmarket damages, however, are highly speculative and not comprehensive. Nonmarket damage estimates are a source of major uncertainty in assessing the implications of global climate change for human welfare. While some regard monetary valuation of such impacts as essential to sound decision making, others reject monetary valuation of some impacts, such as risk of human mortality, on ethical grounds. Additionally, there is a danger that entire unique cultures may be obliterated. This is not something that can be considered in monetary terms, but becomes a question of loss of human diversity, for which we have no indicators to measure economic value.

The assessed literature contains only a few estimates of the monetized damages associated with doubled CO2 equivalent concentration scenarios. These estimates are aggregated to a global scale and illustrate the potential impacts of climate change under selected scenarios. Aggregating individual monetized damages to obtain total social welfare impacts implies difficult decisions about equity amongst countries. Global estimates are based upon an aggregation of monetary damages across countries (damages which are themselves implicit aggregations across individuals) that reflects intercountry differences in wealth and income - this fundamentally influences the monetary valuation of damages. Taking income differences as given implies that an equivalent impact in two countries (such as an equal increase in human mortality) would receive very different weights in the calculations of global damages.

To enable choices between different ways of promoting human welfare to be made on a consistent basis, economists have for many years sought to express a wide range of human and environmental impacts in terms of monetary equivalents, using various techniques. The most commonly used of those techniques is an approach based on the observed willingness to pay for various nonmarket benefits.8 This is the approach that has been taken in most of the assessed literature. Human life is an element outside the market and societies may want to preserve it in an equal way.

An approach that includes equal valuation of impacts on human life wherever they occur may yield different global aggregate estimates than those reported below. For example, equalizing the value of a statistical life at a global average could leave total global damage unchanged but would increase markedly the share of these damages borne by the developing world. Equalizing the value at the level typical in developed countries would increase monetized damages several times, and would further increase the share of the developing countries in the total damage estimate.

Other aggregation methods can be used to adjust for differences in the wealth or incomes of countries in calculations of monetary damages. Because estimates of monetary damage tend to be a higher percentage of national GDP for low income countries than for high income countries, aggregation schemes that adjust for wealth or income effects are expected to yield higher estimates of global damages than those presented in this report.

The assessed literature quantifying total damages from 2-3oC warming provides a wide range of point estimates for damages, given the presumed change in atmospheric greenhouse gas concentrations. The aggregate estimates tend to be a few per cent of world GDP, with, in general, considerably higher estimates of damage to developing countries as a share of their GDP. The aggregate estimates are subject to considerable uncertainty, but the range of uncertainty cannot be gauged from the literature.

The range of estimates cannot be interpreted as a confidence interval, given the widely differing assumptions and methodologies in the studies. As noted above, aggregation is likely to mask even greater uncertainties about damage components. Regional or sectoral approaches to estimating the consequences of climate change include a much wider range of estimates of the net economic effects. For some areas, damages are estimated to be significantly greater and could negatively affect economic development. For others, climate change is estimated to increase economic production and present opportunities for economic development. For countries generally having a diversified, industrial economy and an educated and flexible labour force, the limited set of published estimates of damages are of the order one to a few per cent of GDP. For countries generally having a specialized and natural resource based economy (e.g., heavily emphasizing agriculture or forestry), and a poorly developed and land-tied labour force, estimates of damages from the few studies available are several times larger. Small islands and lowlying coastal areas are particularly vulnerable. Damages from possible largescale catastrophes, such as major changes in ocean circulation, are not reflected in these estimates. There is little agreement across studies about the exact magnitude of each category of damages or relative ranking of the damage categories.9 Climate changes of this magnitude are not expected to be realized for several decades, and damages in the interim could be smaller. Damages over a longer period of time might be greater.10

IPCC does not endorse any particular range of values for the marginal damage of CO2 emissions, but published estimates range between \$5 and \$125 (1990 U.S.) per tonne of carbon emitted now. This range of estimates does not represent the full range of uncertainty. The estimates are also based on models that remain simplistic and are limited representations of the actual climate processes in being and are based on earlier IPCC scientific reports. The wide range of damage estimates reflects variations in model scenarios, discount rates and other assumptions. It must be emphasized that the social cost estimates have a wide range of uncertainty because of limited knowledge of impacts, uncertain future technological and socioeconomic developments, and the possibility of catastrophic events or surprises.

#### **1st Conference of Parties [COP1] to the United Nations Framework Convention on Climate Change [UNFCCC] was in Berlin in April 1995.**

The Indian Government circulated the letter below to all other country delegations. With all the international press coverage of the issue, it created a furore from which the international community has yet to recover.

In his 2006 Nicholas Stern was to walk deeper into the same trap.

This is the text of a letter re COP 1 from: - Kamal Nath Indian Environment Minister and Head of Indian Delegation to COP 1 to his COP counterparts prior to COP 1.

24 03 1995

Dear

With the first "Conference of the Parties" to the Climate Change Convention approaching, I would like to share a few thoughts with you on the critical issues which remain unresolved. We in India are very concerned that there has been no significant progress at all towards the stabilising (leave alone the reduction) of atmospheric concentrations of greenhouse gases, despite the lofty commitments made at Rio. On the contrary, decisive scientific evidence continues to disturb us with serious warnings about where the global community is now headed.

The inconclusive discussions about Joint Implementation and Adequacy of Commitments reveal increasing differences of opinion about the resolve of developed countries to meet even their existing commitments under the Convention. In my judgement, the present impasse became inevitable when the alleged cost- effectiveness of Joint Implementation was sought to be based on absurd and discriminatory Global Cost/Benefit Analysis (G-CBA) procedures propounded by economists in the work of IPCC Working Group III. The scale of bias which underpins the technical assessment intended to provide the basis for policy discussions at the CoP can be gauged from the proposed unequally valued mortality costs associated with global climate changes, and the avoidance of using the Purchasing Power Parity (PPP) system of overall damage costs. These are by no means the only issues about which we feel concerned, but they are pertinently representative examples.

We unequivocally reject the theory that the monetary value of people's lives around the world is different because the value imputed should be proportional to the disparate income levels of the potential victims concerned. Developing countries have no - indeed negative - responsibility for causing global climate change. Yet they are being blamed for possible future impacts, although historical impacts by industrialised economies are being regarded as water-under-the-bridge or "sunk costs" in the jargon of these biased economists. To compound the problem, global damage assessments are being expressed in US dollar equivalent. Thus the monetary significance of damages to developing countries is substantially under-represented. Damage to human beings, whether in developed or developing countries, must be treated as equal, and cannot be translated in terms of the existing currency exchange rate systems.

Faced with this, we feel that this level of misdirection must be purged from the process. The distributional issue of unequal rights-by-income versus equal-rights-percapita must be resolved to enable fruitful discussions about possible protocols to the Convention, proportionality of commitments and financial mechanisms.

This is of immediate concern to us with regard to the AOSIS proposal. We are wholly sympathetic to it and we want to support it, along with all Parties to the Convention as it is clearly aimed at the global common good. But there are attempts to modify the AOSIS proposal to an extent where it contradicts the very essence of the Rio consensus and nullifies the spirit in which developing countries entered into negotiations to frame the Climate Change Convention. We strongly reject any suggestions of encumbering developing countries with obligations under the Protocols, that they do not have under the Convention.

The implications of faulty economic assumptions are manifold. When they are corrected to reflect a true and just position, then, and only then would any talk of Joint Implementation and Adequacy of Commitments become meaningful. It is impossible for us to accept that which is not ethically justifiable, technically accurate or politically conducive to the interests of poor people as well as the global common good.

I am sure you appreciate these issues which are causing India and several other developing countries much concern. We do not want to be driven to a situation where dialogue itself becomes directionless. The Rio process gave rise to several environmental Conventions. If the logic now being propounded in relation to Climate Change, also enters the interpretation of the other Conventions, the gains which accrued to developing countries at the Earth Summit will have reversed all the gains of Rio - the chief one of which was a universal recognition of the principle of equity, and the inalienable rights of all human beings to the fruits of development and 'environmental space' on an equitable basis.

I have instructed the officials of the Indian delegation to the CoP to further elaborate on these issues and discuss them with the officials of your delegation. I trust that you too will instruct the officials of your delegation accordingly, and I look forward to hearing from you on this.

With best wishes and regards Yours sincerely

KAMAL NATH Minister for Environment and Forests Government of India

3

### As Kamal Nath did this he also introduced C&C to the COP1, quoting verbatim from the GCI submission to IPCC SAR WG3: -



APRIL 1995

Kamal Nath Indian Environment Minister

"We face the actuality of scarce resources and the increasing potential for conflict with each other over these scarce resources. The social, financial and ecological inter-relationships of equity should guide the route to global ecological recovery.

Policy Instruments such as "Tradable Emissions Quotas", "Carbon Taxes" and "Joint Implementation" may well serve to make matters worse unless they are properly referenced to targets and timetables for equitable emissions reductions overall. This means devising and implementing a programme for convergence at equitable and sustainable par values for consumption on a per capita basis globally."

[Indian Environment Minsister]

Three years later at COP3 in Kyoto, the campaign for C&C had matured considerably but not conclusively [see http://www.gci.org.uk/brief-ings/zew.pdf]; the matter was kicked into touch with the explanation that it "would be dealt with later"...

#### C&C AT THE CLIMAX OF THE KYOTO [COP3] UN CLIMATE NEGOTIATION, 10 12 1997

For full transcript of final COP-3 Kyoto negotiation, see: http://www.gci.org.uk/temp/COP3\_Transcript.pdf



#### THE AFRICA GROUP [Rungano Karimanzira]:

"..... we do support the amendment that is proposed by the distinguished delegation from India, and just to emphasise the point of the issues that still need a lot of clarification, would like to propose in that paragraph the inclusion, after "entitlements" that is the proposal by the delegation of India, the following wording.

After "entitlements, the global ceiling date and time for Contraction and Convergence of global emissions because we do think that you cannot talk about trading if there are not entitlements, also there is a question of Contraction and Convergence of global emissions that comes into play when you talk about the issue of equity . . . . . "

#### CHAIRMAN [Raul Estrada Oyuela]:

"I thank you very much. ..... May I ask again the distinguished delegate of the USA if they have another suggestion to propose in connection with the proposals made by the distinguished delegate of India . . . . . he does . . . . "



#### UNITED STATES OF AMERICA [Jonathon Pershing]:

".... It does seem to us that the proposals by for example India and perhaps by others who speak to Contraction and Convergence are elements for the future, elements perhaps for a next agreement that we may ultimately all seek to engage in ....." 3 years later in 2000, the campaign had matured further with the adoption of Contraction & Convergence by the UK Royal Commission on Environmental Pollution as a principal recommendation to Government.

http://www.rcep.org.uk/pdf/chp4.pdf

#### The Royal Commission on Environmental Pollution (RCEP - 2000) The Need for an International Agreement - Contraction & Convergence

"3. The government should press for a future global climate agreement based on the Contraction & Convergence approach, combined with international trading in emission permits. Together, these offer the best longterm prospect of securing equity, economy and international consensus (4.69).

4.47 Continued, vigorous debate is needed, within and between nations, on the best basis for an agreement to follow the Kyoto Protocol. Our view is that an effective, enduring and equitable climate protocol will eventually require emission quotas to be allocated to nations on a simple and equal per capita basis. There will have to be a comprehensive system of monitoring emissions to ensure the quotas are complied with. Adjustment factors could be used to compensate for differences in nations' basic energy needs. Those countries which regularly experience very low or high temperatures might, for instance, be entitled to an extra allocation per capita for space heating or cooling.

4.48 A system of per capita quotas could not be expected to enter into force immediately. At the same time as entitling developing nations to use substantially more fossil fuels than at present (which they might not be able to afford), it would require developed nations to make drastic and immediate cuts in their use of fossil fuels, causing serious damage to their economies.

4.49 A combination of two approaches could avoid this politically and diplomatically unacceptable situation, while enabling a per capita basis to be adhered to. The first approach is to require nations emission quotas to follow a contraction and convergence trajectory. Over the coming decades each nation's allocation would gradually shift from its current level of emissions towards a level set on a uniform per capita basis. By this means 'grandfather rights' would gradually be removed: the quotas of developed nations would fall, year by year, while those of the poorest developing nations would rise, until all nations had an entitlement to emit an equal quantity of greenhouse gases per head (convergence). From then on, the quotas of all nations would decline together at the same rate (contraction). The combined global total of emissions would follow a profile through the 21st and 22nd centuries that kept the atmospheric concentration of greenhouse gases below a specified limit.

4.50 The upper limit on the concentration of greenhouse gases would be determined by international negotiations, as would the date by which all nations would converge on a uniform per capita basis for their emission quotas, and the intermediate steps towards that. It would probably also be necessary to set a cut-off date for national populations: beyond that date, further changes in the size of a country's population would not lead to any increase or decrease in its emission quota.

4.51 In table 4.1 17 we have applied "Contraction & Convergence" approach to carbon dioxide emissions, and calculated what the UK's emissions quotas would be in 2050 and 2100 for four alternative upper limits on atmospheric concentration. We have assumed for this purpose that 2050 would be both the date by which nations would converge on a uniform per capita emissions figure and the cut-off date for national populations. If 550 ppmv is selected as the upper limit, UK carbon dioxide emissions would have to be reduced by almost 60% from their current level by mid-century, and by almost 80% by 2100. Even stabilisation at a very high level of 1,000 ppmv would require the UK to cut emissions by some 40% by 2050.

4.52 The UK-based Global Commons Institute has taken the lead in promoting "Contraction & Convergence", and has developed a computer model that specifies emission allocations under a range of scenarios. The concept has been supported by several national governments and legislators. Some developed nations are very wary of it because it implies drastic reductions in their emissions, but at least one minister in a European government has supported it. Commentators on climate diplomacy have identified contraction & convergence as a leading contender among the various proposals for allocating emission quotas to nations in the long term.

4.53 The other ingredient that would make an agreement based on per capita allocations of quotas more feasible is flexibility of the kind already provided in outline in the Kyoto Protocol. Nations most anxious to emit greenhouse gases in excess of their allocation over a given period will be able and willing to purchase unused quota at prices that incline other countries to emit less than their quota, to the benefit of both parties. The clean development mechanism, which allows developed nations to claim emission reductions by sponsoring projects that reduce emissions in developing nations to levels lower than they would otherwise have been, can also be seen as a form of trading.

4.54 In the longer term trading by companies in emission permits, drawn from national emission quotas determined on the basis of a contraction and convergence agreement, could make a valuable contribution to reducing the global costs of stabilising greenhouse gas concentrations while transferring resources from wealthy nations to poorer ones. Trading needs to be transparent, monitored and regulated, and backed by penalties on nations that emit more than they are entitled to. If it became merely a means of enabling wealthy nations to buy up the emission entitlements of poor countries on the cheap, thereby evading taking any action at home, trading would not serve the cause of climate protection. Nor would it if developing countries that had sold quota heavily went on to emit in excess of their revised entitlements." ROYAL CONNESSION ON ENVIRONMENTAL POLLUTION Twenty-mount Report ENERGY - THE CHANGING CLIMATI



This RCEP point is now in 2008, the basis of the UK 'Climate Bill'.



Secretary of State Department for Energy and Climate Change Whitehall Place

7<sup>th</sup> October 2008

From Lord Turner of Ecchinswell

Dear Ed,

#### Interim advice by the Committee on Climate Change

#### 4. Appropriate UK contributions to global emissions reductions

It is not part of the Committee's remit to propose a specific methodology for the purposes on international negotiations. But we believe that it is difficult to imagine a global deal which allows the developed countries to have emissions per capita in 2050 which are significantly above a sustainable global average. In 2050 the global average, based on an estimated population of 9.2 billion, would be between 2.1 to 2.6 tonnes per capita, implying an 80% cut in UK Kyoto GHG emissions from 1990 levels.

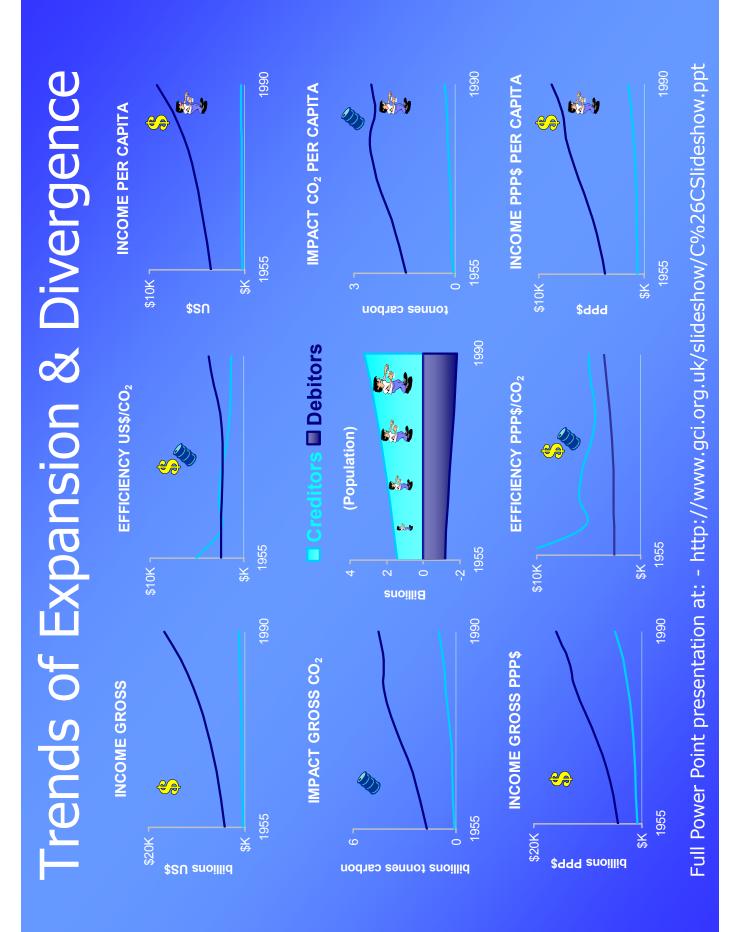
Yours ever,

: Imer

Adair Turner Chair, Committee on Climate Change

http://www.gci.org.uk/correspondence/Interim\_report\_letter\_to\_DECC\_SofS.pdf

#### A short Essay on Expansion & Divergence and Contraction & Convergence for FUTURE ENERGY MAGAZINE in United Arab Emirates [December 2008]



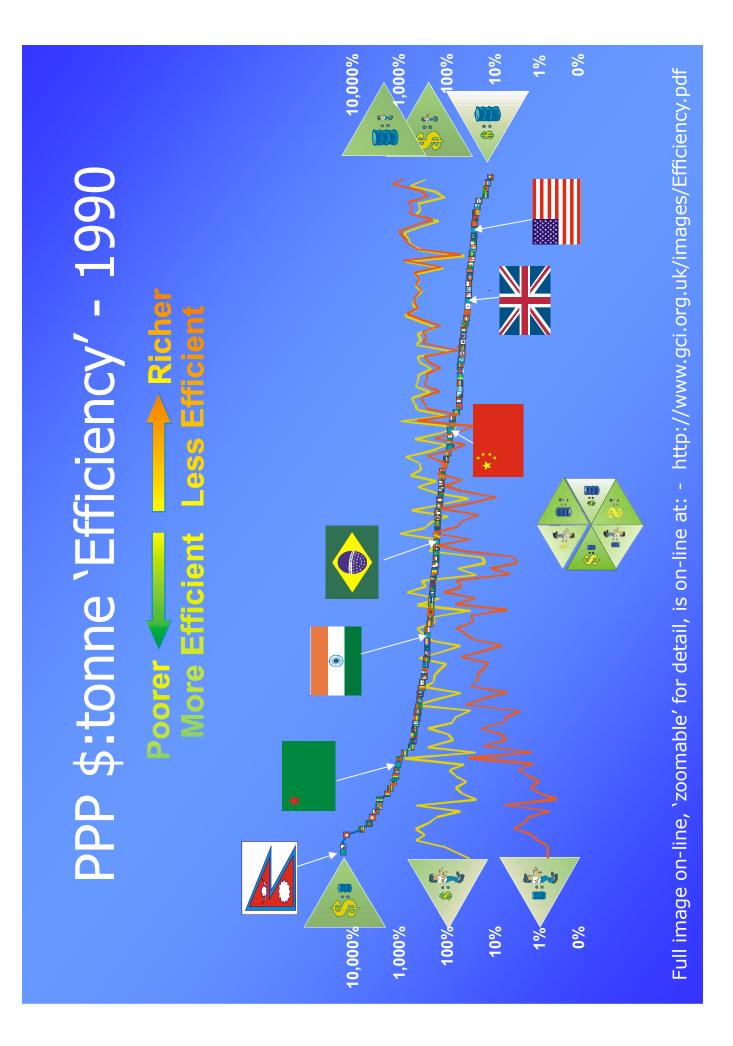
Contraction & Convergence or 'C&C' is a strategic proposal to the United Nations to achieve the objective of its 'Framework Convention on Climate Change' (UNFCCC) based on equalizing per capita emissions at sustainable values globally.

The UNFCCC was created in 1992 to avert the growing trends of damage attending accelerating rates of global climate change. To this end, the objective of the UNFCCC is to stabilise the rapidly rising content of heat-trapping or 'greenhouse' gas (ghg) [principally CO2] in the atmosphere before it reaches a level that triggers dangerous runaway rates of global warming and climate change.

Burning fossil fuels releases CO2 to the global atmosphere where as natural sinks for the gases increasingly fail, it remains indefinitely. To achieve the UNFCCC objective and stabilize the atmosphere requires that we end our dependency on fossil fuels as soon as possible.

The relationship between our emissions of ghg and the atmosphere is like the 'flow' of water from a tap to a bath where as 'stock' they accumulate. The plug in the bath is like the sinks where a fraction of the extra ghg are still to some extent reabsorbed, however these sinks are becoming less active as the plug is increasingly blocked. Technically, C&C accounts for the flow of human ghg emissions that are causing the atmospheric concentrations of ghg to rise. In the analogy, it represents a globally shared effort to turn the tap right off before the bath overflows. A big difficulty is that all the time the effort is made to turn the tap off, the bath level will continue to rise. To address this, the C&C model combines two simple functions. It quantifies the future full-term event of global emissions reduction necessary against posed rates of 'sink-failure', to keep within any given level of atmospheric concentration of greenhouse gas level in the atmosphere [contraction], and it demonstrates under any rate of contraction, all the rates that are possible to pre-distribute the international entitlements to emit so they become equal per capita globally by an agreed date [convergence].

Contraction and Convergence directly addresses the two major obstacles to real progress as the international negotiations on climate change on the UNFCCC came into force in 1995: - the double-jeopardy of asymmetric growth or 'expansion and divergence' in the past and the worsening climate damages we face in the future. To date emissions have been a close proxy for wealth; in a phrase the more money we earned the more fossil fuel was burned; the graphic alongside shows these data as past trends of 'expansion and divergence' since World War 2. Here however, population was divided into 'creditors' and 'debitors'. For example for 1990, the global value of 'US dollars earned per tonne of fossil fuel burned was \$3,000. That year the IPCC said that an immediate 60 - 80% cut in global emissions was need to stabilize the atmosphere, so the \$ per tonnes value was cut to \$1,200 per 0.4 of a tonne. All countries per capita emissions were then assessed as either above or below that value revealing that while one third of people globally were above that value, two thirds were below. Then their incomes gross and per capita in US\$ and in Purchasing Power Parity [PPP] were summed and the procedure was repeated for all years 1955 to 1990. Systemic trends of expansion of divergence were immediately apparent showing that the global majority who had not caused the problem were on the receiving end of structural arrangements made by the minority of people who had. So, while the postwar Washington consensus may have been a structurally beneficial arrangement for the West, despite the inequality of consumption patterns, emissions overall had triggered a global problem of climate change. At the outset the US did not deny the problem, they said it was 'simple sophomore physics' and just asking 'how much climate change and how soon' they simply demanded a global response.



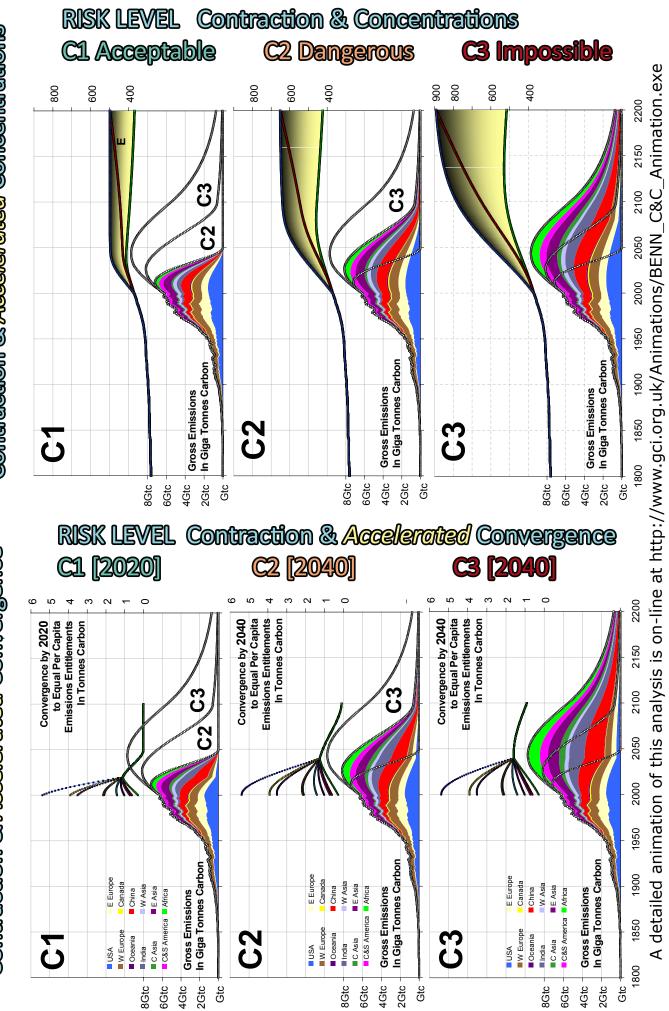
As the Cold war ended, expansion and divergence was not really understood or much talked about. All were encouraged to see that the West had won the Cold War and that the market-system was more prosperous because it was more 'efficient'. However, as the global negotiations on climate change began and the trends of expansion and divergence became apparent, the IMF and the World Bank realized that the issue of Purchasing Power [Dis]-Parity [PPP] between the 'hard-currency' countries of the OECD and the 'soft-currency' countries of the Developing World had to be recognized, not least because the 'local-purchasing-value' of the Chinese Renimbi for example was five times its international purchasing value when traded against the US dollar. The IMF in fact used this as an argument as to why China didn't any longer gualify for Overseas Development Assistance [ODA].

As economists made that argument, they also weighed in on how to assess climate change with cost-benefit analysis and address it with market-mechanisms. They weighed the costs of action to mitigate climate change versus the costs of adapting to it. Asserting that all the assets at risk of damage were proportional to the incomes of the people who owned them, they down-graded developing Country assets [including lives lost in 'climate-mortality'] 15:1 against the high income Developed Countries. Predictably their bottom-line 'proved' that it was cheaper to adapt than to mitigate. This meant the majority of people on the planet who had not caused climate change and were most vulnerable to it, were too poor to save from it.

The bathos of this discreditable effort was capped by the realization that the PPP dollar earned per tonne of fossil fuel burned gave 'efficiency' values for Developing Countries that were more 'efficient' for them than the Industrial Country values. The graphic alongside, shows data for all countries for the year 1990. PPP dollars income per capita are shown alongside fossil fuel impact per capita from low values on the left to high values on the right. They are clearly increasingly closely correlated as the values rise. However, the 'efficiency' point is that from high values on the left to low values on the right [the flags] the 'efficiency' value of the Developing Countries is very significantly higher than it is in the Industrial Country group. In a phrase Developing Country may have been too poor to save, but in respect of economic performance on climate change, they were much more 'efficient'. These are the very countries who had argued in response to the call from the United States for a global response, that a globally equitable response to global climate change was one based on equalizing per capita emissions at sustainable values globally. It was a proposition which already intuited that the dichotomy between 'equity' and 'efficiency' was false and that in terms of the real conservation of energy needed to avoid dangerous rates of climate change, the gap between 'equity' and 'efficiency' does not widen, it closes. It recognizes no-one is saved unless we're all saved.

This is Contraction and Convergence, the model first proposed to the UN by GCI at the Second World Climate Conference in 1990. This was within 5 months of their publication of the First Assessment Report [FAR] of the Intergovernmental Panel on Climate Change [IPCC] who had said that a 60 to 80% cut in emissions was immediately necessary if the rise in the atmospheric concentration of CO2 was to be halted at 353 parts per million by volume [ppmv], the value recorded for that year. Ahead of any notions of trading mitigation off against adaptation, C&C is a model founded on prevention. As the Kyoto Protocol comes into effect in 2008, the concentration of CO2 has now reached 387 ppmv, the idea of prevention is increasingly urgent. Moreover, as sinks fail, the concentration of CO2 is rising faster than ever.

The Kyoto Protocol has not significantly addressed this. Unless we now become really committed to achieving the objective of the UNFCCC as soon as possible with a fullterm C&C arrangement, the double-jeopardy of asymmetric development and climate damages takes the Mutually Assured Destruction of the Cold War to the new and more lethal Mutually Assisted Suicide of doing too little too late on climate change.  $\frac{17}{17}$ 



18

Contraction & Accelerated Concentrations

Contraction & Accelerated Convergence

With full participation, a full-term global emissions contraction event in the future is required to stabilize the rising concentrations in the atmosphere. As the graphics on the left show, it is no longer reliable assume that the sinks for the CO2 will continue to remove on average 50% of any years' emissions. If they continue to fail at rates that are suggested by recent data, the atmosphere may over time come to retain 100% of emissions or more. This means that a contraction event that is too slow, will fail to prevent concentrations, temperature and damages rising out of control. Contraction needs to be fast enough to do enough soon enough to avoid this.

With risk classified as C1 'Acceptable', C2 'Dangerous' and C3 'Impossible', three scenarios of contraction-concentrations futures are shown. Within the contraction rate chosen, the examples also show convergence to equal per capita emissions entitlements globally by 2020 for C1 and 2040 for C2 and C3. By making future emissions entitlements proportional to populations, rather than income, convergence progressively assigns the bulk of the future 'rights-to-emit' to developing countries where per capita emissions have consistently been below the per capita average globally. As this transfers the bulk of the tradable equity share to Developing Countries, this gives negotiators a device with which to correct for the historic inequity.

As a strategic framework that corrects the double-jeopardy, C&C is in principle the only numerate way of projecting our energy future, transparently and globally. It focuses political leaders and their negotiators at the UN on the two key guestions: what is the overall concentration limit that we must not exceed? And how do we share and use resources globally under that limit? C&C integrates the scientific and constitutional requirements of the UNFCCC with the political and economic challenges of making sustainable development inclusive and just in a proportionate and market-friendly way. Developing Countries have the opportunity to seize the moment with C&C as it demonstrates how we can and must now organise to solve the climate problem faster than we are causing it while achieving international reconciliation with each other within this global limit. The whole renewable agenda is fundamentally dependent on this integrated strategy. Without it, asymmetric growth and damages will deepen and compromise economic development everywhere and overwhelm us as rates of climate changes become 'self-accelerating' and 'runaway'. Doing too little too late creates a default where an economics of triage and conflicts will emerge as systems fail and vulnerable communities become discards.

This C&C argument has been developed for twenty years with considerable success. Emerging over many years within the political debate, C&C is now seen as 'pragmatic' and the 'favoured option'. Unlike other proposals, it in the words of Professor Ross Garnaut, "adds up to its stated outcome. Proposals that don't should be rejected immediately." Indeed some have said that, "anyone who thinks it Utopian, simply hasn't looked honestly at the alternatives."

As it puts people first, C&C is certainly the most widely cited approach in the literature and arguably the most widely supported. However, now is the critical period in the political calendar of climate negotiations to transform this support into acceptance at the UN by the end of 2009. This is the date by when the so-called post-Kyoto 'global climate deal' must be agreed. Our common destiny hinges on this.

Considerable support for C&C is here: -

http://www.gci.org.uk/Endorsements/UNEPFI5f.pdf http://www.gci.org.uk/Support/support.pdf Until pressured by Cambridge University Press during 2007/8, Nicholas Stern failed to properly acknowledge the "Contraction and Convergence" proposals from GCI and the source for these [see below], though these proposals were formally submitted to his enquiry - See briefing Treasury website at: www.hm-treasury.gov.uk/media/5/0/GCI\_Briefing\_C&C.pdf

On page 47 and onwards, Nicholas Stern renames "C&C" as "contract and converge" and attacks [sourceless] "*it*" as "an assertion and not an argument'" [concluding that] "*it is unlikely to get support*".

Later in the report he compares C&C [GCI via Hohne - who does acknowledge GCI, though stern removed this] to four other references provided by Hohne.

#### This year [08] he changed his assertions to saying;

"the pragmatic principle of equity would require an equalisation of per capita emissions by then [2050]" whilst also informing the press, "we badly underestimated the degree of damages and the risks of climate change. All of the links in the chain are on average worse than we thought a couple of years ago."

Then he changed again saying 'C&C was like rights-to-kill';

#### NICHOLAS STERN THE ECONOMICS OF CLIMATE CHANGE [2006] PART I: Climate Change – Our Approach

#### 2A Ethical Frameworks and Intertemporal Equity/Climate change p 47

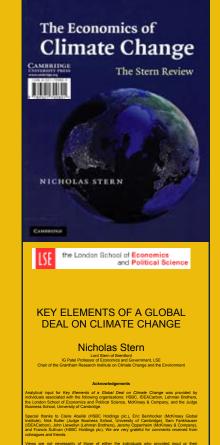
"The notions of the right to climate protection or climate security of future generations and of shared responsibilities in a common world can be combined to assert that, collectively, we have the right only to emit some very small amount of GHGs, equal for all, and that no-one has the right to emit beyond that level without incurring the duty to compensate. We are therefore obliged to pay for the right to emit above that common level.

This can be seen as one argument in favour of the 'contract and converge' proposition, whereby 'large emitters' should contract emissions and all individuals in the world should either converge to a common (low) level or pay for the excess (and those below that level could sell rights).

There are problems with this approach, however. One is that this right, while it might seem natural to some, is essentially asserted. It is not clear why a common humanity in a shared world automatically implies that there are equal rights to emit GHGs (however low). Equality of rights, for example to basic education and health, or to common treatment in voting, can be related to notions of capabilities, empowerment, or the ability to participate in a society.

Further, they have very powerful consequences in terms of law, policy and structures of society. How does the 'right to emit' stand in relation to these rights? Rights are of great importance in ethics but they should be argued rather than merely asserted.

More pragmatically, as we shall examine in Part VI of this report, action on climate change requires international agreement and this is not a proposition likely to gain the approval necessary for it to be widely adopted."



# Nicholas Stern's Great U-Turn on C&C

## "No" [2006]

"C&C is an assertion without support."

## 2006 The Economics of **Climate Change** The Stern Review 11000 NICHOLAS STERN The Economics of **Climate Change** AMERICA The Stern Review ICHOLAS STEPS The Economics of Climate Change

### [2008] **"Yes"**



The C&C Briefing submitted to the Stern Review, appears at the end of this document [pp 21-24]. At the time, it and related submissions were not acknowledged. When I enquired if they had been received I was told there was 'no record'.

The briefing was finally put on the treasury website after I had to re-deliver it by hand asking for a signed receipt: -

http://www.hm-treasury.gov.uk/media/5/0/GCI\_Briefing\_C&C.pdf

#### C&C "An assertion . . . unlikely to get support."

The Stern Report summarily ignored this C&C contribution, the detailed references and the provenance.

A vernacular C&C argument ["contract and converge" unsourced] was introduced [on page 47 of his report] and attacked for being merely "*an assertion"* and "*unlikely to get support."* 

#### C&C - "Too Difficult to get Your Head Around"

Soon after the launch of the Report, Stern explained it differently to an audience at LSE, where he was taking up tenure.

A student asked him, "when is the political tipping point in favour of "Contraction and Convergence?" To the astonishment of many, Stern said it was too difficult to get your head around.

"Now the last question was about the political tipping point coupled with the idea of "Contraction and Convergence" (C&C). For those of you who don't know the jargon, you may not know what political tipping point means. It's actually quite a deep concept.

But on "Contraction and Convergence" it means that if you go into carbon-trading and different nations have different allowances for emissions, the idea of "Contraction and Convergence" (C&C) is that you give everybody the same kind of emissions allowance per capita, regardless of how much they were emitting. So those poor people who emit less can sell some of their allowance to rich countries that emit more. And that's the story of "Contraction and Convergence and it does have obviously strong ethical attraction to it. **It is based on a proposition on rights which is a bit tricky to get your head around** 

- we all have the same rights to emit to some level or other. That's a difficult one to understand. I mean you could argue that we have no right to emit. Or you could argue that have some right to emit; you sort get into quite difficult

**conceptual territory.** But the motivation behind the question . . . . that the story of trading . . . [which requires emissions rights by definition . . . . ] But whether you translate your equity concerns specifically just that one way through, "Contraction and Convergence" (C&C) seems to me to be an open question and how you implement it is open to question."

This reply again was C&C rejectionist reasoning and was reiterated in the UNDP's "Human Development Report" which confusingly also claimed to be **supporting** C&C [see pp 12-15]

#### Margins of Error on curing, "The greatest market failure in history."

The Stern Review didn't question this to any conclusion. It merely and memorably rehearsed the difference between two and three repeats of the total industrial revolutionary emissions output [213,000,000,000 tonnes carbon times 2 or times 3] as a margin of error on atmospheric ghg concentrations in addressing the cure for, "the greatest market failure in history."

During the course of the years from then until now Nicholas Stern has: -

[1] co-signed a statement with 15 Nobel Laureates endorsing: - "The Principle of carbon justice, i.e. striving for a long-term convergence to equal-per-capita emissions rights accomplished through a medium-term multi-stage approach accounting for differentiated national capacities."

http://lists.topica.com/lists/GCN@igc.topica.com/read/message.html?mid=1721226171&sort=d&start=636

#### C&C "A spectacularly weak form of justice."

[2] shared a platform with UN veteran Nitin Desai at the "Helsinki Process" conference on the 11th of December 2007,. There he denounced C&C as, "a spectacularly weak form of justice". [Um so beeindruckter war ich, mit welcher Klarheit er eine unbequeme Wahrheit aussprach: Die von in ihren Reden Merkel implizierte Formel von "Contraction and Convergence", das Konvergieren der Pro-Kopf-Emissionsrechte der Länder in einigen Dekaden (oft wird 2050 genannt), ist kein großzügiges Angebot des Nordens an die Entwicklungsländer. Es ist in der Tat eine *"spektakulär schwache Form von Gerechtigkeit"* ("a *spectacularly weak form of equity"*).

http://lists.topica.com/lists/GCN@igc.topica.com/read/message.html?mid=1721293752&sort=d&start=661

#### Stern Reverses Position on C&C, "A pragmatic principle of equity."

On 5th April 2008, Mr. Stern completely reversed his view on C&C. At the Progressive Heads of Government Conference he affirmed in favour of C&C as "pragmatic principle": -

#### *"A pragmatic principle of equity would require an <u>equalisation of per</u> <u>capita emissions</u> by then."*

His actual statement read as follows and it was posted on the Downing Street website: -

"An international agreement is essential. It must be based on the criteria of effectiveness, efficiency and equity. Effectiveness demands a long-term global goal cap-

ping global emissions and providing a long-term trajectory for investment in low carbon technologies. This should be at least a halving of global emissions by 2050. A pragmatic principle of equity would require an equalisation of per capita emissions by then."

This new pro C&C position was immediately endorsed by the Head of UNDP Kemal Dervis,

".... there is an emerging proposal here

which I think is important and helpful, and that is a broad long-term commitment to equal per capita emissions." [vide King and Gore and WBGU]

http://lists.topica.com/lists/GCN@igc.topica.com/read/message.html?mid=1721425003&sort=d&start=681

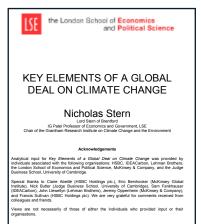
#### April 2008 Stern Publishes for 'C&C' in "Key Elements of a Global Deal"

The above paper was presented by Stern at the LSE on 30th April 2008. Its declared purpose is:

"to support the negotiations of a post-2012 global treaty which needs to be agreed by 2009 and translated into national policy and action plans between 2010-2012. It aims to put forward a coherent set of underlying principles that are consistent with the latest scientific evidence, and which explicitly define options and suggest which are more likely to be suitable."

The underlying principles for the global treaty are stated as:

- Effectiveness it must lead to cuts in greenhouse gas (GHG) emissions on the scale required to keep the risks from climate change at acceptable levels;
- Efficiency it must be implemented in the most cost-effective way, with mitigation being undertaken where it is cheapest; and
- Equity it must take account of the fact that it is poor countries that are often hit earliest and hardest, while rich countries have a particular responsibility for past emissions.





The Reuters report on the LSE launch succinctly summarises Stern's spoken presentation of the Key Elements paper:

- "Rich countries must commit to cutting carbon emissions by 80 percent by 2050 and developing nations must agree that by 2020 they too will set their own targets.
- The only way the world could defeat the climate crisis was by ensuring that global carbon emissions peaked within 15 years, were then halved from 1990 levels to 20 billion tonnes a year by 2050, and cut to 10 billion thereafter.
- The emission target was based on the goal of halting the temperature rise to two degrees Celsius above pre-industrial levels.
- That in turn meant achieving global average carbon emissions of just two tonnes per head
  -- 20 billion tonnes divided by the anticipated world population of nine billion people -- from
  the current average of seven tonnes per head.
- Everything flows from the figures. That is the simplicity of the argument. If you buy into stabilisation at 500 parts per million (atmospheric carbon -- equivalent to two degrees rise) the rest is arithmetic."

### May 08 Stern Publishes his Ely Memorial Lecture in the American Economic Review where he says "*Contract & Converge is like Rights to Kill"*.

"An 80 percent reduction of flows by rich countries by 2050, in the context of a 50 percent reduction overall, is not a target for which rich countries should congratulate themselves warmly as demonstrating a splendidly powerful commitment to equity.

And the contract-and-converge argument for some common flow level, or for using such a level as the eventual basis of trading, on the asserted grounds that there are "equal rights to emit or pollute," does not seem to me to have special claim on our attention. [Asserting equal rights to pollute or emit seems to me to have a very shady ethical grounding. Emissions deeply damage and sometimes kill others. Do we have a "right" to do so?] Rather, the target of equalizing by 2050 (allowing for trade) may be seen as being a fairly pragmatic one, on which it might be possible to get agreement, and one that, while only weakly equitable, is a lot less inequitable than some other possibilities, such as less stringent targets for rich countries."

# guardian.co.uk

#### Friday October 24 2008

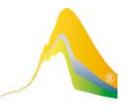
Nicholas Stern proposes a global cut in emissions of 50% by 2050, with an 80% cut in the emissions of the developed countries by then. While the principle of the contraction and convergence to world per-capita average of emissions is welcome, proposing it at a rate that is too slow is not. The coupled climate modelling in the fourth and latest IPCC assessment shows that a global cut in emissions of nearly 100% is needed by around 2060 to offset the accelerated rate at which emissions are now accumulating in the atmosphere. We need emissions contraction and convergence globally, but at roughly twice the rate he argues if we are to avoid greenhouse gas concentrations causing "a major climate disaster".

#### Aubrey Meyer Global Commons Institute

### Contraction and Convergence

07 11 2008

#### Dear Mr. Stern



Thank you for your letter of the 12th of August.

1. The treasury website appears now to have been corrected on the source of C&C in line with the 5th edition of the CUP report which has also been so corrected: - Source: Contraction and Convergence TM (C&C) is the science-based, global climate-policy framework proposed to the UN .since 1990 by the Global Commons Institute (GCl). This is the reference supplied to and at last quoted in your review: -

#### www.gci,org.uk/briefings/ICE.pdf www.hm-treasury.gov.uk/d/Chapter\_2\_Technical\_Annex.pdf

2. Thank you too for the link to your Ely lecture. Here again however, the reference is as 'contract-and-converge', rather that Contraction and Convergence, and it is not attributed to GCI. Instead you raise a critique of some notion of C&C that includes assertions about "equal rights to pollute" [see below] which amount to "rights to kill". These are entirely your assertions and certainly not GCI's. The reference for C&C now given in the CUP edition and on the Treasury website and in the Garnaut Report www.gci,org.uk/briefings/ICE.pdf make no such assertions about equal rights, and your comments are wholly incorrect for asserting this.

It is also quite improper to construct the notion that contract-and-converge [which you now in the CUP and Treasury-based Report do attribute to GCI as "Contraction and Convergence"] perhaps represents "rights to kill". In the light of now attributing C&C to GCI elsewhere, this peculiar remark appears to go in the direction of libel. I have used C&C to fight the economics of genocide since 1990. So I would be grateful if you would read GCI's C&C reference now cited and respond to this request that you withdraw these comments and confirm that point to me in writing.

On whatever basis you care to nominate, rights are by definition being created in a 'global carbon market', as you cannot trade what you do not own. C&C presents this dilemma as a framework-based market the first issue for which is a decision regarding a global contraction rate that is fast enough to avoid the death rates associated with a contraction rate that is too slow.

This modelling was done for Minister Hilary Benn based, at his request, on coupled-modelling of contraction rates as published in IPCC AR4 and this link too is in the C&C reference you cite, as: -

#### www.gci.org.uk/Animations/BENN\_C&C\_Animation.exe

I am surprised to see that you have not paid attention to this and particularly the IPCC modelling. Contraction rates needed for given concentration outcomes are significantly faster than you are suggesting. This is the over-sight that is going to result in the [with-or-without] "rights-to-kill" death-rates that will accompany the scenario that your Ely figures portray - as shown below.

In the context of the Climate Bill which clearly indicates its source origin in the RCEP 2000, the attention accorded to the Stern Review is judged in light of GCI's track record that led from 1990 to 2000, during which time we have used C&C to fight against the Economics of Genocide. You only entered the debate with your report in 2006. Since then you have made two significant re-positionings you acknowledged within a year that: -

[1] the issue was much more serious than your first report had indicated

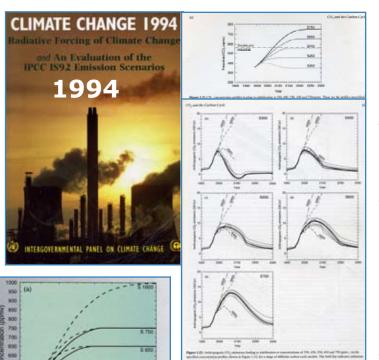
[2] C&C or the equalization of per capita emissions globally was in fact the 'pragmatic' course.

Then in your Ely Lecture you make these absurd remarks: -"An 80 percent reduction of flows by rich countries by 2050, in the context of a 50 percent reduction overall, is not a target for which rich countries should congratulate themselves warmly as demonstrating a splendidly powerful commitment to equity. And the contract-and-converge argument for some common flow level, or for using such a level as the eventual basis of trading, on the asserted grounds that there are "equal rights to emit or pollute," does not seem to me to have special claim on our attention. [Asserting equal rights to pollute or emit seems to me to have a very shady ethical grounding. Emissions deeply damage and sometimes kill others. Do we have a "right" to do so?] Rather, the target of equalizing by 2050 (allowing for trade) may be seen as being a fairly pragmatic one, on which it might be possible to get agreement, and one that, while only weakly equitable, is a lot less inequitable than some other possibilities, such as less stringent targets for rich countries."

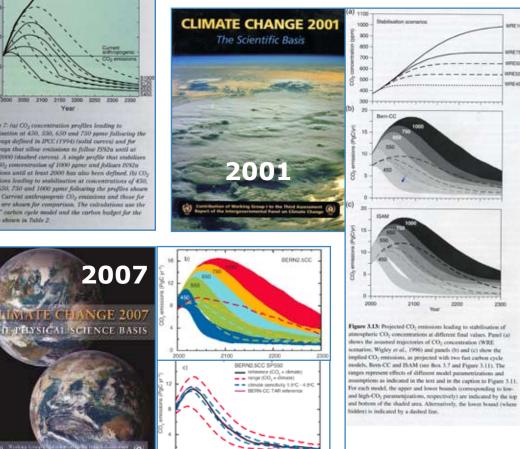
This says therefore that you still appear to believe that you are actually arguing against C&C while you are actually arguing for it, but at rates that are too slow. Please will you confirm which is the case and whatever it is, come up with some more consistent reasoning than has been the case to date. With kind regards

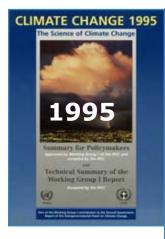
Aubrey Meyer

GCI Global Commons Institute (GCI), 37 Ravenswood Road, LONDON E17 9LY 0208 520 4742 aubrey.meyer@btinternet.com www.gci.org.uk From 1994 through to 2007, the IPCC published the same set of contraction profiles for future CO<sub>2</sub> emissions linked to the same reference set of paths to atmospheric CO2 concentration for: -



350, 450, 550, 650 & 750 pm. Except that while in 1994 the **350** ppm was included, it was dropped from 1995 onwards and replaced by a contraction profile and concentration path for **1000** ppmv, due to pressure from industry.





560

2050 2100 2150 Correctionation profiles touring to at 430, 530, 650 and 750 ppine following fined in DCC (1994) (solid curves) and for at allow emissions to follow IS92a until at

2250 2300

raps that allow remainsments for follow ISS2m should at 0000 (idsafed corresp.). A single periofile that stabilizer 0.2 concentrations of 1000 parts and follows ISS2m one antil at least 2000 has also been defined. (b) CO star backing to a stabilization at concentrations of 450, 50, 750 and 1000 parts following the perifiles shown Carriest anthropogenic CO<sub>2</sub> emissions and those for earbox capite model and the carbon hadget for the shown in TM6 2.

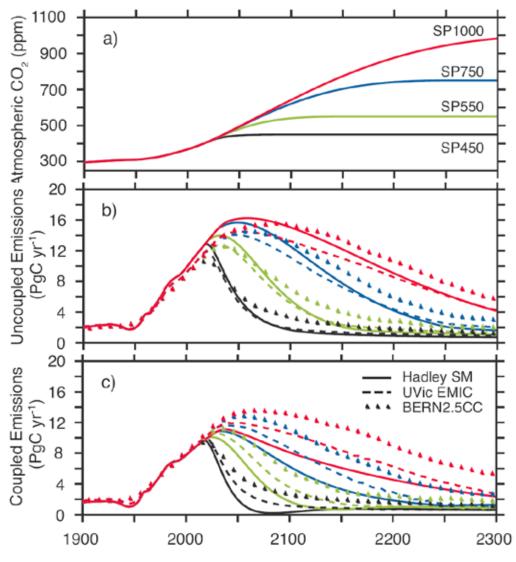


Also, quietly tucked away in Chapter 10 of the Fourth Assessment [AR4] was a bombshell: this was the *revised* contraction profiles for **coupled emissions.** For the same set of concentration outcomes [450, 550, 750 and 1000 ppmv] the contraction profiles were recalculated and shrunk to embrace some of the 'positive feedbacks' that had previously been omitted from the 'uncoupled' climate models.

#### Also in 2007 AR4 Tucked Away in Chapter 10 COUPLED EMISSIONS' Faster Contraction Rates Required

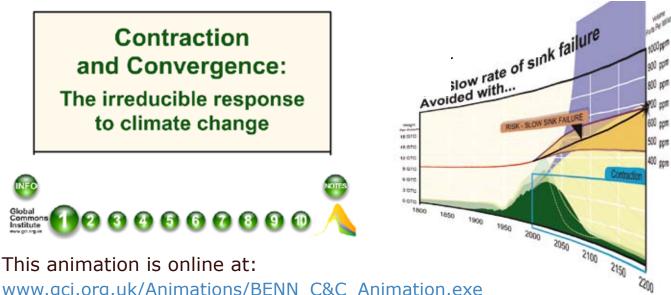
As shown alongside, the coupled contraction events were all shrunk by about 30% to achieve the same concentration outcome.

For example the 450 ppmv had become associated with the 'safe' maximum 2 degree Celsius global temperature rise. The Hadley *coupled* model run to achieve this showed the need to zero emissions globally by +/-2060. This, zero emissions by 2060



as opposed to the previously held rate, weight and date with the 'uncoupled models post 2100, was the bombshell.

GCI animated these revisions for Hilary Benn Minister at DEFRA: http://www.gci.org.uk/Animations/BENN\_C&C\_Animation.exe



#### www.gci.org.uk/Animations/BENN C&C Animation.exe

"This animation of C&C and risk is brilliant. The Kyoto Protocol is having negligible effect. If successful, Kyoto will result in a slowdown in the rise of global temperatures by 0.02C to 0.28C. That isn't going to help a great deal and we must decide what comes after Kyoto. It has to have the US, India and China on board. The best hope is a system called contraction and convergence, which works on the premise that everyone on the planet has the right to produce the same amount of greenhouse gas. A level is set for the planet and it is divided by the number of people, so that each country knows how much it can emit per head of population. The overall level is then brought down by agreement."

#### **Bill McGuire** Director Benfield Hazard Centre, UCL

"Even if we do not know the speed or severity of feedback effects, we must consider the probabilities of disastrous acceleration in climate change within very short timescales. Risk assessment is the core activity of the insurance industry, the biggest industry in the world. Assessment of risk must fully include feedback effects. Insurers are the leading experts in risk and risk modeling. C&C demonstrates how this can be done. C&C already has a high profile with insurers. Governments need to listen to the insurance industry and make C&C central to government policy around the world. From a risk management point of view, C&C produces an important assessment of the risks we face from human-induced runaway climate change and how to frame a response at the policy level."

#### Prof David Crichton, Benfield Hazard Centre UCL

"C&C is so open and transparent. Within the insurance sector it is recognised by CEOs who know they need a long-term global framework within which they can assess their risk. Without C&C they're stuck with a guesswork approach. A stable insurance industry is essential for a stable economy and a stable financial sector. Insurance needs a long term global framework so it can plan for the future. C&C will help bring this about. It needs to be adopted at the highest level, from the UN down through every business sector."

#### Dr JULIAN SALT **Director of Climate Solutions**

"Aubrey Meyer's insight into the problem of mitigation of climate change bears the true hallmark of genius: it is simple and robust. His "Contraction and Convergence" model provides a transparent framework that incorporates the clear objective of a safe global level of greenhouse gases, and allocates the responsibility for achieving this internationally with the irresistible logic of equal shares. At the same time, the model recognises the practical need for an adjustment period to permit nations to conform to the new logic and prepare for a climatefriendly economy. It is no doctrinaire solution, but a brilliantly pragmatic and elegant solution." Dr Andrew Dlugolecki

Advisory Board Director, Carbon Disclosure Project Adviser on Climate Change to UNEP Finance Sector Initiative

#### Some C&C GCI Links Publications

http://www.gci.org.uk/briefings/zew.pdf [Springer Verlag] http://www.gci.org.uk/briefings/UNFCCC&C\_A\_Brief\_History\_to1998.pdf [GLOBE] http://www.gci.org.uk/Book/Surviving\_Climate\_Change.pdf [PLUTO] http://www.schumacher.org.uk/schumacher\_b5\_climate\_change.htm [Schumacher] Briefings

http://www.gci.org.uk/briefings/ICE.pdf http://www.gci.org.uk/Endorsements/UNEPFI5f.pdf http://www.gci.org.uk/briefings/CPI.pdf www.gci.org.uk/briefings/RSA\_Occasional\_Paper.pdf

#### Articles/Interviews

http://www.gci.org.uk/articles/LEXUS.pdf http://www.gci.org.uk/articles/React.pdf http://www.gci.org.uk/articles/New\_Scientist\_Interview.pdf http://www.gci.org.uk/articles/Green\_Futures\_CandC.pdf http://www.gci.org.uk/articles/BMJ\_Stott.pdf http://www.gci.org.uk/articles/Actuary\_McGuire.pdf http://www.gci.org.uk/articles/British\_Medical\_Journal\_22\_December\_2007.pdf http://www.gci.org.uk/articles/Argus\_C&C\_Interview.pdf

COP-3 1997 UNFCCC [Transcript] - C&C nearly agreed in 1997

http://www.gci.org.uk/temp/COP3\_Transcript.pdf

http://www.gci.org.uk/briefings/AFRICA\_GROUP.pdf

The UNFCCC administration has said since 2003, "Contraction and Convergence is inevitabl required to achieve the objective of the convention": -

http://www.gci.org.uk/UNFCCC/C&C\_Janos\_Pasztor\_UNFCCC.pdf

A C&C Booklet 13 languages from COP-11 12/2005: -

http://www.gci.org.uk/briefings/MONTREAL.pdf

Archives covering twenty year history of this campaign: -

http://www.gci.org.uk/Archive/Mega\_Doc\_1989\_2004.pdf

http://www.gci.org.uk/Archive/All\_2000\_2007\_reduced\_file\_size.pdf

The C&C framework is supported by manifesto commitments from the Welsh Nationalists, the Scottish Nationalists, the Liberal Democrats, the Greens and the Respect Party.

www.gci.org.uk/presentations/RSA\_C&C\_G-8\_Quotes.pdf

Many individual UK Labour Party MPs advocate C&C, some Conservative MPs do too.

http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=29500&SESSION=875

http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=27350&SESSION=873 http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=27080&SESSION=873

An issue to some is that C&C merely describes generically an 'outcome' of many future aspirational phases of the Kyoto Protocol. This is what the corporations collectively call 'an inadequate patchwork', see slides 20/1 here: -

http://www.gci.org.uk/presentations/RSA\_C&C\_G-8\_Quotes.pdf

To cure this very randomness, C&C formally means the structure a of full-term, concentrationtarget-based framework endowed by GCI from the outset, as accepted for example by DEFR/ http://www.gci.org.uk/correspondence/Meacher\_15\_11\_02.pdf

and in 2004 by the House of Commons Environmental Audit Committee and result: -

http://www.gci.org.uk/correspondence/EAC\_response\_GCI\_300904.pdf

House of Commons Environmental Audit Committee and result 2004: -

http://www.gci.org.uk/correspondence/EAC\_response\_GCI\_300904.pdf

http://www.gci.org.uk/briefings/EAC\_Final\_C&C.pdf

C&C briefing to All-Party enquiry into climate-consensus and result May 2006: -

http://www.gci.org.uk/briefings/APGCCC\_Evidence\_single\_A4\_pages.pdf

http://www.gci.org.uk/briefings/Consensus\_Report.pdf

The UK House of Commons All Party Parliamentary Group on Climate Change [APPGCC] adopt C&C. A DVD commissioned by the Group presenting Contraction & Convergence was distribute to all UK MPs and Peers. Eminent spokespersons interviewed on the DVD.

http://www.gci.org.uk/images/Contraction\_and\_Convergence\_Challen\_et\_al.mpg

**APPGCC Tribute here: -**

http://www.martin-caton.co.uk/news?PageId=4ec8ff91-07dd-e3d4-5d47-57362266c35c C&C Promotional material is here: -

http://www.gci.org.uk/Movies/Contraction\_and\_Convergence\_Promo.mpg

Key C&C Animation with coupled models/sink-failure here: -

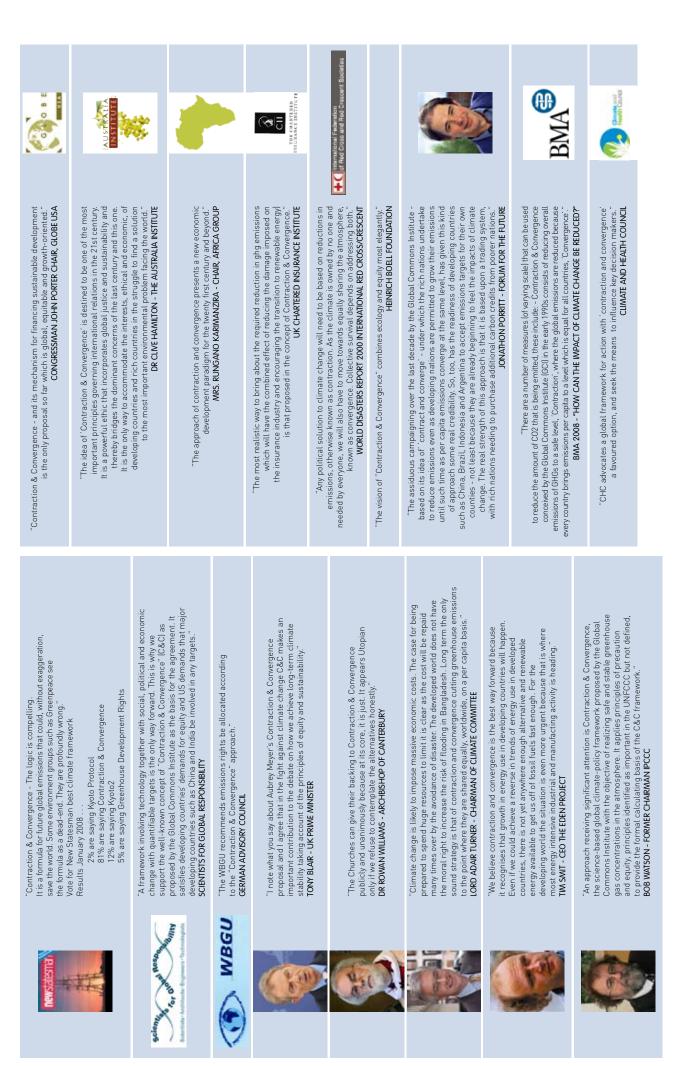
http://www.gci.org.uk/Animations/BENN\_C&C\_Animation.exe

Meyer CV here: -

http://www.gci.org.uk/AubreyMeyer/CV\_Aubrey\_Meyer\_1.pdf

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"Sweden strives for global emissions converging to equal per capita for all. KJELL LARSSON - ENVIRONMENT MINISTER 2000	"Emissions should converge towards equal emissions per inhabitant." 3RD NATIONAL CLIMATE COMMUNICATION 2001	"Contraction & Convergence secures a regime where all nations join efforts to protect our global commons without the risk that any country is deprived of its fair share of the common environmental emission space." SVEND AUKEN - DANISH ENVIRONMENT MINISTER 1999	"We are conscious that in the end, we will have inevitably to evolve towards a more equitable partition between the North and the South of the capacity of our common atmosphere to support greenhouse gases by a gradual convergence of levels of mensions on a per capita basis." COMPREDFIOLIZE - BEIGIANE INVIRONMENT MINISTER 2000	"If we agree to per capita allowances for all by 2030 [so that global emissions stay below 450 ppm 20 global temperature rise] then assigned amounts for Annex One countries would be drastically reduced. However, because all countries would have assigned amounts, maximum	use or grobat emissions trading would strongly reduce the cost or computance. In such a scenario Industrial Countries would have to do more, but it would be cheaper and easier." JAN PRONK COP6 2000 - DUTCH ENVIRONMENT MINISTER	"We do not believe that the ethos of democracy can support any norm other	than equal per capita rights to global environmental resources. PRIME MINISTER INDIA - COP 8 2002	To forestall further damage deeper cuts in greenhouse gas emissions	and these presents outcomponent nucleophone and works are upering and these negatives as universal equal entitlements as engraved in the principles of the Contraction & Convergence Framework." KENYA GOVERNMENT - COPTI 2005	"Conference recognises the urgent need for action to mitigate climate change diven the notentially disastronus consequences for the planet	We pledge to achieve a low carbon emitting society and commit the SNP to supporting the adoption of the internationally-recognised principle of "Contraction & Convergence". ALEX SALMOND - LEADER SCOTTISH NATIONAL PARTY	Liberal Democrats argue for the principle of contraction and convergence with the long-term goal of equalising per capita emissions globally. CHRIS HUHNE - UBERAL DEMOCRATS	"I urge the UK Government to provide leadership on climate change by committing itself to Contraction & Convergence as the framework within which future international agreements	to tackle climate change are negotiated. I confirm that the party also supports this pledge." SIMON THOMAS - POUCY DIRECTOR PLAID CYMRU	"The Kyoto Protocol says notthing about the future beyond 2012. To address that timescale the Green Party advocates the adoption by the UNFCCC of	a framework of Contraction & Convergence (C&C) as the key ingredient in the global political solution to the problem of Climate Change mitigation, and urges the UK and other governments use it as the basis for negotiations in the international fora." <b>CREEN PARTY REAL PROCRESS</b> - CLIMATE POLICY STATEMENT
"Long before the end of the UNFCCC negotiation, GCI presented a proposal on Contraction & Convergence. We all in this room know the model. Level of contraction and timing of convergence should be negotiated on the basis of the precautionany principle. Suggestions for emission reductions are well known and convergence should be achieved at medium term to satisfy legitimacy."	RAUL ESTRADA – CHAIRMAN KYOTO PROTOCOL NEGOTIATIONS "Achieving the goal of the climate treaty [stabilize GHG concentrations] inevitably requires Contraction & Convergence." JOKE WALLER HUNTER - UNFCCC EXECUTIVE SECRETARY	"Success in the Climate Change negotiations requires a deal between the 'Quad', the USA, China, India and the EU. This is possible around the principle of "Contraction & Convergence". The US insistence on India and China accepting targets was not aways	Instead an regulating texter. The need on per deputy in the control we control sections are period analysis of the folloal Commons Institute was seriously discussed in all four capitals in the mid-nineties and the Byrd-Hagel Resolution of the US Senate before Kyoto and the 94 – 0 wet was a statement that such a deal with India and China meant progress." TOM SPENCER - FORMER PRESIDENT GLOBE INTERNATIONAL	"Equity guides the route to global ecological recovery. Tradable Emissions Quotas will make matters worse unless set as targets and timetables for equitable emissions reductions overall. This means convergence at sustainable parity values for consumption on a per capita basis globally." INDIAN GOVERNMENT - COP1 1995	"When we ask the opinions of people from all circles, many people, in particular the scientists, think the emissions control standard should be formulated on a per rapita basis. According to the UN Charter, everyoby is bom equal,	and has inauenable rights to enjoy modern technologicat civitization. CHINA STATE COUNSELLOR DR SONG JIAN - COP 3 1997	"We support India and propose Contraction & Convergence of global emissions. You cannot talk about trading if there are not entitlements; Contraction & Convergence comes into play when we talk about issues of entity."	THE AFRICA GROUP KYOTO - COP 31997	"It does seem to us that the proposals by India and others who speak to Contraction & Convergence are elements for the future, elements perhaps for a next agreement we may utilimately all seek to engage in."	Unlied States of America - Cop'3 1997	A set of common principles must be based on a worldwide binding limit on global emissions consistent with a maximum atmospheric concentration [contraction] with progressive convergence towards an equitable distribution of emissions rights on a per capita basis by an agreed date with across-the-board reductions in emissions rights thereafter." EUSOPEAN PARLINKENTRESOUTION 1998	Per capita CO2 emissions meet in the middle. "In the final analysis the per capita emissions in emerging economies will meet those of industrialised countries. I cannot imagine the emerging economies will one day be permitted to emit more CO2 per capita than we in the industrialised countries.	And the second be on board the global climate negotiations scheduled for 2009." ANGELA MERKEL - PRESIDENT OF GERMANY 2008	"The international climate regime should be based on legitimate principles of equity, such as long-term convergence of emission levels per capita in the various countries."		Attempts to deny C&C's pure logic - ecological, political, social and human - are ultimately futile. Nature won't be fooled. Acceptance of C&C brings not imprisonment, but new unfound freedom; Justice without Retribution,' as Nelson Mandela once demanded. DAVE HAMPTON - CARBON COACH
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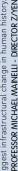












international. With a simple international structure, C&C makes economics kick in which The benefits of the C&C approach in three words are simplicity, economics and is absolutely fundamental to getting the biggest infrastructural change in human history.

# JON SNOW - CHANNEL FOUR TV NEWS

together again. We need to get our own politicians to press our own governments to do formidable clout as Europe to get it delivered by the UN. The great thing about C&C is We can empower the UN to deliver C&C as a global policy. As climate change is the greatest threat to mankind, what better vehicle through which to get the UN pulling this. We need to get our own government to press Europe to do this. We need to use our that it offers the prospect that if you're clever and if you really get to it, you can make this work for you, not just for the world, but for you individually and as a country.

# LORNA WALKER - CABE COMMISSIONER

The C&C framework is very powerful as it addresses two main issues; one is the scientific basis and the rigour, and the other is our intuitive feeling about the moral needs of our community. Scientifically and in terms of equity it gives us targets, timescale and a transparent fairness that through the convergence enables us to leave our children something better than we have now.

# ROBIN STOTT - CHAIR CLIMATE AND HEALTH COUNCIL

groups will offer the hope and inspiration necessary to counter global warming. "C&C is an excellent virtuous cycle policy tool. There are many benefits to our wellbeing of adopting it. Articulating these benefits, health and other professional and so act in accordance with our obligations.

# Angela mawle - Ceo Public Health Association

"We need to go to the United Nations and need to say both to our own citizens, our own communities and global communities through the United Nations, C&C is the only real way forward to ensure a healthy future."

peoples of the world will mortgage their future on a futures market of trading permits. PROF PAUL JOWITT - PRESIDENT ELECT ICE The fundamental attraction of Contraction & Convergence to me is that it's logically based. It's not based on essentially market issues and arbitrary decisions about how many tons of CO2 permits are going to be allowed. It also doesn't have the risk in my view of one of the real issues with trading that some of the poorer nations and poorer

Contraction & Convergence includes the identification of a fixed level for stabilisation

of greenhouse gas concentrations, and comprehensive global participation.

Me

much admire him for it. Above all he's laid out a kind of intellectual and legal framework which is what you need if you're going to se global arrangements

persistence and ingenuity in working out a scheme of this kind, and I very

Aubrey Meyer has done an amazing job and has shown extraordinary

The commission might have added that contraction and convergence

Kyoto Protocol, and that contraction and convergence meets every

single objection raised by the United States to Kyoto."

ORD BISHOP OF HEREFORD

is comprehensive, scientifically based and equitable, unlike the

in place, and these global arrangements should I believe be fully reflected

in the Bill that is now before UK Parliament to regulate Climate Change

SIR CRISPIN TICKELL - DIRECTOR OF THE POLICY FORESIGHT

PROGRAMME JAMES MARTIN INSTITUTE OXFORD

certainty about their national targets and provide a clear signal to allow business Any framework that incorporates long term targets can offer countries greater

to plan ahead and help drive investment in new and better technologies.

NUMBER 10 DOWNING STREET WEBSITE

direction; contraction and convergence provides that direction. "To make sense of our own actions we need to have an overall

SUNAND PRASAD - PRESIDENT OF RIBA

# JACK PRINGLE - FORMER PRESIDENT OF RIBA

of carbon emissions for your country C&C gives a framework within which When I was RIBA President we looked at Kyoto and saving 60% by 2050 looked a But the thing that attracted about Contraction & Convergence to address that. We're comfortable supporting C&C and Aubrey Meyer. or C&C was that it looked at the global dimension and what is a 'fair share reasonable start.

# TIM FLANNERY - AUTHOR OF THE WEATHER MAKERS

potential side effects. One is that the scheme might eventually do away with world the conservatives, for by including every human being in existence under its umbrella it C&C represents a far greater departure from business as usual than does Kyoto. It is strong medicine for a dire malaise, and as with all strong medicine there are poverty and the north-south divide. Not all aspects of the proposal should displease obliterates concern about 'free riders' in the developing world that exists under Kyoto.

## favoured method - contraction and convergence - but there is no The British government has modelling under way in the most diplomatic agreement that this is the best way to proceed." THE AGE REPORTING ON THE G8 2008 IN TOYAKO JAPAN

countries contracting their emissions quickly, while developing countries

are given some room to grow on condition they make cuts later."

'One approach on the table is contraction and convergence - rich

THE GUARDIAN REPORTING ON THE G8 2008

"Long-term convergence of per capita emission rates is an important principle that should be seriously considered in international climate change negotiations." PRIME MINISTER GORDON BROWN AND INDIAN GOVERNMENT ON C&C



My colleagues and Lat the Royal Commission on Environmental Pollution pioneering work in establishing Contraction & Convergence as it is the would like to express our thanks to you and GCI for your remarkable basis upon which so much of our own work has been established." SIR TOM BLUNDELL - CHAIRMAN, RCEP



'Contraction & Convergence is the approach with the most merits.

It is the buzz phrase now on the negotiator's lips."

SIR DAVID KING - "THE HOT TOPIC"



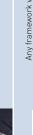


environmental audit committee, "The International challenge of climate change"

& Convergence as the basis for future international agreements to reduce emissions.







Any framework which involves radical emission reductions would in practice resemble the Contraction & Convergence approach advocated by the Global Commons Institute. accepted this approach in adopting the 60% carbon reduction target for 2050; and it is Indeed, in terms of domestic policy aims, the UK Government has already implicitly

#### FIFTEENTH SUMMIT

South Asian Association for Regional Cooperation (SAARC) Colombo, Sri Lanka - August 2-3, 2008

"The Heads of State or Government affirmed that every citizen of this planet must have an equal share of the planetary atmospheric space. In this context, they endorsed the convergence of per capita emissions of developing and developed countries on an equitable basis for tackling climate change."

His Excellency Mr. Hamid Karzai President of the Islamic Republic of Afghanistan His Excellency Dr. Fakhruddin Ahmed Chief Adviser of the Government. The People's Republic of Bangladesh His Excellency Lyonchhen Jigmi Y. Thinley Prime Minister of the Kingdom of Bhutan His Excellency Dr. Manmohan Singh Prime Minister of the Republic of India His Excellency Mr. Maumoon Abdul Gayoom President of the Republic of Maldives The Rt. Hon'ble Girija Prasad Koirala Prime Minister of the Federal Democratic Republic of Nepal His Excellency Syed Yousuf Raza Gilani Prime Minister of the Islamic Republic of Pakistan His Excellency Mr. Mahinda Rajapaksa President of the Democratic Socialist Republic of Sri Lanka

London SW1P 3JR 17 Smith Square Nobel House

Email mos.environment@defra.gsi.gov.uk Website www.defra.gov.uk Telephone 08459 335577

Global Commons Institute 37 Ravenswood Road Aubrey Meyer Esq E17 9LY -ondon



2002 15 Novembe

> From the Minister for Environment and Agri-Environment The Rt Hon Michael Meacher MP

ear Hubin

hank you for your letter of 14 September about references to the "Contraction and Convergence" model in Government publications.

It is unfortunate that the Performance and Innovation Unit's Energy Review omitted to attribute the Contraction and Convergence reference to the Global Commons nstitute. I am sure that this was just an oversight and apologise on their behalf.

greenhouse gas emissions, and give my assurance that all reasonable steps to ensure that full attribution is given to the GCI in each case. I hope this is I fully understand your wish to protect the integrity of the Contraction and Convergence model. By this letter, I would like to seek GCI's consent to references to the model in Government publications dealing with climate change and ensure that full attribution is given to the GCI in each case. I hope this acceptable to you and would be grateful if you would confirm in writing that it is,

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MICHAEL MEACHER

about me, Gower and my work in Westminster and the constit-HELLO I'm Martin Caton, the Member of Parliament for Gower Welcome to my website. I hope this will tell you something uency and issues that I am giving priority to at present

http://www.martin-caton.co.uk/news?PageId=4ec8ff91-07dd-e3d4-5d47-57362266c35c



# Martin Nominates Meyer for 2008 Nobel Peace Prize



other Members of Parliament from across the House, has nominated Aubrey Meyer for the Gower MP, Martin Caton, together with six 2008 Nobel Peace Prize.

or indeed, in many other parts of the world. Martin explained, "Aubrey Meyer may not yet be a household name, here in Britain, Yet his work is absolutely central to the global fight against climate change.

jointly to Al Gore and the Intergovernmental Panel on Climate Change for "The Nobel Institute recognised how important the climate change chalenge is to the future of our planet last year, when it awarded the prize raising awareness about this environmental threat.

done most to provide an international solution to averting the disaster of "We believe that it would, now, be right to recognise the man who has global warming.

mons Initiative in 1990 that developed just such a framework known as framework if we are to protect our planet. He founded the Global Com-"Aubrey Meyer realised that we need a comprehensive climate change 'contraction and convergence'. "This is the logical way forward. The human race reduces its carbon footprint towards zero at the same time as greenhouse gas emissions on a per capita basis in developed and developing nations converge.

message to world leaders as we consider what comes after the end of the "If his initiative was recognised now then it would send exactly the right Kyoto round in 2012."

Martin's fellow nominators of Aubrey Meyer are: -

Colin Challen MP	(Labour),
Peter Ainsworth M P	(Conservative),
Chris Huhne MP	(Liberal Democra
Michael Meacher MP	(Labour),
Joan Walley MP	(Labour) and
Tim Yeo MP	(Conservative)

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