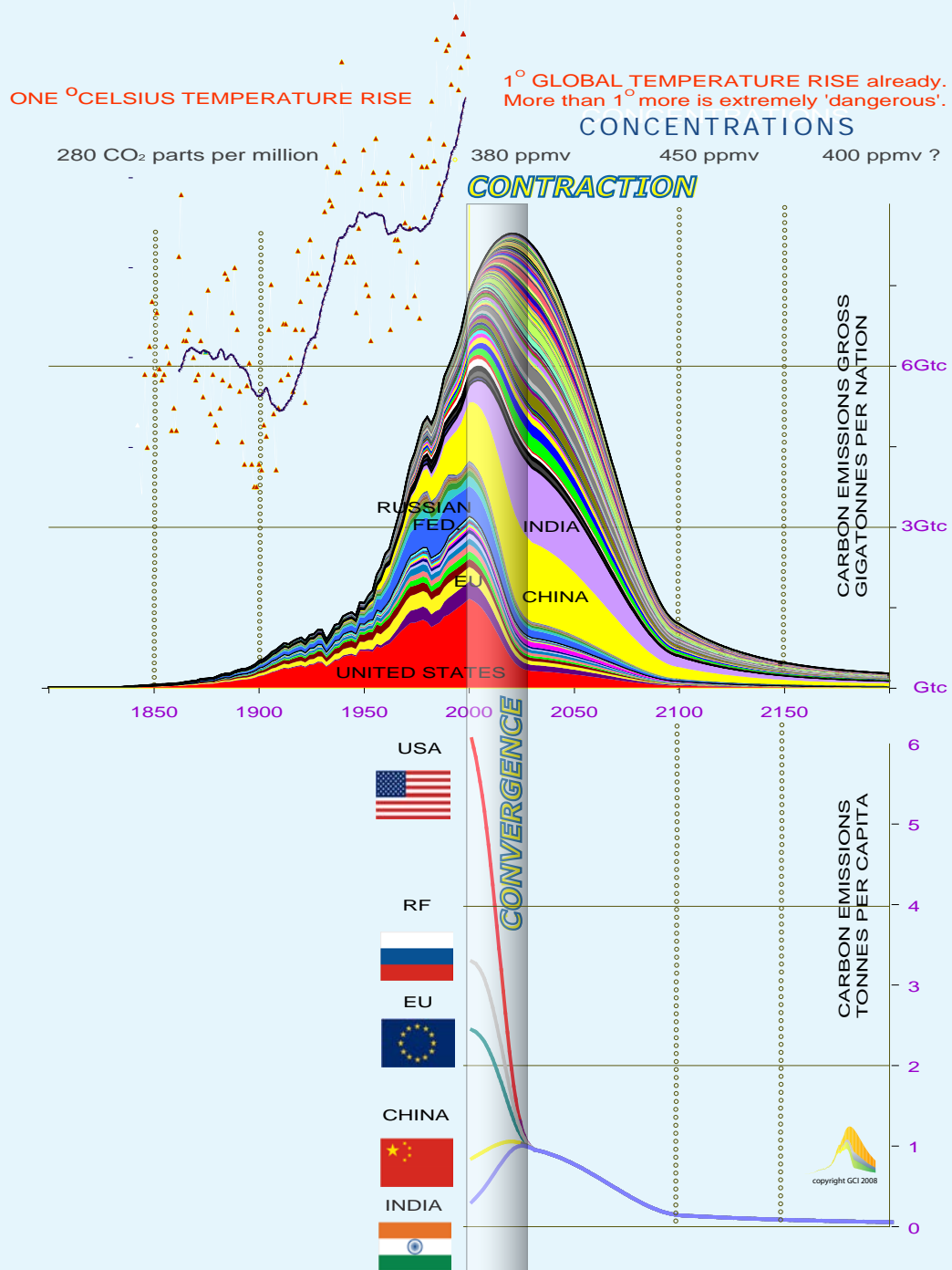


Contraction & Convergence [C&C]

An International Conceptual Framework
for Preventing Dangerous Climate Change

Global Commons Institute

"Underlying all complexity is a deep simplicity."



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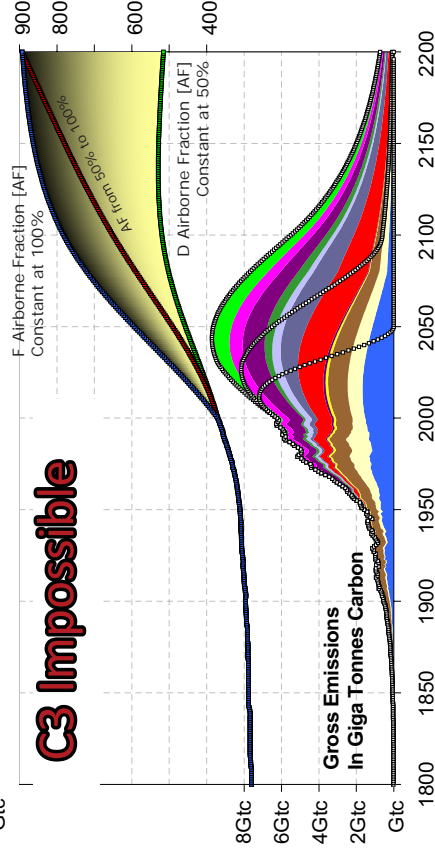
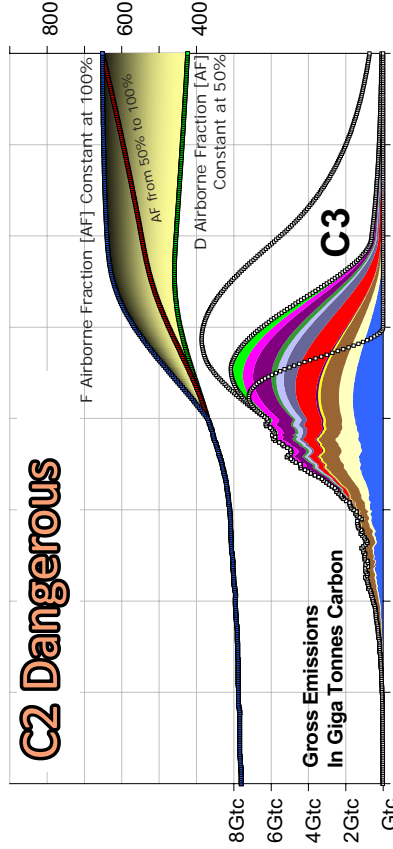
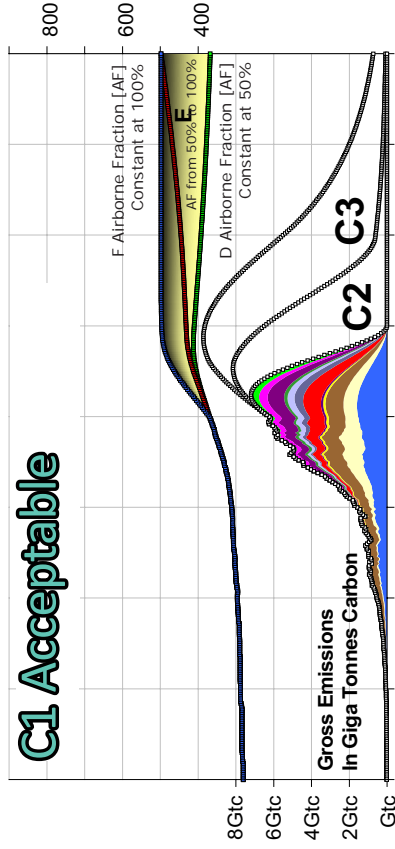
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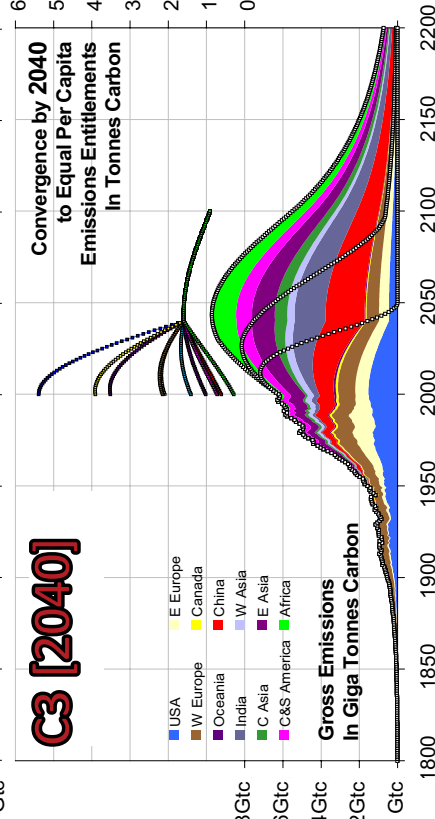
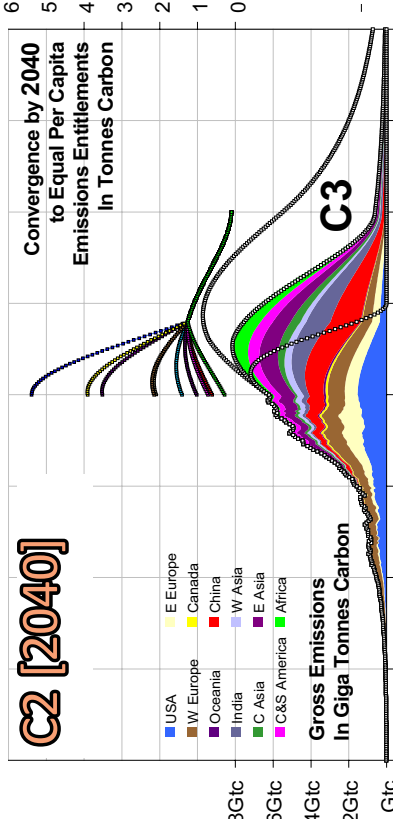
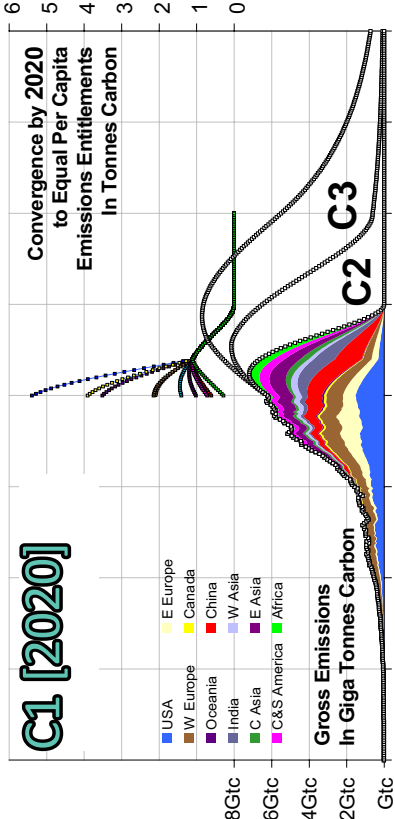
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"Future global carbon emissions and atmospheric concentrations of CO₂ at different rates of Contraction & Convergence"

Accelerated Contraction & Concentrations



Contraction & Accelerated Convergence



Contraction & Convergence

An International Framework for Preventing Dangerous Climate Change

On the 4th of February 2009, Lord Adair Turner told the House of Commons Environmental Audit Committee (EAC) that: -

"The core [of the UK Climate Act] is contract and converge. We cannot imagine a global deal which is both doable and fair which doesn't end up by mid-century with roughly equal rights per capita to emit and that is clearly said in the report. This is strong support for what Aubrey Meyer has been saying."

On the 4th of March 2009, the House of Commons Energy and Climate Change Committee (ECCC) then told Lord Adair Turner that: -

"Your pragmatic support for Contraction and Convergence, on the record from the meeting with the EAC, is very welcome."

Then, referring to the call in January 2009 from the World Economic Forum for an 80% cut *globally* by 2050 on grounds of increased urgency, they asked him: -

"Would you accept that as the speed of Contraction accelerates, the speed of the acceleration of Convergence will also have to pick up? There's always been a presumption at the International Climate Change negotiations that Developing Countries will be allowed to increase temporarily their emissions to help development. But that's going to be a concertina'd process - is that really how you'd see it?"

Lord Adair Turner replied: -

"While this raises a complex issue of international negotiations, you are right."



Lord Adair Turner
Chairman UK Independent Committee on Climate Change

Contraction & Convergence

An International Framework for Preventing Dangerous Climate Change

"If we are to limit global temperature rise to no more than 2-2.4 degrees C global emissions must peak no later than 2015 and start declining thereafter. The faster the decline the greater the possibility of our avoiding some of the worst impacts of climate change.

So when one looks at the kinds of reductions that would be required globally, the only means for doing so is to ensure that there's contraction and convergence and I think there's growing acceptance of this reality. I don't see how else we might be able to fit within the overall budget for emissions for the world as a whole by 2050.

We need to start putting this principle into practice as early as possible so that by the time that we reach 2050 we're well on a track for every country in the world that would get us there and we're not caught by surprise.

On the matter of 'historic responsibility', there is no doubt that accelerating the rate of convergence relative to the rate of contraction is a way of answering that and we really need to get agreement from Developed and Developing Countries to subscribe to this principle."



Rajendra Pachauri
Chairman of the Intergovernmental Panel on Climate Change
Global Humanitarian Forum Geneva June 2009

Contraction & Convergence

An International Framework for Preventing Dangerous Climate Change

"Since the formulation of 'Contraction & Convergence' [C&C], Aubrey Meyer has tirelessly and selflessly argued for and promoted it with great energy and tenacity in scientific, economic and political fora.

Admiration is frequently expressed regarding its elegance and simple logic and it has been widely accepted by policy makers and by NGOs as a basis that should underlie the next stage of policy formulation.

There is no other proposal in play that meets so many of the required principles and criteria or that has any real chance of succeeding.

It is bound to be strongly influential in the crucial round of international negotiations in the UNFCCC that is about to begin.

The personal dedication of Aubrey Meyer, born of a deep concern for global humanity and its future, is what has brought the Contraction and Convergence proposal to the influential position it holds today."



Sir John Houghton
Former Chairman
Science Group, Intergovernmental Panel on Climate Change
& Former Chairman of the UK's
Royal Commission on Environmental Pollution [RCEP]

Contraction & Convergence

An International Framework for Preventing Dangerous Climate Change

"Over the last twenty years, Aubrey Meyer's sustained work through the Global Commons Institute [GCI] with the "Contraction and Convergence" - or C&C - concept and campaign, has created a global standard that is now widely recognized as an outstanding and essential contribution to the global debate on what to do avoid dangerous rates of climate change.

This is remarkable and reflects the integrity of the argument where C&C is mathematically rooted in the science of climate change and marries the limit to future human emissions that avoids dangerous rates of climate change to the politically compelling requirement of equal shares in the use of the atmosphere subject to that limit.

It embodies the economic political reality, that adjustment to equal per capita emissions entitlements will take time. It is a rational, flexible and transparent concept that holds out the best hope of all urgent proposals that might form a basis of an environmentally and economically rational global agreement on climate change mitigation. The contraction and convergence idea was at the core of the proposals for international agreement that are part of the Garnaut Climate Change Review, commissioned by and presented to the Australian Prime Minister and all State Premiers.

Aubrey's success has been achieved with very little funding. So I am asking that financial support is given to this campaign particularly at this time as this year - 2009 - leads to a UN event in Copenhagen in December at which it is intended that the global plan to avoid dangerous rates of climate change is agreed and established for the long-term."



Professor Ross Garnaut
The Arndt Corden Division of Economics
Research School of Asia and Pacific Studies
Australia National University

Contraction & Convergence

An International Framework for Preventing Dangerous Climate Change

"Achieving the goal of the United Nations Framework Convention on Climate Change inevitably requires Contraction and Convergence."



**Joke Waller Hunter [late]
Executive Secretary of the
United Nations Framework Convention on Climate Change
[UNFCCC] 2002 - 2005**

COP-9 in Milan 2003

"Climate Change is the biggest health threat of the 21st Century." **The LANCET**

THE LANCET



**Lancet and University College London Institute for
Global Health Commission**

Managing the health effects of climate change

"Luxury emissions are different from survival emissions, which emphasises the need for a strategy of contraction and convergence, whereby rich countries rapidly reduce emissions and poor countries can increase emissions to achieve health and development gain, both having the same sustainable emissions per person."

The current financial crisis raises doubts about a global model to reduce inequities based on economic growth. Contraction and convergence (panel 4) increase the need for new economic approaches, which place sustainability and equity at the centre of the economic debate."

Panel 4: Contraction and convergence

Climate change requires two possibly conflicting actions. Carbon emissions must be reduced to avoid the worst outcome of climate change. Poor countries need rapid economic development so that no country, community, or individual is too poor to adapt to climate change."

The concept of contraction and convergence, developed by the Global Commons Institute, considers the need to pursue both these actions simultaneously."

Contraction and convergence reduces overall carbon emissions to a sustainable level but do so according to an equal share of emissions per person globally. Industrialised countries would dramatically reduce their emissions whilst developing countries would increase theirs to allow for, and stimulate, development and poverty reduction."

MAY 16 2009



"CHC advocates a global framework for action with 'contraction and convergence' a favoured option, and seek the means to influence key decision makers."

Climate and Health Council 2008

"There is a need to develop conceptual frameworks such as C&C" **The WORLD HEALTH ORGANISATION**

"Improved methods for assessment of the health implications of decisions in other sectors. The few studies that are now beginning to assess the health consequences of decisions aiming to mitigate or adapt to climate change use very different analytical methods and assumptions, even for very similar challenges.

There is a need to develop more generic guidance on conceptual frameworks and methods in order to improve comparability, and assist decision-makers to achieve the greatest health "co-benefits", and avoid harm. This should cover the full range of potential decisions, from the "macro" level, e.g. global contraction and convergence in carbon dioxide (CO₂) emissions and carbon pricing policy and incentives, to more local and sector specific decisions for example city-level policies to promote public transport, or to protect a natural watershed.

The methods developed should be flexible enough to take account of very different local contexts, such as the fundamental issue that poorer populations will generally have to increase rather than reduce energy consumption in order to guarantee basic living conditions and promote health.

Finally, new methods should also help describe how costs are distributed across different sectors and how benefits are spread across various population groups, as costs and benefits that apply outside of the responsibility of a given sectoral decision-maker are often ignored."

World Health Organization 2009



World Health Organization



PROTECTING HEALTH FROM CLIMATE CHANGE

Global research priorities



"There are a number of measures (of varying scale) that can be used to reduce the amount of CO₂ that is being emitted, these include: - Contraction and convergence conceived by the Global Commons Institute (GCI) in the early 1990s consists of reducing overall emissions of GHGs to a safe level, 'Contraction', where the global emissions are reduced because every country brings emissions per capita to a level which is equal for all countries, 'Convergence'."

BMA 2008

"How can the impact of climate change be reduced?"

Contraction and convergence

Healthy response to climate change

Robin Stott

Environmentally friendly policies may feel like a low priority among the many pressures in a busy professional life, but promoting carbon rationing could be your most important contribution to patients' health

Climate change related to global warming is the world's most urgent public health problem. Our planet is already seriously damaged, with worse to come (box 1).¹ Health professionals have an enviable record of contributing solutions to previous threats and must do the same for climate change. The most feasible policy for tackling global warming is contraction and convergence, developed by Aubrey Meyer of the Global Commons Institute.⁶ So how can health professionals contribute?

Contraction and convergence

Contraction and convergence is a carbon cap and trade policy designed to stabilise and then reduce carbon dioxide emissions, which are responsible for 70% of greenhouse gases. Industrial methane emissions, responsible for much of the rest, will reduce alongside carbon dioxide. Frugal fossil fuel users will be able to sell entitlements to profligate users through international trading of this capped amount of carbon dioxide.

The first step in implementing this policy is to set a global carbon budget and allocate an entitlement of this carbon to each region, country, or person. The initial carbon allocation is then reduced (the carbon budget is contracted) at an agreed pace and time until the amount of allocated carbon equals the globe's carrying capacity, about 12 billion tonnes of carbon dioxide a year. Given the present global population, this amounts to 2 tonnes/person/year, five times less than the present UK average emission.

The effect of contraction is to stabilise and then reduce atmospheric carbon dioxide levels. The stabilisation level is negotiable, but the consensus is that an atmospheric level of carbon dioxide of 450 ppm, which will result in a temperature increase of around 2°C, is a tipping point. Carbon budgets should be set with this in mind.

Benefits of contraction

The move to a low carbon society will encourage each of us to get the benefits of low carbon living. It will also enable the much more rapid uptake of measures to

conserve energy, promotion of renewable fuels, building of carbon sequestering coal power stations, and a better informed debate on the need to build new nuclear power stations. However, no foreseeable technological change can compensate for all the energy we presently generate from fossil fuel. In a low carbon future, we will inevitably use more of our own human effort, prompting those of us living in rich industrialised societies to get much more exercise in our everyday lives. Exercising will help reverse the obesogenic trends of industrialised societies. The psychological health benefits of exercise are substantial, and increasing the entire population's exercise levels is key to preventing atheroma, the leading cause of death in industrialised countries.

What about convergence?

All countries must participate in setting and then reducing the carbon budget. The allocation must therefore take into account the needs of countries that have yet to industrialise. By reducing the amount of available carbon based fuels, contraction inevitably restricts the capacity of these countries to reap the benefits of fossil fuel driven industrialisation. Convergence, the move to an equal entitlement of the carbon

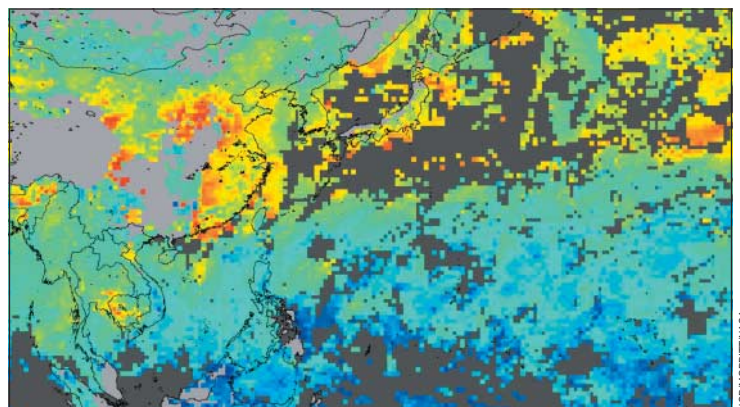
London SE10 8JS

Robin Stott

vice chair Medact

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BMJ 2006;332:1385-90



Carbon monoxide plumes show pollution from eastern Asia extending eastward over the Pacific Ocean. Satellite data were collected early in 2003; no data were collected in grey areas because of cloud cover or gaps between viewing swaths

Box 1: Atmospheric carbon dioxide levels and global warming

- Atmospheric carbon dioxide levels have risen steeply from 280 ppm since the start of the industrial revolution and in step with increasing use of fossil fuels^{2 3}
- Global temperature has risen in parallel with carbon dioxide, and the world is around 1°C warmer than 100 years ago
- Industrialised countries bear greatest responsibility for the present level of 380 ppm, as well as the annual increase of 2 ppm/year
- The US, with one twentieth of the world's population, uses 20 million of the 80 million barrels of oil used each day, Japan 5 million, Germany 3 million, and the UK 1.7 million⁴
- China and India are set to greatly increase their use of fossil fuels over the next few years
- The predicted temperature increase for the 21st century is 0.15-0.6°C per decade
- Around 60% of the ecosystems essential to sustain life are already damaged⁵

budget to every global citizen and then promoting market trading of entitlements, recognises and deals with this problem.

Although every individual will have an equal entitlement of carbon, the amount individuals emit varies considerably. In the main, the rich are profligate emitters, the poor frugal emitters. For instance, people living in most African countries emit less than one tonne of carbon dioxide a year whereas those of us in the United Kingdom emit about 10 tonnes and those in the United States 20 tonnes.⁷ Under contraction and convergence, initial individual entitlement is likely to be around 7 tonnes of carbon dioxide a year, reducing to the sustainable level of 2 tonnes/person over the agreed period. The state will wish to take a proportion of this individual entitlement to cover the carbon cost of specified activities, such as the provision of public services, but the poor will still have unused carbon entitlements to sell to the rich. They will be able to trade carbon dioxide for its market value with a resultant transfer of money from rich to poor, with the poor getting money through market transactions not aid.

Budgetary consequences of entitlements

Evidence from Mozambique suggests that this money will help trigger the latent entrepreneurial skills of the recipients.⁸ Given the likely market value of a tonne of carbon dioxide, it will more than provide the \$110 dollars/person/year that the UN millennium project believes necessary to reach the millennium development goals in Africa.⁹

The financial implications of trading in carbon entitlements mean it will be in everyone's interest to minimise the amount of carbon we emit. Just as all of us strive to live within our financial means, we will strive to live within our carbon means, with the evident financial benefit this brings. The less carbon we emit, the better off financially we are, a major inducement to the global development of low carbon emitting societies.

Benefits of convergence

Convergence will thus facilitate the engagement of the majority world, effect a transfer of resources from the rich to the poor, and stimulate sustainable development that restores and conserves the ecosystem. By synergistically improving the environmental, economic, and social circumstances of our global populations, and so influencing all three pillars of sustainability, contraction and convergence will trigger a global "virtuous cycle" of activity. This global virtuous cycle will facilitate the uptake of many other virtuous cycles.

The health benefits are also considerable. The policy will mitigate the adverse health effects of global warming, narrow the gap between rich and poor, and help deliver the millennium development goals. The psychological lift from the understanding that we are active in resolving our global predicaments will be considerable, and increasing exercise as an essential ingredient of our everyday lives will give many health benefits. Can this policy be made to work?

Implementation

The political courage and will to implement contraction and convergence is gaining ground, and many organisations, institutions, and countries have signed up to the concept.¹⁰ There are senior policy advocates at governmental level in the UK, European Union, India, Africa, and even within the US.⁶ Additional support comes from the German Advisory Council on Global Change,¹¹ the Church of England, the mayor of London, and a cross party UK parliamentary committee. Contraction and convergence is implicitly supported in the Department for International Development's response to the Stern review on the economics of climate change.¹² Business engagement is reflected

Box 2: How health professionals can influence virtuous cycles of activity**Regional or national level**

Regional directors of public health promoting contraction and convergence in conjunction with regional development agencies and business

Community level

Purchasing goods to create local production and consumption cycles—eg, health facilities buying locally grown organic food^{14 15}

Ensuring new health facilities are constructed in a way that improves the economic, environmental, and social circumstances of the localities^{16 17}

Developing and implementing travel plans, including those for visitors and staff (www.activetravel.org.uk)

Encouraging the use of the Good Corporate Citizen self assessment model (www.corporatecitizen.nhs.uk)

Personal level

Monitor carbon emissions (www.carboncounter.org) and use every opportunity to explain why we are doing this

Ride a bicycle

Insulate our homes using local materials and local workers

Promote local meetings and electronic communication in preference to conferences that require air travel

in a statement of support for the concept signed by 25 roundtable business leaders at this year's world economic forum.

This high level support must now be deepened and formalised so that politicians worldwide commit themselves to contraction and convergence. The details of implementation can then be worked out, guided by insights gained from the several carbon trading initiatives already in place in Europe and the north eastern states of the United States. Researchers at the Manchester branch of the Tyndall centre for climate change have developed the idea of domestic tradable quotas. Their research shows the scheme is fair, technically feasible, and affordable, and is acceptable to the public. It is about to be piloted.¹³ Health professionals can use our extensive networks and lobbying expertise to support these political and practical initiatives (box 2).

Fuel security

Although the thrust for contraction comes from the need to control global warming, concern over availability of fossil fuel and fuel security is another stimulus. The demand for fossil fuel will soon exceed the supply, and new fossil fuel sources are not readily or cheaply available.^{18 19} Oil analysts, not noted for their concern about global warming, also articulate the need to reduce use of fossil fuel.

Contraction and convergence as short hand for public health

A public health initiative guided and regulated by the contraction and convergence framework will activate a global virtuous cycle directed at tackling climate change and reducing the gap between rich and poor. Health professionals must develop a powerful passionate and coordinated voice to call for the adoption of contraction and convergence and to implement the many other virtuous cycles of activity which will be facilitated by the framework. Let us show by example the benefits of learning to speak carbon.²⁰

I am indebted to Aubrey Meyer, who developed the idea of contraction and convergence, and to colleagues in Medact, with whom for many years I have discussed the impacts of social, environmental, and economic injustice on health and whose insights have sharpened my understanding of potential solutions to these problems.

Contributors and sources: RS is a member of the Sustainable Development Commission and educational adviser at Guy's, King's and St Thomas's School of Medicine.

Competing interests: None declared.

Summary points

Climate change is a major health threat and requires concerted action to mitigate it

Contraction and convergence offers a way forward which is globally just and produces many health benefits

Trading in carbon will transfer money from the rich to poor, enabling the millennium health goals to be met

By encouraging more physical activity, it will also improve the health of people in industrialised countries

Health professionals must set an example and advocate for contraction and convergence both locally and nationally

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**Towards a comprehensive and ambitious post-2012
climate change agreement**

Institute of Physics - June 2009

http://www.iop.org/activity/policy/Consultations/Energy_and_Environment/file_31750.doc

Mitigation commitments by developed countries:

The EU is of the view that developed countries should continue to take the lead by committing to collectively reducing their emissions of greenhouse gases by 30% by 2020 compared to 1990. They should do so also with a view to collectively reducing their emissions by 60 - 80% by 2050 compared to 1990.

What should be the criteria for allocating emission reduction efforts among developed countries, considering also the need to ensure the "comparability of efforts" as agreed in Bali?

Per capita 'Contraction and Convergence' to the same fossil-carbon emissions.

This should be related to targets for: Zero net-carbon housing (insulation, biomass heating, passive-solar construction, microgeneration of solar heat and solar (plus wind) grid connected electricity, efficient appliances) as promoted by pricing mechanisms, building regulations, rating charges, grants, etc.

Zero net and low-carbon buildings generally, including government buildings

Combined heat and power (CHP) and district heating

Renewable electricity

Nuclear electricity

Renewable fuels (wastes included, with emphasis on agricultural, food and construction wastes) yet realising overlap with food production

Fuel efficient vehicles, especially cars (aim for 2 litre per 100 km), plus use of electric vehicles and biofuels

Radically changed transport and traffic regulations (including keeping to speed limits)

Increased and more efficient rail transport

Radically less air travel

More local resources (less transport)

Sustainable agriculture.

Mitigation actions by developing countries:

The EU recognises the need for enhanced contribution by developing countries, whereby economically more advanced developing countries contribute adequately according to their responsibilities and respective capabilities.

What type of mitigation actions should developing countries undertake?

Developing countries should also seek to accept 'Contraction and Convergence' as detailed in response to question 3.

Global Policy Challenges: Climate Change and Sustainable Development

www.adb.org/documents/events/2009/high-level-dialogue/Hi-Level-Climate-Change.pdf

Reducing disparities through contraction and convergence

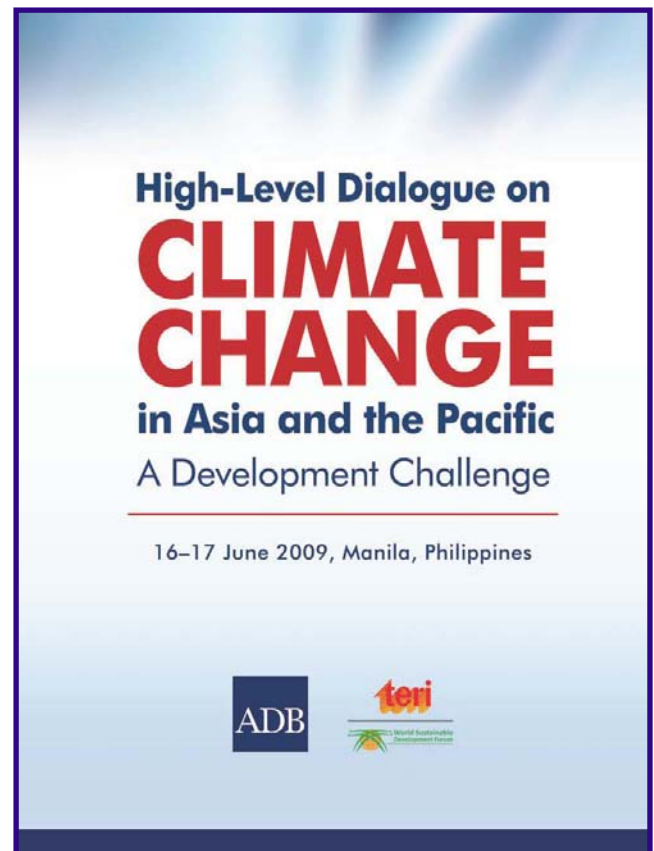
"In order to allocate responsibility for emission reduction, numerous theories have been suggested, ranging from the simple 'total emissions' estimates to the much more complex 'contraction and convergence' estimates that seek to quantify a country's responsibility at a 'fair' level by which emissions should be reduced.

The framework of contraction and convergence provides a flexible methodology to address the problem of allocation of emission rights. The contraction of overall world emissions pursued along with the convergence of countries' average per capita emissions, allows developing countries to partake of the carbon budget. This is achieved while both the developed and the developing countries put in place mechanisms to minimize growth in overall emissions, the developed countries taking into account the developing countries need to exceed their current emission levels in the pursuit of economic growth.

The per capita entitlements approach is an effective one in that it takes into account historical responsibility and is based on the egalitarian distribution of the commons, within which international justice positions of causal responsibility such as the 'polluter pays principle,' come in (Vivekanandan, et al. 2008). This is significant because historical emissions amount to about 1100 tonnes of CO₂ per capita for the US and the UK, while the People's Republic of China's stand at 66 tonnes per capita and India's at 23 tonnes per capita. Currently, the per capita emissions figures for the US, the People's Republic of China, and India stand at 20 tonnes, 6 tonnes, and 1 tonne respectively.

Post 2012, a multi-track framework that takes into account historical responsibility, equity implications, and future emissions would address some of the more critical issues in building a consensus on 'common but differentiated' responsibilities of countries, and enable action by countries at all levels of development, if not in the form of quantitative reduction targets, then by policy-based commitments. This would involve more stringent reduction responsibilities and clear quantitative targets for Annex-I countries, and more sector-specific policy-based initiatives in other countries, including the fast-growing emerging economies. Over time, this flexible mechanism could be made more stringent for developing countries as they reach a certain level of development. This would enable developing countries to participate in the emissions reduction process while also pursuing low-carbon economic growth."

Some of the 30 eminent signatories to this document alongside



Ursula Schäfer-Preuss

Vice-President of ADB (Asian Development Bank) for Knowledge Management and Sustainable Development. She assumed office in November 2006. She is responsible for ADB's Regional and Sustainable Development Department, Economics, and Research Department, and the Office of Cofinancing Operations. Prior to joining ADB, she was the Director-General of the Federal Ministry for Economic Cooperation and Development in Bonn/Berlin, Germany.



Haruhiko Kuroda

President of ADB (Asian Development Bank) and the Chairperson of ADB's Board of Directors. He was elected President by ADB's Board of Governors in November 2004 and was re-elected in November 2006 for a new five-year term. Before joining ADB, Mr Kuroda was Special Advisor to the Cabinet of Japanese Prime Minister Junichiro Koizumi and a professor at the Graduate School of Economics at Hitotsubashi University in Tokyo.



Ban Ki-moon

Secretary general of the United Nations. His ties with the United Nations date back to 1975, when he worked for the foreign ministry's United Nations division. His career encompasses many years of service in government and on the global stage, including as his country's Minister of Foreign Affairs and Trade; postings in New Delhi, Vienna, and Washington DC; and responsibility for a variety of portfolios, including foreign policy, national security, and policy planning.



Rajendra Pachauri

Director of TERI and Chairman IPCC has been the Chairman of IPCC (Intergovernmental Panel on Climate Change) since 2002, and Chief Executive of TERI (The Energy and Resources Institute) since 1982. He accepted the Nobel Peace Prize in 2007 on behalf of IPCC. He has been conferred with several awards including 'Padma Vibhushan' the second highest civilian award in 2008, 'Officier De La Légion D'Honneur' by the Government of France in 2006, and 'Padma Bhushan' in 2001 for his outstanding contribution in the field of science, engineering, and environment.



Yvo de Boer

Executive Secretary of the UNFCCC (United Nations Framework Convention on Climate Change) since 2006. Before joining the UNFCCC, he was Director for International Affairs of the Ministry of Housing, Spatial Planning, and Environment of the Netherlands. Prior to his position as Executive Secretary, Mr de Boer has served as Vice-President of the Conference of Parties to UNFCCC and as Vice-Chair of the Commission on Sustainable Development.



Gloria Macapagal-Arroyo

President of the Philippines. Elected as Senator in 1992, she was re-elected Senator in 1995. She was elected Vice President of the Philippines in 1998. She was sworn in as the 14th President of the Philippines on 20 January 2001 by Chief Justice Hilario Davide, Jr. after the Supreme Court unanimously declared the position of President vacant, the second woman to achieve the presidency by a peaceful People Power revolution (EDSA II).



www.climateactionprogramme.org/features/article/contraction_and_convergence_the_proportionate_response_to_climate_change/

Contraction and Convergence:

THE PROPORTIONATE RESPONSE TO CLIMATE CHANGE

Pictures



AUBREY MEYER
DIRECTOR,
GLOBAL COMMONS INSTITUTE

The United Nations Framework Convention on Climate Change (UNFCCC) was agreed in 1992 with the objective to halt the rising concentration of greenhouse gas (GHG) in the atmosphere. In 2007, efforts to this end remain insufficient and the danger of 'runaway' rates of global climate change taking hold is increasing. The science-based, global climate policy framework of Contraction and Convergence (C&C) offers an equitable solution to cutting carbon emissions in the hope that global collective efforts to reduce emissions can be successful. Three elements are at the core of the C&C campaign: the constitutional concept of Contraction and Convergence (C&C); the techniques and processes developed to focus the debate on rates of C&C that are relevant; the sustained effort to present C&C as the basis of the proportionate response to climate change.

THE BASIS OF C&C

Technically, the C&C model is a coherent and mathematically-stable framework. It holds the science-policy content together as a unity; science-based on the contraction side of the argument and rights-based or 'constitutional' on the 'political' side of the argument. C&C is in effect a bill of rights; it simply plots a full term event for achieving equal *per capita* emissions rights globally (Convergence) but governed by the overall emissions limit over time that stabilises the atmosphere concentration of GHG at a 'safe' value (Contraction).

“ It becomes possible to go beyond the merely aspirational character of the current debate around the UNFCCC, to communicating the rationale and constitutional calculus of C&C. ”

The UNFCCC makes C&C generically true, but C&C specifically embraces a calculus built on this truth that strategically focuses the negotiations at the Climate Convention on two necessarily finite, global assumptions:

- ▶ A trajectory to a safe and stable atmospheric GHG concentration limit, allowing for a range of calculations of the global emissions contraction limit to carbon consumption consistent with that.
- ▶ The calculation of equal rights to the global total of emissions permits to the global total of people consuming within that limit, again allowing for different rates of convergence and even a population base-year to be considered. This is in preference to the irresolvable complexity of assuming any inequality of rights.

With this calculus, C&C captures the goal focus of the UNFCCC process in a structure of reconciliation. It is a universal first order numeraire. From this it

becomes possible to go beyond the merely aspirational character of the current debate around the UNFCCC, to communicating the rationale and constitutional calculus of C&C.

THE LONG TERM PAST

Figure 1 shows data from ice cores for half a million years before industrialisation. Throughout this period, with natural sinks for CO₂, such as the oceans and the forests in balance with the natural sources, the level of atmospheric CO₂ concentration varied between 180 and 280 parts per million by volume (ppmv) averaging at 230 ppmv.

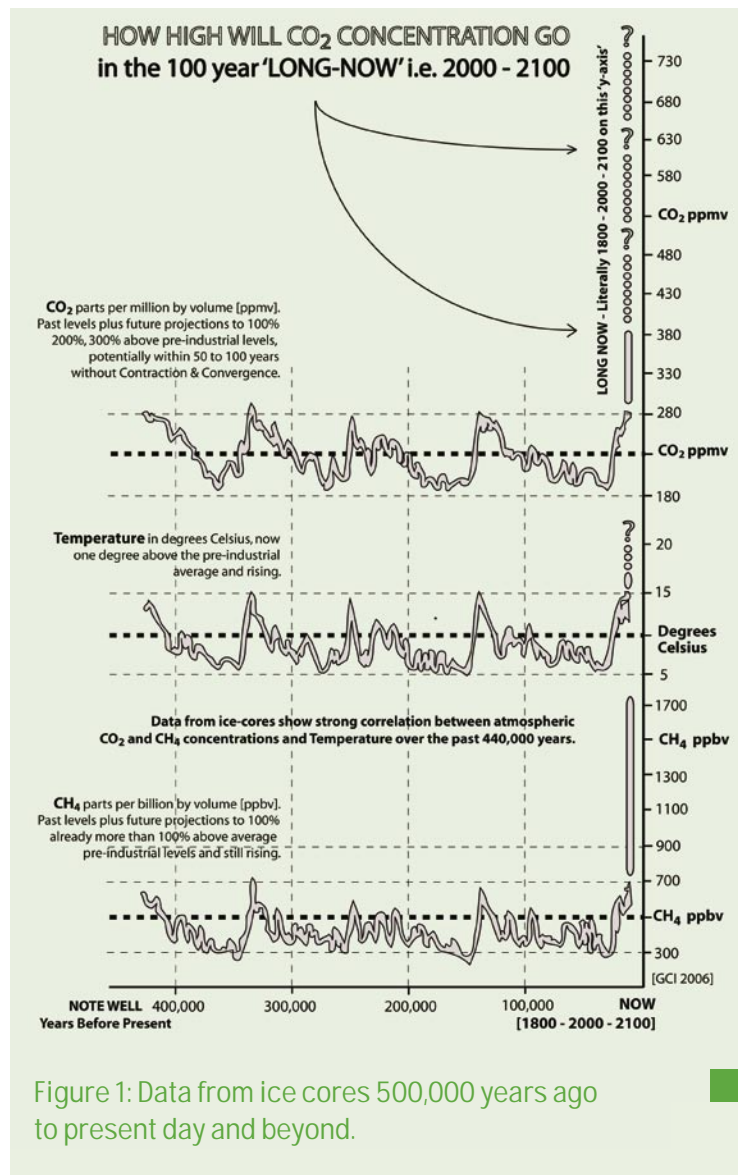
Since 1800 with the onset of industrialisation and fossil fuel burning, human emissions have caused the concentration of CO₂ to increase by over 40 per cent to 380 ppmv. The rise in ppmv CO₂ is higher and faster than anywhere in the historical record. This rise is because CO₂ emissions from human sources, particularly CO₂ from fossil fuel burning, are going to the atmosphere and accumulating. Furthermore, for the past 200 years, on average 50 per cent of any year's human emissions has remained in the atmosphere while the remaining 50 per cent has returned to the natural sinks.

“ Instead of 100 years, we now realise that to reduce human CO₂ emissions and other GHGs in the atmosphere to zero globally, we have only the next 50 years. ”

A slowly increasing fraction of these emissions in the atmosphere remain there, accelerating the rise in concentrations even more. Column one in Figure 2 (see overleaf) demonstrates that the average retention over the past decade has increased from 50 per cent to 60 per cent. This recognises that the capacity of the natural sinks for CO₂ capture is now gradually declining. If this continues unchecked as the graphics suggest, the rise in the concentration of atmosphere GHG will accelerate towards the level at which dangerous rates of rise translate to a climate change crisis that becomes unavoidable. To be UNFCCC-compliant, we need to enact C&C now to prevent the chaos that is otherwise inevitable.

THE SHORT TERM PAST AND FULL TERM FUTURE LIMITS

The UNFCCC objective is to avoid dangerous rates of climate change by stabilising concentrations and we are all both circumstantially and legally bound by this. Compliance is governed by the need for a finite answer to the questions: 'what is a safe GHG concentration value for the atmosphere?' and 'what is the scale of the full term emissions contraction event required to achieve it'?



Without answers, traditional evaluation of the economics of abatement and the social consequences is not possible. Because of weakening sinks, analysis now shows that to stabilise GHG concentration in the atmosphere below the level that prevents dangerous rates of climate change taking hold, requires a rate of overall emissions control that is faster than was previously assessed. Instead of 100 years, we now realise that to reduce human CO₂ emissions and other GHGs in the atmosphere to zero globally, we have only the next 50 years [IPCC AR4 and Hadley Centre, 2007].

As activities under the Kyoto Protocol show, unless we are visibly organising globally by a shared commitment not to exceed that safe concentration number, the probability increases that our collective efforts to avoid dangerous rates of climate change will be too little too late.

Already under Kyoto, the slight gain of CO₂ emissions avoided has been more than negated by more carbon accumulating in the atmosphere at an accelerating rate as the result of changes in the climate system as a whole. Consequently, a global arrangement for emissions control in future that is sufficient in the light of this is *sine qua non* for success. As the original authors of the UNFCCC understood at the outset, embracing this primary question of the sufficient, and indeed the proportionate response, is fundamental to the whole global engagement.

Figure 2: Charting the UNFCCC Objective & Principles, the Development Benefits of Growth versus the growth of Climate Change Related Damage Costs. (http://www.gci.org.uk/images/Proportionate_Response.pdf)

Columns one and two address the objective and principles of the UNFCCC. Columns three and four compare the development benefit of growth with the growth of climate damage and costs. The left hand side of each graph shows:

- ▶ Expanding fossil fuel emissions of CO₂, measured in billions of tonnes of carbon between 1800 – 2000.
- ▶ Rising concentration of atmospheric CO₂ as parts per million by volume (ppmv) between 1800 – 2000.

The key questions for integration are in four columns:

Column 1: Contraction and Concentration: what is a safe level of concentrations and, in the light of sink failure, how rapid must contraction be to avoid GHG concentration going too high in future?

Column 2: Contraction and Convergence: what is the internationally equitable agreement necessary to ensure this level is not exceeded?

Column 3: Contraction and conversion: what is the rate at which we must convert the economy away from fossil fuel dependency?

Column 4: Damage costs and insecurity: what is the environmental and economic damages trend associated with this analysis?

Each Row has a different level of Risk projected across the four columns:

- ▶ **C1 (bottom row) Acceptable risk:** global GHG emissions contraction complete by 2050 so concentrations end up around 400/450 ppmv with damages potentially still under control.
- ▶ **C2 (middle row) Dangerous risk:** global GHG emissions contraction complete by 2100 so concentrations keep going up through 550/750 ppmv with the illusion of progress maintained, while damages are going out of control.
- ▶ **C3 (top row) Impossible risk:** global GHG emissions contraction complete by 2200 so concentrations keep going up through 550/950 ppmv while the illusion of progress is being destroyed, damages costs are destroying the benefits of growth very quickly and all efforts at mitigating emissions become futile.

In each graph, different futures are projected on the right-hand side as scenarios or rates of change that are linked to the objective of the UNFCCC where three levels of risk for stabilising the rising concentration of CO₂ are understood in the light of the rising fraction of emissions that stays airborne.

See pages 20-21 for chart summary and link to animation

DAMAGES

We are still locked into causing global climate change much faster than we are mitigating it. Treating climate change as a global emergency is now long overdue and responding proportionately is vital. Unless the risk analysis is focused by this understanding, our best efforts will be in vain.

According to the reinsurers, the weather-related damages trend is growing at twice the rate of the global economy, see Figure 2, column four. To prevent this damage trend from running out of control, emissions need to contract to zero globally by 2050 if it is to be fast enough to stabilise atmosphere GHG concentrations at a level that prevents change accelerating uncontrollably. This is corroborated by the latest coupled climate modelling results from the UK Government's Hadley Centre, published in the IPCC Fourth Assessment. While the notion of global emissions control is certainly heroic, the only vector of the problem over which we can still posit direct control, is our GHG emissions and thereby the level to which GHG concentrations will rise in the future.

With this integrated approach we can more clearly visualise the challenge within a finite calculus of collective responsibility, and so keep focused on the imperative of solving the problem faster than we are creating it. Communicating and implementing this remains the primary challenge.

A FRAMEWORK-BASED MARKET

With the C&C operational framework, we can compare how much must be achieved globally to avoid dangerous climate change, with the widening margins of error in which we are becoming trapped.

“Treating climate change as a global emergency is now long overdue and responding proportionately is vital.”

There are more complicated 'alternatives to' and 'derivatives from' C&C. While defending the evolutionary nature of the politics, these have also attempted to be non-chaotic. They include for example the Kyoto Protocol, which seeks to interpose a partial and random market-based framework in support of the Convention. But such an evolutionary response to its objective and principles is guesswork by definition, and there is no evidence

VISIT: WWW.CLIMATEACTIONPROGRAMME.ORG



Satellite image of Hurricane Katrina, which has cost the south-eastern US billions of dollars. Damages from extreme weather events are increasing with climate change.

supporting claims that merely incremental activity at the margins will collectively generate a sufficient response fast enough to be effective. Until recently, the unguided inertia of evolutionary process under the Kyoto Protocol has been projected as *ne plus ultra*.

“C&C overcomes the stand-off where a one sided agreement is not an agreement and where half an argument is not, nor will ever become, a whole solution. It recognises that separate development is not sustainable development.”

The fact is that this is a lottery where everybody loses. This approach has obscured the global objective of safe and stable concentrations and the obviously urgent need for a trajectory to this objective by design. C&C starts with an integral response to the Convention's objective and allowing a full term framework-based market to result, where:

- Equity as collateral is the 100 per cent entirety of the emissions contraction event necessary for concentration stability.

- The social equity as the equal per person claim on the same 100 per cent throughout that event but softened by convergence.
- The commercial equity is the shares pre-distributed this way sum to the same 100 per cent and are tradable so as to accelerate the positive sum game for the emissions-free economy that must emerge if we are to prosper in the future.

In a nutshell, this integration puts rational principle ahead of stochastic practice in order that the former guides the latter. In practice this arrangement is flexible and will create a lucrative framework-based market for the zero emissions industries within a future structure that corrects and compensates for the asymmetric consumption patterns of the past while saving us all from dangerous rates of climate change.

In this context C&C overcomes the stand-off where a one sided agreement is not an agreement and where half an argument is not, nor will ever become, a whole solution. It recognises that separate development is not sustainable development.

In September 2007, the German Government recognised this when mediating between supporters and opponents of the Kyoto Protocol with C&C as the basis of the post-Kyoto agreement. Their urgent call for a whole and proportionate solution should be supported vigorously.

Aubrey Meyer grew up studying music in the *separate development of apartheid* South Africa. The proportionate response to global environmental limits now imposed by climate change emerged easily as the constitutional logic of Contraction and Convergence or 'C&C'. As in South Africa, the reality was that separate development was not sustainable development. The C&C model proportions this possibility as justice without vengeance and climate chaos.

In 1990, aged 43, he put brackets around a successful career in music and co-founded the Global Commons Institute (GCI) in London.

Since then he has campaigned at the United Nations negotiations on climate change to win acceptance of the management of global greenhouse gas emissions through a framework of scientific truth and political reconciliation, or 'Contraction and Convergence' (C&C).

The structure, imagery and animations of C&C created by Meyer over the years have been variously described as, "*morally and intellectually coherent*", "*beautiful*" and C&C itself as "*the single most elegant and important idea currently awaiting adoption by humanity*".



UNITED NATIONS FRAMEWORK CONVENTION on CLIMATE CHANGE

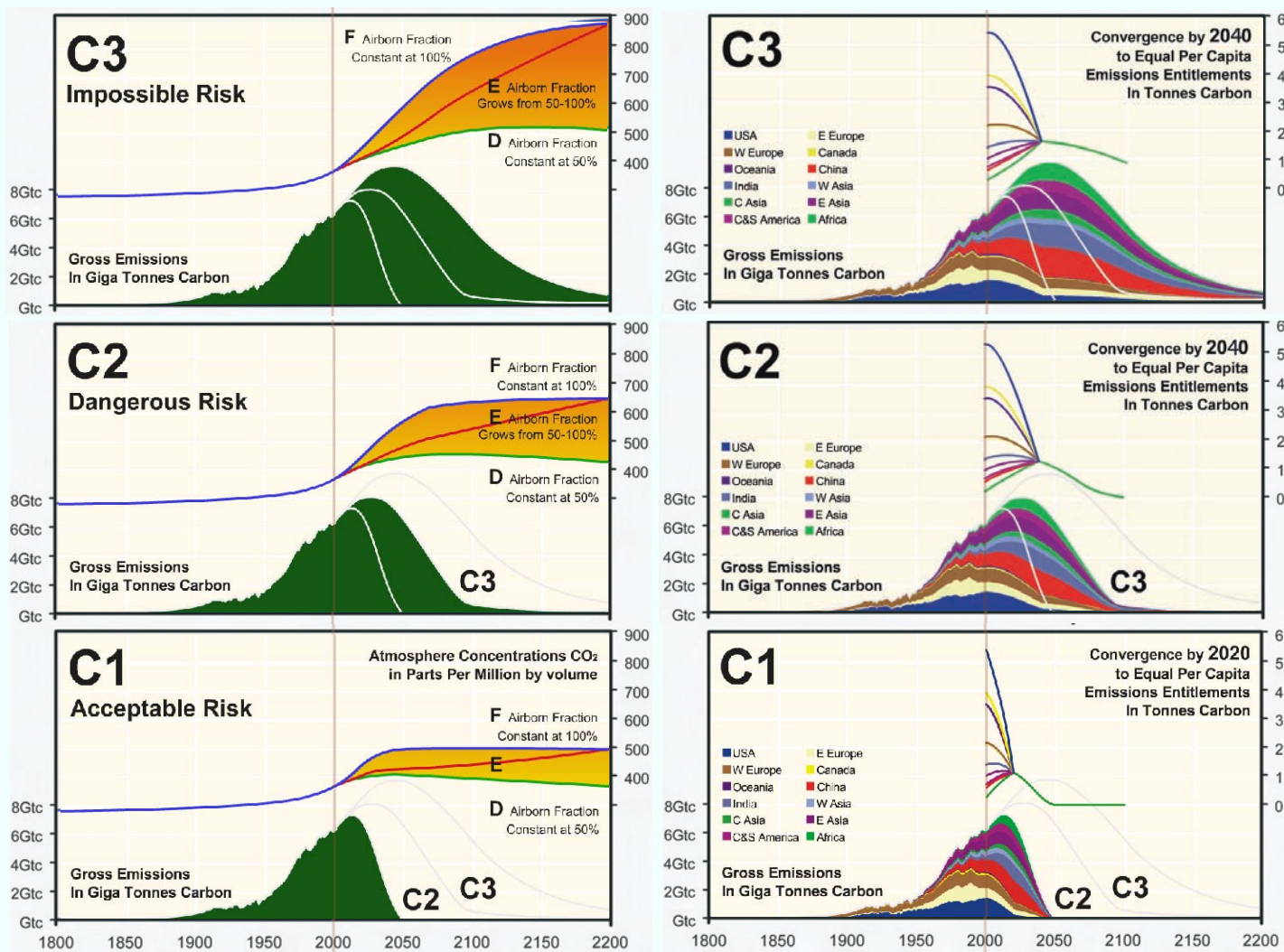
OBJECTIVE

Contraction & Concentrations

PRINCIPLES

Precaution Equity

Contraction & Convergence



This animation is on-line at: - www.gci.org.uk/images/Final_presentation.exe

This summarises Meyer's presentation [2006] to the Royal Institute of British Architect's [RIBA] Conference. *"It was 'the most powerful set of arguments and performance around climate change I have ever witnessed'."*

Jon Snow Channel 4 and RIBA fellow

See: - www.gci.org.uk/Movies/Contraction_and_Convergence_Promo.mpg

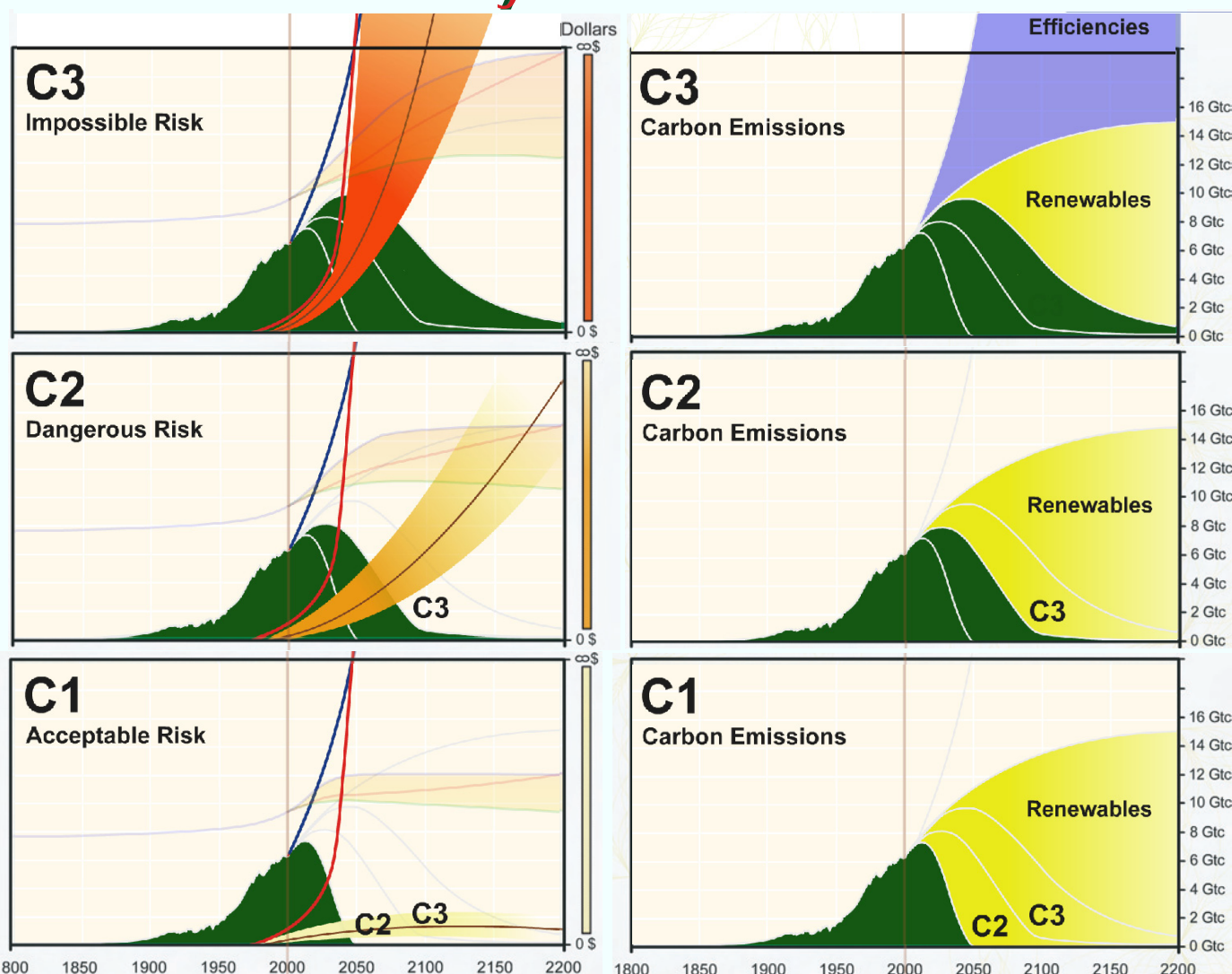
GLOBAL CLIMATE CHANGE DAMAGE-COSTS/DEVELOPMENT-BENEFITS

DANGEROUS CLIMATE CHANGE

Damage Costs & Insecurity

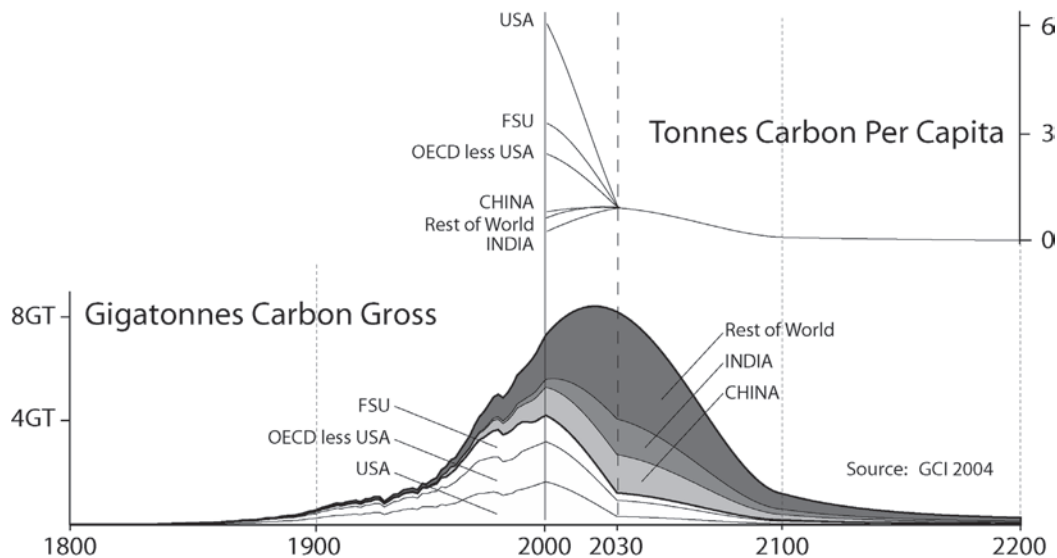
UN/SUSTAINABLE DEVELOPMENT

Contraction & Conversion



Touch buttons  to advance within scenes and logos  between them.

GCI BRIEFING: "CONTRACTION & CONVERGENCE"



This example shows regionally negotiated rates of C&C.
This example is for a 450ppmv Contraction Budget, Converging by 2030.

The Global Commons Institute [GCI] was founded in 1990. This was in response to the mainstreaming of global climate change as a political issue. Realising the enormity of the climate crisis, we devised a founding statement on the principle of "Equity and Survival". [1]

In November 1990, the United Nations began to create the Framework on Climate Convention [UNFCCC]. GCI contributed to this and in June 1992 the Convention was agreed at the Earth Summit in Rio. Its objective was defined as stabilizing the rising greenhouse gas [GHG] concentration of the global atmosphere. Its principles of equity and precaution were established in international law. Climate scientists had showed that a deep overall contraction of GHG emissions from human sources is prerequisite to achieving the objective of the UNFCCC. In 1995 negotiations to achieve this contraction began administered by the specially created UNFCCC secretariat.

Between 1992 and 1995 and at the request of the Intergovernmental Panel on Climate Change [IPCC], GCI contributed analysis highlighting the worsening asymmetry, or "Expansion and Divergence" [E&D] of global economic development. It became clear the global majority most damaged by climate changes were already impoverished by the economic structures of those who were also now causing the damaging GHG emissions. [2]

To create a sustainable basis on which to resolve this inequity, GCI also developed the "Contraction and Convergence" (C&C) model of future emissions. In 1995 the model was introduced by the Indian Government [3] and it was subsequently adopted and tabled by the Africa Group of Nations in August 1997. [4]

Negotiations for the Kyoto Protocol to the UNFCCC ran from 1995 until 1997. In December 1997 and shortly before they withdrew from these negotiations, the USA stated, "C&C contains elements for the next agreement that we may ultimately all seek to engage in." [5]

Since then C&C has been widely referenced in the debate about achieving the objective of the UNFCCC. In 2000 C&C was the first recommendation of the UK Royal Commission on Environmental Pollution in its proposals to government. [6] In December 2003 C&C was adopted by the German Government's Advisory Council on Global Change in its recommendations. [7] In 2003 the secretariat of the UNFCCC said the objective of the UNFCCC, "inevitably requires 'Contraction and Convergence'." [8] The Latin America Division of the World Bank in Washington DC said, "C&C leaves a lasting, positive and visionary impression with us." In 2004 the Archbishop of Canterbury took the position that, "C&C thinking appears utopian only if we refuse to contemplate the alternatives honestly." [9] In 2002, the UK Government accepted GCI authorship of the definition statement of C&C, recognising the need, "to protect the integrity of the argument."

This statement follows and is available in thirteen languages. [10] It has been adopted by the House of Commons Environmental Audit Committee and in part in the UN's forthcoming "Millennium Assessment." In 2005, the UK Government will host the next G-8 summit. The Government has already committed this event to dealing strategically with the problems of Africa and Climate Change. Numerous civil society and faith groups are now actively lobbying the Government to have C&C adopted as the constitutional basis for avoiding dangerous future climate change.

[1] <http://www.gci.org.uk/signon/OrigStatement2.pdf>

[2] <http://www.gci.org.uk/articles/Nairob3b.pdf>

[3] http://www.gci.org.uk/Archive/MegaDoc_19.pdf [p 116]

[4] http://www.gci.org.uk/nairobi/AFRICA_GROUP.pdf

[5] http://www.gci.org.uk/temp/COP3_Transcript.pdf

[6] http://www.gci.org.uk/Endorsements/RCEP_Chapter_4.pdf

[7] http://www.gci.org.uk/Endorsements/WBGU_Summary.pdf

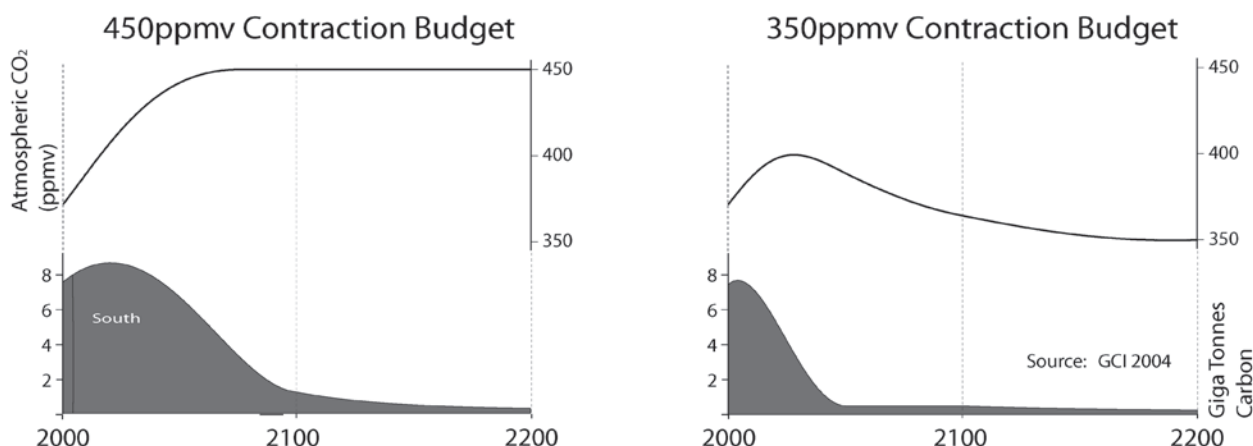
[8] http://www.gci.org.uk/slideshow/C&C_UNFCCC.pdf

[9] <http://www.gci.org.uk/speeches/Williams.pdf>

[10] <http://www.gci.org.uk/translations.html>

“CONTRACTION & CONVERGENCE” - DEFINITION STATEMENT

Negotiating Rates of Contraction

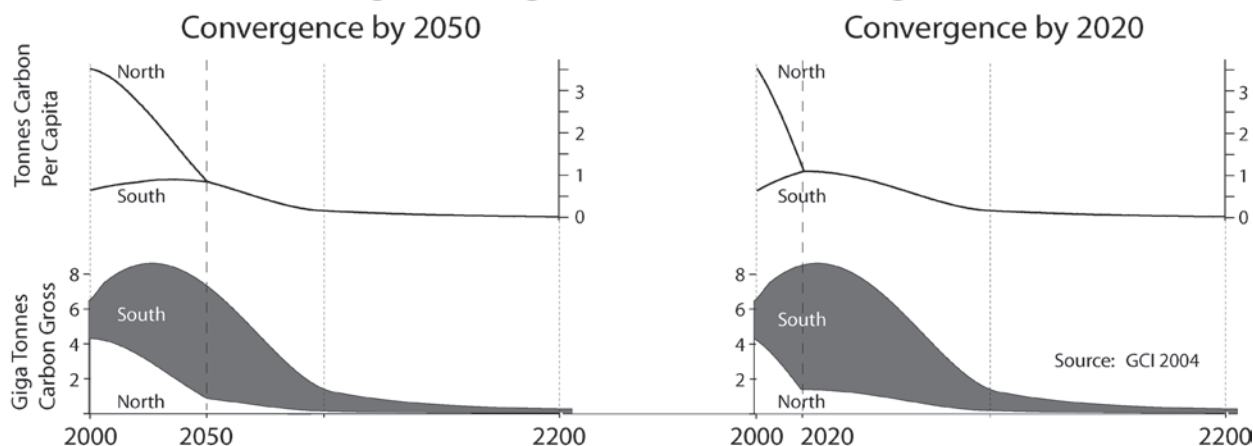


Annual Carbon Emissions contract over time to a sustainable level. This is the "Contraction Event".

The Choice of a "safe" CO2 stabilisation level determines the total tonnage of carbon to be burnt during the contraction event. Two examples of CO2 stabilisation levels are shown above, with their corresponding contraction budgets.

1. "Contraction and Convergence" (C&C) is the science-based, global climate-policy framework, proposed to the United Nations since 1990 by the Global Commons Institute (GCI). [1,2,3,4]
2. The objective of safe and stable greenhouse gas concentrations in the atmosphere and the principles of precaution and equity, as already agreed in the "United Nations Framework Convention of Climate Change" (UNFCCC), provide the formal calculating basis of the C&C framework that proposes:
 - * A full-term contraction budget for global emissions consistent with stabilising atmospheric concentrations of greenhouse gases (GHGs) at a pre-agreed concentration maximum deemed to be safe, following IPCC WG1 carbon cycle modelling. (See Image Two on page two - GCI sees higher than 450 parts per million by volume [ppmv] CO2 equivalent as 'not-safe').
 - * The international sharing of this budget as 'entitlements' results from a negotiable rate of linear convergence to equal shares per person globally by an agreed date within the timeline of the full-term contraction/concentration agreement. (GCI suggests [a] between the years 2020 and 2050, or around a third of the way into a 100 year budget, for example, for convergence to complete (see Image Three on page two) and [b] that a population base-year in the C&C schedule is agreed).
 - * Negotiations for this at the UNFCCC should occur principally between regions of the world, leaving negotiations between countries primarily within their respective regions, such as the European Union, the Africa Union, the US, etc. (See Image One on page one).

Negotiating Rates of Convergence

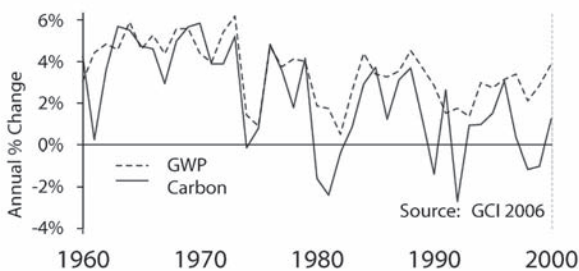


Per capita emissions around the World converge on equality by a negotiated "Convergence Date". Two examples of convergence are shown here, each within a 450ppmv contraction budget.

- * The inter-regional, inter-national and intra-national tradability of these entitlements in an appropriate currency such as Energy Backed Currency Units [5] should be encouraged.
- * **Scientific understanding of the relationship between an emissions-free economy and concentrations develops, so rates of C&C can evolve under periodic revision [6].**

3. Presently, the global community continues to generate dangerous climate change faster than it organises to avoid it. The international diplomatic challenge is to reverse this. The purpose of C&C is to make this possible. It enables scenarios for safe climate to be calculated and shared by negotiation so that policies and measures can be internationally organised at rates that avoid dangerous global climate change.
4. GHG emissions have so far been closely correlated with economic performance (See Image Four Page Three). To date, this growth of economies and emissions has been mostly in the industrialised countries, creating recently a global pattern of increasingly uneconomic expansion and divergence [E&D], environmental imbalance and international insecurity (Image 4 p 3).

GWP, Carbon Lockstep



Year to year percentage change of Gross World Product, GWP (measured in US\$) and Global Carbon emissions

5. The C&C answer to this is full-term and constitutional, rather than short-term and stochastic. It addresses inertial argument about 'historic responsibilities' for rising concentrations recognising this as a development opportunity cost to newly industrialising countries. C&C enables an international pre-distribution of these tradable and therefore valuable future entitlements to emit GHGs to result from a rate of convergence that is deliberately accelerated relative to the global rate of contraction agreed (Image 3 p 2).
6. The UK's Royal Commission on Environmental Pollution [7] and the German Advisory Council on Global Change [8] both make their recommendations to governments in terms of formal C&C. Many individual and institutional statements supporting C&C are now on record. [9,10] The Africa Group of Nations formally proposed it to the UNFCCC in 1997. [11] It was agreed in principle at COP-3 Kyoto 1997 [12]. C&C meets the requirements of the Byrd Hagel Resolution of the US Senate of that year [13] the European Parliament passed a C&C resolution in 1998 [13] the UK Parliament has reported on C&C [15, 16, 17].
7. This synthesis of C&C can redress the increasingly

dangerous trend imbalances of global climate change. Built on global rights, resource conservation and sustainable systems, a stable C&C system is now needed to guide the economy to a safe and equitable future for all. It builds on the gains and promises of the UN Convention and establishes an approach that is compelling enough to galvanise urgent international support and action, with or without the Kyoto Protocol entering into force.

- [1] <http://www.gci.org.uk>
- [2] <http://www.gci.org.uk/model/dl.html>
- [3] [http://www.gci.org.uk/images/CC_Demo\(pc\).exe](http://www.gci.org.uk/images/CC_Demo(pc).exe)
- [4] http://www.gci.org.uk/images/C&C_Bubbles.pdf
- [5] <http://www.feasta.org/events/debtconf/sleepwalking.pdf>
- [6] http://www.gci.org.uk/Animations/BENN_C&C_Animation.exe
- [7] <http://www.rcep.org.uk/pdf/chp4.pdf>
- [8] http://www.wbgu.de/wbgu_sn2003_engl.pdf
- [9] http://www.gci.org.uk/Archive/1989_2004
- [10] <http://www.gci.org.uk/consolidation/Sasakawa.pdf>
- [11] <http://www.gci.org.uk/papers/zew.pdf> [appendix C, page 16]
- [12] http://www.gci.org.uk/temp/COP3_Transcript.pdf
- [13] <http://www.gci.org.uk/briefings/C&C&ByrdHagel.pdf>
- [14] http://www.gci.org.uk/consolidation/UNFCCC&C_A_Brief_History_to1998.pdf [pp 27 - 32]
- [15] http://www.gci.org.uk/EAC/Climate_C&C_Report.pdf
- [16] <http://www.gci.org.uk/links/detail.pdf>
- [17] http://www.gci.org.uk/briefings/Consensus_Report.pdf

The charts on page 47 are stacked one above the other on the same horizontal time axis [1800 - 2200]. This helps to compare some of what is known about existing rates of system change with an underlying assumption in favour of a C&C arrangement being put in place.

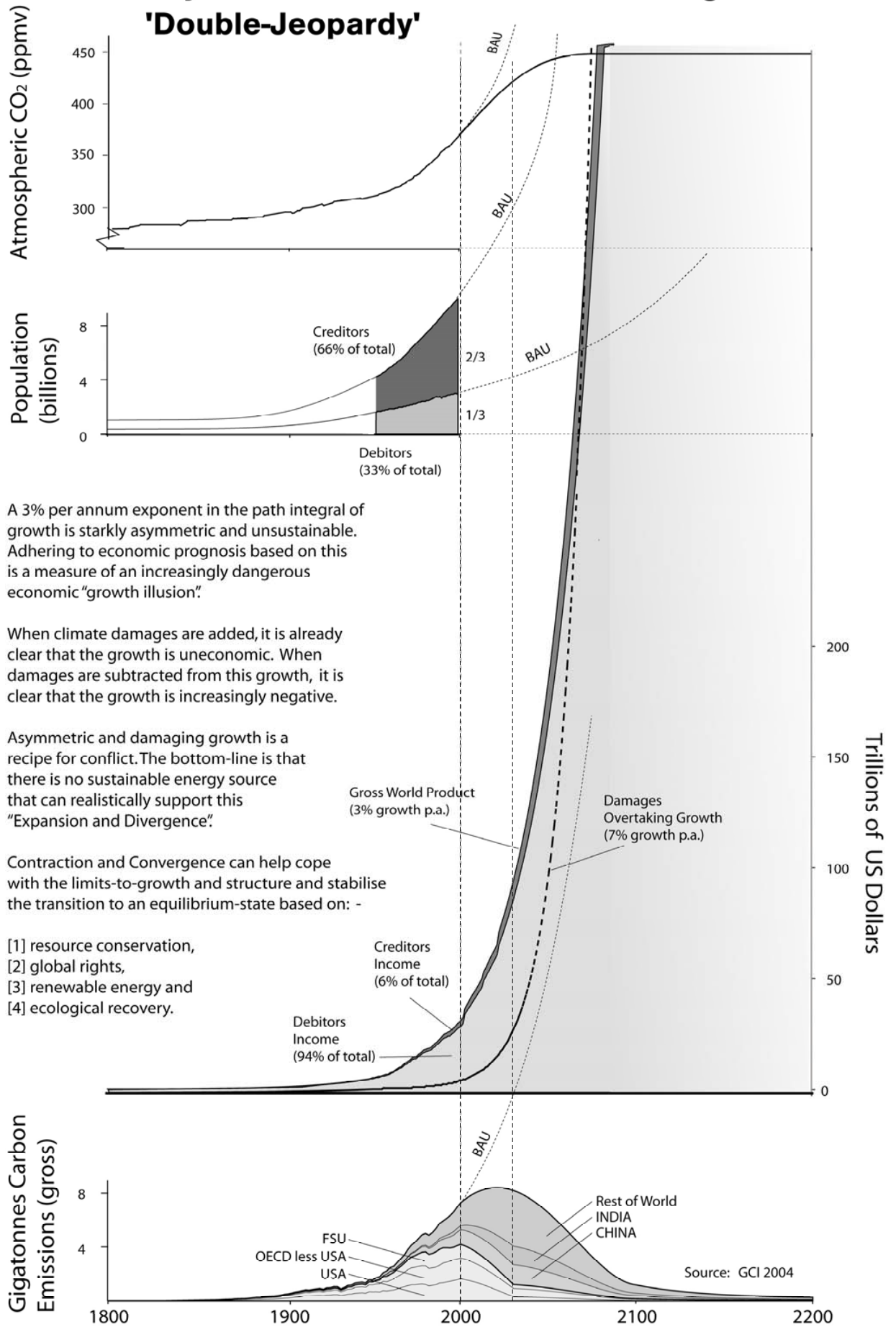
A new feature shown is the rate of economic damages from increasingly 'unnatural disasters' (measured as 'uninsured economic losses' by Munich Re) now rising at 7% per annum, twice the rate of global growth. Another is the devastating and worsening economic asymmetry of "Expansion and Divergence" (E&D). This shows a persistent pattern of increasingly dysfunctional economic growth. One third of population have 94% of global purchasing power and cause 90% of GHG pollution. [We call these 'debtors']. The other two thirds, who live on less than 40% of the average global per capita income, collectively have 6% of global purchasing power and a 10% share of GHG pollution. [We call these 'creditors'].

To escape poverty, it is creditors who embody the greatest impulse for future economic growth and claim on future GHG emissions. But this group also has the greatest vulnerability to damages from climate changes.

Most institutions now acknowledge that atmospheric GHG stabilization, "inevitably requires Contraction and Convergence". However, some of the response to C&C, sees it merely as 'an outcome' of continued economic growth with only tentative acknowledgement of the damages and little comprehension of E&D.

While C&C is not primarily about 're'-distribution, it is about a 'pre'-distribution of future tradable and valuable permits to emit GHGs. Its purpose is to resolve the devastating economic and ecological imbalance of climate change. GCI's recommendation to policy-makers at the United Nations is for the adoption of C&C globally for ecological and economic recovery as soon as possible.

Asymmetric Growth & Climate Damages 'Double-Jeopardy'



"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 precautionary 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 and Convergence'. The US insistence on India and China accepting targets was not always merely a negotiating tactic. The idea of per capita equity in the Contraction and Convergence analysis of the Global 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 vote 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 time-tables for equitable emissions reductions overall. This means convergence at sustainable parity values for consumption on a per capita basis globally."

Indian Government COP 1 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 capita basis. According to the UN Charter, everybody is born equal, and has inalienable rights to enjoy modern technological civilization."

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 equity"

THE AFRICA GROUP Kyoto COP 3 1997



"It does seem to us that the proposals by India and others who speak to Contraction and Convergence are elements for the future, elements perhaps for a next agreement we may ultimately all seek to engage in."

UNITED 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."

European Parliament Resolution 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. With this proposal, emerging nations with rapidly expanding economies could be on board the global climate negotiations scheduled for 2009."

Angela Merkel President of Germany 2008



"The international climate regime should be based on principles of equity, such as long-term convergence of emission levels per capita in the various countries."

Nicholas Sarkozy President of France 2008



"An emerging proposal here that is important and helpful is a broad long-term commitment to equal per capita emissions. It's a tough proposal. If we take it as part of the progressive agenda to move to that it will be helpful in bringing the world together as it brings the developing countries as part of this effort with an ethical and political commitment, not immediate, but towards convergence in terms of per capita emissions."

Kemal Dervis Chief Administrator UNDP



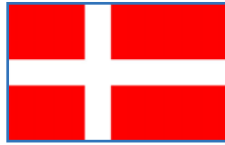


"Sweden strives for global emissions converging to equal per capita for all."

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 emissions on a per capita basis."

Olivier Delouze

Belgian Environment Minister 2000



"If we agree to per capita allowances for all by 2030 [so that global emissions stay below 450 ppm 2o global temperature rise] then assigned amounts for Annex One countries would be drastically reduced. However, because all countries would have assigned amounts, maximum use of global emissions trading would strongly reduce the cost of compliance. 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 than as presently contained in the Kyoto Protocol are urgently required and these must be organised as universal equal entitlements as engraved in the principles of the Contraction & Convergence Framework."

KENYA GOVERNMENT COP 11 2005



"Conference recognises the urgent need for action to mitigate climate change given the potentially disastrous 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 and 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

Liberal democrats



"I urge the UK Government to provide leadership on climate change by committing itself to Contraction and 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 Policy Director Plaid Cymru



"The Kyoto Protocol says nothing about the future beyond 2012. To address that timescale the Green Party advocates the adoption by the UNFCCC of a framework of Contraction and 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."

**Green Party Real Progress
Climate Policy Statement**

"To make provision for the adoption of a policy of combating climate change in accordance with the principles of . . .

"Contraction and Convergence" and for connected purposes."

Colin Challen Chair All-Party Group Climate Change

Any framework which involves radical emission reductions would in practice resemble the Contraction and Convergence approach advocated by the Global Commons Institute. Indeed, in terms of domestic policy aims, the UK Government has already implicitly accepted this approach in adopting the 60% carbon reduction target for 2050; and it is therefore inconsistent not to adopt such an approach internationally. We do not see any credible alternative and none was suggested in evidence to our inquiry. We therefore recommend that the UK Government should formally adopt and promote Contraction and Convergence as the basis for future international agreements to reduce emissions.

Environmental Audit Committee House of Commons

"The Government should press for a future global climate agreement based on the Global Commons Institute's "Contraction and Convergence" approach as the international framework within which future international agreements to tackle climate change are negotiated. These offer the best long-term prospect of securing equity, economy and international consensus."

Royal Commission on Environmental Pollution

"Contraction and Convergence helps greatly. It is inclusive and makes clear what needs to be achieved. Without such a shared model, there will not be the necessary relationships that create the new and exciting possibilities and the trust for shared action."

Chris Mottershead Distinguished Advisor Energy & Environment British Petroleum plc

"Almost any conceivable long-term solution to the climate problem will embody a high degree of contraction and convergence. Atmospheric concentrations of GHGs cannot stabilize unless total emissions contract; and emissions cannot contract unless per capita emissions converge."

John Ashton UK Climate Ambassador Pew Report

"The solution to climate change requires a globally equitable model of emissions reductions. The Contraction and Convergence model calls for already large polluting countries to cut their emissions, while newly industrialising countries increase theirs, up to the point that we converge at a sustainable level. "

Ken Livingstone Former Mayor of London

"I admire GCI's Contraction and Convergence model and their now nearly twenty year crusade by to get it established as the international basis of policy to meet the objective of the UN Climate Treaty.

Their presentation of it is a dauntingly hard act to follow."

Nick Butler Director Cambridge Energy Studies

"I support the concept of Contraction and Convergence as does the Environment Agency"

Sir John Harman Chairman UK Environment Agency

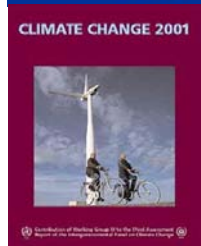
Attempts to deny C&C's pure logic - ecological, political, social and human - are ultimately futile. Nature won't be fooled. Acceptance of C&C brings not imprisonment, but new unfound freedom; 'Justice without Retribution,' as Nelson Mandela once demanded.

Dave Hampton Carbon Coach

"Per capita 'Contraction and Convergence' to the same fossil-carbon emissions should be the criteria for allocating emission reduction efforts among developed and developing countries to ensure comparability of efforts as agreed in Bali."

**An ambitious post-2012 climate change agreement
UK Institute of Physics**





"Business and government cannot solve the problem alone. Solutions must be global and participation of all major emitters is essential. Companies cannot determine the scale of needed investment without a stabilization threshold for greenhouse gas concentrations. The short-term "patchwork" of the Kyoto Protocol is not cost-effective. A global long term, market-based policy framework in a new partnership with China, India, Brazil, South Africa and Mexico is needed. Emissions rights with common metrics that can be adjusted over time to reflect evolving developments will ensure that a truly global solution to the problem is achieved."

G8 Climate Change 2005 Business Leaders

"A formulation that takes the rights-based approach to its logical conclusion is that of Contraction and Convergence" [GCI]

IPCC WG3 Third Assessment Report

"The global framework develops so that CO2 concentration in the atmosphere is held at or below 400 ppmv. This long-term climate objective is met by ensuring that short-term targets are linked to and consistent with it, with a gradual transition towards a system of equal per capita rights to use the absorptive capacity of the atmosphere."

Stephen Byers MP International Climate Task Force

"The Byers report refers to a new basis of equity and common, but differentiated, responsibilities. We need environmental equity with a cap and trade programme. Contraction and Convergence is the name that we must give to it. We must link that battle with the battle against poverty."

UK All-Party Parliamentary Group Climate Change

"Policy-makers need consensus on a global framework for climate stability based on principles of precaution and equity such as Contraction and Convergence."

UNEP Financial Initiative

There is no other method of rationally and ethically guiding global reductions in greenhouse gas emissions."

Royal Institute of British Architects 2006

"The UIA commits itself to campaigning for the most effective outcome possible at COP15 through advocacy of an emission limitation agreement based on the principle of contraction and convergence."

International Union Architects Turin Conference 2008

There is a desperate need to create an effective policy for preserving healthy ecosystems by providing incentives and the resources to do so. The Contraction and Convergence approach promoted by UN is a well thought through and potentially powerful approach which also addresses fair distribution.

Peter Head Director ARUP

"The per capita approach is generally referred to as 'contraction and convergence' (Global Commons Institute 2000) and has figured in the international debate for some time. It has been promoted by India and has been discussed favourably in Germany and the United Kingdom (German Advisory Council on Global Change 2003; UK Royal Commission on Environmental Pollution 2000). Recent reports have shown increasing support for this approach internationally: see, for example, Stern (2008) and the Commission on Growth and Development (2008).

Ross Garnaut Australian Government Economist

"An international agreement is essential. It must be based on the criteria of effectiveness, efficiency and equity. Effectiveness demands a long-term global goal capping 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 will require developed countries to cut by around 80%."

Nicholas Stern UK Government Economist

"Contraction and Convergence - The logic is compelling. It is a formula for future global emissions that could, without exaggeration, save the world. Some environment groups such as Greenpeace see the formula as a dead-end. They are profoundly wrong."

Vote for New Statesman best climate framework

Results January 2008 . . .

2% are saying Kyoto Protocol

81% are saying Contraction and Convergence

12% are saying Kyoto2

5% are saying Greenhouse Development Rights



"A framework involving technology together with social, political and economic change with quantifiable targets is the only way forward. This is why we support the well-known concept of "Contraction and Convergence" (C&C) as proposed by the Global Commons Institute as the basis for the agreement.

It satisfies developing countries' demands for equity and US demands that major developing countries such as China and India be involved in any targets."

Scientists for Global Responsibility



"The WBGU recommends emissions rights be allocated according to the "Contraction and Convergence" approach."

German Advisory Council



"I note what you say about Aubrey Meyer's Contraction and Convergence proposal and I agree that in the fight against climate change C&C makes an important contribution to the debate on how we achieve long-term climate stability taking account of the principles of equity and sustainability."

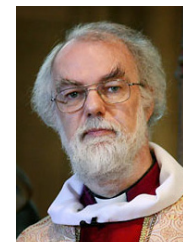
Tony Blair UK Prime Minister 1997 - 2007



"The Churches can give their backing to Contraction and Convergence publicly and unanimously because at its core, it is just. It appears Utopian only if we refuse to contemplate the alternatives honestly."

Dr Rowan Williams

Archbishop of Canterbury



"Climate change is likely to impose massive economic costs. The case for being prepared to spend huge resources to limit it is clear as the cost will be repaid many times over by the avoidance of disaster. The developed world does not have the moral right to increase the risk of flooding in Bangladesh. Long term the only sound strategy is that of contraction and convergence cutting greenhouse emissions to the point where they are shared equally, worldwide, on a per capita basis."

Lord Adair Turner

Chairman of Climate Committee



"We believe contraction and convergence is the best way forward because it recognises that growth in energy use in developing countries will happen. Even if we could achieve a reverse in trends of energy use in developed countries, there is not yet anywhere enough alternative and renewable energy available to get us off of fossil fuels fast enough. For the developing world the situation is even more urgent because that is where most energy intensive industrial and manufacturing activity is heading."

Tim Smit

CEO The EDEN Project



"An approach receiving significant attention is Contraction and Convergence, the science-based global climate-policy framework proposed by the Global Commons Institute with the objective of realizing safe and stable greenhouse gas concentrations in the atmosphere. It applies principles of precaution and equity, principles identified as important in the UNFCCC but not defined, to provide the formal calculating basis of the C&C framework."

Bob Watson

Former Chairman IPCC





"Contraction and Convergence - and its mechanism for financing sustainable development is the only proposal so far which is global, equitable and growth-oriented."

Congressman John Porter Chair, GLOBE USA



"The idea of 'Contraction and Convergence' is destined to be one of the most important principles governing international relations in the 21st century. It is a powerful ethic that incorporates global justice and sustainability and thereby bridges the dominant concerns of the last century and this one. It is the only way to accommodate the interests, ethical and economic, of developing countries and rich countries in the struggle to find a solution to the most important environmental problem facing the world."

**Dr Clive Hamilton
The Australia Institute**



"The approach of contraction and convergence presents a new economic development paradigm for the twenty first century and beyond."

**Mrs. Rungano Karimanzira
Chair, Africa Group**



"The most realistic way to bring about the required reduction in ghg emissions (which will have the combined effect of reducing the damage imposed on the insurance industry and encouraging the transition to renewable energy) is that proposed in the concept of Contraction and Convergence."

UK Chartered Insurance Institute

**THE CHARTERED
INSURANCE INSTITUTE**

"Any political solution to climate change will need to be based on reductions in emissions, otherwise known as contraction. As the climate is owned by no one and needed by everyone, we will also have to move towards equally sharing the atmosphere, known as convergence. Collective survival depends on addressing both."

World Disasters Report 2000 International Red Cross/Crescent



"The vision of 'Contraction and Convergence' combines ecology and equity most elegantly."

Heinrich Boll Foundation



"The assiduous campaigning over the last decade by the Global Commons Institute - based on its idea of 'contract and converge' - under which the rich nations undertake to reduce emissions even as developing nations are permitted to grow their emissions until such time as per capita emissions converge at the same level, has given this kind of approach some real credibility. So, too, has the readiness of developing countries such as China, Brazil, Indonesia and Argentina to accept emissions targets for their own counties - not least because they are already beginning to feel the impacts of climate change. The real strength of this approach is that it is based upon a trading system, with rich nations needing to purchase additional carbon credits from poorer nations."

**Jonathon Porritt
Forum for the Future**



"There are a number of measures (of varying scale) that can be used to reduce the amount of CO2 that is being emitted, these include: - Contraction and convergence conceived by the Global Commons Institute (GCI) in the early 1990s consists of reducing overall emissions of GHGs to a safe level, 'Contraction', where the global emissions are reduced because every country brings emissions per capita to a level which is equal for all countries, 'Convergence'."

BMA 2008

"How can the impact of climate change be reduced?"



"CHC advocates a global framework for action with 'contraction and convergence' a favoured option, and seek the means to influence key decision makers."

Climate and Health Council

"Admiration is frequently expressed, regarding the elegance and simple logic of Contraction and Convergence and it has been widely supported by policy makers as a basis that should underlie the next stage of policy formulation."

Sir John Houghton,
Former Chair IPCC Working Group One



"Many governments around the world have accepted the concept of Contraction and Convergence as the only equitable response mechanism to the threat of climate change."

Grace Akumu
Director, Climate Network Africa



In the end, they will need to give much weight to equal per capita rights of emissions. They will need to allow long periods for adjustment towards such positions—within the over-riding requirement to stay within an environmentally responsible global emissions budget. One possible way of bringing these two elements together would be the "contraction and convergence" approach that has been discussed favourably in Germany and India.

Ross Garnaut
Climate Strategist Australian Government



"I not only support the C&C concept, I find it inconceivable that we will avert climate catastrophe without a regime built on some variation of this approach. In the debate about climate change, an impression has been created that the problem is too daunting and complex to prevent. Contraction and Convergence provides a way forward that is both fair and feasible."

John Ritch
World Nuclear Association



"It is absolutely remarkable that the idea of Contraction and Convergence has taken such a firm hold worldwide in such a short space of time."

Tessa Tennant, Chair Association for Sustainable & Responsible Investment in Asia



"Contraction and Convergence is an extremely powerful idea and we are moving remorselessly towards it."

Michael Meacher
Former UK Environment Minister



"... an approach receiving significant attention is Contraction and Convergence [C&C] - a science-based global framework whereby total global emissions are reduced (contraction) to meet a specific agreed target, and the per capita emissions of industrialized and the developing countries converge over a suitably long time period, with the rate and magnitude of contraction and convergence being determined through the UNFCCC negotiating process. It applies principles of precaution and equity; principles identified as important in the UNFCCC but not defined."

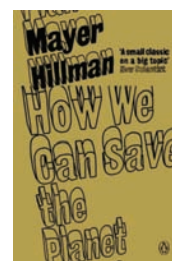
World Bank on
Contraction and Convergence



THE WORLD BANK

"A brilliant, imaginative and simple means of reaching a just global agreement on emission reductions is called Contraction and Convergence (C&C). It was first proposed by the Global Commons Institute (GCI) in 1990. Recognition of its unique qualities as a framework for combating climate change has grown at an astonishing rate since that date."

Mayer Hillman
Author of How We Can Save the Planet



"In the light of the long-term perspective two basic requirements must be met: Stabilisation of greenhouse gases in the atmosphere at a level in accordance with the overall objective of the Climate Change Convention. A fair distribution of rights and obligations, by establishing the concept of per capita emission rights for all countries, as proposed in the 'Contraction and Convergence' scheme."

David Hallman
World Council of Churches





"The Scientific Case for Setting a Long-Term Emission Reduction Target. The framework of this study builds on the RCEP work which uses a contraction and convergence methodology. Contraction and convergence is an international policy framework for dealing with global climate change developed by the London-based Global Commons Institute."

DEFRA on C&C



UK building industry leaders wrote to Mr Blair saying this framework-based market is contraction and convergence. "We highlight the point made by the Corporate Leaders Group on Climate Change that getting the right global climate change framework in place is the most urgent action. The Contraction and Convergence Framework, accepted by the UN and by the Royal Commission on Environmental Pollution (amongst others) could well provide a fair structure for the engagement of all nations."

CIBSE and ICE on C&C



"The leading model advocating equal per capita emissions rights globally is 'Contraction & Convergence', to which all equity frameworks and proposals owe their existence."

Christian Aid



Tearfund wrote to Mr Blair saying this framework-based market is contraction and convergence. "The C&C framework is global, long-term, effective, and, importantly, equitable, without which it would stand no chance of being agreed. From the outset developing countries have a guarantee of equitable allocations and assurance as to when this would happen."

TEARFUND on C&C



Contraction & Convergence (C&C) provides a simple framework for globally allocating the right to emit carbon in a way that is consistent with the physical constraints of the biosphere.

The approach rests on two simple principles contraction: reducing humanity's emissions to a rate that the biosphere can absorb convergence: distributing total emissions so that each person ultimately gets the same portion of the 'global budget'. The extension of C&C to all demands on the biosphere is referred to as Shrink & Share.

Jonathon Loh GFN - WWF on C&C



"To minimise the danger of global temperature rises exceeding 2°C, a level considered dangerous, a concentration of no more than 400ppm of CO2 in the atmosphere is recommended [Byers Report] . . . and the EU's burden of responsibility to meet this science-based cap should be apportioned on the basis of equal global rights to carbon consumption."

Greenpeace on Byers Report



"A recommendation in the Byers report is to build on the global climate change framework of both the UN Framework convention on climate change. It refers to a new basis of equity and common, but differentiated, responsibilities.

We need environmental equity with a cap and trade programme.

Contraction and convergence is the name that we must give to it.

We must link that battle with the battle against poverty."

Colin Challen MP

Byers Report is C&C



"Thanks very much for passing on the very nice animation of C&C and risk. One of the things we will be looking at in my newly formed group here at Victoria University in Wellington is burden sharing issues, so the new work on C&C in the UK is of interest to me."

Martin Manning

IPCC Technical Support Unit WG1

The idea of contraction and convergence is particularly persuasive as it addresses two key threats to humanity, climate change and unequal development, in one framework.

Local Government Information Unit UK

"The commission might have added that contraction and convergence is comprehensive, scientifically based and equitable, unlike the Kyoto Protocol, and that contraction and convergence meets every single objection raised by the United States to Kyoto."

Lord Bishop of Hereford

Aubrey Meyer has done an amazing job and has shown extraordinary persistence and ingenuity in working out a scheme of this kind, and I very 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 see global arrangements 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

Contraction and Convergence includes the identification of a fixed level for stabilisation of greenhouse gas concentrations, and comprehensive global participation. Any framework that incorporates long term targets can offer countries greater certainty about their national targets and provide a clear signal to allow business to plan ahead and help drive investment in new and better technologies.

Number 10 Downing Street Website

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

Sunand Prasad President of RIBA

"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

Any framework which involves radical emission reductions would in practice resemble the Contraction and Convergence approach advocated by the Global Commons Institute. Indeed, in terms of domestic policy aims, the UK Government has already implicitly accepted this approach in adopting the 60% carbon reduction target for 2050; and it is therefore inconsistent not to adopt such an approach internationally. We do not see any credible alternative and none was suggested in evidence to our inquiry. We therefore recommend that the UK Government should formally adopt and promote Contraction and Convergence as the basis for future international agreements to reduce emissions.

**Environmental Audit Committee,
"The International Challenge of Climate Change"**

"My colleagues and I at the Royal Commission on Environmental Pollution would like to express our thanks to you and GCI for your remarkable pioneering work in establishing Contraction and Convergence as it is the basis upon which so much of our own work has been established."

Sir Tom Blundell; Chairman, RCEP

"Contraction and 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"

"One approach on the table is contraction and convergence — rich countries contracting their emissions quickly, while developing countries are given some room to grow on condition they make cuts later."

The AGE Reporting on the G8 2008 in Toyako Japan

"The British government has modelling under way in the most favoured method - contraction and convergence - but there is no diplomatic agreement that this is the best way to proceed."

The Guardian Reporting on the G8 2008





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 potential side effects. One is that the scheme might eventually do away with world poverty and the north-south divide. Not all aspects of the proposal should displease the conservatives, for by including every human being in existence under its umbrella it obliterates concern about 'free riders' in the developing world that exists under Kyoto.

Tim Flannery Author of The Weather Makers



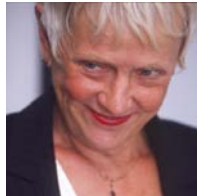
When I was RIBA President we looked at Kyoto and saving 60% by 2050 looked a reasonable start. But the thing that attracted about Contraction and Convergence or C&C was that it looked at the global dimension and what is a 'fair share' of carbon emissions for your country C&C gives a framework within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

Jack Pringle Former President of RIBA



The fundamental attraction of Contraction and 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 peoples of the world will mortgage their future on a futures market of trading permits.

Prof Paul Jowitt President Elect ICE



"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."

Angela Mawle CEO Public Health Association



"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 groups will offer the hope and inspiration necessary to counter global warming, and so act in accordance with our obligations."

Robin Stott Co-Chair Climate and Health Council



"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."

Lorna Walker CABI Commissioner



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 together again. We need to get our own politicians to press our own governments to do this. We need to get our own government to press Europe to do this. We need to use our formidable clout as Europe to get it delivered by the UN. The great thing about C&C is 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.

Jon Snow Channel Four TV News



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

Professor Michael Mainelli Director Z/Yen

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."

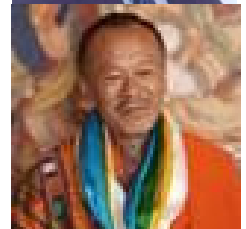
**His Excellency Mr. Hamid Karzai
President of the Islamic Republic of Afghanistan,**



**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,**



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 inevitably 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, concentration-target-based framework endowed by GCI from the outset, as accepted for example by DEFRA:

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] adopted C&C. A DVD commissioned by the Group presenting Contraction & Convergence was distributed 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?PagelId=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

COMMENTS

Professor Brendan Mackey Australian National University

It is now axiomatic that human-induced climate change is the gravest threat to global security and the future and survival of humanity on Earth. However, the world community has struggled to reach consensus on the framework for an international agreement that will lead to a satisfactory coordinated response. Rather, negotiations are constantly derailed by short-term concerns, vested interests, and conventional thinking.

Aubrey Meyer through his work with GCI has developed a framework for international cooperation that addresses the fundamental impediments to successful negotiation of a new climate change agreement. This approach is called Contraction & Convergence (C&C), and it remains a singular beacon of sanity in the madness of climate change treaty negotiations and is humanity's best hope for a global deal that is the real deal – one that will solve the problem.

As with all great ideas, C&C is deceptively simple, addresses the root causes of the problem, and is recognized as a grave threat to those vested interests who fear the climate change problem's successful resolution because of the fundamental changes it will wrought on our economic status quo.

This is the crucial year for climate change as it culminates in the Copenhagen conference and hopefully the generation of a new agreement for the next commitment period. It is absolutely critical that C&C's message is heard loud and clear throughout the year in the lead up to Copenhagen, as well as during the conference. Also, it is likely that Copenhagen will not deliver the definitive answer the global situation demands and that key issues will continue to be negotiated in the coming years – therefore requiring continuation of the C&C campaign. I am convinced that GCI's time will come, and that Aubrey Meyer's contribution will prove to be of historic significance.

The Archbishop of Canterbury

"C&C appears utopian only if we refuse to contemplate the alternatives honestly."

Dr. Julian Salt Director of Climate Solutions

"Aubrey Meyer is the most courageous and brilliant climate researcher I have ever met. He is willing to say what others merely think. He is quite fearless of any audience and the most eloquent of speakers because he knows that ultimately the concept of Contraction and Convergence [C&C] is indestructible and will in the fullness of time be adopted in some form by the UNFCCC. He has developed his arguments over twenty years with a minimum of funding and has refused to compromise his position in any way for financial gain or glory. He is tireless in his research and quest to understand every nuance of the climate debate. It has been an honour for me to have known and worked with such a brilliant mind and such an honest person as Aubrey. He has much support from very well placed and respectable people and deserves global recognition for his work. He is quite simply a modern-day genius who will one day be respected for his vision and beliefs. He should be considered for the Nobel Peace prize as his efforts ultimately will save the planet from the ravages of man-induced climate change."

UNITAR Seminar

"Meyer is arguably the world's leading carbon strategist" and "the Mandela of Climate Change" for demonstrating the end of global apartheid.

Nobel Nomination by UK All Party Parliamentary Climate Change Group

"We have nominated Aubrey Meyer for the Noble Peace Prize 2008 because we believe that it would, now, be right to recognise the man who has done most to provide an international solution to averting the disaster of global warming. He realised that we need a comprehensive climate change framework if we are to protect our planet and founded the GCI in 1990 to develop just such a framework known as '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. If his initiative was recognised now then it would send exactly the right message to world leaders as we consider what comes after the end of the Kyoto round in 2012."

Michael Meacher, the UK Environment Minister [2001 - 2003]

"if ever there was an initiative that deserved recognition and support, it is the brilliant and relentless campaign waged by this fiercely independent, creative and apparently tireless individual."

Andrew Lees Memorial Award - 1998

"Aubrey Meyer, almost single-handedly and with minimal resources, has made an extraordinary impact on the negotiations on the Climate Change Treaty, one of the most important of our time, through his campaign for a goal of equal per capita emissions, which is now official negotiating position of many governments, and is gaining acceptance in developed and developing countries alike."

The Schumacher Award - 2000

"Aubrey Meyer set up his Global Commons Institute (GCI) in 1990, with minimal resources, to campaign to bring the threat of global warming to the attention of the public and to policy makers. For over ten years, with great determination and meticulous attention to scientific detail, he has presented his case counteracting the arguments put forward by corporate interests. Of special significance is his formulation of 'contraction and convergence', a strategy for fairly sharing the rights to emit carbon dioxide worldwide. This is increasingly recognised as the most logical and effective way of preventing climatic catastrophe while promoting justice and equity. It has made an extraordinary impact on the Climate Change Treaty negotiations."

A Findhorn Fellowship 2004

"Aubrey Meyer is a professional violinist who has largely bracketed his music career to address the global challenge of climate change. Having attended the first UN meetings on the subject in the early 90's, he has since fully engaged with the issue and developed the 'Contraction and Convergence' model as an antidote to it. He created and directs the Global Commons Institute in London as a vehicle to advance his formula to virtually all who will listen. He presented it here at the Restore the Earth conference in 2002. Its genius lies in its capacity prospectively to reduce greenhouse emissions by the 60-80% that the UN IPCC (International Panel on Climate Change) say is required to minimise the likely devastating effects of global warming. His views are increasingly endorsed by prominent members of the British establishment. I hope you join me in welcoming Aubrey to the Fellowship and in supporting his remarkable, indeed heroic, initiative. Aubrey Meyer is arguably the world's foremost carbon strategist and to global warming what Michael Moore is to the US electoral saga - a delightful maverick who just might 'save the day'."

City of London Life-Time's Achievement Award - 2005

"From the worlds of business, academia, politics and activism, Aubrey Meyer has made the greatest contribution to the understanding and combating of climate change having led strategic debate or policy formation. In recognition of an outstanding personal contribution to combating climate change at an international level through his efforts to enhance the understanding and adoption of the principle of Contraction and Convergence."

Honorary Fellow of Royal Institute of British Architects - 2007

For his challenging and inspirational promotion of environmental issues, in particular his development of the concept of Contraction and Convergence. Architects adopted C&C at RIBA Council in 2006 and asked Aubrey to present C&C at their annual conference in October. There, RIBA's Chairman declared climate change as the dominant agenda for the 21st Century, called for C&C targets and committed RIBA to campaigning for C&C." He was an inspirational speaker at the RIBA's 2006 Annual Conference in Venice and reported the event as follows; *"Meyer, formerly a professional musician, started with a virtuoso performance that was simultaneously moving, terrifying and informative. He played the violin theme to Schindler's List to images of the environmental holocaust he went on to argue that we face."*

The UNEP FI Global Roundtable Financial Leadership Award - 2007

UNEP FI for the first time recognized executives within the financial services who have contributed in a significant manner to the development of financial ideas, innovative products, institutional change and or the carbon markets themselves through the UNEP FI Carbon Leadership Award. Four executive awards were given for each category of financial services: Banking, Insurance/ Reinsurance, Asset Management/Private Banking and Pension Funds. In addition, an award was given for a representative from civil society who had worked towards the same end. Award winners were selected from a large number of entries by a small group of UNEP FI's long term climate change advisors. The civil society category award for the most impressive commitment and innovative thinking around climate change and the financial sector with the UNEP FI Carbon Leadership Award went to Aubrey Meyer of the Global Commons Institute.

**Some letters from eminent persons
supporting the application for funds
by the Global Commons Trust
to support the continuation of
the climate change campaign for
'Contraction and Convergence'
from the Global Commons Institute**

Written by: -

1. Prof Tom Blundell - University of Cambridge
2. Mark Levene - University of Southampton
3. Mike Mainelli - Z-YEN
4. Julian Salt - ex-UNEPFI
5. Sunand Prasad RIBA
6. Peter Head - ARUP
7. Robert Goodland - ex World Bank
8. Geoff Lean - Independent on Sunday
9. Joan Walley MP
10. Prof Ross Garnaut - Australia National University
11. Andrew Dlugolecki - CII
12. Prof Brendan Mackey - Australia National University
13. Bill McGuire - Benfield
14. Crispin Tickell
15. Tim Smit - EDEN
16. Frank Jotzo - Australia National University

Professor Sir Tom Blundell FRS
Sir William Dunn Professor of Biochemistry

Head of School



28 February 2009

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Tel: 44(0)1223 333628 Fax : 44(0)1223 766082
E-mail: tom@cryst.bioc.cam.ac.uk

To Whom It May Concern

Dear Sirs,

Aubrey Meyer and "Contraction and Convergence"

I am writing as a former Chairman of the Royal Commission on Environmental Pollution concerning Aubrey Meyer's contributions to the global debate on how to avoid dangerous rates of climate change and to support his application for funding from your Foundation.

Aubrey began his campaign to establish Contraction and Convergence in the UK in 1989 and in 2000 the Royal Commission on Environmental Pollution under my chairmanship advocated it to Government. Since then Contraction and Convergence has proved to be a defining concept in the work of many in the UK and beyond. It has been the subject of review and advocacy by many including the House of Commons Select Committee for Environmental Audit and this year the Committee was advised by Lord Adair Turner of the UK Climate Change Committee that Contraction and Convergence does in fact form the basis of the UK Climate Bill.

The remarkable impact of Contraction and Convergence reflects the fact that the argument is firmly rooted in the science of climate change. It marries the limit to future human emissions to the idea of equal shares in the use of the atmosphere. It is a rational, flexible and transparent concept that is now the most widely cited and probably the most widely supported proposal.

All this is consistent with the wide uptake of the Contraction and Convergence concept globally. However, Aubrey has achieved this impact with very little funding. I am therefore asking that financial support is given to this campaign particularly at this time as this year - 2009 - leads to a UN event in Copenhagen in December at which it is intended that the global plan to avoid dangerous rates of climate change is agreed and established for the long-term.

I believe that Contraction and Convergence must be the basis of the global deal on climate change. I also believe that it makes sense for Contraction and Convergence to be formally endorsed as the basis of the global deal by the UNFCCC. We are now closer than ever to achieving that. With financial support for this campaign this will be achieved soon and I ask you to support this strongly.

A handwritten signature in black ink that reads "Tom Blundell". The signature is written in a cursive, slightly slanted style.

Sir Tom Blundell

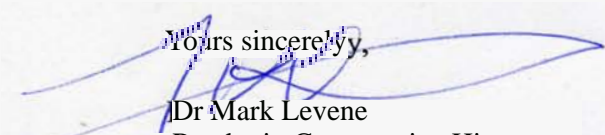
26th February 2009

TO WHOM IT MAY CONCERN

For time and motion reasons this has to be very brief. So let me state it succinctly. If I have repeatedly stated to those that do not know him or his work that Aubrey Meyer is probably the most important person on the planet, I am not being flippant.

Contraction and Convergence represents the joining of science and ethics, prescience and social justice. It is fundamentally about the reconciliation of the human condition set against the background of ever accelerating anthropogenic climate change. If this may sound high-falutin' the reality is that C and C is not only utterly grounded in the reality of the science and economics of the here and now but is in its essence graspable by everybody. While governments and their advisors seek complex ways of avoiding what is at stake, Aubrey has got to the heart of the matter. This is thus why his argument is also the central pillar and chapter of Cromwell and Levene eds. *Surviving Climate Change, The Struggle to Avert Global Catastrophe* (Pluto Press, 2007).

In short, I commend Aubrey and his work which has been pursued remarkably, tenaciously, singularly for the best of two decades. And essentially with little or no financial support. It is time that the 'value' of Aubrey's efforts were properly recognised. Esme Fairbairn would be doing more than Aubrey a great service by offering its support to GCI.


Yours sincerely,
Dr Mark Levene
Reader in Comparative History

'Zest for Enlightenment'

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Facsimile : +44 (0)20 7628-5751
Email: michael_mainelli@zyen.com

To Whom It May Concern

Dear Sir

LETTER OF SUPPORT - CONTRACTION & CONVERGENCE - AUBREY MEYER

Aubrey Meyer has asked me to write a letter of support. I run a leading commercial think-tank in the City of London, Z/Yen Group, and have been the creator and Principal Advisor to the London Accord, the largest financial and economic initiative into climate change – www.london-accord.co.uk – Z/Yen's *pro bono* work on climate change.

Over the last twenty years, Aubrey Meyer's sustained work through the Global Commons Institute on 'Contraction and Convergence' - C&C - is widely recognized as one of the most focused and significant contributions to the global debate on what to do avoid dangerous rates of climate change. C&C marries population to the economic, financial and equity issues of future human emissions. It is a rational, flexible and transparent concept that is now the most widely cited and arguably the most widely supported proposal in the process as a whole. Therefore, it is challenging.

Aubrey began his campaign to establish C&C in the UK in 1989 and by 2000 C&C was being formally advocated to the UK Government by the Royal Commission on Environmental Pollution. Since then C&C has proved to be a defining concept in the work of many in the UK and beyond. It has been the subject of review and advocacy by many including the House of Commons Select Committee for Environmental Audit. This year the Committee was advised by Lord Adair Turner of the UK Climate Change Committee that C&C does in fact form the basis of the UK Climate Bill. Last year members of the UK All-Party Parliamentary Group on Climate Change, nominated Aubrey Meyer for the Nobel Peace Prize in honour of the concept and the campaign.

Aubrey's success is all the more remarkable as all this has been achieved with very little funding. So I am writing to commend that financial support is given to this campaign, particularly at this time, when we have the UN event in Copenhagen in December at which it is intended that the global plan to avoid dangerous rates of climate change is agreed.

I am one of the many people who believe that C&C, or something close, must be the basis for a global deal on climate change. I appeal to you to support C&C.

Yours faithfully

Professor Michael Mainelli
cc Dr Mayer Hillman

Julian Salt - ex-UNEPFI

Durlock House
Durlock Rd
Ash,
Kent,

CT3 2HU.

25.2.09

Dear Sir,

I am writing to you in respect of potential new funding for Aubrey Meyer of The Global Commons Institute.

I have known Aubrey since 1992, when we first met by phone. I was a Research Associate in the Dept. Peace Studies, University of Bradford. Instantly I clicked with Aubrey and his then audacious vision of Contraction & Convergence. Upon seeing the first graphics come out of the fax machine I was hooked and convinced that one day the concept of C&C would be utilized by the UN in some form as the basis for a future climate deal. What I and Aubrey didn't know at the time is that it would be virtually 20yrs of hard work on his part until he finally gets recognition for his ground-breaking ideas.

To say that Aubrey is/was ahead of his time is an understatement. He has

incredible vision in tandem with phenomenal drive and determination. He will not rest until this concept is adopted internationally. In to the bargain he is incredibly honest and modest.

I thus urge you as a Trust to back his efforts financially, as you will not get better return on your investment, especially in these troubled times.

Yours sincerely,

Julian E. Salt.

Dr. Julian E. Salt PhD, DIC, MSc, BSc (Hons)

- ex-advisor to UNEP-FI (Climate Change Group)
- ex-Loss Prevention Council (Natural Perils Advisor)
- ex-BRE Consultant (Climate Change Impacts).
- ex-Research Fellow (Bradford University)
- ex-Honorary Research Fellow (Benfield Grey Hazard Centre, London).



26th February 2009

To Whom It May Concern

Financial Support for Global Commons Trust and Contraction and Convergence

Climate change is recognised almost universally now as the greatest threat facing our civilisation. As an institute whose worldwide membership is daily engaged in the design of the built environment that contributes around half of global carbon emissions, one of the RIBA's key policy positions is action to avert catastrophic climates change. The first element of this policy is endorsement of a science based, equitable and practical principle to underpin a global climate treaty. namely 'Contraction and Convergence'. At this important moment when world governments are meeting in Copenhagen to hammer out a Climate Treaty, I am writing to ask you to support the Global Commons Institute [GCI] which has developed this brilliant and simple concept over twenty years on a shoestring.

Over the last twenty years, GCI's work, under Aubrey Meyer's leadership of the Contraction and Convergence - or C&C - concept and campaign, has created a global standard that is now widely recognized as the most focused and significant contribution to the global debate on what to do avoid dangerous rates of climate change. It is a rational, flexible and transparent concept that is now the most widely cited and arguably the most widely supported proposal in the process as a whole.

Meyer began his campaign to establish C&C in the UK in 1989 and by 2000 C&C was being formally advocated to the UK Government by the Royal Commission on Environmental Pollution. Since then C&C has proved to be a defining concept in the work of many in the UK and beyond. It has been the subject of review and advocacy by many including the House of Commons Select Committee for Environmental Audit and this year the Committee was advised by Lord Adair Turner of the UK Climate Change Committee that C&C does in fact form the basis of the UK Climate Bill.



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VAT Registration Number 232 351 891

Several voices in the international insurance industry have acknowledged that C&C is a rigorously rational concept and also that it has been communicated globally with what they describe as nothing short of genius and over the years Aubrey has received many honours for this work. Last year members of the UK All-Party Parliamentary Group on Climate Change, nominated Aubrey Meyer for the Nobel Peace Prize in honour of the concept and the campaign.

GCI's and Meyer's work is all the more remarkable as it has been carried out with very little funding. Unfortunately at this important juncture there is a real chance of the work stalling through lack of funds. So I am asking that financial support is given to the Global Commons Trust, the charity that supports the GCI.

I am one of the many people who believe that C&C must be the basis of the global deal on climate change. I have also argued that, given the scale of the need for education and for people around the world to understand the scale of the challenge, it makes sense for C&C to be formally endorsed as the basis of the global deal by the United Nations Framework Convention on Climate Change [UNFCCC]. I believe that we are now closer than ever to achieving that. With financial support there will be a greater likelihood of achieving an effective treaty at Copenhagen and I appeal to you to give what financial support you can to the Global Commons Trust.

Yours sincerely

A handwritten signature in black ink that reads "Sunand Prasad". The signature is written in a cursive, flowing style with a horizontal line under the name "Prasad".

Sunand Prasad
President

Our ref PRH/UMK

Date 26 February 2009

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www.arup.com

TO WHOM IT MAY CONCERN

Dear Sir/Madam

AUBREY MEYER

ARUP

I have recently been presenting a lecture around the world for the Institution of Civil Engineers showing research into how the world could move to a sustainable way of living by 2050 which addresses climate change and ecological footprint reduction. In my paper and lecture I refer to policies including Contract and Convergence as critical to achieving this outcome and stress the urgency of action. The work of Stern and Garnaut have shown that action is now urgent and will not damage economic performance, indeed can help us out of recession.

Over the last twenty years, Aubrey Meyer's sustained work through the Global Commons Institute [GCI] with the "Contraction and Convergence" - or C&C - concept and campaign, has created a global standard that is now widely recognized as the most focused and significant contribution to the global debate on what to do avoid dangerous rates of climate change.

This is remarkable and reflects the integrity of the argument where C&C is mathematically rooted in the science of climate change and marries the limit to future human emissions that avoids dangerous rates of climate change to the polity of equal shares in the use of the atmosphere subject to that limit. It is a rational, flexible and transparent concept that is now the most widely cited and arguably the most widely supported proposal in the process as a whole.

Aubrey began his campaign to establish C&C in the UK in 1989 and by 2000 C&C was being formally advocated to the UK Government by the Royal Commission on Environmental Pollution.

Since then C&C has proved to be a defining concept in the work of many in the UK and beyond. It has been the subject of review and advocacy by many including the House of Commons Select Committee for Environmental Audit and this year the Committee was advised by Lord Adair Turner of the UK Climate Change Committee that C&C does in fact form the basis of the UK Climate Bill.

Several voices in the International Insurance Industry have acknowledged that C&C is a rigorously rational concept and also that it has been communicated globally with what they describe as nothing short of genius and over the years Aubrey has received many honours for this work. Last year members of the UK All-Party Parliamentary Group on Climate Change, nominated Aubrey Meyer for the Nobel Peace Prize in honour of the concept and the campaign.

All this is consistent with the wide uptake of the C&C concept globally. However, Aubrey's success is all the more remarkable as all this has been achieved with very little funding. So I am asking that financial support is given to this campaign particularly at this time as this year - 2009 - leads to a UN event in Copenhagen in December at which it is intended that the global plan to avoid dangerous rates of climate change is agreed and established for the long-term.

I am one of the many people who believe that C&C must be the basis of the global deal on climate change. I also argued that, given the scale of the need for education and for the whole planet really to understand the scale of the challenge, it makes sense for C&C to be formally endorsed as the basis of the global deal by the UNFCCC. I believe that we are now closer than ever to achieving that. With financial support for this campaign this will be achieved soon and I appeal to you to support this vigorously.

Yours faithfully



PETER HEAD OBE FREng FRSA
Director, Arup
Head of Global Planning

cc Dr Mayer Hillman, Chairman
Global Commons Trust

Robert Goodland - ex World Bank

From Robert Goodland
RbtGoodland@aol.com;
Thursday, 26 February, 2009

Subject: Contraction and Convergence

To Whom It May Concern

I urge you and your Trust to do all in your powers to support the Global Commons Trust so that Contraction and Convergence is in a position to reduce the awful risks of climate change just as soon as humanly possible. We are in dire straits with few tools at the world's disposal to save at least some semblance of our beautiful world for our children.

The Contraction and Convergence tool devised by GCT and Aubrey Meyer is arguably THE single most powerful tool for helping to prevent truly disastrous climate change, but only if it pushed fully into place and used asap.

This is a very considered statement as i have been doing what little lays within my ambit for some years now. Im convinced that C & C is the major part of the climate change solution. I served as the UN/World Bank Group's Environmental adviser for 23 years until my 62-year retirement in 2001. Since then i have been doing what i can to prevent the worst damage from climate change.

You have seen that a major and increasing number of -- importantly Southern -- national governments support C & C. In addition, the UN Climate Convention Secretariat, Fmr. Environmental Minister Michael Meacher, Sir John Houghton, Sir Crispin Tickell and many other luminaries energetically support C & C.

You will have seen that UK's All-Party Parliamentary Climate Change Group nominated Aubrey Meyer for the Nobel Peace Prize in order to accelerate the use of C & C.

I want to make this recommendation just as strong as possible for yr purposes. Please therefore dont hesitate to contact me 24/7. Im not exaggerating when i lable this issue one of life and death

Warm personal regards
Dr Robert Goodland

Geoff Lean - Independent on Sunday

To Whom It May Concern

I am writing to lend my support to the application for funding from the Global Commons Trust.

I have the greatest respect for Aubrey Meyer, whose 20 year long tireless advocacy of contraction and convergence has single-handedly brought it to the forefront of international attempts to tackle climate change. He has achieved the apparantly impossible in taking his remarkable concept to the point where it is widely regarded as the key to any long term arrangement to move to a low carbon world, and where it has been adopted as policy by many governments and endorsed by many leading authorities worldwide.

This achievement is all the more remarkable because Aubrey has done all this with virtually no funding. He deserves to be resourced properly, and I hope you will consider helping him.

Yours sincerely,

Geoffrey Lean,
Environment Editor,
Independent on Sunday.



Joan Walley

Member of Parliament for Stoke-on-Trent North
House of Commons, London, SW1A 0AA
Tel: 020 7219 4524/6985 Fax: 020 7219 4397

Our Ref: s/ESME01001/01090195

26th February 2009

To Whom It May Concern

I am writing to provide a letter of support to a funding application which I understand Aubrey Meyer is making on behalf of the Global Commons Institute to your organisation.

I write in a personal capacity but as an MP of almost 22 years standing who has had long involvement with environment issues first as a councillor in Lambeth, and more recently as the vice chair of the House of Commons Environmental Audit Select Committee. It is very clear to me that the public awareness and international engagement with the issue of climate change is not commensurate with the scale of the challenge that faces the planet in trying to urgently reduce carbon emissions.

Aubrey's work on Contraction and Convergence makes a key contribution by marrying the limit to future carbon emissions to avoid dangerous levels of climate change with the polity of equal shares in emissions subject to that limit. The theory is rooted in the science of climate change and I believe it should form the basis of a global deal on climate change.

It is vital that Aubrey is able to continue his work and it is for this reason that I am hopeful you will fund Aubrey's proposal.

Yours sincerely

Joan Walley MP
Stoke-on-Trent North

Cc Dr Mayer Hillman Global Commons Trust

CC. DR AUBREY MAYER

Constituency Office:

Unit 5, Burslem Enterprise Centre, Moorland Road, Burslem, Stoke-on-Trent, ST6 1JN
Tel: 01782 577900 Fax: 01782 836462 e-mail: walleyj@parliament.uk www.joanwalleymp.org.uk

Our ref PRH/UMK

Date 26 February 2009

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Yours faithfully



PETER HEAD OBE FREng FRSA
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I urge you and your Trust to do all in your powers to support the Global Commons Trust so that Contraction and Convergence is in a position to reduce the awful risks of climate change just as soon as humanly possible. We are in dire straits with few tools at the world's disposal to save at least some semblance of our beautiful world for our children.

The Contraction and Convergence tool devised by GCT and Aubrey Meyer is arguably THE single most powerful tool for helping to prevent truly disastrous climate change, but only if it pushed fully into place and used asap.

This is a very considered statement as i have been doing what little lays within my ambit for some years now. Im convinced that C & C is the major part of the climate change solution. I served as the UN/World Bank Group's Environmental adviser for 23 years until my 62-year retirement in 2001. Since then i have been doing what i can to prevent the worst damage from climate change.

You have seen that a major and increasing number of -- importantly Southern -- national governments support C & C. In addition, the UN Climate Convention Secretariat, Fmr. Environmental Minister Michael Meacher, Sir John Houghton, Sir Crispin Tickell and many other luminaries energetically support C & C.

You will have seen that UK's All-Party Parliamentary Climate Change Group nominated Aubrey Meyer for the Nobel Peace Prize in order to accelerate the use of C & C.

I want to make this recommendation just as strong as possible for yr purposes. Please therefore dont hesitate to contact me 24/7. Im not exaggerating when i lable this issue one of life and death

Warm personal regards
Dr Robert Goodland

Geoff Lean - Independent on Sunday

To Whom It May Concern

I am writing to lend my support to the application for funding from the Global Commons Trust.

I have the greatest respect for Aubrey Meyer, whose 20 year long tireless advocacy of contraction and convergence has single-handly brought it to the forefront of international attempts to tackle climate change. He has achieved the apparantly impossible in taking his remarkable concept to the point where it is widely regarded as the key to any long term arrangement to move to a low carbon world, and where it has been adopted as policy by many governments and endorsed by many leading authorities worldwide.

This achievement is all the more remarkable because Aubrey has done all this with virtually no funding. He deserves to be resourced properly, and I hope you will consider helping him.

Yours sincerely,

Geoffrey Lean,
Environment Editor,
Independent on Sunday.



Joan Walley

Member of Parliament for Stoke-on-Trent North
House of Commons, London, SW1A 0AA
Tel: 020 7219 4524/6985 Fax: 020 7219 4397

Our Ref: s/ESME01001/01090195

26th February 2009

To Whom It May Concern

I am writing to provide a letter of support to a funding application which I understand Aubrey Meyer is making on behalf of the Global Commons Institute to your organisation.

I write in a personal capacity but as an MP of almost 22 years standing who has had long involvement with environment issues first as a councillor in Lambeth, and more recently as the vice chair of the House of Commons Environmental Audit Select Committee. It is very clear to me that the public awareness and international engagement with the issue of climate change is not commensurate with the scale of the challenge that faces the planet in trying to urgently reduce carbon emissions.

Aubrey's work on Contraction and Convergence makes a key contribution by marrying the limit to future carbon emissions to avoid dangerous levels of climate change with the polity of equal shares in emissions subject to that limit. The theory is rooted in the science of climate change and I believe it should form the basis of a global deal on climate change.

It is vital that Aubrey is able to continue his work and it is for this reason that I am hopeful you will fund Aubrey's proposal.

Yours sincerely

Joan Walley MP
Stoke-on-Trent North

Cc Dr Mayer Hillman Global Commons Trust

CC. DR AUBREY MAYER

Constituency Office:

Unit 5, Burslem Enterprise Centre, Moorland Road, Burslem, Stoke-on-Trent, ST6 1JN
Tel: 01782 577900 Fax: 01782 836462 e-mail: walleyj@parliament.uk www.joanwalleymp.org.uk



Ross Garnaut
Distinguished Professor
The Arndt-Corden Division of Economics
Research School of Pacific and Asian Studies

Canberra ACT 0200 Australia
Telephone: +61 2 6125 3100
Facsimile: +61 2 6249 8057
Email: Ross.Garnaut@anu.edu.au
<http://rspas.anu.edu.au>

3rd March 2009

To Whom It May Concern:

Over the last twenty years, Aubrey Meyer's sustained work through the Global Commons Institute [GCI] with the "Contraction and Convergence" - or C&C - concept and campaign, has created a global standard that is now widely recognized as an outstanding and essential contribution to the global debate on what to do avoid dangerous rates of climate change.

This is remarkable and reflects the integrity of the argument where C&C is mathematically rooted in the science of climate change and marries the limit to future human emissions that avoids dangerous rates of climate change to the politically compelling requirement of equal shares in the use of the atmosphere subject to that limit. It embodies the economic political reality, that adjustment to equal per capita emissions entitlements will take time. It is a rational, flexible and transparent concept that holds out the best hope of all urgent proposals that might form a basis of an environmentally and economically rational global agreement on climate change mitigation. The contraction and convergence idea was at the core of the proposals for international agreement that are part of the Garnaut Climate Change Review, commissioned by and presented to the Australian Prime Minister and all State Premiers (R. Garnaut, 2008, The Garnaut Climate Change Review, Cambridge University Press; www.garnautreview.org.au).

Aubrey's success has been achieved with very little funding. So I am asking that financial support is given to this campaign particularly at this time as this year - 2009 - leads to a UN event in Copenhagen in December at which it is intended that the global plan to avoid dangerous rates of climate change is agreed and established for the long-term.

Regards,

Ross Garnaut

"Early Bank"
17 Craigie Place
Perth PH2 0BB
25 February 2009

To Whom It May Concern

Over the last twenty years, Aubrey Meyer's sustained work through the Global Commons Institute [GCI] with the "Contraction and Convergence" - or C&C - concept and campaign, has created a global standard that is now widely recognized as the most focused and significant contribution to the global debate on what to do avoid dangerous rates of climate change.

This is remarkable and reflects the integrity of the argument where C&C is mathematically rooted in the science of climate change and marries the limit to future human emissions that avoids dangerous rates of climate change to the polity of equal shares in the use of the atmosphere subject to that limit. It is a rational, flexible and transparent concept that is now the most widely cited and arguably the most widely supported proposal in the process as a whole.

Aubrey began his campaign to establish C&C in the UK in 1989 and by 2000 C&C was being formally advocated to the UK Government by the Royal Commission on Environmental Pollution. Since then C&C has proved to be a defining concept in the work of many in the UK and beyond. It has been the subject of review and advocacy by many including the House of Commons Select Committee for Environmental Audit and this year the Committee was advised by Lord Adair Turner of the UK Climate Change Committee that C&C does in fact form the basis of the UK Climate Bill. Last year members of the UK All-Party Parliamentary Group on Climate Change, nominated Aubrey Meyer for the Nobel Peace Prize in honour of the concept and the campaign.

Several voices in the International Insurance Industry have acknowledged that C&C is a rigorously rational concept and also that it has been communicated globally with what they describe as nothing short of genius. In 2007 Aubrey was awarded the prize for achievement on environment and finance by the UNEP Finance Initiative. On February 23rd 2009, the Chartered Insurance Institute, in its third report on climate change and insurance, recommended C&C as the basis for a solution to the mitigation of climate change

All this is consistent with the wide uptake of the C&C concept globally. However, Aubrey's success is all the more remarkable as all this has been achieved with very little funding. So I am asking that financial support is given to this campaign particularly at this time as this year - 2009 - leads to a UN event in Copenhagen in December at which it is intended that the global plan to avoid dangerous rates of climate change is agreed and established for the long-term.

I am one of the many people who believe that C&C must be the basis of the global deal on climate change. I have also argued that, given the scale of the need for education and for the whole planet really to understand the scale of the challenge, the crystal clarity of C&C makes it the obvious policy to be formally endorsed as the basis of the global deal by the UNFCCC. I believe that we are now closer than ever to achieving that. With financial support for this campaign this will be achieved soon and I appeal to you to support this vigorously.

Yours faithfully

Dr Andrew Dlugolecki,
Nobel Prize-sharing lead author of the IPCC
Advisory Board Member, Carbon Disclosure Project
Senior Advisor on Climate Change to the UNEP Finance Initiative

Prof Brendan Mackey

Director, The ANU *WildCountry* Research & Policy Hub
The Fenner School of Environment & Society, College of Science
The Australian National University, Canberra ACT 0200 Australia
T: +61 2 6125 4960; F: +61 2 61253770;
E: brendan.mackey@anu.edu.au; www.anu.edu.au



04 March 2009

Financial support for Global Commons Trust and Contraction & Convergence

I am writing to support the application by GCT for financial support from your Trust.

It is now axiomatic that human-induced climate change is the gravest threat to global security and the future and survival of humanity on Earth. However, the world community has struggled to reach consensus on the framework for an international agreement that will lead to a satisfactory coordinated response. Rather, negotiations are constantly derailed by short-term concerns, vested interests, and conventional thinking.

GCT supports Aubrey Meyer who, through his work with GCI, has developed a framework for international cooperation that addresses the fundamental impediments to successful negotiation of a new climate change agreement. This approach is called Contraction & Convergence (C&C), and it remains a singular beacon of sanity in the madness of climate change treaty negotiations and is humanity's best hope for a global deal that is the real deal – one that will solve the problem.

The sustained effort of GCI over 20 years is a testimony to Aubrey's integrity, commitment, and resolve. The logic and calculus of C&C is inescapable once an objective analysis is undertaken. For years, it was foolishly dismissed as impractical! Somewhat ironically, those who now view the problem with a clear head are increasingly accepting that C&C presents the only politically acceptable solution to the foundational question of how the permissible emissions can be distributed amongst the people of Earth.

As with all great ideas, C&C is deceptively simple, addresses the root causes of the problem, and is recognized as a grave threat to those vested interests who fear the climate change problem's successful resolution because of the fundamental changes it will wrought on our economic status quo.

This is the crucial year for climate change as it culminates in the Copenhagen conference and hopefully the generation of a new agreement for the next commitment period. It is absolutely critical that C&C's message is heard loud and clear throughout the year in the lead up to Copenhagen, as well as during the conference. Also, it is likely that Copenhagen will not deliver the definitive answer the global situation demands and that key issues will continue to be negotiated in the coming years – therefore requiring continuation of the C&C campaign.

I encourage and urge the Trust to invest in GCI during the coming year and beyond. I am convinced that GCI's time will come, and that Aubrey Meyer's contribution will prove to be of historic significance.

Yours sincerely,



To Whom It May Concern

**Support for the funding application of
Aubrey Meyer and the GCT**

I write to support enthusiastically, Aubrey Meyer's application for funding to underpin the activities of the Global Commons Trust. In the run-up to the UN Climate Change Conference in Copenhagen this coming December, we find ourselves at a pivotal moment in human history. If we are to have any chance of avoiding climate catastrophe, it is imperative that a greenhouse gas emissions reduction mechanism is presented to the conference that is both equitable and realistic, and which can bring the required level of emissions cuts over the time-frame that climate science demands.

That mechanism is Contraction & Convergence [C&C] the extraordinarily innovative brainchild of Aubrey Meyer, which has been taken forward in recent years through the Global Commons Institute with the support of the Global Commons Trust.

C & C already has many supporters in government and industry circles around the world. In the months left before Copenhagen, however, it is imperative that the mechanism is promulgated as widely as possible as the only option available to bring the climate change beast to heel. To help accomplish this, I urge you as strongly as I possibly can to support Aubrey and the GCT – for all our sakes and those of our children and grand children.

Yours sincerely

Bill McGuire
Professor of Geophysical & Climate Hazards
Director, Aon Benfield UCL Hazard Research Centre



Benfield Hazard Research Centre
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University College London
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London WC1E 6BT

t +44 (0)20 7679 3637
w www.benfieldhrc.org

From: Sir Crispin Tickell's Office <ct@crispintickell.net>
Subject: Aubrey Meyer: Contraction and Convergence, the Global Commons Trust

Friday, 27 February, 2009

To Whom It May Concern

I write to commend a candidate for financial support from your Foundation. Aubrey Meyer is appealing for support for the Global Commons Trust (GCT) which for many years has sustained work on Contraction and Convergence.

Contraction and Convergence is more than a slogan, and over the years has set a global standard that is now widely recognized as a significant contribution to the many issues, including equity, underlying the global debate on mitigating and adapting to climate change. I won't go over the practical details which you know already, but I am sure that you, like me, must be impressed by the degree of support that Contraction and Convergence has received, most recently by Lord Turner, of the Climate Change Committee who told the House of Commons Select Committee for Environmental Audit, that Contraction and Convergence lay at the basis of the work of the Committee.

Aubrey Meyer has received many honours for his work. Last year members of the All Party Parliamentary Group on Climate Change, nominated him for the Nobel Peace Prize. Contraction and Convergence has also entered the literature and is used by many, without always recognition of its author, as the basis for the work leading up to the Copenhagen Conference on Climate Change next December. As a member of the Copenhagen Climate Council preparing for this event, I am well aware of what Aubrey Meyer has achieved.

His success is remarkable as it has been done with very little funding. With the Copenhagen Conference now ahead of us it is all the more important that everyone, from the global community to national governments, local communities and individuals, should understand what is at stake and work for a successful and practical outcome. That is why the Global Commons Trust and through it the Global Commons Institute needs your support. I very much hope that you can and will help.

With all good wishes
Crispin Tickell

Sue Lee
Secretary to Sir Crispin Tickell, Director
Policy Foresight Programme
James Martin 21st Century School
University of Oxford
<http://www.21school.ox.ac.uk/outreach/policy-foresight/>
http://www.21school.ox.ac.uk/news_and_events/news/archive.cfm/2008/pfp-hub
Office tel: +44 (0) 1285 740 569
<http://www.crispintickell.net/>

CC Dr Mayer Hillman
Chairman
Global commons Trust

Tim Smit - EDEN

March 2nd, 2009

To whom it may concern,

I am writing as both an admirer of the work of the Trust and of Aubrey Meyer and his work in developing the concept of Contraction and Convergence. The detail of the work of the Global Commons Trust and the scientific basis are well documented elsewhere. The reason for my letter is that we work with around 30,000 schoolchildren a year at Eden out of a total audience of around 1.1m a year. The current generation of schoolchildren is massively concerned about climate change and they feel impotent in the face of it. What comes out time and time again is the realisation that the lifestyle commentary about changing light-bulbs, insulating houses and driving less feel woefully inadequate to them. They know the issue is more serious than any of these suggested measures could possibly address.

When Governments acknowledge we have forty years or less to radically reduce our carbon emissions the case is won, but the solution seems to remain in thrall to the same politics that have anchored us in stasis for so many years.

Every group of children I speak to about C&C understands its simplicity and potential instinctively. Its basis in equity is hugely important.

So...please allow me to express to you my belief that what is being suggested here may in years to come be seen as marking a moment as important as the dawning of the Renaissance. I know we live in a world of hyperbole, but in this case I believe it to be true. The lives of countless people could be improved and indeed secured were this work to get the support it needs.

May I ask you to look upon this application kindly?

Yours sincerely,

Tim Smit

Chief Executive

The EDEN Project

Frank Jotzo - Australia National University

"Over the last twenty years, Aubrey Meyer's sustained work through the Global Commons Institute [GCI] with the "Contraction and Convergence" - or C&C - concept and campaign, has created a global standard that is now widely recognized as an outstanding and essential contribution to the global debate on what to do to avoid dangerous rates of climate change.

The C&C concept embodies the economic political reality, that adjustment to equal per capita emissions entitlements will take time. It is a rational, flexible and transparent concept that holds out hope to form a basis of an environmentally and economically rational global agreement on climate change mitigation. The contraction and convergence idea was at the core of the proposals for international agreement that are part of Australia's Garnaut Climate Change Review (R. Garnaut, 2008, The Garnaut Climate Change Review, Cambridge University Press; www.garnautreview.org.au). I worked as economic advisor on the relevant parts of the Review.

Aubrey's success has been achieved with very little funding. So I am asking that financial support is given to this campaign particularly at this time as this year - 2009 - leads to a UN event in Copenhagen in December at which it is intended that the global plan to avoid dangerous rates of climate change is agreed and established for the long-term."

Dr Frank Jotzo

The Australian National University

Research Fellow, College of Asia and the Pacific

Deputy Director, ANU Climate Change Institute

Theme leader climate change, Environmental Economics Research Hub

A MAN FOR ALL SEASONS

FROM HIS LONDON LOUNGE ROOM, CLIMATE CAMPAIGNER AUBREY MEYER MAY JUST SAVE THE WORLD WITH HIS PLAN FOR PER CAPITA GLOBAL CARBON EMISSIONS TARGETS

BY DAVID ADAM | ILLUSTRATION BY PADDY MILLS | PHOTOGRAPHY BY PETER DENCH

The Global Commons Institute sounds as though it should be a grand organisation with a fine headquarters. The institute is at the forefront of the fight against the growing threat of global warming and lobbies scientists, the media and politicians to listen to its ideas. It publishes glossy brochures, distributes them at all the key climate events, and its ideas are backed by an impressive roll call of supporters, including presidents and prime ministers.

In fact, the Global Commons Institute is a small association led by one man, working from a plain house in northeast London. That man is Aubrey Meyer, and from his home he has devised the answer to the world's biggest problem. Meyer is not a physicist, economist or green technology guru. He is a musician – a very good one – and his idea to address global warming called 'Contraction and Convergence' (C&C) is striking a chord across the globe. Britain's Guardian newspaper recently named him one of the 50 heroes of the planet and New Statesman magazine placed him among the 10 people most likely to change the world.

As awareness of climate change has risen, so has interest in C&C. It sets out a framework to control each country's gas emissions based on the principle that, subject to the overall amount that stabilises the rising concentration of greenhouse gases in the atmosphere (contraction), each person has the right to produce the same quantity each year, wherever they live (convergence).

And as nations struggle to agree a new global treaty to limit carbon emissions that fits all of their respective domestic agendas, Meyer's idea is increasingly being talked about as the way we should go. Last year, German chancellor Angela Merkel became the latest big-name politician to throw their weight behind a version of it. And the Archbishop of Canterbury said those who thought it Utopian simply hadn't looked honestly at the alternatives.

For the 60-year-old Meyer, such moves vindicate a determined campaign spanning nearly two decades. It's a crusade that began in earnest in 1990 when his then four-year-old daughter turned to him from her cot and asked: 'Daddy, is the planet really dying?'

Meyer's response – 'no, don't you worry, we'll sort it out' – illustrates his no-nonsense attitude to the issue. Meyer cares not for political compromises: for him, the existing Kyoto Protocol is a largely ineffective, global deal to regulate carbon pollution, requiring that only rich countries make cuts.

Born in Britain but raised and schooled in apartheid-era South Africa, Meyer is acutely aware of the perils of inequality and of the need for a global agreement to be truly global. 'By definition you can't possibly resolve this situation on a separated basis,' he says. 'Separate development is not sustainable development. Global apartheid doesn't work.'

Instead, Meyer proposes a system of equal-per-capita emissions entitlements that places every citizen in a framework-based market under full-term global emissions control, and keeps below the greenhouse gas concentration target (see 'What is C&C?' on page 47).

Meyer's extraordinary calculating and communication skills have set a standard for the whole debate, although his dogged campaign has managed to annoy all sides of the green movement in the past. To politicians and economists of the UK and US, the idea had echoes of communism, while hardened eco-warriors disliked the carbon trading aspects of the scheme and thought it too complicated, prescriptive and thus politically unsellable.

Meyer says: 'As soon as you push a per capita argument, people call it communism and as soon as you allow trading, people call you a capitalist. These critics wanted a row and their attitude to me was "who let you in here? Go and get a hair cut." But their dichotomy was a false and discriminatory stitch-up with no understanding of the need for integration and accuracy.'

We talk sitting on the floor of the Global Commons Institute's living room, surrounded by papers that he shuffles through from time to time to illustrate a point, and interrupted by phone calls from his daughter (now 21 and a university student) as she plots her trip home for Christmas.



What is C&C?

Contraction and Convergence (C&C) starts with the UN objective that global atmospheric concentrations of greenhouse gas cannot be allowed to rise much above the present level. This means that the future total of greenhouse gas emissions to the atmosphere must now be significantly reduced at a rate determined by how quickly we need to stabilise greenhouse gas concentration and hence global temperatures.

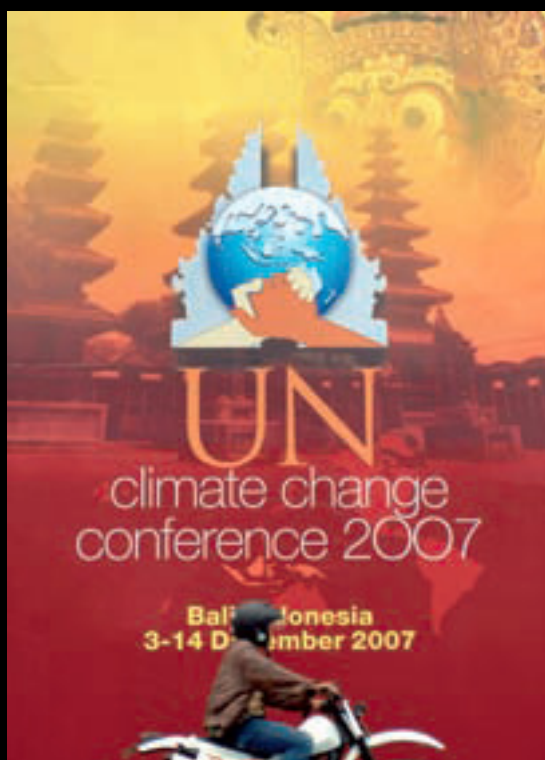
Working backwards like that gives us a shrinking amount of carbon we can emit overall between now and whenever we would exceed our limit, expressed as an annual, decreasing, carbon ration. This is contraction and it needs to be continually measured in light of the changing relationship between our sources and the declining natural sinks for the gases as revealed in the latest IPCC (Intergovernmental Panel on Climate Change) report.

Treating the atmosphere as a 'global common', C&C would then divide the remaining carbon output available under contraction among every person on the planet. Each would have an equal entitlement in the overall emissions output.

Richer countries such as Britain and the US, with higher emissions per person and which emit more than their global share, would converge with poorer nations, such as China and India, who emit less. Subject to the contraction imperative, all nations would agree a future date for their entitlements to become the same per capita. This is the convergence.

During this process, as global entitlement decreases, poorer countries would be allowed to increase emissions, while richer nations would be required to reduce them. Subject to the C&C framework, a market for emissions trading from poorer countries that do not use their full allowance could help richer nations meet their targets, providing revenue for the former. Meyer says: 'It's poetic justice.

It corrects fatal poverty and fatal climate change in the same framework.



Has he kept his promise to her to sort out the world? 'We're as close as we ever have been to getting C&C adopted,' he says. 'In that sense, we're probably closer to finding a solution, but in another sense we're in so much deeper trouble now, and a lot of us are beginning to doubt that this problem is really going to be fixed.'

Climate change may have finally hit the mainstream recently, but the science has moved on as well. All the signs suggest we face a greater challenge to limit temperature rise to 2° Celsius than we realised, and that we have less time to slash carbon pollution than we thought. Meanwhile, the international political response drags along at a glacial pace, or perhaps a melting glacial pace.

At United Nations climate talks at the end of last year in Bali, countries pledged to find a way to replace the Kyoto Protocol by 2009. Many people predict that the change in government when George W Bush leaves the White House will smooth the path to such an agreement. But for Meyer, President Bush and the US are not the climate criminals they are often painted. 'Bush acknowledged the problem is real and serious and there are many serious people beyond him.

'The global apartheid argument is made by the US, who have constantly said that unless China and India are part of the deal then it won't work. However much people want to vilify the US for being a big, bad bully, in one critical respect [the US has] been right from the word go. The US saw C&C and the US Senate Byrd Hagel Resolution as the same thing and said so in Kyoto.'

And what about the European approach: that developed countries should make unilateral cuts, as specified under Kyoto? 'Kyoto was an attempt to get a process going, but it's essentially picking numbers out of a hat and saying because we're guilty Europeans, we'll reduce our emissions alone. The Americans say we don't care whether we're guilty or not, we want everybody in.'

This is where C&C appeals. 'If you want everybody in, then you must integrate and have a way of organising it. It has to be global and rights-based. You need to specifically and formally agree to stabilise the atmosphere and agree to move towards equal emissions per capita by a given date.' That gives us a path shared globally where countries either limit or reduce their emissions according to whether their average per capita emissions are below or above the global average.

After studying music at university in South Africa, Meyer returned to Britain, played with the London Philharmonic Orchestra and became a successful composer. In 1988 he turned to environmental politics in a search for answers to questions raised while researching a musical about Chico Mendes, the assassinated Brazilian rainforest campaigner. A friend, fed up with his newfound curiosity on the environment, suggested he join the Green Party. Two years later, following the question from his daughter that was to change his life, the Global Commons Institute was born.

‘From that moment on I thought: this is the end of music,’ Meyer says. ‘I sold my scores, I sold my viola and used the money to buy a computer to start figuring out how to deal with this issue.’ Has a musical background allowed him to see the problem in a different way? ‘The key thing, especially with music and string playing, is that real feeling comes from integration and accuracy.

It’s a war on error. You have to be sure when you’re playing that it is the audience that’s crying. If you’re crying and your tears are all over the fingerboard then you’re skidding around and you can’t play a damn note. You’ve got to be ice cold and yet red hot to get it over.’

He adds: ‘That’s partly the false dichotomy that haunts this debate. There are people who speak this red-hot rhetoric about the defilement of the environment, and others who have this measured commerce approach. Without a really shared discourse, there’s error and no possibility of a proportionate response.’

Meyer uses musical metaphors a lot. He compares the difficulty of cutting carbon pollution to learning to play the Sibelius violin concerto – ‘It’s a tough piece but you learn it; it doesn’t learn you.’ C&C, like all music, has the disciplined demand of structure: coordination and accuracy in harmony, rhythm and form. He sometimes appears frustrated that words fail to communicate his thoughts and feelings as elegantly as a musical score can.

‘Nobody has a choice but to be an environmentalist,’ he says. ‘We’re integrally part of it. It’s just that your relationship is determined by how much you surrender to how beautiful [the world around you] is.’

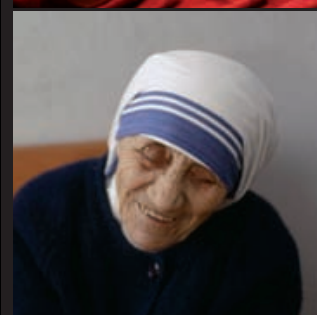
Perhaps drawn by its logic, or driven by the failure of other approaches, Meyer’s idea is steadily emerging as a serious political option. In Britain, the Royal Commission on Environmental Pollution and most political parties support Contraction and Convergence. It is the stated basis of policy in India, China and most African countries.

With political recognition has come a raised profile and awards for Meyer, including a City of London lifetime achievement award in 2005, and a UNEP (United Nations Environment Programme) financial leadership prize last year. Meyer says: ‘I’ve received many awards now. Ten or 15 years ago I would have been proud as hell and worn them on my blazer, but what’s most pleasing today

is that for all the people in the corridors who have been saying for years that I’m an idiot and rude and have got this really stupid idea, there are now people saying hang on, this is quite a useful argument.’ He pauses for a moment.

‘But rude? Direct - I’ll give them that.’

www.gci.org.uk/briefings/ICE.pdf



THE NOBEL PEACE PRIZE

After last year’s Nobel Peace Prize was awarded to Al Gore and the UN’s Intergovernmental Panel on Climate Change (IPCC) for underlining the climate problem, many have said that Aubrey Meyer should be a future recipient of the award for having pioneered and established the solution to it.

But how is a winner decided? Uniquely among the Sweden-based Nobel Awards, the Peace Prize is agreed by a Norwegian committee and awarded in Oslo. Alfred Nobel never explained why he wanted this unusual arrangement. The Norwegian Parliament appoints a Nobel committee which invites nominations each year from the great and the good around the world, including members of national governments, international courts, university chancellors, leaders of peace institutes and foreign affairs institutes, former winners and committee members and professors of social science, history, philosophy, law and theology.

More than a hundred nominations can be received each year. These are supposed to be kept confidential. The committee asks for help from qualified experts in drawing up profiles of the nominees and then decides who in Nobel’s words, ‘has done the most or the best work for fraternity between the nations, for the abolition or reduction of standing armies and the holding and promotion of peace congresses.’

Nelson Mandela and FW de Klerk received it for ending South African apartheid through justice without vengeance. With Contraction and Convergence, Meyer could receive it for establishing that template of reconciliation that avoids dangerous rates of climate change by ending ‘global apartheid’.

Clockwise (from above left) Alfred Nobel, who bequeathed funds to establish the eponymous awards; Nobel Peace Prize recipients Nelson Mandela, Al Gore, The Dalai Lama and Mother Teresa

Rory Bremner

on Bush, burqas and kilts 9

Martin Bright

Tories storm Blair's backyard 10

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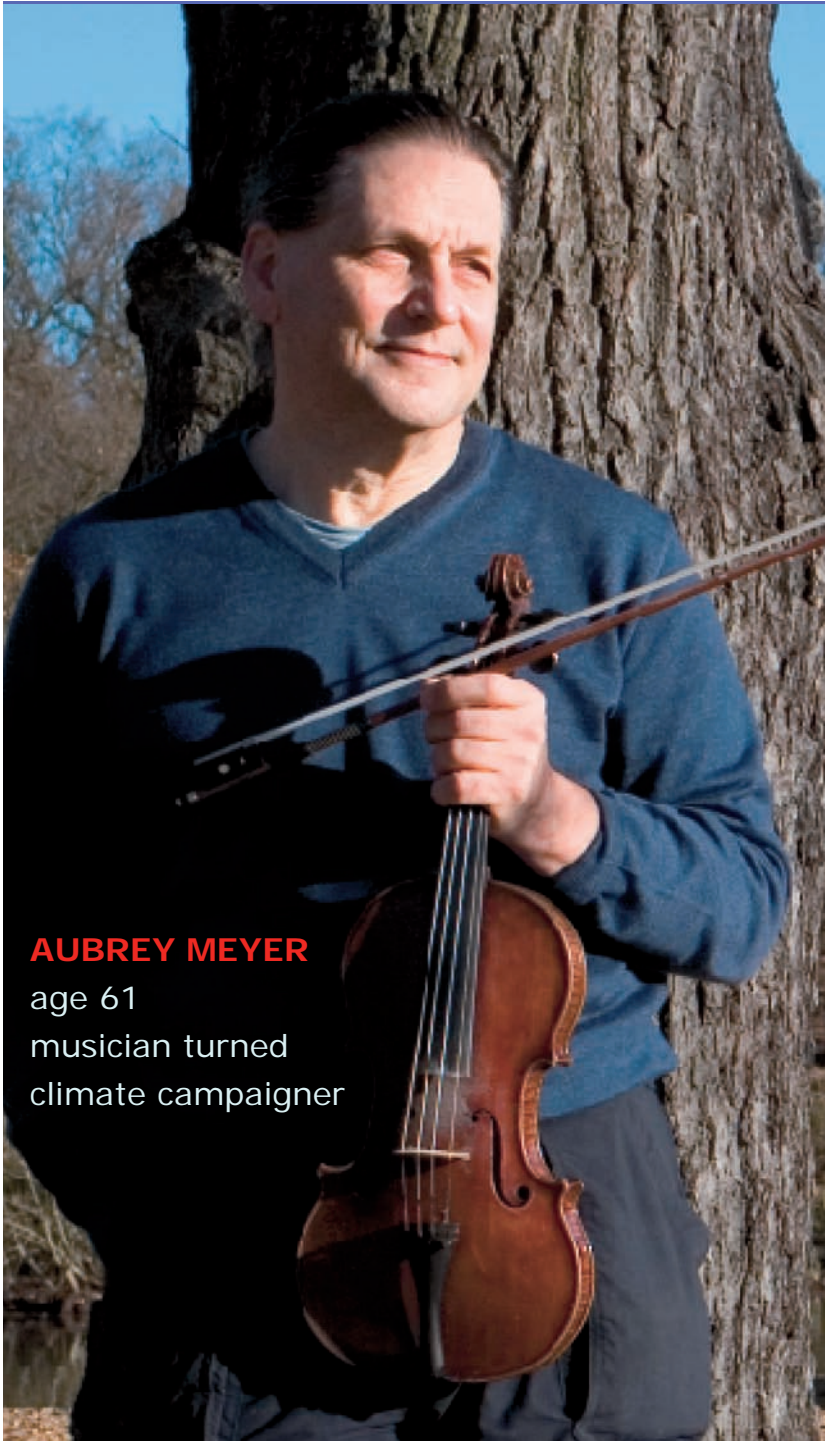
SPECIAL ISSUE

10
people
who will
change
the world

AUBREY MEYER

age 61

musician turned
climate campaigner





newstatesman

Special
Supplement

'Contraction & Convergence'

"The logic is compelling.

***It is a formula for
future global emissions
that could,
without exaggeration,
save the world."***

THE ACTUARY MAGAZINE APRIL 2008

Professor Bill McGuire says the insurance industry should take a leading role in pushing the agenda for climate change action

Against the tide

The pre-eminent oceanographer and climate scientist Wallace Broecker has famously warned that 'climate is an angry beast and we are poking at it with sticks'.

Well, the beast is now stirring and looks likely to be wide awake within a decade or so. The big question is, can we lull it to sleep once more, or are we too late? Having just finished writing a book on climate change, I am caught between mild optimism at the rate at which some nations, in particular Germany, are embracing serious measures to tackle climate change, and utter depression at the miserable efforts of the UK.

The UK government and much of the country's industrial and commercial base are simply not taking the threat sufficiently seriously. Sadly, this includes the financial services sector, where there is certainly more awareness and talk about climate change, but still very little action. Bearing in mind that the insurance sector sits fore-square in the front line in the battle against climate change, this is difficult to understand.

Let me try and get across the seriousness of the situation. In order to prevent dangerous climate change, sufficient, according to Sir Nicholas Stern, to trigger a global depression worse than that of the 1930s and economic and social mayhem to match that of the World Wars, we need to avoid a global average temperature rise of around two degrees



Too little, too late

The reality, unfortunately, is that global emissions are not only still rising, but are accelerating. The EU is aiming to cut emissions by 20% by 2020, and the UK is hoping to match this, but given what is needed, and taking into account the economic growth of China, India, Brazil and other industrialising nations, this is not nearly good enough. In the UK, in particular, any talk of seriously tackling climate change is ridiculed by a government that is pushing through 120 new road building projects and plans for a major expansion of airport infrastructure.

There is little leadership from the CBI either, who despite pledging to 'do what it takes' to meet the UK's greenhouse gas reduction targets, has so far only come up with the proposal that companies will work towards cutting collective emissions of 370 million tonnes by one million tonnes over the next three years. Big deal!

Clearly, the time is ripe for someone to take the lead in pushing the climate change agenda in the UK, and the insurance

sector is centrally placed to do this. Not only because it is liable to suffer more than most businesses due to a widespread increase in climate-related catastrophes, but also because it has the authority and weight to make government, business and industry sit up and listen. From a purely selfish perspective too, notwithstanding how increasing floods and windstorms, and rising sea levels, will impact upon business portfolios, the bottom line is,

will the insurance sector be able to function, or even survive, given the worst economic and trading conditions since the 1930s, and with no end in sight.

So, where to start? In a little over two years, the UN climate conference in Copenhagen will effectively provide our last chance to prevent dangerous climate change. The meeting will either come up with an all-inclusive, global agreement to cut emissions by the amount required, or we can say goodbye to stable trading conditions for the foreseeable future. The most critical element of the meeting will be agreement on a framework that will allow the fair and equitable reduction of emissions across all nations. At the moment, the only mechanism on the table is Contraction and Convergence (C&C). Developed by the London-based Global Commons Institute, C&C is gaining huge support across the world, including from India, China, Germany, the European Parliament and the UK All Party Parliamentary Climate Change Group.

Global premise

The framework is based on the premise that everyone on the planet has a right to emit the same amount of greenhouse gas. Consequently, a future climate agreement has to be based upon the allocation of national emissions targets that are determined by population, and which enables emissions allowances to be traded internationally within a global carbon budget.

In the crucial run-up to Copenhagen, the Global Commons Institute is seeking support from business and industry via its Carbon Countdown campaign. I would urge every company in the insurance sector to sign up now and use its enviable clout and reputation to ensure that C&C is adopted. Download the Carbon Countdown prospectus at www.gci.org.uk/kite/Carbon_Countdown.pdf

Professor Bill McGuire is director of the Benfield UCL Hazard Research Centre at University College, London. His new book, *Seven Years to Save the Planet*, is published in July.

» We need to be looking towards a zero-carbon world by mid-century «

Celsius. The latest science indicates that to accomplish this, even a 90% cut in global emissions by 2050 will not be enough. In other words, we need to be looking towards a zero-carbon world by mid-century. Currently, a number of small nations, including Norway and New Zealand have already indicated that this is their goal, and, last year in the UK, the Liberal Democrats outlined plans for a zero-carbon Britain.

THE INDEPENDENT ON SUNDAY

Kyoto: there is no alternative

Published: 07 December 2003

The future of the planet now rests in the hands of three people: President George Bush, President Vladimir Putin - and the unlikely figure of one Aubrey Meyer, a former concert violinist from east London. President Bush has set out to kill the Kyoto Protocol. Despite growing support in the US for addressing climate change, he has spared no effort in stopping it coming into effect. He is putting the screws on President Putin. Under the protocol's rules, it now only needs Russia's ratification to come into force. The signals from Moscow are mixed, but Putin is thought to be waiting to see whether the US or the European governments, who support Kyoto, will come up with the best price.

And Mr Meyer? He is the still relatively unknown originator of a body of work that is fast becoming the leading contender in the fight against global warming, after Kyoto. To that end, he has set up the Global Commons Institute. Michael Meacher, the former Environment minister, endorses the plan - dubbed "contraction and convergence" - on page 22. The Royal Commission on Environmental Pollution, the World Council of Churches, and African governments have all adopted it. Under the plan, every person on the planet would have the right to emit the same amount of carbon dioxide, which is the main cause of global warming. Each nation would be set quotas, adding up to a figure the world's climate could tolerate. They would be expected to meet them, say by 2050, and could buy and sell parts of them.

Kyoto must first be brought into force: there is no alternative. Then nations should start negotiating bigger cuts in pollution on this equitable basis - worked out in an unprepossessing London flat.

Aubrey Meyer Musician and Activist

The Guardian Weekend

January 5 2008



Can a 60-year-old South African violinist living in a flat in Willsesden, north London, actually change the world? It's a serious question because the odds are increasing that over the next two years rich and poor countries will come round to Aubrey Meyer's way of thinking if they are to negotiate a half-decent global deal to reduce climate change emissions.

Nearly 20 years ago, Meyer devised what he believed was the only logical way through the political morass dividing rich and poor countries on climate change. After a letter from him was published in the Guardian, he gave up playing professional music to set up the tiny Global Commons Institute in his bedroom. There he developed the idea that not only did everyone on earth have an equal fight to emit CO₂, but that all countries should agree loan annual per capita ration or quota of greenhouse gases.

That was the easy bit. But then the musician, who had played with the LPO and had written for the Royal Ballet, went further. Meyer proposed that each country move progressively to the same allocation per inhabitant by an agreed date. This meant that rich countries would have steadily to cut back their emissions, while poor ones would be allowed steadily to grow theirs, with everyone eventually meeting in the middle at a point where science said the global maximum level of emissions should be set. He called it "contraction and convergence" (C&C).

Meyer is nothing if not determined. Since 1990 earning next to nothing and sometimes practically begging for money so he could lobby international meetings, he has pressed C&C at every level of global government. Early opposition came from British civil servants, who said it was akin to communism, and major environmental groups, which were ideologically opposed to any kind of trading emissions. For many years the US government had no interest in any such deal.

But the climate stakes have risen with every new scientific report, and the politicians and environment groups have moved on. As the urgency for a global agreement has grown, so C&C has emerged as one of the favourites to break the international impasse.

"Its advantage is that it is far simpler and fairer than the Kyoto agreement, which applied only to a few rich countries," Meyer says. It also allows science to set the optimum level of emissions; it gets round long-standing US objections that poor countries should be part of a global agreement; and it is inherently pro-business, because it encourages rich and poor countries to trade emissions between themselves.

The long years of single-minded lobbying mean that Meyer's idea now has some powerful backers, including, in Britain, the Royal Commission on Environmental Pollution. 180 MPs have supported it in an early day motion, and the government, equivocal so far, is moving towards a version of it. It has become official policy in India, China and most African countries, Germany and India are expected to run with it in UN meetings. Angela Merkel, the German chancellor, has backed C&C publicly.

Other proposals are emerging and it will take two more years to thrash out a system that will please everyone. But few have the elegance of C&C. *"It's the least unfair of all the proposals that have been put forward,"* Meyer says. *It secures survival by correcting both fatal poverty and fatal climate change in the same arrangement."*

Writing music and calculating emissions have a lot in common, he says. "Look at a sheet of music and you would not know what it was, But when you hear it played, then it's beautiful. Equally, when you read the calculations on countries' gases, they mean nothing. But when you work out how you can reduce them, it's clear that it's the best thing for humanity."

Meyer still plays the violin every day, but seldom with an orchestra. *"I just did not realise that it would take quite so long to change the world,"* he says.

Contraction and Convergence: The irreducible response to climate change



Global
Commons
Institute
www.gci.org.uk

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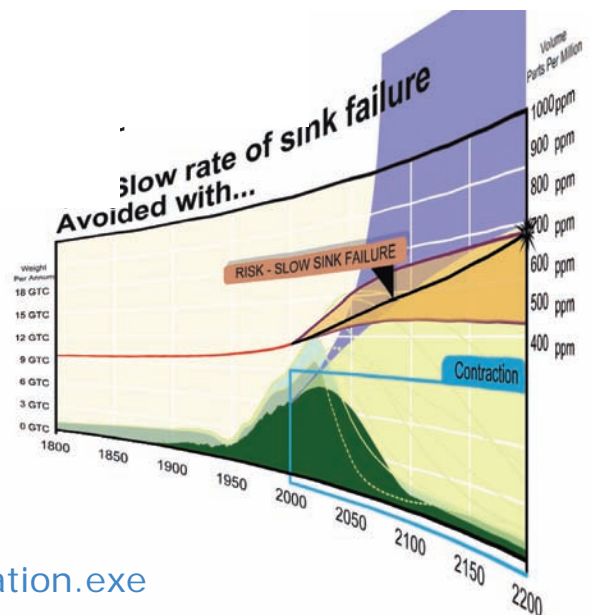
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www.gci.org.uk/Animations/BENN_C&C_Animation.exe

"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 climate-friendly 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

