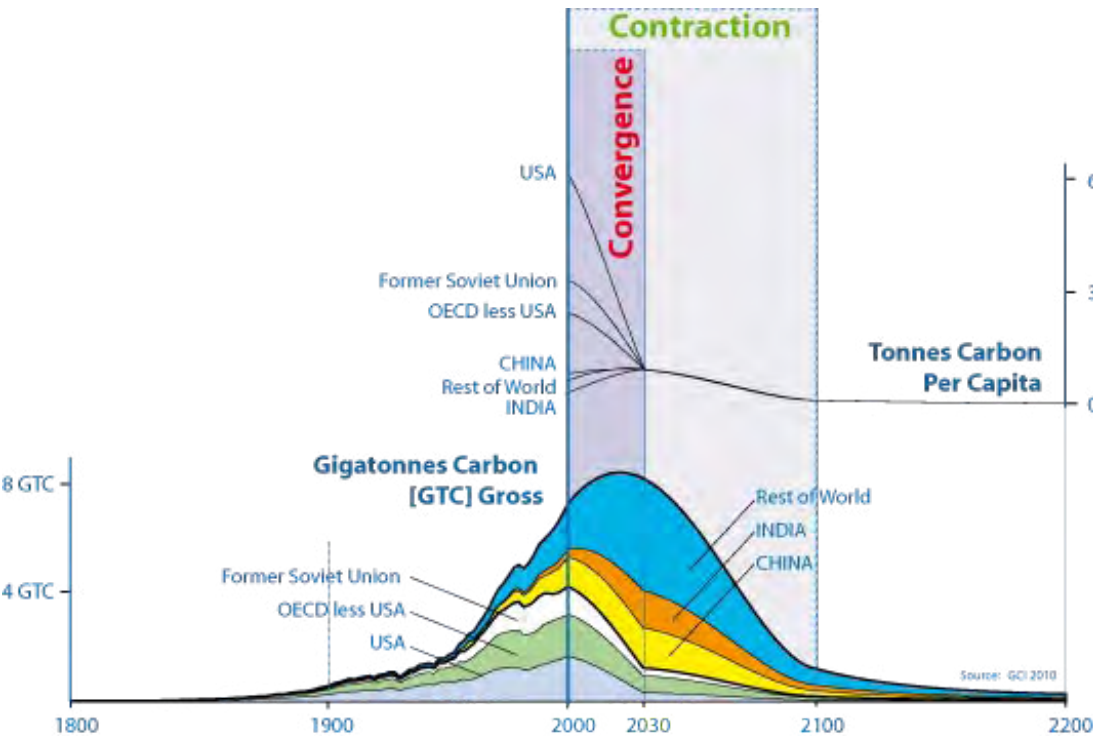


Message to Christiana Figueres
Executive Secretary UNFCCC
& many of the UNFCCC/COP Party negotiators
for the Doha COP 18 meeting December 2012.

“SOS FROM EARTH
ACT TO AVOID SHAMEFUL FAILURE.”

23 October 2012

From Dr Harley Wright Climate Sense



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

Dear Executive Secretary and Party negotiators to COP 18 and ADP 1-2

I am concerned that the UNFCCC’s actions are not able to avoid dangerous climate change. Accordingly I exhort all negotiators to work before and at COP 18 in Doha for urgent new measures to implement strong and continuing global emissions reductions taking full effect in 3 to 5 years. My conclusion suggests some key measures.

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No sufficient plan or timetable

I can’t find a UNFCCC plan or timetable sufficient to avert dangerous climate change. I have followed the UNFCCC developments with great expectations from its inception in 1992. From promising beginnings and the commendable achievements of the Kyoto Protocol and Marrakesh Accords, recent progress has been alarmingly slow and inadequate. It is primarily engaged in peripheral and procedural aspects rather than solving the core problem – how to share the limited carbon space.

Current path to shameful failure

The Durban outcome - 'to adopt a legal agreement by COP 21 in 2015 to come into effect and be implemented from 2020'¹ - is insufficient. The accounts I read, Meinshausen², OECD³, UNEP by Alcamo⁴ and Bernie et al at Hadley Centre⁵ make it clear that 2020 is too late. If we are to satisfy the Meinshausen limit (~1,500 Gt CO_{2e} or ~1,000 Gt CO₂ CDIAC budget; 2000 to 2050), we need around 5.8% year on year reduction of global emissions commencing in 2016. This is a difficult and serious challenge. Yet if continuous reductions don't start until 2020 (under Durban, ADP), year on year reductions of around 8.4% must be maintained. Most would agree this could not be achieved. Do you have advice to the contrary?

Without urgent action to agree on a plan and a timetable the UNFCCC seems doomed to fail: it will not avoid dangerous anthropogenic climate change. It's current efforts can not avoid a temperature rise of 2°C above pre-industrial world average temperature, let alone the desirable target of limiting a rise to 1.5°C.

The IPCC produces detailed and authoritative analyses of anthropogenic global warming. However, the UNFCCC/COP has not produced a comparable analysis of the policy options to reduce emissions. It seems the UNFCCC/COP process is not currently adequate to develop and drive the large and urgent changes and abatements required. It appears to lack project management of the core issue. UN requirements, especially for full consensus, hinder the development and execution of an effective abatement model. Sadly it seems, the COP develops policy by increments of the lowest possible common denominator ('incrementalism'), inching forward without determining the possible policy paths to achieve quantified carbon reductions in a timeframe to avoid dangerous climate change.

Shame of our generation – technically able but too selfish and organisationally inadequate

Modern society has the ability to undertake and achieve huge projects. Space projects and major infrastructure developments (eg, the Three Gorges Dam or deepwater oil rigs) are successfully accomplished to a timetable. Skilled project management takes ideas and concepts through to successful fulfilment. It seems essential that the UNFCCC employ similar project management skills and processes to develop and drive the strong abatement necessary.

It will be the shame of our generation if our descendants say;

“they had the means to reduce emissions but they lacked the organisational skills and many countries were too selfish to agree to a credible plan to save the planet from their damaging addiction to easy sources of energy and other sources of warming emissions.”

Improved UNFCCC processes – include project management

To fulfil its primary goal, the UNFCCC must adopt urgent and stronger measures. To avoid dangerous climate change it must develop a plan and timetable to ensure emissions peak within around 3 to 5 years. The current slow and bureaucratic processes of the UNFCCC are not sufficient to achieve this.

An emissions peak in 3 to 5 years could be achieved if the UNFCCC commissioned a new Urgent Abatement Management Team (see Annex 1, Suggested Doha agreement) to develop options and timetables. COP would then adopt the best model with policies, steps and a timetable to achieve the necessary abatement.

A carbon budget to 2050 – plus rationed allocations to countries

The core tasks are simple in theory; 1) agree on the maximum cumulative emissions to 2050 (eg, Meinshausen's 1,500 Gt CO_{2e}) and 2) agree on sharing the 'carbon space', viz, 'ration' each country's emissions; ie, allocate emission permits so the global budget is not exceeded.

Prof Ross Garnaut provided a detailed review of options, "Towards a global agreement", which is attached⁶. He states "that a 'modified contraction and convergence' framework was the best approach to calibrating fair shares across countries." Following Durban's call for "options and ways to further increasing the level of ambition"⁷ I provided to the UNFCCC Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP) for consideration at its Bonn meeting, May 2012, a model based on contraction and convergence. My basic 'Sydney Bridge' model is attached⁸ and the timetable follows at the end of this letter – Annex 3. It shows emissions trading with strong abatement commencing in 2016, though not all major emitters may elect to join then. The abatement team could consider this model and develop several of its own models for urgent consideration by the COP.

Some key features of the Sydney Bridge model:

- Countries commit voluntarily now to a process based on contraction and convergence: 'the process'.
- Participating countries (the Participants) quickly develop the detailed rules for *all* Participants to agree to – probably engage consultants to provide models to choose from
- Countries participating are allocated emissions entitlements for their current emissions and these move to equal per capita entitlements over time (time yet to be decided - contentious)
- Entitlements would be freely traded among Participants. The economies of all participating countries would 'see' and respond to the carbon price.
- Countries with below-average carbon emissions (the South) earn income by selling their excess entitlements to above-average emitters (the North)
- The use of Border Adjustment Measures on imports from non-participating countries helps provide a level playing field between Participants and non-Participants. It can encourage non-Participants to join the UN process
- Emissions entitlements and full trading commences 2016 with strong reductions, almost 6% per year (year on year) continuing to 2050.

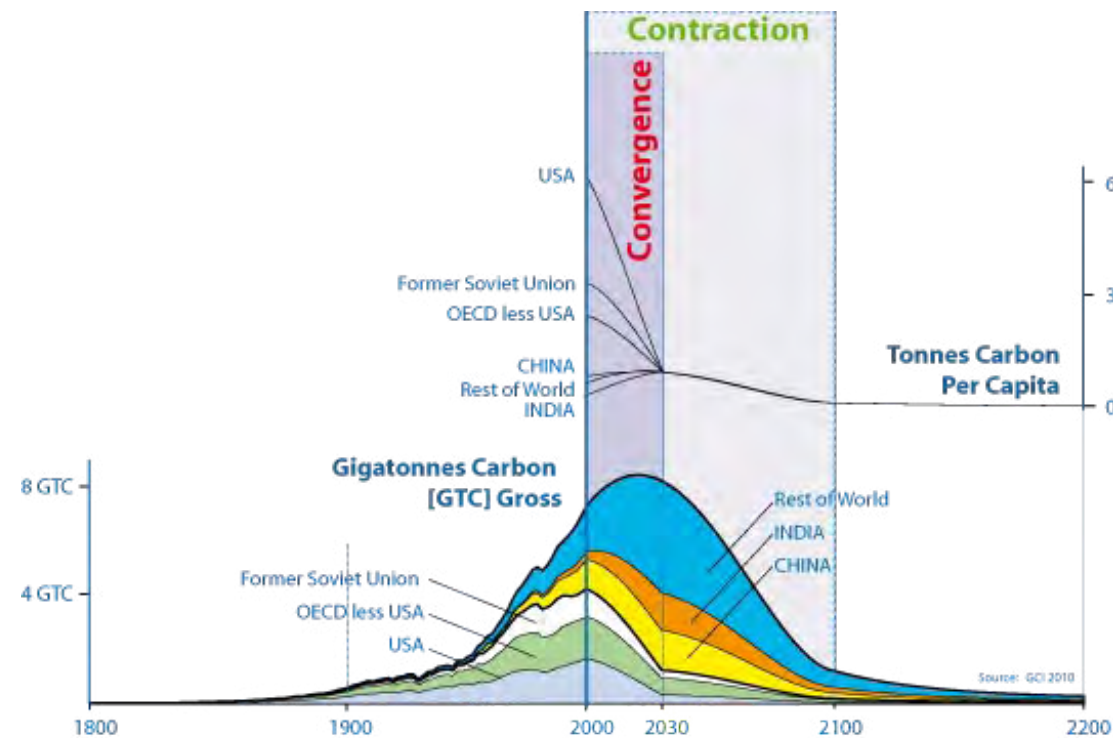
Contraction and Convergence - emissions trade

'Sydney Bridge' adopts Contraction and Convergence (C&C) the emissions management model based on equity and clear logic. See, <http://gci.org.uk/>. An excellent movie is available at⁹ and a technically detailed submission to UNFCCC at¹⁰. C&C is arguably the oldest and most widely accepted model for the difficult task of sharing the carbon space equitably, simply and



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Trade in carbon entitlements, determined by each country's per capita allocation, means that countries with above world average carbon intensity buy entitlements (permits) from those with below average carbon intensity. The trade can be substantial, which my simple estimates in Annex 2 for an extreme condition, total over \$170 billion in the first year (at \$25/t CO₂). This exceeds the \$100 billion/year promised for the Green Climate Fund. There are winners (the South) and losers (the North). Annex 2 gives income from the sale, or the cost to buy, emissions permits expressed as a percentage of each country's GDP. In the first year, Pakistan, India and Indonesia could earn around 11%, 7% and 3% respectively of their GDP. Conversely, China, Iran, and South Africa pay 1.0% to 1.1% of GDP for permits, Russia and Saudi Arabia 0.9% and Poland 0.5% of GDP.

These costs are substantial, yet they seem unlikely to send their economies backwards against inevitable growth from technological change. While there is real pain from such arguably fair arrangements, it is easy to think that countries unwilling to commit now to the strong world-wide reductions urgently required to avoid dangerous climate change, are game-playing the COP talks. To avoid game playing to achieve an unfair advantage for their country, perhaps there should be times when negotiators do not have country affiliation and vote by secret ballot?

CONCLUSION - Please act now

Can you please act now with other negotiators to initiate urgent new decisions by the UNFCCC/COP at Doha COP 18, particularly;

- **Adopt new management processes using project management** – commission consultants as eg; an urgent abatement management team
- Quickly **develop and implement a plan with timetable** to continuously reduce emissions, starting 2016 to meet an agreed emissions budget
- thoroughly **research the role of Border Adjustment Measures (BAMs)** (eg, a special team and report) so COP can **accept schemes with incomplete agreement and participation**. ie; Lead on principle. Laggards [eg, USA] can join later.
- **Adopt and develop contraction and convergence** as the fair means to reduce carbon soon.

If the current stasis in UNFCCC processes is not overcome, we should all be ashamed of our failure to our descendents.

Yours sincerely

Harley Wright



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Personal Background

I am an Australian citizen who is deeply concerned that the world is not acting firmly enough to deal with the increasing threats from global warming. I am a retired environmental manager and have no commercial or government affiliations. I am acting on my own account and putting my relevant experiences to use. A CV/biography is attached.

Attachments to this email

1. Garnaut 2008 Chapter 9.pdf
2. SOS from Earth, Exhort UNFCCC, v20121022b.pdf
3. Sydney bridge - Framework to fair, strong carbon reductions to start 2016, v20120528.pdf
4. Harley Wright, CV Oct 2012.pdf



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Annex1: Suggested Doha agreement
Suggested form of agreement at COP 18, Doha, eg;

The Conference of the Parties;

Noting with grave concern that [“ . . .” similar to or same as Durban agreement]

1. Agrees that the global carbon budget from 2000 to end 2049 should be 1,500 Gt CO_{2e}
2. Notes the arguments for ‘historical responsibility’¹¹ and agrees this issue be left for consideration once longterm processes are established to reduce current emissions
3. Agrees that contraction and convergence is the most suitable means to allocate emission entitlements and tradeable permits and
4. Decides to commission expert consultants (called eg, Urgent Abatement Management Team) to manage the task, which is;
 - to provide abatement models by Jun 2013 for COP and then the COP
5. Agrees on a model for development which is to be implemented by start 2016
6. Commissions the Urgent Abatement Management Team (UAMT)
 - to advise on a convergence date (when all per capita entitlements are equal)
7. Notes that the measurement and reporting of GHGs can be a challenge technically and financially for countries with small wealth and technical development. CO₂ reported by CDIAC is reliable. Estimates of LULUCF emissions & sinks are complex and imprecise.
8. Accordingly commissions the UAMT
 - to advise whether different countries could have different responsibilities of reporting and rights to entitlements, thence consider possible country groups having different levels of involvement in emissions monitoring, reporting, entitlements and trade. COP notes the potential for different kinds of tradeable permits depending on a country’s category.
9. Commissions the Urgent Abatement Management Team (UAMT)
 - to advise on Border Adjustment Measures (BAMs) and possible agreements under GATT to allow for BAMs where some countries decline to commit to the global model to reduce emissions in a measured and allocated way.

Annex 2: Value of trade in emissions permits
Illustrative incomes and costs from trading permits by 21 major emitters in 2011 – assumes equal per capita entitlements with global 2011 emissions 5.8% less than 2010 emissions (actual)**; Other key assumptions – below table.

Country ↓	Emissions % of world total [CDIAC CO ₂]	Income from sale of excess permits @ \$25/t CO ₂	Cost to buy permits @ \$25/t CO ₂
Units→	%	% of GDP	% of GDP
 China	24.6%		1.10%
 United States	16.4%		0.30%
 India	6.2%	6.9%	
 Russia	5.0%		0.90%
 Japan	3.4%		0.16%
 Germany	2.3%		0.18%
 Iran	1.7%		1.11%
 South Korea	1.7%		0.44%
 Canada	1.5%		0.26%
 Saudi Arabia	1.5%		0.86%
 United Kingdom	1.5%		0.17%
 Indonesia	1.4%	2.9%	
 Mexico	1.4%	0.4%	
 South Africa	1.3%		0.98%
 Brazil	1.3%	0.7%	
 Italy	1.2%		0.16%
 Australia	1.1%		0.23%
 France	1.1%		0.11%
 Poland	0.9%		0.52%
 Pakistan	0.5%	11.5%	
World Sales revenue = Purchase cost	76.0%	\$million 171,573	\$million 171,573

Key assumptions; This illustrative model assumes emissions contract in 2011 from the base year emissions data for 2010 (actual CDIAC values). This hypothetical timeframe is used because emissions data for 2010 is known so extrapolation, with its extra uncertainty, is avoided. Emissions trading is estimated for 2011 when global emissions decrease by 5.8% from 2010. A 5.8%/year decrease is needed continuously from 2016 to 2050 in the Sydney Bridge model to satisfy Meinshausen’s budget limit (1,000 Gt CO₂). In the estimates here for 2011, low-carbon countries (sales in black) maintain the same emissions in 2011 as 2010. They sell their excess emissions entitlements to high-carbon countries (purchases in red). High-carbon countries have total permits (per capita entitlement + purchase from others) which are 6.6% less than their 2010 emissions. Their emissions are constrained to this level – or perhaps COP allows forward purchasing of permits from future years.

**** Nb:** These are unverified, preliminary results for illustrative purposes. They are based on real data and hypothetical, plausible conditions though politically unacceptable to the North. Calculations available from [Harley Wright](#).

Annex 3: COP Timetable from Sydney Bridge model

Policy Steps to ensure “highest possible mitigation” – global emissions trading starts 2016

Step	Policy steps	2012	2013	2014	2015	2016
Contraction			Kyoto 2 nd Period Ends 2015, Cap & Trade starts Jan 2016			
1	Agree to Contraction (qualitative only)	Agreed COP 18				
1.2	Maximum emissions for 2050, 2030	Agreed COP 18				
1.3	Maximum emissions by 2020 eg: Annex I = 1990 -25%; non Annex I = 1990 +20%		Agreed COP 19			
Convergence						
2	Agree to Convergence (qualitative – no time limit)	Agreed COP 18				
Convergence Date						
3.1	Agree shortest & longest convergence dates, eg, 2008 to 2050	Agreed COP 18				
3.2	Agree tighter dates, eg 2015 to 2030		Agreed COP 19			
3.3	Agree convergence date, eg 2025			Agreed COP 20		
Entitlement Profiles						
4	Emissions Profiles, Permit issue & trade, Reconciliation					
4.1	Framework – Principles & Policy Steps to be developed	Agreed COP 18				
4.2	Agree each Annex B country's target for Kyoto2 2013-2017	Agreed COP 18				
4.3	Working Party sets emissions entitlement (permit) profiles (say in 5 y steps)			Agreed COP 20		
4.4	Working Party develops <ul style="list-style-type: none"> • permit management, compliance • & late-joiners policy 			Agreed COP 20		
4.5	Agree full compliance to start cap & trade 2016			Agreed COP 20		
4.6	The full working measure is finalised in 2015 & approved at COP21.				Finalise details. Agreed COP 21	Jan: CAP & TRADE STARTS
Other policies, issues						
	Green Climate Fund					
	Others - Many					

References

- ¹ FCCC/CP/2011/L.10 Clause 4 of Draft decision /CP.17 Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action
- ² Malte Meinshausen et al, Nature Vol 458, 30 Apr 2009, Greenhouse-gas emission targets for limiting global warming to 2°C
- ³ OECD Environmental Outlook to 2050 The Consequences of Inaction, ISBN 978-92-64-122161, March 2012
- ⁴ Joseph Alcamo, UNEP, Ministerial briefing, Bonn 4 May 2012, *The message from science: The emissions gap and how to bridge it*
- ⁵ Bernie et al, Met Office Hadley Centre, 22/12/2011, *AVOID – Avoiding dangerous climate change*
- ⁶ Prof Ross Garnaut, in *The Garnaut Climate Change Review*, 2008, Chapter 9 Assessing the international response – Attachment to email.
- ⁷ FCCC/CP/2011/L.10 Point 8 of Draft decision /CP.17 Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action
- ⁸ Harley Wright, *Sydney bridge - Framework to fair, strong carbon reductions to start 2016*, v20120528.pdf; - Attachment to email
- ⁹ Movie explaining contraction & convergence and emissions trading next page & at: - http://www.gci.org.uk/Documents/Movie_Only.pdf
- ¹⁰ GCI submission to UNFCCC Bonn May 2012 at: - http://www.gci.org.uk/Documents/GCI_to_UNFCCC_and_Movie_.pdf
- ¹¹ Winkler H et al, BASIC experts, 3 Dec 2011, Equitable access to sustainable development”, BASIC expert group: Beijing, Brasilia, Cape Town & Mumbai



