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The Hon Greg Combet MP **(Copy)**  
Minister for Climate Change, Energy Efficiency and Water  
Parliament House  
Canberra ACT 2600

12 October 2010

Dear Sir,

### **Climate Change: Lessons From Copenhagen**

I expect that, like me, you were disappointed at the outcome of the Copenhagen Climate Conference. While no binding agreement emerged, an accord was salvaged through President Obama's intervention, and the voluntary commitments made by developed nations, with the possible exception of Australia, provide a foundation on which to build. As we approach the next climate conference in Mexico in December, we should learn the lessons of Copenhagen and develop a vision for an effective and equitable international agreement.

It will probably be argued that the kind of agreement proposed in this letter is too ambitious to replace Kyoto, given that the latter needs to be negotiated by 2012. This proposal is more like a blueprint for 2020, but if it is ever to be achieved, the next agreement needs to prepare the way.

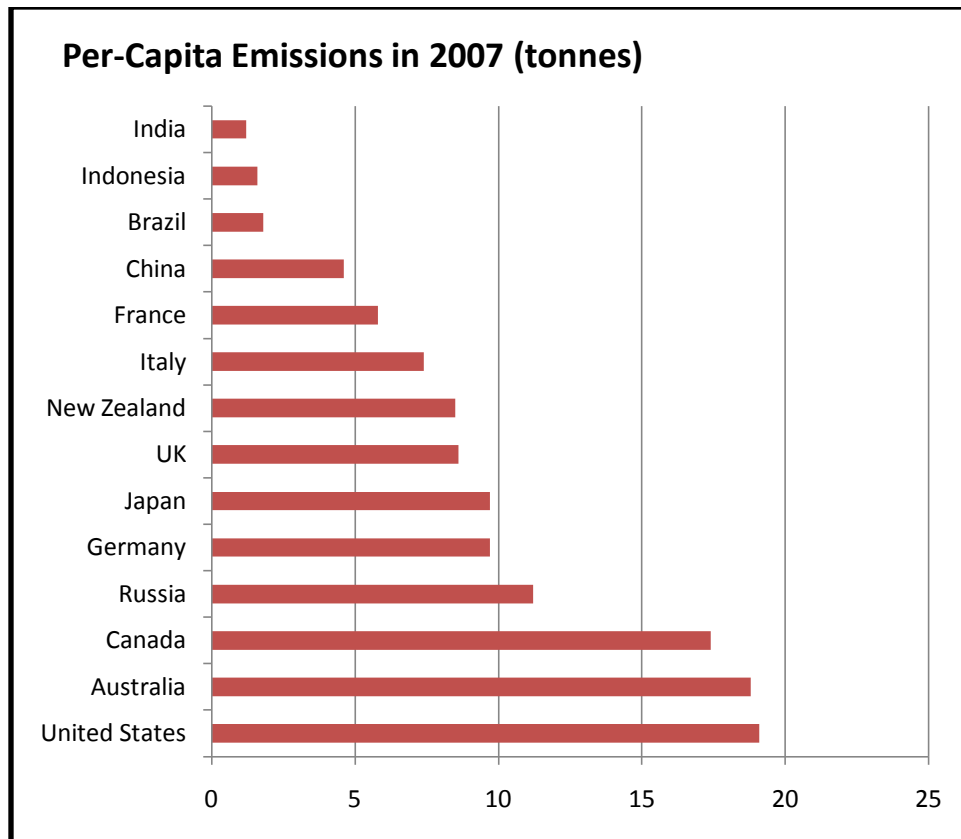
### **The Main Reason for Copenhagen's Failure**

Many factors have been suggested as reasons for the disappointing outcome at Copenhagen. These included the host government's handling of the conference, a draft declaration authored by "friends of the chair", the fierceness with which nations protected their perceived economic interests, and China's procedural tactics, which obstructed progress through much of the summit.

While the US blames China for the failure to secure a legally binding outcome, the truth is that these two nations have irreconcilable positions on how fairly to share the burden of emission reductions. The problem can be traced back to the time of the Kyoto Protocol, which was vigorously opposed by the Senate during President Clinton's second term, and by President Bush during his administration. The argument used by both the Senate<sup>i</sup> and President Bush to justify their opposition was that they would not ratify a treaty that they thought put the U.S. at a disadvantage relative to developing nations such as China and India. While the total emissions from China have recently overtaken the U.S., we must remember that China has four times the population. In 1997 when the protocol was signed, China's emissions were just 2.7 tonnes of CO<sub>2</sub> per person compared to 19.8 metric tons per

person in the U.S.<sup>ii</sup> If the U.S. was to comply with its Kyoto target, it would still massively out-pollute China on a per-capita basis. The opposition of the White House and the Senate was therefore without any moral foundation and was an unfortunate manifestation of ignorance.

In the years since Kyoto was signed, it is true that China's economic growth has increased its per-capita emissions, while in the US they have remained flat. In 2007, the last year for which comparative data is readily available<sup>iii</sup>, China's emissions were 4.6 tonnes per person compared to 19.1 tonnes per person in the U.S. I have used these figures to create the chart below. Global average per-capita emissions were 4.4 tonnes in 2007. The level of per-capita emissions generally regarded as safe is 2 tonnes.



No binding global agreement is possible until the developed nations recognize that in a carbon constrained global economy, where emission rights have a value, the only fair way to distribute such rights is on a per-capita basis. Far-sighted individuals have recognized this from the foundation of the UNFCCC. The leading solution for setting national targets based on per-capita emissions is the Contraction and Convergence model<sup>iv</sup> developed in the UK by the Global Commons Institute. It has been "on the table" since 1990, and is promoted as a basis for a post Kyoto agreement by a group of developing countries led by India.

I find it amazing, given that the model is so widely known internationally, that it has received so little attention from politicians and the media in Australia.

## Contraction and Convergence

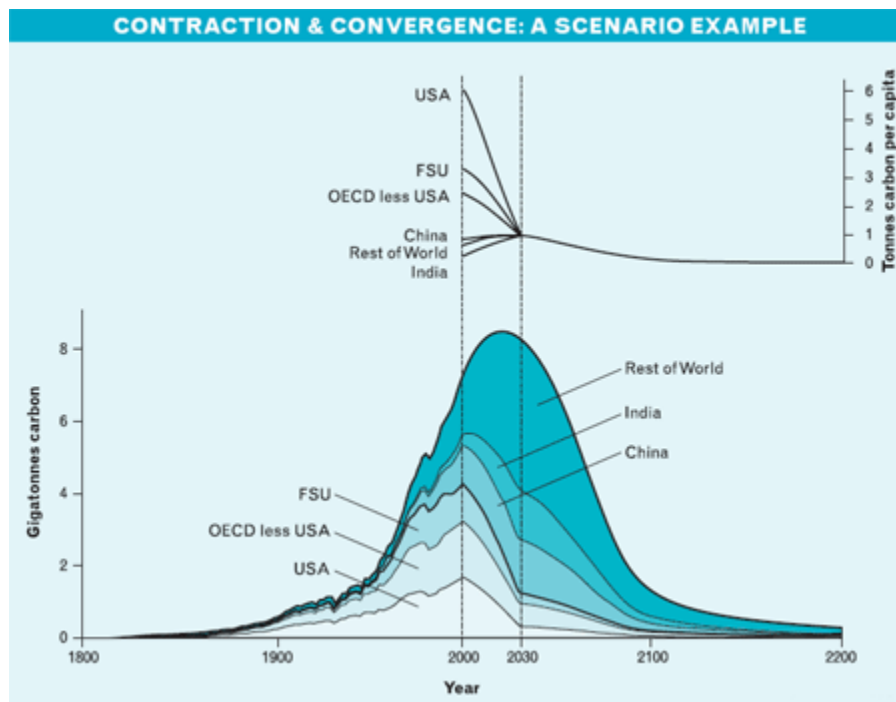
Built on the ideal of per-capita emissions rights, the model is practical in its implementation. Because the emissions cuts required by developed nations are so deep, convergence to a per-capita solution is only possible over time.

In **contraction**, the total annual emission of greenhouse gases reaches a ceiling, and then gradually contracts. The **convergence** mechanism facilitates the distribution of emission entitlements across the world to converge on equality. At the end of the convergence period countries receive entitlements in proportion to the size of their population. Developed countries are the first to make large cuts in their emissions levels, whereas developing countries are permitted to keep increasing their emissions levels for a period before also beginning to cut their emissions.

The model has widespread support from scientists, businessmen, politicians, and faith groups. It has received endorsement from a long list of luminaries<sup>v</sup>, including:

Raul Estrada, Chairman Kyoto Protocol Negotiations  
Nick Clegg, UK Deputy Prime Minister  
Ed Milliband, Leader of the UK Labour Party  
Sir David Attenborough, Naturalist  
Dr Tim Flannery, Australian of the Year

At Oxford University in the UK, university students have initiated the Climate Justice Project to campaign for this solution. Their website<sup>vi</sup> explains how the model works.



The model is illustrated by the graphic above. (Note that tonnes of carbon need to be multiplied by 3.5 to get tonnes of CO<sub>2</sub>.)

Since the model was first formulated, much time has been wasted. Therefore, the time axis in the graphic may need to be adjusted by 20 years, which would push the convergence point out to the year 2050, as recommended in the Garnaut Climate Change Review. (Garnaut proposes a modified version of Contraction and Convergence) <sup>vii</sup>.

While Contraction and Convergence sets emission targets for each nation, decisions about how those targets are met are entirely up to national governments. Contraction and Convergence is a means of setting targets for nations, but each national government will still need to choose an ETS, carbon tax or regulatory measures to reduce their own emissions. The pros and cons of these options are discussed on the "Solutions – Economic" page of my web site, [www.climatechangeanswers.org](http://www.climatechangeanswers.org).

### **The Copenhagen Accord**

The UNFCCC principle of "common but differentiated responsibilities" responds to the fundamental issue of fairness. Contraction and Convergence is an excellent model for addressing this principle, though there are alternate approaches. The Copenhagen Accord has received pledges of absolute reductions from developed nations, and pledges of reductions in emission intensity from a number of developing nations including China. This goes some way to recognizing the lower current emissions, and lower historical responsibility, of the developing nations. The accord states that countries will take action "consistent with science and on the basis of equity". The United States cannot expect China to make the same percentage cuts in emissions while its per-capita emissions are four times those of China. That is not equitable.

The accord also contains an important global commitment. The 110+ nations that have signed up to the accord agree that "deep cuts in global emissions are required according to science, and as documented by the IPCC Fourth Assessment Report (AR4), with a view to reduce global emissions so as to hold the increase in global temperature below 2 degrees Celsius" <sup>viii</sup>. How deep do these cuts need to be? The accord does not say. However, the authors of the landmark report "The Copenhagen Diagnosis" <sup>ix</sup>, using AR4 projections, estimated that emissions reductions of around 40% from industrial nations are required if this goal is to be achieved.

### **Australia Should Lead Rather Than Follow**

When Kevin Rudd went to the Bali Climate Conference to announce Australia's ratification of the Kyoto Protocol, we gained a "seat at the table" with an opportunity to help formulate a treaty to replace the protocol after it expires at the end of 2012. We now risk squandering that opportunity.

The Copenhagen Climate Conference did have some positive outcomes. The commitments under the Copenhagen Accord, while less than is needed, are significant. Most UNFCCC Annex 1 countries have introduced, or are in the process of introducing, mechanisms to price greenhouse gas emissions. Australia, on the other hand, still struggles to forge a consensus that climate change is real! It is to be hoped that the Australian Government uses the upcoming conference in Cancun, Mexico to re-engage with the international effort, and re-engage the Australian public.

## **Global Governance of the Atmosphere and Oceans**

In his latest book <sup>x</sup>, Dr Tim Flannery has a vision of what is needed. He writes:

*The immediate challenge is fundamental - to manage our atmospheric and oceanic global commons - and the unavoidable cost of success in this is that nations must cede real authority, as they do whenever they agree to act in common to secure the welfare of all. This does not mean the creation of a world government, simply the enforcement of common rules, for the common good.*

Dr Flannery's last point is a particularly important one. I believe there is a need for global governance of the global commons, but not global government. Nations have always existed and always will exist, but their boundaries stop at the sea. The oceans and the atmosphere have always been the common heritage of mankind. The survival of every nation depends on its responsible joint management.

Given the enormity and urgency of the task, we need to move rapidly to a near-zero carbon economy. Furthermore, if we are to ever reduce atmospheric CO<sub>2</sub> to a safe level, we need to extract the bulk of the CO<sub>2</sub> emitted from 1750 up till now. That will require either carbon sequestration on an industrial scale, or geo-engineering. Both these solutions will involve decisions we make as a species, not as competing peoples.

### **Conclusion**

At Copenhagen, Archbishop Desmond Tutu gave a warning that nations will "sink or swim together" <sup>xi</sup>. I hope that you will go to the Cancun Climate Conference as both Australia's representative, and as a global citizen. If the first priority of delegates is to protect their perceived national economic interests, then the process will fail. If however, delegates arrive with an understanding of the science, an appreciation of the numbers, a sense of urgency, and a vision for what might be achieved, then real progress is possible.

Regards,

### **Copies Distributed To:**

The Hon Julia Gillard MP, Prime Minister  
The Hon Wayne Swan MP, Deputy Prime Minister  
The Hon Mark Dreyfus, Parliamentary Secretary for Climate Change and Energy Efficiency  
The Hon Kevin Rudd, Foreign Minister  
Senator Bob Brown, Leader of the Greens  
Senator Christine Milne, Deputy Leader of the Greens  
Mr Adam Brandt MP  
Mr Robert Oakeshott MP  
The Hon Tony Windsor MP

## References

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<sup>i</sup> S. Res. 98, 105th Cong. (1997).

<sup>ii</sup> Millennium Dev. Goal Indicators, *Carbon Dioxide Emissions*, available at <http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=751&crd=>.

<sup>iii</sup> International Energy Agency (see <http://www.iea.org/co2highlights>)

<sup>iv</sup> Gl (2008), Global Commons Institute, *Carbon Countdown: The Campaign for Contraction and Convergence*, available at [http://www.gci.org.uk/kite/Carbon\\_Countdown.pdf](http://www.gci.org.uk/kite/Carbon_Countdown.pdf).

<sup>v</sup> See <http://www.gci.org.uk/endorsements.html>

<sup>vi</sup> The Climate Justice Project: A Student-led Campaign for Contraction and Convergence, <http://www.climatejustice.org.uk/>.

<sup>vii</sup> Ross Garnaut, *China and the Transition to a Low Carbon National Economy*, available at <http://www.rossgarnaut.com.au/Documents/Garnaut%20250909%20China%20and%20the%20Transition%20to%20a%20Low%20Carbon%20National%20Economy.pdf>

<sup>viii</sup> UNFCCC, *Copenhagen Accord*, available at <http://www.grist.org/article/2009-12-18-text-of-the-not-yet-final-climate-deal/>

<sup>ix</sup> *The Copenhagen Diagnosis*, available from <http://www.copenhagediagnosis.org/download/default.html>

<sup>x</sup> Tim Flannery, *Here on Earth: An Argument for Hope*, Text Publishing 2010

<sup>xi</sup> Archbishop Desmond Tutu, as reported in NationJournal.com on 12 December 2009 (see <http://copenhagen.nationaljournal.com/news/>)