Mr. V (Gujji) Muthuswamy
Industry Fellow
Faculty of Business and Economics
Monash University (Caulfield campus)
Melbourne
[redacted]

Ms Anthea Harris
The Chief Executive Officer
Climate Change Authority (the Authority)
Australian Government

29 May 2013

Dear Ms Harris

Ref: Submission in response to the Issues Paper "Caps and Targets Review" dated April 2013

I thank the Authority for the opportunity to provide input to the above review. The points made in this submission are my personal views and do not represent the views of Monash University.

1.0 Background to this submission:

By way of introduction, I designed, and have been running, a unit (subject) on carbon pricing for Master's Degree students at Monash University since 2010.

A key part of the course is the simulation of the auction of Australian carbon units ("ACU"s or "permits") to teams of students (purporting to represent liable entities with permit obligations) using auction software developed by Tradeslot Pty Ltd. Teams have tried both sequential and simultaneous auctions, both 'ascending clock' and 'proxy bidding' which mimics a sealed bid system.

The student teams have also traded in secondary market operations platform where they can trade four main instruments, namely ACUs, Australian Carbon Credit Units (ACCUs), Certified Emissions Reductions units (CERs) and European Union Allowances (EUAs). Simulations also include the restrictions on the use of international certificates while acquitting their permit liabilities, such as 50% limit on EUAs + CERs, with a sub-limit of 12.5% from CERs. In some instances we have also tried different limits on the use of international linkages to assess the market price outcomes. These exercises take place in the Simulated Teaching and Research laboratory (STARlab) of the Department of Banking and Finance in the Faculty of Business and Economics at Caulfield campus.

The theory part of the course includes an overview of climate science, economic costs of climate change and its mitigation, Kyoto flexibility mechanisms, carbon pricing policies and mechanisms, investment in low-emissions technology, impact on the uncovered sectors such agriculture and transport, emissions trading schemes in Europe, California, NZ and pilot trials in China.

My professional career in the Australian industry before my association with Monash covered more than 30 years in the Victorian electricity industry. This includes before, during and after privatisation and deregulation of electricity markets, and in areas such as demand management, renewable

energy strategy, energy trading risk management, network (distribution) pricing etc. A somewhat out-of-date profile can be seen at http://www.buseco.monash.edu.au/aaf/staff/mutuswamy.html

My comments and suggestions are covered in sections 2.0 to 6.0 below.

2.0 Definition of the word "Target"

This is not a semantic point! In Box 1 (page 2) it is stated *"Australia's target relates to "net" emissions – that is emissions in Australia, adjusted for any import and export of emissions units."* This has also been clearly spelt out in various model results and past policy documents (e.g. CPRS-5, CPRS-15 etc. scenario study results). However, Box 3 (page 13) describing the Government's 2020 target policy does not reinforce the point that we are talking about 'net' targets.

This fact is also not widely understood or communicated in the general public sphere. For example, when one (e.g. a politician) talks about our unconditional guarantee of 5% reduction by 2020 compared to 2000 levels, most people do not realise that only a portion of that 5% reduction will come from local actions in the Australian 'air shed' and the balance is expected to be made up of international certificates.

Do other countries, listed in Table 3 (pages 22-23) also quote only their 'net' targets? Furthermore if, hypothetically speaking, all the 180 or so countries were to express their national targets on a 'net' basis (i.e. local action plus/minus trade components), the possibility of double counting could not be ruled out when computing global carbon budgets.

Furthermore, the flow of money outwards from Australia for the purchases of these instruments and its adverse impact on achieving a 'budget surplus' is neither recognised nor debated.

Recommendation: In the interests of transparency and a clearer appreciation by the public of the relative mix of our own internal actions and dependency on overseas abatements, targets and trajectories to 2020 should be expressed as made up of two factors: a "local actions component" and a "trade component". This is particularly important as post-Kyoto binding agreements amongst major emitting nations are unlikely to be reached until later in this decade.

3.0 International action and Australian targets

While the global budget must necessarily be a starting point in all the debates and Fig 6 (page 17) provides a conceptual picture of alternate abatement paths, their usefulness in setting Australian targets and trajectories to 2020 is not readily apparent. The Issues paper rightly points out the difficulties in data constraints, uncertainties regarding countries' 2020 emissions reduction goals and varying level of actions in different countries (page 19). The collapse of CER prices raises more questions about the confidence of potential investors in Clean Development Mechanism (CDM) projects.

These are other reasons for the Authority to set targets and trajectories in two distinct parts: local Australian reductions and trading in international certificates.

4.0 Sharing of global emissions budgets

The "contraction and convergence" approach as described in Section 3.2.3, Table 4 (page 27) would appear to be the most equitable, long-term approach, *with the proviso* that population growth rate is also brought into the equation:

*(Global emissions = Global per capita emissions * Global population).*

While developed economies have an obligation to reduce their conspicuously high per capita emissions, all countries should be obliged to keep their population growth to no more than the replacement rate; this will help to stabilise both per capita emissions growth and population growth.

This would need to be addressed in any discussions leading to a new post—Kyoto agreement by 2015. An article of mine that appeared in 'The Age' on 22 August 2011 discusses this issue in greater detail. http://www.theage.com.au/business/ten-principles-for-climate-change-20110821-1j4oe.html

5.0 Setting Caps

Continuing with the theme of setting targets for local actions separately, it would be good if CCA were to model the following alternative approach to setting the caps at least for the period from 2015 to 2018, and preferably to 2020:

1. *Use GHG reduction targets from local actions only in setting the scheme cap for 2015/16 on.*
2. *From 2015 to 2018, do not allow any linkage with the EU ETS or the use of CERs (assuming this is legally possible).*
3. *Use of Australian offsets such as ACCU could be treated in one of two ways: (a) as an acceptable local offset in the Australian ETS or (b) making it as an acceptable instrument in either the Renewable Energy Target Scheme and/or State-based energy efficiency certificates schemes". Option (a) would provide greater incentives for CFI projects.*
4. *No access to low-cost CERS and EUAs will inevitably push up the auction clearing price. This could be addressed by the ceiling price being modified to reflect a trade-weighted index approach, i.e. more weighting given to carbon prices in countries with whom we trade most. This could also mitigate the quantum of assistance needed by emissions intensive trade exposed (EITE) industries.*
5. *The cash outflow from Australia "saved" by the ban on the use of CERs ((i.e. 12.5% * (Scheme cap)* (price of CER)) should be channelled by the Government to promote bi-lateral actions in least developed countries to promote sustainable development.*
6. *Establish a bi-lateral link with the EU ETS in 2018 as planned, but abandon the one-way linkage starting in 2015.*

I put forward these ideas in a recent article on "The Conversation" website:

http://theconversation.com/why-a-bipartisan-approach-is-needed-on-carbon-pricing-12871

The above steps would be a suitable set of interim measures that enable Australia to proceed with the carbon pricing initiatives without compromising its integrity while waiting to see how the international developments pan out.

6.0 How much to auction?

The Issues Paper talks of the need "to take into account any Government purchases of international units when recommending caps." (Section 4.3, page 34). However, it is not clear to the writer as to how the advance purchases of international certificates by liable entities would be taken into account by the Clean Energy regulator (CER) when determining the amount of permits to be auctioned. Let us look at a simplified case to highlight this issue:

> Assume Scheme cap for a particular vintage is 350 Million permits and all of it is to be auctioned in one auction. Assume also that many of the liable parties have already bought about 100 Million permits (both EUAs and CERs) with the intention of meeting their acquittal obligations. Some of these may be still held overseas and some may have been brought into the Australian registry. The question is "How many permits should be auctioned?" If all 350 Million permits were to be offered, then total demand may well be less than the supply in the very first round of the ascending clock auction, with the clearing price being the reserve price and there will be many unsold permits. Should a reduced number of permits be auctioned by the CER taking into account some estimate of purchases of international offsets? If so, how will that estimate be made? Will this be a more (or less) of a problem in case of quarterly auctions?

While the above issue has not been specifically raised in the Issues Paper, I would appreciate if the Authority were to clarify this practical doubt /query in its report.

Thanks again for seeking comments on the Issues Paper. I trust these points are helpful to the Authority in its deliberations. Please feel free to contact me if you need to discuss further.

Yours sincerely

Gujji Muthuswamy

Industry Fellow
Faculty of Business and Economics
Monash University
Caulfield Campus
Melbourne