

28<sup>th</sup> November 2013

Climate Change Council

CANBERRA, ACT 2601

## Targets and Progress Review Draft Report

### Submission by Eastern Melbourne Climate Action Group

The Eastern Melbourne Climate Action Group welcomes the opportunity to comment on the Targets and Progress Review Draft Report by the Climate Change Authority (CCA). We believe that this report is a very comprehensive assessment of Australia's current progress to date in reducing greenhouse gas emissions and potential future targets for greenhouse gas reduction and are grateful to the CCA in the work in putting the report together. The CCA has asked for comments on three specific areas of the report:

- Australia's emission reduction target
- The use of international carbon permits and
- Australia's progress to date

Our suggestions concerning each of these areas are covered in this submission.

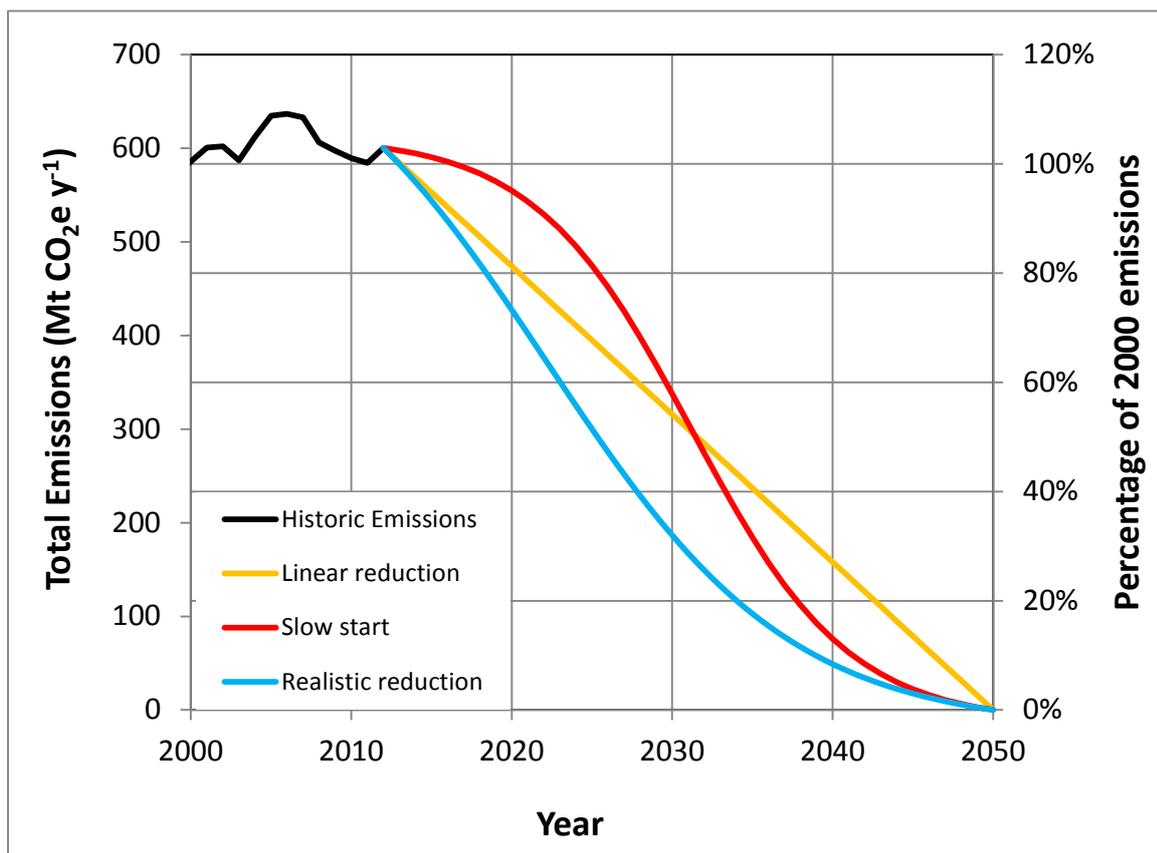
### **Australia's Emission Reduction Target**

The Eastern Melbourne Climate Action Group believes the current commitment by both the Government and opposition to reduce emissions by at least 5% in 2020 relative to total emissions in 2000 is too low. The risks posed by climate change and ocean acidification to the world in general and Australia in particular are too great to justify anything but the most determined effort to reduce our contribution to global greenhouse gas pollution. The underlying science makes it clear that the world as a whole must aim for zero emissions by 2050. To achieve this goal, Australia must aim to reduce emissions by at least 27% by 2020, and by 68% 2030.

A modelled trajectory of Australia's future emissions indicates that the most realistic scenario for Australia achieving zero emissions by 2050 is to reduce emissions rapidly initially and more gradually subsequently (Fig. 1). This is because there are many options for reducing emissions in the short term that are relatively cheap or even cost negative (e.g.

improving efficiency of commercial and residential heating and lighting). Modelling by McKinsey et al. (2008) indicates that Australia could reduce its emissions by 20% at little or no cost to the economy. Further cuts will be more expensive and so will take longer to achieve resulting in a tapering off in the curve. This contrasts with current modelling which often assumes either a linear reduction in emissions with time, or a slow initial start to emission reduction which places far greater demands for reductions in the mid-term (2020-30). The Eastern Melbourne Climate Action Group considers both these alternative scenarios to be unrealistic.

The proposed “realistic scenario” also limits Australia’s total emissions for 2013-2050 to the budget of 1% of total allowable global emissions proposed by the Climate Change Authority (10,100 Gt). In contrast, the “slow start” trajectory exceeds this budget by 11% while the straight line trajectory exceeds this budget by 10%. These alternative trajectories imply that we would require other countries to take on a far larger share of the burden in terms of emission reductions. Therefore, a 27% reduction in emissions by 2020 is the only target that will allow Australia to achieve its longer term share of the global effort to reduce emissions.



**Figure 1: Possible emission reduction trajectories for Australia towards zero emissions by 2050. Historic emissions from Climate Change Authority (2012) Reducing Australia’s greenhouse gas emissions – targets and progress review. Draft report. Trendlines modelled by Barrie May.**

Other reasons for increasing Australia's 2020 target from 5% to 27% include:

- Recent studies have shown that, despite commitments by 99 countries to reduce emissions by 2020, the world is still on course to substantially exceed the target for emissions required to limit global warming to < 2 degrees. It is important that wealthy countries like Australia, that have the resources to establish large-scale renewable energy systems, provide leadership on this issue by putting in place strong targets now which can be used to leverage support for stronger targets by other countries.
- As the 15<sup>th</sup> largest greenhouse gas emitter in the world with the highest per capita emissions of any developed country, it is incumbent on Australia to reduce its emissions rapidly to: a) demonstrate to the world that we are serious about protecting the future of the planet, b) provide an example to other countries of what can be achieved and c) develop the new technologies and systems which will be needed by the rest of the world in a low carbon future.
- An analysis of efforts to reduce emissions by other countries as well as State and Federal emission reduction programs in Australia indicates that targets are frequently not achieved or are achieved more slowly than originally planned. This can be as a result of unforeseen difficulties or delays, changes in economic conditions or even changes in political will. We need to factor these scenarios into any global action to reduce emissions by building in a buffer for our own domestic cuts to emissions as well as the overall global target. In other words, it is important to aim for stronger targets than the minimum required, to offset the risk of failures by a few countries who fail to meet their own targets. To do otherwise is likely to result in global emissions exceeding the maximum limit recommended by the IPCC and other bodies.
- Studies by Beyond Zero Emissions (e.g. Green and Finighan 2012, Wright and Hearps 2011) have demonstrated that it is feasible for Australia to move to 100% renewable stationary energy and become a world leader in green energy and technology in 10 years.
- We need also to factor in the risk that 2 degrees warming is too high and that we need to be aiming for stabilizing CO<sub>2</sub> at 350 ppm to reduce the impact of climate change (e.g. a recent study indicates that the Greenland ice sheet could melt with as little as a 1.6 degree C rise in temperature, potentially raising sea levels by 6 m, Robinson et al. 2012).

## Use of International emission Reductions

While the Eastern Melbourne Climate Action Group believes that Australia should aim to reduce its own emissions as much as possible through domestic action, we understand that the purchase of a proportion of emission permits from overseas is likely to provide a cheaper alternative path to achieving emission reductions. However, we do not believe that Australian companies should be free to achieve all their emission reductions by this method. This is because this approach has a number of potential problems such as:

- emissions purchases resulting in significant capital outflows from Australia impacting on our terms of trade (i.e. increasing imports and increasing our trade deficit);
- likely reduction in the amount of investment in the renewable energy sector and the development of new energy efficient and low carbon technologies industries that could provide a source of jobs and export revenue in the future;
- increased exposure of Australia to rising abatement costs as the price of overseas emission permits rises over time; and
- relinquishment of control of emission abatement programs to other countries who may have less stringent requirements for additionality or permanence compared with Australia and so result in investment in programs that yield lower returns in terms of true reductions in emissions compared with domestic programs.

Despite these risks, we believe that international carbon trading should have a place in Australia's emission reduction program as it potentially provides resources to developing countries which would otherwise not be able to afford to make substantial cuts to their own emissions. Examples of potential opportunities include:

- Protection of forest areas which are currently being rapidly logged and/or converted to intensive agricultural industries such as palm oil plantations;
- Replacement of existing or proposed new carbon intensive coal fired power stations with renewable power;
- Investment in energy efficiency measures such as more efficient lighting and heating;
- Development of new technologies and industries to produce items such as wind turbines, solar panels, solar hot water services and biogas producers for domestic use or export as an alternative to dependence on the production of raw materials such as timber, coal and oil for export revenue.

Therefore, we believe that purchase of international permits should form a component of Australia's emission reduction scheme on a limited basis. These provisions include:

- Limiting the maximum proportion of emission permits purchased to 50% of the total abatement required; and
- Ensuring that only permits that are demonstrated to be truly permanent and additional are able to be purchased.

To achieve the second goal, it will be crucial that Australia plays a leading role in the development of an international carbon trading system to ensure that only carbon permits that result in real, verifiable and permanent reductions in carbon emissions are included. This includes reviewing the inclusion of free permits provided to certain industries and removal of the practice of grandfathering (i.e. allowing industries to carry over free permits allocated in previous years to future years).

## **Australia's progress towards its emissions reduction goals**

The Eastern Climate Action Group believes that Australia's progress towards reducing its emissions has been totally inadequate to date. We may have met the weak target set under the Kyoto 1<sup>st</sup> agreement and achieved a minimal increase in renewable energy production, but progress to date has been expensive, inefficient and has not yet reduced our emissions. Furthermore, the recent moves by the new Coalition Government to remove the carbon price, dismantle the Clean Energy Finance Commission and review the renewable energy target risk destroying the single most effective and cost effective scheme yet established to reduce our emissions in the long term.

Our national target for an 8% increase in emissions by 2012 relative to 1990 was very weak and set under highly controversial circumstance. Australia was one of the few industrialised countries to sanction an increase in its emissions. Furthermore, in the final negotiations Australia effectively hijacked the whole agreement by refusing to sign unless emissions associated with land clearing in 1990, (coincidentally, the year with one of the highest rates of land clearing in Australia) were included. To add insult to injury, after all these negotiations which effectively weakened the whole agreement, Australia refused to sign the final document. Not surprisingly, when Australia finally agreed to sign the agreement in 2007, we were able to meet our own target with relatively little effort.

Prior to the commencement of the carbon pricing mechanism in 2012, a range of state and Federal-based schemes assisted with the development of the renewable energy sector and improvements in energy and carbon efficiencies. However analyses by the Auditor General (ANAO 2011) and the Grattan Institute (Daley and Edis 2011) showed that these schemes have suffered from a range of problems including:

- taking significantly longer than planned to achieve any abatement with delays of two years not uncommon,
- inability to find enough suitable projects (with an average of 60% of funds left unspent),
- achieving substantially less emissions reductions than planned with the most successful scheme (New South Wales Government's Greenhouse Gas Abatement Program, GGAP) achieving only 40% of the planned reductions

- resulting in high abatement costs with the NSW Greenhouse Gas Abatement Program costing \$40/tonne of CO<sub>2</sub>e and the average cost across all programs being \$140/tonne CO<sub>2</sub>e, and
- despite a total of \$12 billion dollars being spent on grant-tendering schemes and rebate programs, these had done very little to reduce emissions.

As a result despite billions of dollars being spent on emission reduction programs, many very similar to the Emissions Reductions Fund proposed by the current Federal Government, Australia's emissions have continued to increase at one of the fastest rates among OECD countries over the past 20 years. According to the most recent summary report by the UNFCCC (2011), Australia ranked 5<sup>th</sup> out of the 40 Annex 1 countries in terms of growth in emissions between 1990 and 2008. Furthermore, despite our very high per capita emissions, Australia is currently doing less than most other countries in terms of investing in emission abatement. Research by the OECD (2013) indicates that, even with a carbon tax of \$23 per tonne CO<sub>2</sub>e, the effective price for Australia's emissions is equivalent to around 17 Euros, or less than half the weighted average of all OECD countries (35 euros). In fact, out of the 34 OECD countries, Australia ranked 30th in terms of carbon pricing.

It has only been with the recent introduction of a carbon price in 2012 that emissions showed any signs of falling, with a 9% reduction in emissions from power generators in the first 6 months after the scheme was introduced (News ABC 2013). Unfortunately, the recent moves by the new Government to remove this mechanism, even before the basic workings of its own proposed replacement scheme (the Emissions Reduction Fund) have been established threatens to remove the single most cost-effective mechanism for reducing Australia's emissions in the long term. This apparent act of lunacy has only increased uncertainty in the energy sector and removed any incentive to invest in long term mitigation options for the future.

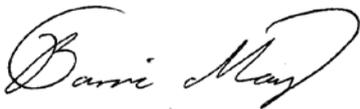
On top of the regressive step to dismantle the existing carbon pricing mechanism, Australia appears to be acting in total opposition to the demonstrated urgent need to reduce global emissions. This includes:

- substantially increasing the export of black coal to India and China with plans for massive expansion of this industry over coming years
- planning to investigate the potential expansion of brown coal mining in Victoria with the aim of developing a brown coal export industry in that state
- rapidly developing natural gas production through the exploitation of fracking which has been associated with high emissions of methane (a greenhouse gas 21 times more potent than CO<sub>2</sub>).
- Increasing the regulatory restrictions on development of wind energy in Victoria to a point where it is unlikely that there will be any further large development of wind energy in that State,

- Withdrawing funds from international programs working to reduce emissions from developing countries such as Indonesia,
- Refusing to agree to new funding programs including the Green Investment Fund proposed at the recent Commonwealth Heads of Government meeting.

It is clear that Australia's action to date in terms of reducing its emissions has been totally inadequate and is in stark contrast to the overwhelming evidence of the need for urgent action to stem global warming. Therefore, we believe that Australia must now set in place an ambitious but achievable set of targets to make a meaningful contribution to international efforts to reduce emissions. Without these actions, Australia will fail to play its part in averting the risk of runaway climate change; the result of which would be a crisis for humankind of unimaginable proportions.

Yours sincerely,

A handwritten signature in black ink that reads "Barrie May". The signature is written in a cursive, flowing style with a large initial 'B'.

Barrie May

BA Forest Sci., PhD Sci.

**EASTERN MELBOURNE CLIMATE ACTION GROUP**

## RECOMMENDED EMISSIONS REDUCTION GOALS

The Authority is canvassing two options for Australia's emissions reduction goals, which include 2020 targets of 15 per cent or 25 per cent below 2000 levels (refer Chapter 11). Please provide comments. optional

## USE OF INTERNATIONAL EMISSIONS REDUCTIONS

The Authority's draft recommendation is that the Government keep access to genuine and cost effective international emissions reductions available to use in meeting Australia's emissions reduction goals (refer Chapter 13). Please provide comments. optional

## AUSTRALIA'S PROGRESS TOWARDS ITS EMISSIONS REDUCTION GOALS

The Authority has assessed Australia's progress towards reducing and opportunities to further reduce emissions (refer Chapter 12 and Part D). Please provide comments. optional

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