

Committee Secretary
Senate Select Committee on Climate Policy
PO Box 6100
Parliament House
Canberra ACT 2600
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Dear Committee Secretary:

RE: Inquiry into policies relating to climate change

We are a group of concerned young Australians, deeply alarmed by the threat that climate change poses to our world. At the current time, we believe that Australia has a valuable opportunity to establish a pathway for rapid, proactive and bold action in order to address the climate change crisis facing our globe. We are passionate about ensuring Australia responds appropriately to this crisis, and hence welcome the opportunity to provide a submission to the Senate Select Committee on Climate Policy.

Below, we respond to points (a), (c) and (e) of the Terms of Reference for the Select Committee's Inquiry into Climate Policy. Our key positions regarding Australia's climate policy are:

1. Meaningful emissions-reductions targets must be set in line with international scientific advice
2. Climate change policy should be designed to promote action within Australia to reduce emissions without delaying action
3. Climate change policy should be proactive in identifying mechanisms to transition Australia's economy into a low-carbon future, instead of attempting to minimize change or maintain the status quo

(A) The choice of emissions trading as the central policy to reduce Australia's carbon pollution, taking into account the need to (i) reduce carbon pollution at the lowest economic cost, (ii) put in place long-term incentives for investment in clean energy and low-emission technology, and (iii) contribute to a global solution to climate change

The certainty of outcome provided by an emissions trading scheme is of benefit. However, certain design elements of an ETS do bring with it certain complexities, particularly concerning carbon offsets. Under the proposed legislation, unlimited linking with several foreign schemes and programs is allowed. We have significant reservations as to the merits of offsets in the scheme, outlined below.

Access to unlimited international offsets has the potential to act as an effective price cap, given the comparatively large pool of global abatement opportunities compared to the size of Australia's emission reduction targets. While this can be seen as achieving emissions reductions at the lowest cost, it ignores the objective of Australia's emissions trading scheme to drive a transition to a low carbon economy. Over-use of offsetting early in our emissions reduction trajectory could mask increasing domestic emissions. Given that the transition to a low carbon economy is ultimately inevitable, this would leave the nation having to very abruptly reduce domestic emissions at a later date, destroying the significant value of having implemented an emissions trading scheme at this earlier stage.

Allowing unlimited access to international offsets may have detrimental effects in developing countries. Assuming that Australia implements an emissions trading scheme ahead of much of the rest of the world, and that developing countries are required to engage in some emission reductions under the forthcoming global agreement, Australia's use of low-cost international offsets could increase the cost of emissions reductions for developing countries who are least able, and under the least moral obligation to fund emissions reductions.

Further, relationships have been seen between foreign offsetting schemes and a decline in living conditions for poor citizens, often indigenous people who rely upon their traditional lands for their basic needs. We find it completely unacceptable to consider that Australia might attempt to meet its reductions targets at the expense of under-privileged and voiceless people in developing countries. Examples of hydroelectric schemes in Borneo and the planting of palm oil plantations across SE Asia are areas where the adverse affects of improper offsetting could become apparent.

Finally, there is significant and ongoing debate amongst the international community over additionality issues with some forms of international offsets. We believe all of these issues have not received the attention they deserve, with little or no mention of them in the discussion of 'linking' in the CPRS white paper. We therefore implore the committee to examine these issues closely to ensure injustice does not occur and that our abatement targets are met through real change in our economy.

(C) Whether the Government's Carbon Pollution Reduction Scheme is environmentally effective, in particular with regard to the adequacy or otherwise of the Government's 2020 and 2050 greenhouse gas emission reduction targets in avoiding dangerous climate change¹

In order for Australia to enact a climate policy that is effective in mitigating dangerous climate change, this policy must be grounded in unbiased and robust science. The IPCC Fourth Assessment Report states that global average temperatures have already risen by 0.74°C. Due to existing carbon emissions, the globe is also 'locked in' to further warming of at least 0.6°C in the future. If appropriate action is not taken, it is predicted that global average temperature could increase by up to a further 6.4°C by 2100.

Already, Australia has observed a range of changes in environmental systems, and these changes are closely linked to climate change. Examples include shifting distributions of habitat types, altered rainfall patterns and increasing frequency of extreme weather events, mass coral-bleaching events in the Great Barrier Reef, and impacts on fauna such as varying migration times for birds. To avoid further severe and negative impacts on the environment, Australia must implement rigorous targets for reduction of carbon emissions.

There is wide international acceptance that an increase of 2°C above pre-industrial temperatures will result in dangerous climate change. Notably, the European Union

¹ Unless indicated otherwise data, trends, statistics, observations, scientific statements etc. in this section are taken from the IPCC's Fourth Assessment Report: IPCC (2007) *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 976pp.

has used this figure in guiding the development of targets for emissions reductions. Below the 2°C level of warming, it appears that recovery of the immeasurably important Great Barrier Reef in Australia could be possible (Hoegh-Guldberg, 2004)². The IPCC, in its Fourth Assessment Report (Working Group III Figure SPM.8) clearly recommends 450ppm CO₂^e as the stabilisation level required to restrict warming to 2°C. In addition, the Commonwealth Government has clearly stated their intention to maintain concentrations below 450ppm. Therefore, it appears clear that any carbon emissions reduction strategies should be implemented with this goal in mind.

The impacts of exceeding emissions levels of 450ppm will be catastrophic on a global scale. To achieve stabilisation at 450ppm, global emissions must be reduced in the range of 50-85% by 2050 compared to 2000 levels. The IPCC has stipulated that for Annex 1 countries, such as Australia, this translates to emissions reductions of 80-95% by 2050. While this recommendation provides a range of options for emissions targets, it is clear from an effective risk management approach that Australia should commit to emissions reductions at the upper end of this range. In a case such as this where the consequences of the hazard would be extremely severe, the most extreme mitigation action should be undertaken. The 2020 emissions reduction target set forward by the IPCC for developed nations was 25-40% below 1990 levels. At the very least, Australia must undertake a course of action that will meet these targets.

The current targets (5-15% by 2020 and 60% by 2050) set forward by the Commonwealth Government are consistent with a 650ppm approach according to the IPCC (see Appendix A). As young adults, we are not prepared to accept this approach, which would likely see warming greater than 3°C, resulting in severe negative impacts to our environment, economy, and social structures.

An additional consideration is that peer-reviewed scientific analyses since the release of the IPCC's Fourth Assessment Report in 2007 suggest that emissions increases and observed climate impacts are tracking above IPCC projections. The International Scientific Congress on Climate Change (Copenhagen, 10-12 March 2009) brought together more than 2000 scientists from around the globe that are engaged in research into climate change and its effects. At the conclusion of this Congress, the participants jointly released a statement including the follow key message:

*"Recent observations confirm that, given high rates of observed emissions, the worst-case IPCC scenario trajectories (or even worse) are being realised. For many key parameters, the climate system is already moving beyond the patterns of natural variability within which our society and economy have developed and thrived. These parameters include global mean surface temperature, sea-level rise, ocean and ice sheet dynamics, ocean acidification, and extreme climatic events. There is a significant risk that many of the trends will accelerate, leading to an increasing risk of abrupt or irreversible climatic shifts."*³

In light of this updated scientific knowledge and understanding of climate change trends, it is clear that Australia must commit to large emissions reductions in a short timeframe to avoid the risk of dangerous climate change.

When assessed in the context of the aforementioned science-based recommendations, it is clear that the emissions reduction targets included in the

² WWF Australia and Queensland Tourism Industry Council commissioned *'Implications of Climate Change for Australia's Great Barrier Reef'*

³ Press Release, *Key Messages from the Congress*, March 12 2009, http://climatecongress.ku.dk/newsroom/congress_key_messages/

Commonwealth Government's proposed Carbon Pollution Reduction Scheme are completely inadequate. They will not be useful in helping Australia or the world avoid dangerous climate change, and are in no way environmentally effective. As an alternative, we recommend that Australia adopt an emissions-reduction target of at least 40% below 1990 levels by 2020. Emissions-reduction targets for longer timeframes should then be guided by independent and robust scientific advice.

(E) Whether the design of the proposed scheme will send appropriate investment signals for green collar jobs, research and development, and manufacturing and service industries, taking into account permit allocation, leakage, compensation mechanisms and additionality issues.

Compensation of Emissions-Intensive Trade-Exposed Industries (EITEI)

In contrast to the assistance package for other sectors, we acknowledge that a well-designed assistance program for emissions-intensive trade-exposed industries is necessary and in keeping with the economic and environmental aims of the CPRS. Having said that, there are several elements of the implementation chosen in the CPRS that cause us significant concern.

Treasury modeling

The purpose of EITEI assistance, from the Government's perspective and from an economic perspective, is to prevent "carbon leakage." Advice from Treasury (Australia's Low Pollution Future, Box 6.7) indicates that noticeable carbon leakage is not predicted to occur at the carbon price predicted for the "CPRS -5" scenario even in the total absence of EITEI assistance. Though not stated explicitly in Treasury's publication, it is reasonable to assume that if, due to the adoption of a comprehensive global emissions reduction agreement, a higher emissions reduction target was adopted in Australia and a higher carbon price resulted, that the likelihood of carbon leakage would be greatly diminished by the international effects of said global agreement. Treasury also notes that where EITEI assistance is implemented, it comes at the cost of other sectors of other Australian economies and to the detriment of the aggregate efficiency of the sector (ALPF, Box 6.7). Even the Government's CPRS White Paper outlines several compelling arguments for limiting EITEI assistance to the minimum necessary (White Paper pp 12-11 to 12-12).

Despite evidence that little assistance is required under the proposed emissions reduction targets, the CPRS Exposure Draft Legislation outlines a large assistance program – corresponding to an estimated 25%-35% of all emissions permits being required for fulfillment of EITEI assistance obligations (White Paper Policy Position 12.11). This leaves significant scope for reduction of the quantum of assistance supplied and/or adoption of greater emissions reduction targets that might result in a higher carbon price.

Mechanism

Professor Garnaut (Garnaut Climate Change Review, Box 14.5) identifies that the function of EITEI assistance should not be to offset the entire cost of compliance with an emissions trading scheme, as this leads to an unsustainable level of production. Rather, such assistance should offset the costs of the system only to the extent that it supports a level of production that is sustainable in the long run. Assistance should be given only to the extent that the current price of a good differs from a price that fully reflects the associated carbon costs. The EITEI assistance program outlined in the Exposure Draft Legislation commentary fails this test by providing near-complete cost offsetting for the most exposed industries.

Further failure is also evident by the fact that there is no legislative mechanism to remove assistance to EITE industries in the context of a global agreement on emissions reductions. Ongoing assistance in such a situation could be considered a contravention of Australia's international trade obligations and is therefore inconsistent with the Government's own objectives for the assistance program (Commentary Item 4.4). Failure to incorporate a natural or legislative mechanism for the reduction and/or cessation of EITE assistance in the context of increasing global emissions abatement will only serve to encourage similar failures in future policies of other nations, thus endangering Australia's ability to terminate the assistance program. This could leave the Australian government with an unsustainable burden, but more importantly could create a scenario in which significant international effort must be dedicated to simultaneous phasing-out of assistance programs around the world. One must only consider the unenviable task of the World Trade Organisation to realise the importance of avoiding such a situation. To address this shortcoming, the definition of emissions-intensive trade-exposed industries could be modified to take account of the proportion of goods in the global marketplace that are sourced from economic regions in which the price of the good reflects carbon pricing. Such a mechanism would be effective without imposing any additional compliance burden on businesses seeking assistance.

Finally, the design of an assistance program for which the cost to the Government, and by extension the Australian people, is not known with certainty nor limited in total quantum strikes us as unwise to say the least. When combined with the failure to guarantee the removal of assistance in the context of coordinated global carbon pricing this is a most dangerous proposition. In this situation it is possible that Australia would experience reverse carbon leakage; that is, production in EITE industries may be artificially inflated in Australia due to the over-compensation of these industries by our assistance scheme. While some may delight in such a prospect, it must be remembered that this will cause inflation of the Government's assistance obligations under the program as currently designed and that therefore the expansion of these industries will be due to direct subsidy by the tax-payer. The burden of emissions reduction would also be shifted further onto unassisted sectors of the economy, and the carbon price would rise indirectly through reduced permit revenues available for energy efficiency and R&D measures and other similar indirect forms of assistance. Thus, failure to cap assistance to EITE industries has the potential to cause significant hardship to those sectors of our economy which are not EITE industries but account for 94 percent of GDP.

Compensation of coal-fired electricity generators

In the CPRS White Paper, the Government justified its assistance to coal-fired electricity generators on the basis that operators in this sector will have significant "sunk capital" in the form of plant for which capital investment was committed before the impact of a carbon constrained economic environment could be factored into the investment decision (Chapter 13, pp 13-1 to 13-5). We strongly reject this as a justification for the provision of government assistance to the sector. Based on official commentary to the CPRS Exposure Draft Legislation (Item 5.11) it appears the Government considers that the investment decision-making landscape changed significantly on 3 June 2007 with the then Prime Minister's announcement of the Government's intent to implement an emissions trading scheme by 2012. The reality, however, is that inevitability of a carbon-constrained economy has been evident since the adoption of the Kyoto Protocol in December 1997, or indeed since the treaty was drafted in June 1992. Similarly, the establishment of the IPCC by the UN in 1988 represents a significant and visible indication of long-term future constraints on greenhouse gas emissions. In this context, it is clear that the announcement of an Australian emissions trading scheme in June 2007 merely represents the natural

progression of the issue from a highly uncertain, long term risk (1990) to a short term risk with much greater certainty as to the nature, price and scope of its impacts.

Survey of the available research literature suggests that capital investment decisions in the electricity generation are carried out on a 20 year horizon. While investors in the 1990s would not have been able to specifically price the impacts of the proposed Scheme in the context of investment decisions, the reality of a long term risk of this nature as demonstrated above should have been reflected in the risk premium demanded of these projects. As young Australians, it is nearly impossible for us to accept that investment decision-makers did not or could not account for this risk when we, as primary schoolers in the early 1990s, could have told you that coal-fired electricity generation was a primary cause of global warming and that our methods of electricity generation needed to change as soon as possible.

In the official commentary to the Exposure Draft Legislation, the Government subtly changes its rationale for the assistance program, citing the possibility of failures in investor confidence in the sector that may be disproportionate to the risks associated with the actual emissions of particular projects (Items 5.7, 5.8). We equally consider this inadequate justification for government assistance. While the Government's assessment that investor sentiment is likely to be affected by the level of extreme losses more so than the average level of loss in the electricity generation sector, we consider that job losses due to plant closure rather than loss of asset value on paper will be the major cause of such investor irrationality. The proposed compensation scheme, therefore, is likely to merely delay such inevitabilities and will be of little net benefit to the nation. Furthermore, while we agree with the Government's assertion that continuing investment in the electricity generation sector is important, we reject the notion that a collapse in investor confidence in coal-fired electricity generation will translate into a collapse in confidence in the electricity supply sector as a whole, as there is already clear differentiation between sub-sectors (e.g. fossil-fuel, renewable energy) pre-existing in investors' minds. We ask the Committee to consider the inverse proposal – that indications, such as this assistance program, that the fossil-fuel lobby has disproportionate influence over the CPRS will result in sub-optimal investment in low emissions technologies, particularly in the electricity generation sector.

Aside from ideological arguments surrounding the rationale for government assistance to coal-fired electricity generators, we are also strongly critical of the effects that such assistance will have on the broader economy and the effectiveness of the CPRS. The provision of assistance to the stationary energy sector has no demonstrable economic benefit – its effectiveness in preventing economic harm is highly subjective. On the other hand, its provision does reduce the revenue the government receives from the auction of permits. This is revenue that would otherwise be available through a variety of policy instruments as assistance to households or businesses to implement energy efficiency measures, or to fund the research and development of low emissions technologies. These in turn will create downward pressure on the carbon price, which is a demonstrably positive economic outcome.

Concluding remarks

We believe it is clear that the current Carbon Pollution Reduction Scheme proposed by the Commonwealth Government will be inadequate in effectively reducing carbon emissions, and stimulating positive change in the Australian economy. Both the Stern Report and Garnaut Review have both detailed how comprehensive action now

(rather than delayed action) is actually an opportunity to reform economies and to avoid the cost of adverse effects of climate change. Comprehensive action in the short term will also be the lowest cost option in the long term. In order to achieve the deep cuts required in emissions by 2020 and especially by 2050, a fundamental shift in the functioning of the Australian economy must occur. As young adults, we are keen to participate in this economic transformation, but believe that the combination of modest targets and high levels of compensation currently proposed will send a 'business as usual' signal. In contrast, it is clear that putting in place IPCC consistent targets will promote greater innovation within Australian industry and at the household level. We are keen to be part of this movement for change and believe it will strengthen our economy and society, rather than destroy it. Furthermore, with adequate targets of at least 25-40% by 2020, Australia can finally send a message to other nations that we are committed to effective action in order to stop global warming beyond 2°C.

Yours sincerely,

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Appendix A

Box 13.7 The range of the difference between emissions in 1990 and emission allowances in 2020/2050 for various GHG concentration levels for Annex I and non-Annex I countries as a group^a

Scenario category	Region	2020	2050
<i>A-450 ppm CO₂-eq^b</i>	Annex I	-25% to -40%	-80% to -95%
	Non-Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia	Substantial deviation from baseline in all regions
<i>B-550 ppm CO₂-eq</i>	Annex I	-10% to -30%	-40% to -90%
	Non-Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle East
<i>C-650 ppm CO₂-eq</i>	Annex I	0% to -25%	-30% to -80%
	Non-Annex I	Baseline	Deviation from baseline in Latin America and Middle East, East Asia

Notes:

- ^a The aggregate range is based on multiple approaches to apportion emissions between regions (contraction and convergence, multistage, Triptych and intensity targets, among others). Each approach makes different assumptions about the pathway, specific national efforts and other variables. Additional extreme cases – in which Annex I undertakes all reductions, or non-Annex I undertakes all reductions – are not included. The ranges presented here do not imply political feasibility, nor do the results reflect cost variances.
- ^b Only the studies aiming at stabilization at 450 ppm CO₂-eq assume a (temporary) overshoot of about 50 ppm (See Den Elzen and Meinshausen, 2006).

Source: See references listed in first paragraph of Section 13.3.3.3

Gupta, S., D. A. Tirpak, N. Burger, J. Gupta, N. Höhne, A. I. Boncheva, G. M. Kanoan, C. Kolstad, J. A. Kruger, A. Michaelowa, S. Murase, J. Pershing, T. Saijo, A. Sari, 2007: Policies, Instruments and Co-operative Arrangements. In *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.