



29 November 2013

Chief Executive Officer
Climate Change Authority
submissions@climatechangeauthority.gov.au

Thank you for the opportunity to comment on the **Reducing Australia's Greenhouse Gas Emissions – targets and progress Review Draft Report**, given the special significance of the subject with the recent news the atmospheric CO₂ has reached 400ppm.

Capricorn Conservation Council has since 1973 been the principal non-government environmental organisation in Central Queensland, covering the Fitzroy Basin, the coastal and marine areas from Baffle Creek to St Lawrence and the coal and gas fields of the Bowen and Galilee Basins. Our submission endeavours to provide a regional perspective on the matter raised in the Issues Paper.

The area we cover is of special significance to the Issues Paper as summarised as follows:

1. Firstly due to its contribution to increasing extraction, use and export of fossil fuels and consequent release of GHGs
2. Secondly the immediate impacts on coastal ecosystems from the port developments (Gladstone, Curtis Island, Fitzroy Delta and Keppel Bay)
3. Thirdly increasing negative influence of extreme floods events in the catchment of the Fitzroy on biodiversity, soils, wetlands, food production and ultimately the ecosystems of the southern Great Barrier Reef

2.1 Climate Science

While the uncertainty of the precise relationship between concentration and temperature increase is noted on page 7 Central Queensland has already been experiencing greater variability of weather extremes since at least 2007. During this time temperature, rainfall and flood records have exceeded the previously known range and severe impacts such as soil erosion, river bank collapses and the devastation of the coral communities in the Keppel group are being observed. The Southern GBR is struggling to recover from increased storm activity including from Cyclone Hamish (Cat. 5 2007) and the extreme record rainfall from ex-Tropical Cyclone Oswald.

The coral community of the Keppel Group is amongst the most diverse on the GBR having evolved and adapted to living under the influence of the largest and most variable river system entering the GBR lagoon, The Fitzroy. Research (Jones, A., CQU¹) into this community has described the variation in coral symbiont types which has enabled the coral to survive the historic patterns of extreme turbid freshwater flood plumes at reasonable, but are struggling to cope with the last five years of above average floods.

On page 8 the chart refers to increased coral bleaching and there is a body of evidence (Including from Researchers on Heron Island) that many corals and other marine organisms dependant on Calcium carbonate for skeletons and shells may not survive at atmospheric CO₂ above 450ppm

¹ <http://content.cqu.edu.au/FCWViewer/staff.do?site=1829&sid=JONESMA>

which will happen within a couple of decades unless more strident efforts are made to more rapidly reduce GHG emissions.

These are but a couple of the regional indicators of observable impacts of the increasing GHG levels.

2.2.1 Australia's Emissions

CCC notes that the biggest single source of Australia's greenhouse emissions comes from Stationary energy sources. (p.10 Figure 3 ~300Mt CO₂ -e). This provides Australia with the greatest opportunity to quickly and massively reduce our overall and per capita emissions through greater support and investment in the renewable stationary energy sources outlined in the Zero Carbon Australia – Stationary Energy Plan.²

On the same chart the emissions the GHG impact of deforestation has reduced by a fifth in the past two decades. CCC has expressed opposition to the Queensland Government's changes to the Nature Conservation Act and Vegetation Management Act, which if implemented would reverse the trend of the net reduction of GHG emissions through logging Forest Reserves and clearing of regrowth and riparian vegetation. If allowed to proceed without legislative intervention (e.g. EPBC Act) or severe financial disincentives (carbon price), efforts to reduce Australia's overall GHG emissions will have to be compensated by actions elsewhere.

Regarding Sector GHG contributions shown in Figure 4 CCC notes that QAL-Rusal recently announced scrapping of plan to transition from coal to lower emission gas power because of market forces. Unless the full impacts of coal burning (including scope 3 emissions) are accounted for barriers to industry making a transition to lower emissions will be almost insurmountable.

2.2.3 Emission Reduction Targets

With respect to the target depicted in Box 3 a more rapid transition towards 15-25% reduction is needed. Of all nations Australia has the greatest wealth, expertise and abundance of alternatives to manage the medium term transitional 'pain' necessary to reduce risk of +3⁰C increases. In contrast our environment, food security and social structure and economy and at the higher end of the risk profile if we cannot provide global leadership as well as make the necessary changes more rapidly.

Central Queensland, Gladstone especially, is highly vulnerable due to our dependence on coal and gas mining and export. We are also well placed to transition to an economy based on renewable energy sources.

3 Australia's Emission Reduction Goals

Central Queensland is undergoing a massive expansion of coal mining and port expansion. The environment of Gladstone Harbour and Curtis Island and potentially the Fitzroy Delta and Keppel Bay are under increased pressure from the plans to double coal export to 150mta and the current three LNG plants (with 3 more under consideration). In considering Figure 6, CQ Coal exports are planned to double by next 2020. Scope 3 emissions not factored into carbon price or offsets for projects. The Queensland Govt "Four Pillars" strategy is pushing to increase agriculture, land clearing, dams and weirs, coal and gas exports. Coastal planning and coastal hazards are under review with sea level rise getting less attention.

² <http://bze.org.au/zero-carbon-australia-2020>

Agriculture and mines (& power generation) are known to be highly vulnerable to changing weather norms including floodplain inundation. Until the 2008 Fitzroy floods mines were struggling to obtain water for their operations and there was a risk that with 12 months Queensland's largest electricity supplier, Stanwell Power Station, could have had to reduce production due depletion of Eden Bann Weir. Following the 2008 flood many mines were inundated, (there is still a massive legacy of trapped water - 250GL) and water quality plummeted. Since then extremes have become norm.

3.2.2 International action

CCC urges Australia to take stronger lead in reducing emissions and in developing alternatives technologies. In considering Table 3 the Australian per capita GDP (\$42 354) shows we are ~ 5 times more affluent than Chinese citizens (\$9146 per capita) but our per capita CO₂ emissions are ~5 times higher per person (27.5 t vs. 5.6 t). Australians also have twice the per capita CO₂-e emissions than The European Union (10.3 t)

3.2.3 Sharing global emission budgets

Australia is better placed than most nations to lead and innovate; plus we have a much high climate risk to the environment, food security and overall economic transition from fossils fuels to renewables.

5.2.2

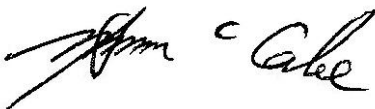
More incentives are needed to improve voluntary transition away from high GHG producing activities; e.g. removal of subsidies for high GHG industries and activities.

Conclusion

In conclusion Capricorn Conservation Council supports the following Queensland Conservation key recommendations.

1. Increase the National Emission Reduction target
2. Advocate an International phase out of fossil fuels and the subsidies that support their use
3. Adopt strong domestic policies (IE. Increased emission reductions, fossil fuel subsidy phase out and clean energy expansion) to build Australia's credibility in international negotiations
4. Introduce a Beyond fossil Fuels public policy discussion paper
5. Increase the national Renewable Energy Target to 50% by 2030
6. Set national energy efficiency targets

Yours sincerely



Michael McCabe
Coordinator