



Prof. Ross Garnaut  
Level 2  
1 Treasury Place  
MELBOURNE 3002

1 February 2008

### **Submission to Garnaut Review.**

Dear Ross Garnaut,

Queensland Conservation (QCC) welcomes the opportunity of contributing to your review.

We support the views contained in the joint submission made by WWF-Aust, ACF and the Climate Institute that actions must be taken in the context of stabilising emissions at 400 pmm CO<sub>2</sub>-e so as to avoid a greater than 2 degree rise in global temperatures.

QCC very much appreciated the opportunity of providing some of our views directly to you over lunch at the Low Emissions Energy Technologies forum in Brisbane on 10 December 2007.

This submission is a reiteration of those views with some additional points not covered at that time.

We hope that this submission will prove useful to you in forming recommendations to the government on Australia's future climate change policy. These views are made in the context that emissions must be stabilised as soon as possible and that a milestone 2020 target is essential for our generation to play its part.

#### **Our Energy Future**

Both Jaap Bierman and Kelly Thambimuthu in their presentations (Low Emission Energy Technologies Forum, Brisbane Dec 07) provided information on the International Energy Agency forecasts of an increase in energy consumption of 57% by 2030. Their conclusion being that only coal could meet this increased in demand.

This forecast is based upon the assumption that *current laws and policies remain unchanged*. The IEA forecast is simply an extrapolation on historical energy growth in the context of business-as-usual. However, laws and policies on greenhouse emissions have and will change. We need an extrapolation which takes into account these changes. Inevitably that will produce a very different future scenario.

It is more likely that the world will learn to do more with less and reduce consumption and switch to clean energy sources. How prepared is Australia for this scenario?

The future of the coal industry will not be determined by the size of the resource but by the size of the market. After all, the Stone Age did not end because we ran out of stones. It ended because technology and society changed.

In this age, dominated by the need for clean energy, it is highly likely that new and preferred technologies will supercede coal power in the medium to long term.

QCC believes that it would be prudent for the Government to fully assess our energy future and not put most of our investment eggs in the one basket. A diversified energy future should be encouraged, rather than the current situation in which *clean coal* receives most of the funding support.

*We would also draw your attention to the fact that nearly 70% of Australian coal exports are for steel making not energy production. Clean coal technology is being developed for electricity generation. In this context, we need to ask what measures are being undertaken to reduce emissions from Australian export coking coal, surely the greater contribution this industry is making to global emissions.*

QCC strongly urges the Federal Government to support a far broader mix of energy technologies to reduce our future risk, particularly in the event that *clean coal* technology will prove unacceptable or unviable.

### **Coal Export Levy**

In 1975 the Australian Government imposed a \$6 per tonne export levy on coal. With the average price of coal (at that time) being \$33 per tonne, this represented a 15% levy. We would urge the re-introduction of this levy with the proceeds being directed towards initiatives that contribute to achieving a national greenhouse reduction target for 2020.

### **Emissions Inventory**

We believe that the current AGO inventory is inaccurate and does not reflect the nation's actual ghg emissions. For instance, we have considerable concern about the accuracy of fugitive methane gas emissions. As a result we believe there has been considerable under-reporting of these emissions.

The IPCC has also just upgraded the greenhouse equivalence of methane from 25 times to 75 times, effectively tripling its greenhouse effect.

### **Reduction Targets**

At the recent Kyoto Protocol discussions in Bali, reduction targets in the range of 25-40% reduction (on 1990 levels) by 2020 were mooted as the required levels that need to be set. QCC believes that this is the range that Australia should adopt.

Painful as it may be for some, Australia must accept the necessity of reduction targets both for 2050 and 2020 to support the greater good and our nation's future. It is essential towards stabilising emissions and ultimately, solving climate change. It is now an international political expectation for the Federal Government. The challenge is to harness our drive and our innovation towards achieving the required targets.

Targets frame the agenda. Australia has languished as a poor performer in reducing greenhouse emissions due to the lack of a goal or benchmark on emission reductions. QCC believes that the previous administration failed because it did not set a target. This should not be repeated by the new government.

We note that the current Federal Government's aspirational target is for a 60% reduction (on 2000 levels) by 2050. However, according to the IPCC, this target would mean accepting a global temperature rise of 2.4-2.8 degrees. At this temperature, the Great Barrier Reef will be destroyed. We take the view that a reduction target of 90% by 2050 is required. In this context, setting a *carbon neutral* 2050 target meets both that necessary goal and will provide a clear public message the Australian community can adopt.

A Climate Change Bill which sets reduction targets and establishes an annual reporting mechanism to Parliament on progress should be drafted and introduced. This bill would give more policy certainty; provide transparency and an opportunity for review of initiatives.

### **Meeting a 2020 target**

So called *clean coal* has no part to play in a 2020 target. The technology is simply not sufficiently advanced to be operational in this period.

We believe that nuclear power has no place in Australia and, like clean coal, is irrelevant in the 2020 context.

The 2020 target can only be realistically achieved through a combination of greenhouse gas stabilisation and reductions, the greater use of renewables, energy efficiency, a reduction in vehicle emissions and changes to land and agricultural practices. These are the issues that should be addressed in any Federal Government reduction agenda.

## **Greenhouse gas stabilisation**

If Australia is to meet a reduction target, emissions cannot continue to grow. According to the AGO, Queensland emissions, for instance, will triple to 530 MT by 2030, under a business as usual scenario.

Australia must establish a carbon neutral policy for all new developments, with a commitment to stabilise emissions by 2010.

We note that the ALP election water policy supported new water infrastructure-on the condition it was carbon neutral. This approach must be applied across the board.

*QCC describes carbon neutral as the achievement of no net greenhouse gas emissions through a combination of emission reductions and the offsetting of residual emissions by the purchase of offsets such as renewable energies and energy efficiency. Investment in vegetation offsetting could be part of that process, but we see this as a last resort.*

Reduction and offsetting programs could be applied as a matter of urgency. Investment in energy efficiency, in particular, could be implemented now, ahead of any emissions trading scheme.

We note that the Emissions Trading Taskforce recommended that *early adopters* should not be disadvantaged for taking action now.

## **Electricity Generator Efficiency**

A National Greenhouse Abatement Program should be established to work with the States to set efficiency standards for any new electricity generation to be less than 500 kgs of CO<sub>2</sub> per MWH. Existing generators should be obliged to meet the standard through improved operations and offsets. Those that fail should be phased out.

## **Emissions Trading**

We support a cap and trade scheme and see emissions trading as a tool towards achieving a target.

## **Energy Efficiency**

The National Framework for Energy Efficiency group estimates consumption can be reduced by 30%-*with the use of current technologies.*

We believe that a distinction needs to be drawn between high energy users and corporates, small businesses and residential users. Most of these sectors can readily take advantage of energy efficiency measures or make the switch to clean energy.

The Federal Government should make the reported initiatives from the Energy Efficiency Opportunities Program (EEOP) compulsory and fast track their adoption.

Individual Energy Reduction Agreements with corporations and small business should be introduced. Funding should be available for energy audits on the proviso that efficiency measures that have a payback period of less than 3 years are implemented.

A carbon neutral homes program should be introduced. The ALP has announced a loan scheme for energy and water efficiency installations. This initiative should be expanded significantly, with funding derived from the coal export levy and other sources. A date by which all homes are carbon neutral should be set.

New homes and new residential development must meet efficiency/greenhouse reduction standards of (at least) 70% below current average household consumption

### **Renewable Energy**

*There are more kangaroos in Australia than there are in Austria, but there are more solar hot water systems in Austria than there are in Australia*

The ALP's announced 20% renewable target is a welcome start, but remains inadequate. Australia can do a lot better. The nation has considerable renewable energy assets but, to date, has failed to properly invest in these.

Recent initiatives in Queensland, such as the Cloncurry solar thermal plant, demonstrate the opportunities for renewable energy development.

The future is not simply about finding a *clean energy* replacement for base-load power. Coal power is suited to a centralised system. This is inherently inefficient and wasteful for a continent with such a geographically spread population. Many alternative or renewable sources are more suited to a distributed system and would deliver both greenhouse and efficiency outcomes.

The Federal Government should establish a Clean Energy Authority with specific responsibility to achieve the national renewable energy target. The government must become an advocate of renewable energy. Its first task should be to conduct a renewable energy assessment of the nation.

### **Reducing transport emissions**

Around 12% of emissions are generated by transport, predominantly private motor vehicles. Whilst lower emission transport systems must be constructed between our

major cities-particularly to cut down aircraft miles-it is a myth to suggest that the size of the country is responsible for most emissions. 80% of all journeys occur within urban centres, and are made in private motor vehicles.

The AGO estimates that emissions from the transport sector will grow by 40% (above 1990 levels) by 2010.

We need worlds best practice vehicle efficiency and emission standards introduced. We need public transport infrastructure made a priority and elevated above the need for roads. The issues of peak oil and oil price volatility should already have encouraged this. However, government has been slow to react, despite these threats.

A renewed focus upon the *liveability* of cities and towns will create the agenda for changing our attitude to transport. We need a new mandate around sustainable transport which builds a new and informed culture, in which the private motor vehicle does not dominate.

### **Land and Agricultural Practice Change**

We recognise that the agricultural sector has already made a significant contribution to reducing national emissions. Whilst the sector must continue to play its part, we note that the electricity generation, industrial and transport sectors have not made similar reductions and continue to be the dominant contributors to Australia's greenhouse gas profile.

Farming, forestry and land management sectors account for about 30% of Australian emissions. This figure will probably need review given the upgrading of methane as a greenhouse gas. Whilst emissions from this sector are notoriously difficult to calculate, there are some key initiatives that should be taken.

The banning of landclearing in Queensland reduced national emissions by around 10%. Landclearing must be banned nationally as part of any reduction target.

Savannah burning should be more carefully controlled and a new approach introduced.

Livestock emissions better managed to reduce emissions from digestion, manure and soil/vegetation disturbance.

A national labelling scheme for food should be developed. The scheme should assess carbon footprint, water consumption, transport miles and fair trade issues. The value of such a scheme is in providing better information and influence to consumers and in driving change in producers towards more sustainable practices and techniques.

A national standard for vegetation offsets should be developed to allow greater certainty for these carbon sinks. This will also assist in encouraging better vegetation management and landscape resilience.

Improving techniques in soil management-where most carbon is stored- and adopting these must be prioritised. The advantages of biochar must be investigated and supported.

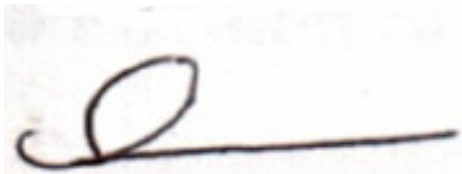
## **Conclusion**

QCC believes that the Rudd Government has been given a mandate for change on climate policy. It must now set the agenda, not to meet the needs of the present but the needs of the future. The agenda is easy to articulate -reduce greenhouse gas emissions according to the best available scientific assessments. The challenge is to harness the nation's ability to change and meet those targets.

The computer industry has risen from a fledgling industry into the most dominant technological sector on the planet in 30 years; very few of us live without depending upon a computer.

Had we applied our current approach to climate policy to the development of the computer industry, we would all still be using typewriters today.

*We can't solve problems by using the same kind of thinking we used to create them-  
Albert Einstein*

A handwritten signature in black ink, appearing to read 'Toby Hutcheon', with a long horizontal stroke extending to the right.

Toby Hutcheon  
Coordinator  
Queensland Conservation