



# **CLARENCE ENVIRONMENT CENTRE**

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# **SUBMISSION**

## **TO THE GARNAUT INQUIRY**

**Climate Change  
Strategies for the Future**

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Hon Secretary.  
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## **Introduction: The need for directional change**

The link between the burning of fossil fuels, particularly coal in the production of electricity, and irreversible climate change has been scientifically established, leading to worldwide, -

- increases in hurricane and cyclone intensity.  
<http://earthobservatory.nasa.gov/Newsroom/MediaAlerts/2006/2006081522903.html>
- increases in droughts, fires and floods.  
<http://earthobservatory.nasa.gov/Newsroom/MediaAlerts/2006/2006081422905.html>
- sea level rises, forcing the peoples living in low-lying areas, particularly island nations, to evacuate, and
- predicted extinction of up to 50% of all species on earth within the 21<sup>st</sup> century.

These are just a few of the impacts with which future generations will have to contend. The root cause of these future catastrophic events has already been set in place, is irreversible, and the human race will be forced to adapt accordingly. However, failure to immediately address the causes of climate change, particularly greenhouse gas emissions, has the potential to threaten all life on earth as we know it.

## **The Australian response**

We believe the current level of measures being undertaken in Australia to deal with climate change are far from adequate, particularly at a Federal level.

Both State and Federal governments have claimed that any slowing of the expansion in mining and use of coal will “cost Australian jobs”, and somehow ruin the economy, making us believe that there has to be a choice between a healthy economy, or a healthy environment.

We must not be tricked by this rhetoric. A simple example of this fallacy is the fact that Australia was once a world-leader in solar technology, and lack of government initiative and foresight has seen that technology largely taken off-shore in the name of economic rationalism (along with so many other Australian inventions). Solar energy is now one of the fastest growing industries in the world, and Australia has no part in it, with more than 50% of solar systems currently being installed in Australia, having to be imported from overseas.

We assert that if jobs are lost in the coal or any other industry, there is a huge potential to increase jobs in the renewable energy sector that would more than compensate those losses. Everything from development of new technologies in our universities and technology centres; to the manufacture of existing systems, wind turbines, solar panels, insulation, and a host of other alternative energy products; to the marketing, export, and installation of those products world-wide.

We point to the Stern Report which makes a clear prediction that failure to adequately address climate will cost trillions of dollars. If the short-term vision of both State and Federal Governments are not re-focused, there will be no future economy to ruin.

To this point in time, the Australian Government's response has been abysmal!

The ongoing drought in Australia has seen:

- Billions of dollars paid out in drought relief, but little by way of supporting change. With good rainfall in recent months, farmers have simply picked up on the same routine practices that have proved a dismal failure in recent decades.

- Plans to drain wetlands and dam what is left of the Murray River.
- Cutting of irrigation water to the Murrumbidgee irrigators which could have seen the collapse of the entire scheme.
- The partial shutting down the Snowy Mountains Hydroelectric Scheme, the slack to be taken up by polluting coal-fired power stations, which have been mainly responsible for the problem in the first instance.
- Sydney, Perth, Brisbane, and Adelaide, all suffering serious water restrictions, and all developing desalination plants, none of which use solar desalination technology, although use of wind and green power are proposed for some.
- Inland cities such as Goulburn and Toowoomba requiring water to be pumped in from elsewhere, while refusing to consider recycling of water, and
- Crazy proposals such as damming the one remaining viable river system in Southern Australia, the Clarence, to support ongoing inappropriate development in Queensland, and arid inland crop irrigation.

Recent intense storm activity has seen the worst ever run of natural disasters in Australia as a result of global warming. It has solved some of those drought problems, however, these events are exactly what scientists have predicted with climate change, and lengthy drought periods will return with greater frequency.

On 28<sup>th</sup> November 2006, NSW Premier, Morris Iemma responded to the Clarence Environment Centre's concerns confirming that:

- *“Delta Energy and Eraring Energy have made commercial decisions to upgrade Mt Piper and Eraring power stations. And,*
- *Delta is also undertaking feasibility studies into upgrades of the coal-fired units at Munmorah and Vales Point.”*

In a seeming attempt to calm our concerns, Mr Iemma also informed us that:

- *“Construction has commenced on TRUenergy's 400MW gas-fired plant at Tallawarra.*
- *Planning approval has been granted for a new, 600MW gas-fired peaking power generation facility at Munmorah.*
- *Gas-fired generation has also been proposed at Uranquinty, near Wagga Wagga.”*

Which he claimed, are just, *“some of several gas-fired stations planned across the state.”*

In the run up to last year's NSW State elections, the Iemma government claimed: *“Support for carbon capture and sequestration, including a commitment to spend \$22m on two pilot clean coal projects...”*. We presume the \$22m and the unspecified millions going towards other clean coal research, will come from the much vaunted Climate Change Fund. All this despite even the coal industry acknowledging that the technology may prove to be ineffective, and even if it does work, cannot be developed and introduced before your first emissions reduction deadline in 2025. There is a serious imbalance in the amount of money being made available to clean up fossil fuels, as opposed to that being put towards renewable energy.

The resulting Owen Inquiry identified that clean coal cannot be introduced until “after 2020”. How much after was not identified. What the report did identify was that **25% of all power produced by coal-fired power stations, would be required to power the clean coal component.**

We are making our arguments using NSW information. However we believe those arguments apply to all Australian states so must therefore be relevant to Australia as a whole. One response to our pre-election questionnaire to State government, specifically raising the issue of a carbon tax, claimed that carbon trading since 2003 has been a significant success, claiming: *“To date, greenhouse gas emissions have been cut by 38 million tonnes.”* We consider this statement is planned to mislead, as gas emissions from coal-fired power stations have greatly increased over the period, and offsets have been incorrectly calculated such as a supposed reduction in land clearing which is simply not evident on the field.

We believe the NSW government's claim that: *“NSW will lead Australia in the development of renewable energy”* is, if true, a sad indictment on the nation as a whole.

While Australia procrastinates, the growing energy needs in developing nations such as China and India is creating unprecedented demand for cheap coal which we are all too eager to fill, using the justification that, *“if we don't provide the coal, other countries will”* (Sartor 15<sup>th</sup> June 2007).

Industry lobby groups, such as the Minerals Council of Australia are also claiming that preventing Australian coal mines from opening will not reduce worldwide emissions, because other countries will fill the demand. While probably true, this issue has to be immediately addressed at the highest international level. The warped logic justifying the increase in coal production, by claiming that “if we don't sell it someone else will”, cannot be allowed to continue.

Australia's mining industry is pursuing profit in the short term, while threatening the long-term existence of mankind. It has been estimated that coal from the now approved Anvil Hill mine alone will, when in full production, contribute 25 million tonnes of CO<sub>2</sub> to the atmosphere annually, an unacceptable level of pollution, and is just one of a large number of projects proposed in a massive expansion of the coal industry across the country. To invest in infrastructure such as new mines, and coal loaders, that locks the world into ever increasing fossil fuel usage, must be seen as ethically and morally corrupt.

## **The considered solution**

It is generally accepted that it is imperative to achieve a 60% reduction in greenhouse gas emissions over the next 50 years. While NSW's proposed gas solution is an acknowledged improvement over coal-fired power generation, it too produces prodigious quantities of greenhouse gas emissions, is yet another non-renewable resource that is predicted to run out even before oil, and should only be pursued as a stop-gap solution to shortages in demand, or to progressively replace coal-fired stations.

There also needs to be a reversal in the enormous funding imbalance, with renewable energy research and development funding coming a poor second behind research in clean coal technology. We consider more funding should be directed into providing meaningful funding of renewable energy projects.

**The focus must be on reducing emissions, through a reduction in demand for electricity, and a move to renewable energy sources to fill base load power needs.** This can and must be achieved.

We believe there must be an immediate move to a mix of renewable power sources such as:

- Hot rocks.
- Solar thermal.
- Wave and tidal power.
- Increased wind generation.
- Increased solar power.

- Co-generation projects, where heat from current industrial enterprises is tapped to generate electricity, such as is occurring in some (not all) sugar and timber mills.

We acknowledge government's initiatives on GreenPower; BASIX and the Australian Building Greenhouse Rating Scheme; mandatory carbon trading; creation of a National Emissions Trading Scheme, etc. However, these can be up-graded to become even more effective. Other initiatives could include the following:

- Increased education and even mandatory measures to cut electricity consumption.
- Tighter regulation on the import and manufacture of low efficiency appliances.
- A closer look at the night lighting, advertising billboards, is there a real need for so much night sport, etc.
- Solar panels could become mandatory on all new buildings, domestic, commercial and industrial, incorporating hot water and grid-feed systems.
- Building codes should be aimed at optimal energy efficiency in all construction activities.
- Taking the lead from Germany where solar grid feed operators are paid 4 times the selling rate for the electricity they produce. With 20 year contracts, this makes the investment worth while, economically as well as environmentally, and has resulted in individuals, such as farmers investing in their own solar power plants.
- Solar hot water systems should be mandatory on all new buildings, and more generous subsidies given to house-holders to encourage installation on existing homes.
- We suggest that a direct tax on carbon emissions, in conjunction with carbon trading should be considered. Increasing the cost of coal-fired electricity would lead to:
  - Improved competitiveness of renewable energy, and allow more renewable projects to proceed.
  - Higher cost of electricity would encourage users to reduce their consumption and embrace power-saving technologies such as solar hot water, and would make solar grid-feed systems more economically attractive, i.e. greater savings and higher returns.
  - To become competitive, the coal industry would be encouraged to develop and introduce emission reduction technologies, including undertaking their own research into clean coal technology, potentially saving millions of tax-payers dollars.
  - Money raised by the tax could be channeled back into research and establishment of renewable energy.
- Because there is always wind on the sea front, high-rise buildings in these locations could be required to install wind generators on roof-tops (not the windmill variety, but a horizontal system such as is used to measure wind velocity).

Finally the Clarence Environment Centre opposes any proposal for nuclear power. There is only one person in the country that has said they would be happy to have a nuclear power station near their home, and that is the late Prime Minister. Its introduction will likely cause huge social disruption through protests, that invariably end in riots, and other civil unrest, because the rest of the Australian population is almost totally opposed to having nuclear power stations anywhere near them.

Nuclear is yet another non-renewable energy source, while the claim that it is CO<sub>2</sub> free is clearly mischievous, with the mining and processing of uranium producing very high levels of atmospheric and other pollutants. There are indications that the world will run out of high grade uranium ore within forty years, resulting in even greater pollution during the processing of lower grade ore.

It will take decades before nuclear power can be introduced, even if States and communities oblige, and with safe waste disposal technology still not available, nuclear power is simply not an option that will have a major impact on reducing greenhouse gas emissions.

It is our sincere hope that the Garnaut report will identify some of the falacies attached to such measures as clean coal technology. We ask too that it will give some thought to those future generations that we have condemned to live with the results of what we, the human race, has done to this point, and ensure we do all in our power to not make things worse.

Remember, there is no life, let alone jobs and an economy, on a dead planet.

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