Australian Democrats Dissenting Report

Introduction

The Government's failure to implement recommendations 8 and 9 of the Tambling report (to increase and extend MRET) in this Bill is economically, socially and environmentally irresponsible and short-sighted.

Every business or industry representative in their submission to this inquiry unequivocally stated that renewable energy development had now stalled, because sufficient projects now exist or are under development to fully deliver the 9500 GWh target; more than three years ahead of the target date of 2010.

The predominance of existing hydro schemes in generating the MRET renewable energy certificates (RECs) in the first three years of operation (due to generous baseline arrangements) has meant that the value of RECs is now well below the \$40 anticipated in the design of MRET and, as a result, wind power makes up a mere 15% of MRET's energy mix.

The original aim of MRET was to increase the proportion of Australia's energy generated from renewables from 10.5% to 12.5% by 2010 but the conversion of this proportion to a GWh target, based in inaccurate forecasts of energy use, means that by 2010 renewables will make up only 10.5% of power generated and by 2020 it will have dropped to a mere 8.5% without an extension of the target.

All submissions called for an increase in the target and extension of MRET beyond 2010 to facilitate ongoing growth in wind power development.

The majority report defends the Government's decision to not increase and extend MRET by citing only one report, The Energy Market Review, 2002, that recommended that MRET not be expanded because:

(a) Australia has abundant coal and natural gas, and a focus on renewable energy diverts investment away from 'more efficient carbon reducing options'.(b) Increasing renewable energy may lead to unnecessary cost escalation in the price

of energy.

(c) A national economy wide trading system should be introduced instead.

There are several significant problems with the majority report arguments.

There have been a raft of other reports, research and industry representation, including the Government's own independent review of the Renewable Electricity Act in 2003 – the *Tambling Report* - that recommends that MRET be increased and expanded.

The Government's obvious preference for relying on 'clean coal' technology is highly risky as the technologies are unproved in the context of stationary energy generation, it is not expected to be developed and available for implementation until the middle of the next decade, and it is unlikely that the costs can be brought down sufficiently to make the process viable. It is worth noting here that Australia has the 3^{rd} lowest electricity prices for industry and 2^{nd} lowest for households in the OECD¹.

Whilst MRET is a market-based mechanism that has certainly driven investment in renewable energy, at least until now, a nation-wide carbon trading scheme would better account for greenhouse gas emission and provide a level playing field in which truly clean technologies could compete. The Australian Democrats have called for emission trading for many years². However, despite such a scheme being developed by the Australian Greenhouse Office some years ago, it was mothballed by the Government in favour of mechanisms and funding that continue to allow coal-based energy generation to evade the environmental costs of its operation.

The consequences of the Government failure to increase and extend MRET include:

- Reduction in investment in renewable energy in Australia
- Loss of potential export industry
- Loss of jobs and failure to create more jobs (especially in regional areas)
- Increase in greenhouse emissions
- Increase long-term costs

These issues are explored in more detail below.

Reduction in investment in renewable energy in Australia

Many of the submission to this inquiry noted that the MRET scheme to date has been very successful, but went on further to comment that it would be unfortunate if the past successes, including job creation were partially lost.

Investment has already stalled

The Australian Business Council for Sustainable Energy in their submission noted that investments have stalled because the current MRET target of 9500 has essentially been met:

We would also highlight that new investment in renewable energy projects has now effectively stalled as sufficient projects now exist to fully deliver the 9500 GWh target.³

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¹ OECD 2004, *Electricity Information 2004*. Table 32 - Electricity prices for industry in US dollars/kWh and Table 34 - Electricity prices for households in US dollars/kWh.

² See Senate Inquiry report *The Heat Is On: Australia's Greenhouse Future*; Senate inquiry report *Lurching Forward, Looking Back*; and the Democrats *Greenhouse and Energy* Issue Sheet

³ Australian Business Council for Sustainable Energy, *Submission 7*, p. 1.

This sentiment was also stated by another industry association, Renewable Energy Generators Australia:

Most of the projects needed to meet the cumulative MRET target have already been built or committed and in the advanced planning stages.⁴

The wind association body, Auswind, noted that there were projects in the pipeline but they had not been taken to the next stage:

This investment cliff is clearly evident in the number of projects and associated investments that have now banked up in Australia. These projects, nineteen wind farms with a total capacity of 1369 MW, have received planning approval and yet have not been taken to the next stage.⁵

The sentiments of the industry associations were also echoed by companies themselves:

The 'cliff' at 2020 for bioenergy projects remains, and the non-expansion of MRET has resulted in several bioenergy projects under development struggling to go ahead without an expanded and extended MRET scheme.⁶

While the Roaring 40s has been an active developer in Australia to date, its development activities have stalled due to the Government's decision not to increase the MRET.⁷

Investment in new renewable energy is likely to stall by 2007 due to a restricted market and subsequent lack of commercial viability.⁸

Loss of jobs and failure to create more jobs

A number of submissions noted how valuable the renewable energy industry had been to date in generating jobs, especially in regional areas.

The Renewable Energy Industry as a whole provides around 15,000 direct and indirect jobs across Australia... The activity from upgrading existing infrastructure and developing new projects has also contributed to significant levels of investment in regional Australia which has also generated increased levels of employment in areas of significant need.⁹

Industry growth has also led to the establishment of manufacturing facilities to support wind farm installations. These facilities have included a nacelle factory in Tasmania, blade manufacturing in Victoria and tower manufacturing in

⁴ Renewable Energy Generators Australia Ltd, *Submission 1*, p. 2.

⁵ Australian Wind Energy Association, *Submission* 8, p. 2.

⁶ Bioenergy Australia, *Submission 4*, p. 4.

⁷ Roaring 40s, *Submission 3*, p. 2.

⁸ Hydro Tasmania, Submission 6, p. 1.

⁹ Renewable Energy Generators Australia Ltd, *Submission 1*, p. 1.

Tasmania, Victoria and South Australia. The local manufacturing industry now employs several hundred people in regional centres.¹⁰

Concern was expressed that, without an increase and expansion of MRET, jobs would be lost.

This [stalling of investments] will also put pressure on the associated manufacturing industry that has developed to support the industry.¹¹

The investment (much of it in regional areas) will stop and the established jobs and knowledge will be dissipated.¹²

Moving offshore and a loss to the export industry

In addition to potential job losses submitters also indicated that because of the Government's failure to provide business certainty companies and investors are moving offshore resulting in billions of dollars of lost investment in Australia. This is criminal given Australians widening trade and current account deficit gap.

The Australian Wind Energy Association cited in their submission a number of examples of investors going offshore as a result of Government inaction:

The investment cliff is also clearly demonstrated by the amount of investment that is proceeding offshore to countries and regions providing market incentives for the renewable energy sector. For example:

- Novera Energy withdrew from the Australian Stock Exchange on April 4th 2006, and relocated to the UK. The company expressed its disappointment at what it considered to be little incentive for market innovation in Australia's renewable energy industry, and it being a very difficult market for small companies, given competition by larger companies and the state-owned enterprises for limited renewable energy opportunities; and
- The Investec Bank (Australia) Ltd, in its submission to the Victorian Government's Paper "Driving investment in renewable energy in Victoria – options for a Victorian market-based measure", states that: "The practical reality is that the Commonwealth MRET scheme delivered significant impetus to the nascent renewable energy in Australia and resulted in the development and construction of many landmark projects since its introduction in 2000. However, with the non-renewal of the MRET scheme and its targets, this momentum has stalled, with many renewable energy projects across Australia unable

¹⁰ Australian Wind Energy Association, *Submission* 8, p. 1.

¹¹ Hydro Tasmania, Submission 6, p. 1.

¹² Renewable Energy Generators Australia Ltd, *Submission 1*, p. 3.

to be brought to construction and many renewable energy stakeholders leaving Australia for more conducive jurisdictions".

This migration of business offshore is resulting in billions of dollars of lost investment in Australia, excluding the monetary value of the lost emissions reduction.¹³

AusWind's sentiments were shared by wind energy company the Roaring 40s:

Without this change [increasing and expanding MRET], the Australian Wind Industry is likely to stall and emerging capabilities in the industry will, in our view, locate off-shore.¹⁴

Business needs certainty

It is important in any business setting that business is given some degree of certainty. Most of the submissions indicated that because of the timeframe needed to establish energy projects, that investors and developers needed certainty that there would be demand for renewable energy.

In their submission Auswind stated:

Auswind and other organisations have emphasised, additional market incentives are needed for this growth to continue and for the current investment cliff, which, in the absence of government intervention will bring a halt to further wind energy developments by the end of 2006, to be averted.¹⁵

Bioenergy Australia said:

Greater impetus would be given to bioenergy projects under MRET if the 'cliff' at 2020 were softened or the MRET extended well beyond that date. The project life of a bioenergy plant would typically be in excess of twenty years and capital recovery is typically fifteen years or more. The longer the period for capital recovery, the less this cost affects the electricity selling price. As the target only reaches 9,500 GWh/a in 2010, many proponents see this 'cliff' at 2020 as being a disincentive for a project with an economic life of 20 to 30 years. MRET would have a greater impact in bringing forth bioenergy projects if the 2020 horizon were extended.¹⁶

The Renewable Energy Association said:

¹³ Australian Wind Energy Association, *Submission* 8, p. 2.

¹⁴ Roaring 40s, *Submission 3*, p. 2.

¹⁵ Australian Wind Energy Association, *Submission* 8, p. 2.

¹⁶ Bioenergy Australia, *Submission 4*, p. 3.

No further investment is likely to be committed from that time under current policy settings and the Bill contains no provisions to reverse this reality.¹⁷

The Tambling Report realised the importance of creating business certainty, concluding that:

The Review Panel....considers that there is a strong case for an increase in the target post-2010. Such an approach would help maintain the momentum created by the first decade of MRET without adversely affecting electricity users in the short term...

...steady progress towards a target of 20,000 GWh in 2020 will:

- Maintain the momentum established by the 9500 GWh target and provide ongoing certainty and industry development.
- Provide a minimum critical mass of investment needed to enable the industry to demonstrate its commercial viability, including the possible domestic manufacture of components for renewable energy projects.
- Provide a domestic demand base to allow the development of further export markets.
- Provide a more managed investment framework that will promote cost effective technology improvements and industry learning.

The need for a target to reduce long-term costs

In the past 2 months two reports have been released that have looked at economic costs of reducing greenhouse gas emissions – *The Business Case for Early Action* by the Australian Business Roundtable on Climate Change; and *Options for Moving Towards a Lower Emissions Future* by AGL, Frontier Economics and WWF.

The Business Case for Early Action showed that if action on climate change is delayed it becomes more expensive for business and the wider Australian economy to reduce greenhouse gas emissions. The report concluded that you need long-term aspirational goals coupled with short-term binding targets as a milestone. That we need to accelerate efforts to manage energy and reduce emissions – not stall them.

The *Options for Moving Towards a Lower Emissions Future* showed that costs can be minimised by immediately setting an emissions target, that results can be achieved with today's electricity generation technology and knowledge about energy efficiency, and that the cost would be between \$0.43 - \$2 week per person each year to 2030. The report again emphasised the importance of setting targets.

Both reports emphasise the need to act now to prevent greater cost in the long-term and critical to this is the need for market mechanisms and targets.

¹⁷ Renewable Energy Generators Australia Ltd, *Submission 1*, p. 2.

The submission by the Roaring 40s noted that China had set a renewable energy target of 15% by 2020, and the Victorian government proposes to build on the existing MRET to achieve a state renewable energy target of 10% by 2012.¹⁸

Renewable energy vs other energy sources

Nuclear Power

There has been talk lately amongst some Government members that Australia should go down the path of nuclear energy to address climate change. Nuclear industry in Australia would be dangerous, costly and would still contribute to greenhouse emissions. According to Friends of the Earth:

Nuclear power could at most provide a very partial and problematic 'solution' to climate change. To double nuclear power output by the middle of the century would require the construction of about 1,000 reactors with a capital cost of several thousand billion dollars. The reactors would produce 1.5 million tonnes of high-level nuclear waste over a 50-year lifespan, and they would produce enough plutonium to build 1.5 million nuclear weapons. The climate dividend? A lousy 5% reduction in greenhouse emissions - about one-tenth of the reduction required to stabilise atmospheric concentrations of greenhouse gases. That meagre 5% climate dividend assumes that the comparison is with fossil fuels. If the comparison is with renewables and energy efficiency measures, nuclear power results in *increased* greenhouse emissions in addition to the legacy of nuclear waste and plutonium. A US study found that, per dollar invested, energy efficiency measures yield greenhouse emission reductions seven times greater than nuclear power.¹⁹

Even if a nuclear power station was built today, it would be at least 15 years before the first one could deliver electricity.²⁰ There is also a limited supply of uranium in the world, so by the time a plant was built its life span would be very short.

Most of the world is rejecting nuclear in favour of renewable energy. The rate of increase is nearly 30% for wind, 20% for solar, and only 0.6% for nuclear.²¹

In contrast to nuclear power, renewable energy development is cheaper, cleaner and more flexible.

¹⁸ Roaring 40s, *Submission 3*, p. 2.

¹⁹ http://www.foe.org.au/bni.htm#power

²⁰ Professor Ian Lowe AO, ACF President, Is nuclear power part of Australia's global warming solutions? http://www.acfonline.org.au/news.asp?news_id=582

²¹ Professor Ian Lowe AO, ACF President, Is nuclear power part of Australia's global warming solutions? http://www.acfonline.org.au/news.asp?news_id=582

Clean Coal Technology

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The Government have signalled that they are looking to carbon capture and storage from coal fired power as a primary means to address greenhouse emissions, and earlier this year the Government announced major funding for 'clean coal technology'.

The Senate ECITA References Committee report Lurching Forward, looking back: budgetary and environmental implications for the Government's Energy White Paper, cited evidence stating that there are problems with the Government relying on clean coal technology:

- There is not a single operational coal-fired power plant in the world, even at a pilot level, the sequesters its greenhouse emissions;²²
- The technologies are unproven in the context of stationary energy;²³
- will not help reduce CO2 emissions by any significant amount for at least the next 25 years - far too late to contribute to the immediate problem of controlling CO2 output;²⁴
- that it is not zero emission technology, you might get 80 to 90% emission reduction;²⁵
- that the development of geosequestration would be costly around \$50 to capture one tonne of $CO2^{26}$

A Discussion Paper produced by the Australia Institute in September 2004 concludes with:

Over the next two decades, however, a policy that neglects or excludes other low emission technologies, in favour of coal with CCS (CO2 Capture and Storage), will place Australia on an unnecessary high-cost path to reducing emissions. This is not an economically optimal policy for reducing greenhouse gas emissions from the energy sector.²

Renewable Energy

Renewable energy sources are diverse and numerous including solar, wind, hydro, wave, ocean, tide, geothermal-aquifer, hot dry rocks, and numerous forms of bioenergy.

Used in a mix or with gas, renewable energy is flexible, reliable and can meet spiking energy demands.

²² Senate ECITA References Committee, Lurching Forward, looking back: budgetary and environmental implications for the Government's Energy White Paper, May 2005, p.28.

²³ Senate ECITA References Committee, Lurching Forward, looking back: budgetary and environmental implications for the Government's Energy White Paper, May 2005, p.28. ²⁴ Senate ECITA References Committee, Lurching Forward, looking back: budgetary and

environmental implications for the Government's Energy White Paper, May 2005, p.48.

²⁵ Senate ECITA References Committee, Lurching Forward, looking back: budgetary and environmental implications for the Government's Energy White Paper, May 2005, p.49. ²⁶ Senate ECITA References Committee, Lurching Forward, looking back: budgetary and

environmental implications for the Government's Energy White Paper, May 2005, p.48.

²⁷ The Australia Institute, *Geosequestration*, Discussion Paper 72, September 2004, p. xii, website. 31 March 2005 at: http://www.tai.org.au.

Renewables now account for a quarter of the installed capacity of California, a third of Sweden's energy, half of Norway's and three-quarters of Iceland's.²⁸

The Majority report reiterated the Government's previously stated view that MRET would impose significant economic costs through higher electricity prices. However as pointed out in the evidence to the Senate ECITA References Committee into the Government's Energy White Paper, the costs of renewable energy are small and decrease significantly as the industry gets bigger:

Several submissions disagreed with the Government's assessment of the cost of increasing the MRET after 2010. For example, the ACF stated that:most studies, except those commissioned by the mining and coal industry and those quoted by the Federal government, indicate only small costs for increasing renewable energy targets. For example McLennan Magasanik Associates forecast that costs due to an increase in target size in 2010 are projected to be some \$180 million per annum with a 5% renewable target. In addition, as the size of the renewable energy industry increases, the costs of renewable energy decrease significantly.

Hydro Tasmania also disagrees with the Government's assessment, arguing: The 2003 Charles River Associates Report found that a 5% MRET target would have no change on GDP or employment. The Governments commissioned McLennan Magasanik Associates 2003 Report found that a 5% target would result in an increase in GDP of [only] 0.08%.

Hydro Tasmania also analysed the cost of the increased MRET proposed in the Tambling Report, and concluded that:

[it] will result in residential electricity price increases of only 0.5% per year above the current target costs... It is estimated that there would be approximately a \$5 increase per quarter on the average household electricity bill representing an increase of just over 3% per annum (not 27% as claimed by Senator Abetz).

The Committee notes the results of the study commissioned by REGA and conducted by Charles River Associates to assess the industry and economy-wide impacts of different levels of MRET:

The study found that electricity prices would rise 1% under a 5% MRET (relative to the current MRET) and 2.1% under a 10% MRET. These percentage increases are small relative to those seen in the wholesale contract market for electricity over recent years.²⁹

²⁸ Professor Ian Lowe AO, ACF President, Is nuclear power part of Australia's global warming solutions? http://www.acfonline.org.au/news.asp?news_id=582

²⁹ Senate ECITA References Committee, Lurching Forward, looking back: budgetary and environmental implications for the Government's Energy White Paper, May 2005, pp 24–26.

It is also important to note that clean coal technology and nuclear power all come at additional costs and will inevitably lead to an increase in electricity prices. The difference is that renewable energy is safe, plentiful, lasts forever and most importantly renewable energy is clean.

Increase in Greenhouse Emissions

Failure to increase and expand MRET has already led to stalling of investment and development of renewable energy projects. Given that at present there aren't other viable greenhouse gas emission technologies in place, Australia will struggle to reduce greenhouse gas emissions in the short to medium term, without renewable energy sources and will in fact risk increasing the level of greenhouse gas emissions.

A report released on 2^{nd} of May 2006, found that greenhouse gas emissions continue to increase worldwide in 2005.

The single largest contributor to human induced gas emission is the burning of fossil fuels to create energy.³⁰ On a per capita basis, Australia is one of the highest emitters in the world. Australia's high emissions levels are largely due to the country's abundant coal reserves which are used to produce electricity and other forms of energy.³¹ The stationary energy sector is the largest and fastest growing emissions sector in Australia, with the stationary energy sector contributing 51.4% of Australia's total CO2 emissions in 2003. The Australian Greenhouse office predicts that electricity generation will contribute nearly 70% of the sector's emissions by 2010.³²

As the majority report notes, MRET was originally established as a greenhouse gas abatement measure; and that it was designed to accelerate the uptake of renewable energy in grid-based power applications, in turn reducing fossil fuel emissions. It also established at 2% target. Yet as Hydro Tasmania noted in their submission, the MRET target has been diluted over time due to higher than expected electricity demand growth. This means that the intended target of an additional 2% of renewable generation by 2010 is very unlikely to be reached.³³

Conclusion

Renewable Energy Generators Australia argued in their submission that the ongoing rate of growth requires action now in terms of deploying existing clean energy technologies and enabling the deployment of yet to be developed technologies and reducing the upwards trend. The MRET has been an effective deployment mechanism

³⁰ AGL, Frontier Economics and WWF-Australia (2006) Options for Moving Towards a Lower Emission Future, p. 8.

³¹ AGL, Frontier Economics and WWF-Australia (2006) Options for Moving Towards a Lower Emission Future, p. 12.

³² Australian Wind Energy Association, *Submission 8*, p. 2.

³³ Hydro Tasmania, Submission 6, p. 4.

and has enabled the deployment of renewable energy technologies into the electricity market at the lowest cost.³⁴

The fact is that the Government has no valid justification for not increasing and expanding MRET. The Minister for Environment, Senator Ian Campbell, recently invoked the Environment Protection Biodiversity Conservation Act to reject a wind farm at Bald Hills, Victoria, using the spurious argument that there was a 1 in 1,000 chance that an endangered orange bellied parrot could be killed. This is despite the fact that there had never been a sighting of the bird there. This rejection was soon followed by a threat to withdraw previously provided approval and funding for three small wind turbines proposed by a community-based group in Denmark, WA under the remote area power generation scheme negotiated by the Democrats to bring renewable energy to off-grid communities. These moves suggest a growing antagonism on the part of the Government towards renewable energy, of which refusal to address the inadequacies of MRET is a part.

The Democrats concur with the statement made by the Clean Energy Crisis Meeting Group in their submission to the Senate ECITA References Committee into the Government's Energy White Paper:

The failure to increase the [MRET], the only measure that drives industry growth for the renewable energy industry, defies international trends, is out of step with community expectations and signals the end of growth for the clean energy industry in Australia.³⁵

The Renewable Energy (Electricity) Amendment Bill 2006 is somewhat pointless without increasing and expanding MRET.

Senator Lyn Allison Australian Democrats

³⁴ Renewable Energy Generators Australia Ltd, *Submission 1*, pp 3-4.

³⁵ Senate ECITA References Committee, Lurching Forward, looking back: budgetary and environmental implications for the Government's Energy White Paper, May 2005, p. 25.