



**Western Australian Sustainable  
Energy Association (WA SEA)**  
ABN: 16 549 616 697

PO Box 8078  
PERTH BC 6849

Phone: (08) 9328 8411

Fax: (08) 9328 8933

**SUBMISSION**

**TO THE**

**MANDATORY RENEWABLE ENERGY TARGET  
REVIEW PANEL**

**IN RESPONSE TO**

**Renewable Energy (Electricity) Act 2000**

**Monday, 19<sup>th</sup> May 2003**

**CONTACT PERSON**

**Johanna Gastevich**

Executive Officer

Phone: (08) 9328 8411

Fax: (08) 9328 8933

Email: [johanna@wasea.com.au](mailto:johanna@wasea.com.au)

PO BOX 8078

PERTH BC 6849

The Western Australian Sustainable Energy Association (WA SEA) Inc. is the peak body of the Western Australia Sustainable Energy Industry. The Association promotes the development and adoption of sustainable energy technologies and practices that minimise and/or displace fossil fuel use. The Association has over 50 company and individual members, representing a broad spectrum of the industry including waste, renewables and energy efficiency.

The Mandated Renewable Energy Target (MRET) was established as a Federal Government initiative aimed at promoting the development of the Australian renewable energy industry as much as reducing Australia's greenhouse gas emissions. MRET is rightly seen by both the Australian public and international community as a watershed in Federal energy policy; being the most significant Australian commitment in support of the Australian renewable energy industry sector ever enacted.

For over 100 years, coal has been heavily fostered and subsidised by State and Federal Governments and more recently gas has been given similar incentives to be developed as a major energy source. MRET has the ability to create an environment where new electricity generation capacity using renewable sources is included and maintained as a meaningful component of the Australian energy mix.

WA SEA Inc has been fully supportive and congratulates the Federal Government for being the first Government internationally to take the initiative and implement a Mandated Renewable Energy Target (MRET).

WA SEA's submission will highlight a number of key issues that will assist the MRET Review Panel in its review of the MRET. **Please note, these and other issues will be discussed more comprehensively with the MRET Panel while they are in Perth.**

## Summary of Key Recommendations

#	Recommendation	Comment
1	Increase MRET Target to 10%	<ul style="list-style-type: none"> <li>• 9,500 GWh is not an effective target</li> <li>• Market inertia - target must be high enough to overcome market dominance of fossil fuel</li> <li>• The cost of a 10% MRET is low compared to historic fossil fuel industry incentive measures</li> <li>• 10% MRET is key to a strong and growing renewable energy industry</li> <li>• 10% MRET will complement current State Government schemes</li> </ul>
2	Increase length of MRET program	The MRET program needs to be extended to take account of project financing realities - renewable energy projects finance over 12 to 15 years.
3	Maintain an effective penalty	The value of money changes over time however the current penalty is fixed over the life of the program.
4	Support for solar hot water systems	Continued inclusion and support of SHWH in the MRET
5	MRET Scheme reviews	It is necessary to ensure that legislation is open for modification over its life to maintain its effectiveness in a changing environment.
6	Base Line Setting	<ul style="list-style-type: none"> <li>• The baseline methodology needs to be clear and transparent in its application</li> <li>• That the baselines that have already been set should be reviewed through an open and consultative process</li> <li>• That the baseline setting process should be reviewed to make sure that it will deliver additional new renewable energy</li> </ul>
7	Reject portfolio approach	MRET has been designed to work in a free market environment. Portfolio approach may act to increase the cost of deliver of renewable energy solutions.

## **1. Increase MRET Target to 10%**

The key intended outcomes to flow from the Renewable Energy (Electricity) Act, 2000 was strong growth for the Australian renewable energy industry and a corresponding reduction in Australia's greenhouse gas emissions.

### ***1.1 9,500 GWh is not an effective target***

While the MRET program has operated reasonably well within its functional framework it is not as effective as intended because of the very low level of the 9,500 GWh target. Research published in the EcoGeneration Magazine (2002) shows that the 9,500 GWh target is too low and will not increase the market share for renewable energy by 2% by 2010 - the stated aim of MRET is to lift renewable generation in Australia from 10.5% to 12.5% by the year 2010. The reality is that the 9,500 GWh target for renewable energy only maintains market share by 2010 due to the revised growth in the Australian electricity generation sector.

### ***1.2 market inertia - target must be high enough to overcome market dominance of fossil fuel***

The results of the low target are particularly evident in WA where we have not seen any large-scale private sector renewable energy projects come on line and the level of renewable electricity use is 0.4% of all electricity sales and set to fall with the State currently seeking generating capacity to meet load growth and plant replacement through a state-underwritten power procurement process that explicitly excludes renewable energy generators from bidding.

Despite MRET and WA's wealth of renewable energy sources, the abundance of fossil fuels and historical government policy has ensured that market share and momentum continues to lie with the coal and gas generation technologies.

While all levels of government in Australia have supported and promoted fossil fuel, few have been as aggressive in recent times as WA – in recent years we have seen the WA Government sign the world's largest ever take or pay contract (\$8 billion) for gas to underwrite the development of the North West Shelf. This left the WA taxpayers purchasing more gas than could be used.

This was very similar to the assistance that the State has provided to the coal industry with the provision of lucrative contracts for coal and for infrastructure.

As has been previously stated, there is concern that BCSE figures show that under the existing operating environment, no new renewable energy projects need to be established until 2008. This does not support development of an eager and budding industry but acts to frustrate and stall development and greenhouse abatement.

### **1.3 *The cost of a 10% MRET is low compared to historic fossil fuel industry incentive measures***

The cost of raising the MRET target to 10% will have a very small impact on the cost of electricity in Australia. Work undertaken by McLennan Magasanik Associates (2002) states:

*“Another key finding was that for every 5% increase in the MRET, the average cost to the wholesale market is of the order of \$1/MWh (0.1¢/kWh). This impact is lower than many of the regular wholesale price movements within the National Electricity Market (NEM). For example, recent generator bidding practices raised average prices across the NEM in 2001/02 by \$5/MWh to \$6/MWh.”*

The cost effectiveness of a 10% MRET as an effective industry assistance strategy is brought fairly into light when considered against the incentives paid to fossil fuel such as the virtual subsidies provided by extensive take or pay contracts, and schemes such as the Victorian smelter levy that adds around \$3/MWh to the price of electricity in the Victorian market.

Increasing investor confidence and certainty for renewable energy projects is particularly relevant as currently investors' appetites for renewable energy projects is growing.

### **1.4 *10% MRET is key to a strong and growing re industry***

A successful and workable MRET will allow Australia's sustainable energy industry to develop and will facilitate a number of key renewable energy projects that have high value for our community. The majority of all Australians will welcome this.

The key to the development of a strong and vibrant Australian renewable energy industry, with all its benefits, is a guaranteed minimum market share that delivers the critical mass and momentum that is needed to overcome the inertia of the status quo.

MRET provides the context for increasing Australia's ability to develop commercially competitive renewable energy technologies. A significant MRET target increases the likelihood of overseas manufacturers (for example wind turbines) establishing a manufacturing base in Australia, bringing much needed employment, particularly in regional Australia where renewable energy projects are traditionally concentrated.

It has been estimated that a ten percent increase in new renewable energy by 2010 could mean up to 9,375 direct and indirect jobs are created in the Australian wind industry alone by 2010.

Much of this investment and the resulting employment opportunities will be located in regional Australia. Nearly 70% of new renewable energy projects registered with the national Green Power Accreditation scheme are located in rural areas. (AEA, 2000)

### **1.5 10% MRET will complement current state government schemes**

There are signs of change within the State Governments that are in direct reaction to the MRET legislation and making small moves to ensure that the renewable energy industry can leverage the Federal programs. Within Western Australia we have seen the:

- Establishment of a Sustainable Energy Development Office (SEDO)
- Inclusion within the terms of reference of the Electricity Reform Task Force (established to lay the framework for a more competitive WA electricity industry) provisions to ensure that renewable energy gets access to the electricity network
- Design of an electricity market that is planned to facilitate the development of renewable energy.

These positive steps have flowed from the MRET targets.

WA has the projects that can easily meet the needs of a 10% MRET target. We have many hundreds of MW of new projects eagerly being progressed – our industry is just awaiting the opportunity to effectively leverage a reasonable market.

## **2. Increase Length of MRET Program**

As the RECs provide a meaningful revenue stream for projects, two factors act as constraints on market development with the program ceasing in 2020.

Firstly, least cost renewable energy projects typically finance over 12 to 15 years, so any project financing in 2010, for example, will be looking to ensure RECs will be available at least until 2022-2025. With the MRET program finishing in 2020, financing will be adversely impacted.

Secondly, the ‘ramp-up’ for targets may not match the readiness of the renewable energy market to deliver – resulting in peaks and troughs in the sale of RECs that will send irregular pricing signals to the market and increase uncertainty in project financing. Lengthening the program overall will decrease the adverse impacts of ‘ramp-up’ as the overall demand will gradually increase and smooth out undesirable market fluctuations.

### **3. Maintain an Effective Penalty**

The key positive impact of MRET is achieved through its negative power – the power to penalise firms that fail to reach the mandatory target. The penalty must be effectively maintained. That is to say:

- ❑ Targets must be enforced
- ❑ Penalties must be publicly applied – ie reported in a public arena
- ❑ Penalties must keep up with the value of money
- ❑ The benchmark for not applying a penalty where, prima facie, the target has not been met should be extremely onerous; the process for deciding not to apply a penalty should be absolutely transparent (there should be no ‘commercial in confidence’ reasons to undermine transparency); and, thus, any such decisions should be on the public record, reported in a public arena.

### **4. Continued Support For Solar Hot Water Systems**

With four out of five Solar Hot Water Heater (SHWH) manufacturers located in Western Australia, this industry segment contributes significantly to the State’s economy in terms of revenue generation and employment creation. In addition, water heating is one of the largest contributors to household overall energy use and hence greenhouse gas emissions. The installation of solar hot water heaters has proven to significantly decrease overall household energy costs and most importantly net greenhouse gas emissions.

The inclusion of SHWH in the MRET gives householders additional financial incentive to purchase SHWH through the generation of RECs. In addition, the inclusion of SHWH enables every householder in Australia to participate in this legislation and be rewarded for their individual commitment to decreasing emissions.

The inclusion of SHWH in the MRET has enabled the market segment to slightly increase its market penetration of the hot water industry. At present, the solar market share of the hot water industry is 4.8% with gas 25% and electric 59%.

The Market model approach has been favoured over a Portfolio approach, as the Market model enables each renewable energy company to move their technology forward without the restrictions imposed by the Portfolio approach. It is believed that further growth of the SHWH segment would be severely restricted if a Portfolio approach was implemented.

WA SEA recommends:

- Continued inclusion and support of SHWH in the MRET
- The portfolio approach not be instigated

## 5. MRET Scheme Reviews

The MRET legislation exists in a dynamic and changing environment. National and international pressures, community attitudes and the effective development of the Australian renewable energy industry (and the ability to obtain project finance) all play a part as does the success of the scheme. It is therefore desirable to ensure that the legislation is open for modification over its life to maintain its effectiveness in a changing environment.

Full reviews of the program should occur at three-yearly intervals and the results of the reviews be made publicly available. Full reporting of achievements, penalties and other aspects of the program should occur annually, as should National and State reconciliations of performance against targets.

## 6. Baseline Setting

WA SEA is concerned with the way baselines have been determined for existing large-scale hydro projects, as revealed by the BCSE. BCSE's research showed that these power stations can obtain RECs if they increase electricity output above established baselines.

The analysis showed that existing large scale hydroelectric power stations could earn more than 30 million Renewable Energy Certificates (RECs) (equating to up to \$1 billion) under the MRET legislation. This **does not** result in new renewable energy projects being developed and/or any additional greenhouse abatement. In fact, AEA's research found that no new renewable energy projects are required to be built until 2008.

WA SEA fully supports the premise that the legislation was supposed to be an incentive for old hydro projects to improve their performance. However, the way in which the baselines were set has meant that RECs can be created without generating additional renewable energy. The lack of newly-developed renewable energy projects will mean significant economic loss to the industry and consequently Australia.

WA SEA recommends:

- The baseline methodology should be reviewed to ensure that it is clear and transparent in its application and is consistent with the spirit and elements of the MRET legislation.
- That the baselines that have already been set should be reviewed through an open and consultative process.
- That the objective of the baseline methodology review should be to make sure that the revised process will deliver additional new renewable energy.

## **7. Reject Portfolio Approach**

The portfolio approach seems to rest on the assumption that particular renewable markets may need to be encouraged, protected, or discouraged. However, the future of renewable energy uptake by the Australian community will reside in its pricing and availability. Low cost renewables will naturally be preferred, as will those which have some local relevance. Indeed, given the ability of renewables to respond to regional fuel and energy contexts, it is quite likely that the employment benefits associated with renewables could be seriously undermined by the portfolio approach, which would be technologically driven.

Imagine the scenario where a group of local shires get together to discuss their combined energy needs, and the source of that energy. Such a discussion might lead to them identifying a particular fuel source that could be harvested or developed locally, which would generate not only electricity, but local employment, innovation, ownership and civic pride and a sense that their community was moving forward, becoming sustainable, and making a positive change for current and future residents. MRET helps stimulate that type of activity. A portfolio approach, where decision-making about what is needed is centralised, doesn't.

A portfolio approach is also a very risky strategy to employ in an emerging market. At this stage, it is too early to predict what the shape of the Australian renewable energy market is going to look like – and far too early to start shaping and constraining that market. With the MRET covering a broad range of technologies, there is room for the market to grow to its strengths.

Where technologies that don't have a natural marketplace or are yet technologically undeveloped are concerned, the Government should encourage their development through research and commercialisation grants, not through market mechanisms such as MRET.

## 8. References

Australian EcoGeneration Association (2000). *Boosting rural and regional investment and jobs*. EcoGeneration Magazine, Australian EcoGeneration Association. October, 2000.

Business Council for Sustainable Energy (BCSE) (2002). *MRET doesn't increase market share*. EcoGeneration Magazine, Australian EcoGeneration Association. December, 2002.

McLennan Magasanik Associates (2002) "*Incremental Electricity Supply Costs from Additional Renewable and Gas Fired Generation in Australia*"