Components of a 10% (34,000 GWh) MRET

A supplementary paper requested by the MRET Review Panel

Part 1 – open paper
Part 2 - commercial in confidence
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Appendix – open paper

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Part 1 - setting the scene

Executive Summary

EBA has been asked to provide data to show what renewable energy sources could be expected to make up a 10% Mandated Renewable Energy Target (34,000 GWh) by 2010. As indicated below, **a suite of existing and high potential technologies could easily achieve the recommended target. Between 36,000 GWh and 57,000 GWh per annum can be generated by renewable energy sources by 2010. However, it is emphasised in the strongest possible terms that market certainty for investors and financiers must be provided. The increase in and extension of the MRET is vital to the future development of the renewable energy industry in Australia and its competitiveness in overseas markets.**

Renewable energy source	*GWh p.a. by 2010*	*Longer term growth prospects*
Wind	15,000 – 20,000	
Biomass/bio-energy	5,000 – 6,500	
Geo-thermal	2,500	Significant longer term (2015) growth potential
Wave	600	Significant longer term (2015) growth potential
Tidal	200	Significant longer term (2020) growth potential
Solar water heating	4,500 – 13,000	
Solar thermal	NA	
Solar cells	720 – 2,400	
Solar tower	350	
Hydro	3,850 – 8,000	
Small & mini hydro	3,500	Significant longer term (2015) growth potential
Fuel cells	NA	Significant longer term (2012) growth potential
Hydrogen	NA	Significant longer term (2020) growth potential
TOTAL	**36,220 – 57,050**	

Part 3 - Background

Hydrogen

There is significant international R&D being devoted to the 'hydrogen economy' and this in USA, Canada, Europe and in developing countries such as China and India. It is unlikely that hydrogen delivery infrastructure will be highly developed by 2010 but we do expect to see some important demonstration sites that will have the potential to lead the market to replace many fossil fuel sources by 2015-2020. While hydrocarbon catalysts are less expensive than renewable energy sources we anticipate that market demand for 'clean and green' combined with decreasing costs of renewable energy will make them the catalysts of choice by 2020-2025.

Additional benefits

- Regional employment – to 15,000 jobs
- Reduction of greenhouse gas emissions of 26 million tonnes (equivalent to taking 6 million cars off the road)
- Innovative technology, infrastructure, skills to developing countries and overseas markets
- In the case of bioenergy, re-addressing land management and water useage – reversing or mitigating impacts of dryland salinity

Issues

EBA believes that there are a number of technical, commercial, regulatory, financing and 'perception' barriers to the uptake of renewable energy that need to be overcome. These have been outlined in EBA's and in the Roundtable on Sustainable Energy's initial submissions to the MRET Review Panel.

Chief among these is the expectation that new technologies should be cost competitive even at early developmental stages. While it is understandable that certain sectors would be highly protective of their position and asset base and current production status quo, EBA suggests that the broader issues of externality costs and market trends need to be included in analysis. The longer term national interests and competitiveness are at stake.

The lack of demonstration sites and apparent government unwillingness 'to pick winners' needs to be addressed and an increase and extension of MRET is a good way to assist Australian companies who are in fierce competition with companies from other countries such as France, Germany, Canada and the USA where governments provide substantial support for renewable energy technologies throughout the supply chain.

Another significant issue is the high focus on Australia's energy intensity and rich supplies of fossil fuels. While we acknowledge the abundance of supply and the relative low cost in today's dollar terms, we believe that market trends favouring sustainable production and consumption, together with other countries' aggressive focus on renewable energies and low to zero emission production will change the international marketplace dramatically within the next ten years. An analysis of future market potential for goods and services provided by different energy sources is an urgent necessity.

Appendix 1

Sovereignty Risk

Currently, under the Commonwealth Renewable Energy (Electricity) Act 2000 ("the Act"), the Mandatory Renewable Energy Target ("MRET") covers the period calendar years 2001 to 2021 (s.4 of the Act). Consistent to the federal government's concerns that the international framework for Climate Change needs to extend "beyond Kyoto", we believe that the MRET scheme needs to address the "cliff edge" issue post calendar year 2020. This "cliff edge" aspect is expected to inhibit investments in renewable energy generation towards calendar year 2020, particularly where renewable energy generation projects require and/or have an operational life span that goes beyond calendar year 2021.

We submit that this "cliff edge" issue can be addressed by amending the Act either by providing for continued operation of MRET post calendar year 2020, or alternatively provide for a defined review process so as to allow for the operation of MRET to assist with Australia's greenhouse gas abatement efforts at a time in which an international emissions scheme is likely to be present. Amending the Act is preferable than, as we understand it, the federal government's view that rights under the MRET scheme be transferred as "fair market value" into any future scheme that may replace MRET post calendar year 2020.

In respect of the financial aspect of sovereignty risk, we note that the Act provides for no compensation to any parties should the MRET be terminated (although the Parer Report "Towards a Truly National and Efficient Energy Market", November 2001 recommended a compensation subsidy in the event that MRET is replaced by a national emissions trading scheme).

Although s.51(xxxi) of the Australian Constitution requires that the Commonwealth acquire property on "just terms", the accepted common law position is that no type or form of environmental regulation, however intrusive, will amount to an acquisition. That is, the constitutional provision for "just terms" will only come into play where environmental legislation gives the Commonwealth a recognised proprietary interest in land or at least some exclusive use of it (Commonwealth v State of Tasmania (1983) 158 CLR 1).

Further, our understanding is that financial institutions are not willing to provide a "sovereignty risk" product for parties entering into contractual arrangements that rely upon the existence of the MRET (and this position is unlikely to change given the current risk averse insurance business climate).

Therefore, given the absence of compensation rights under the Act and common law as well as the absence of appropriate sovereignty risk insurance, it is critical to ensure that sovereignty risk associated with Renewable Energy Certificates ("RECs") is sufficiently well defined and understood so as to not inhibit the objectives of MRET as expressed under s.3 of the Act.

Specifically the issues for associated sovereignty risk for RECs as they currently operate under the Act include:

1. Provisional Accreditation - to introduce a greater level of certainty for proponents of renewable energy generation projects, we submit that the Act be amended so as to permit the Office of the Renewable Energy Regulator ("ORER") to provide "provisional accreditation" that allows the renewable energy generation proponent to rely upon provisional accreditation when the project is completed to create RECs (provided that the completed project is consistent to the provisional accreditation application).

2. RECs Holder Statutory Warranty - whilst the Act affords protection to those parties whom have purchased RECs that have been improperly created on the REC registry (as RECs can only be retired under s.29 of the Act, with penalties for improper creation defined under s.24 of the Act), the Act does not provide protection to purchasers of RECs for the fraudulent transfer of RECs. The common law position is that where a REC has been fraudulently transferred from party A to party B, the REC remains the property of party A notwithstanding any further dealings to party C.

We submit that the Act should be amended so as to afford statutory protection to the purchasers of RECs whom have purchased fraudulent RECs in good faith, which is consistent to the current statutory protection afforded to purchasers of RECs that have been improperly created. Whilst we acknowledge that a REC transfer fee may be required, we submit that the benefits associated in strengthening this aspect of RECs will greatly outweigh the REC transfer fee cost.

3. Future Reviews - any future reviews represent possible sovereignty risk. We submit that should the MRET scheme require further statutory reviews that any review only permit amendments, at the very least, that do not impact the accreditation status of an eligible power station.

4. Possible RECs Category Caps - we oppose any RECs category caps as this will introduce sovereignty risk related to capping the eligible number of RECs from defined technology categories of eligible power stations.

5. Disclosure of Baselines - we submit that s.14 of the Act require ORER to publish the 1997 eligible renewable power baseline, allowing all MRET participants to make an informed decision as to investing in renewable energy projects in light of the capacity of RECs that can be created from all eligible power stations.

Our understanding is that the combined effect of the current MRET review and the Parer Report's national emissions trading scheme has dampened business activity and investments in renewable energy generation in Australia. Whilst we appreciate and commend the MRET review process, we submit that Australia should always have a vibrant and strong MRET scheme as one element of Australia's overall greenhouse gas abatement measures.

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