

# RECs, Baselines and Industry Development

A report by the Australian EcoGeneration Association



**If all the RECs that could be produced from pre-existing projects were produced, no new renewable power projects would be required until 2008.**

**23% of the current overall MRET market for RECs for the next two decades can be met by old large-scale hydro projects without undertaking any new generation investment. This will cost electricity customers \$1.1 billion without these payments delivering material additional greenhouse abatement.**

**Existing large-scale hydro generators will be able to earn a significant number of Renewable Energy Certificates (RECs) for existing capacity without undertaking any new generation investment. This undermines the credibility of the Mandated Renewable Energy Target (MRET) and will make it difficult for this important Federal Government initiative to fully achieve its potential for industry development and greenhouse abatement.**

This report forms part of the work and analysis that is periodically undertaken by the Australian EcoGeneration Association (AEA) to assess the technology and fuel mix of new renewable generation projects to be built to meet the Mandated Renewable Energy Target (MRET). This report specifically focuses on the likely level of Renewable Energy Certificates (RECs) that will be produced from pre-existing generators and the impact that this is likely to have on the capacity of the MRET scheme to meet its objectives. It reveals that the level of new projects and industry development will be considerably lower than market participants had expected.

The AEA has been and continues to support MRET. Our concern has always been that the target is not high enough - it is embarrassingly low compared with renewable targets in other developed countries - and the buildup to the 9500 GWh target by 2010 is so slow it does not provide sufficient incentive for the development of new renewable projects. This analysis shows this lack of market incentive will be exacerbated by the ability of large-scale hydro generators to earn a significant amount of RECs for pre-existing plant without requiring any investment.

The adverse impact on renewable industry development relates to the way baselines are being determined for large-scale hydro generators existing at or before 1997. The manner in which baselines are determined and the estimated baselines by fuel type are included in an AEA companion paper titled "Determining Baselines for Pre-existing Generators" dated July 2002.

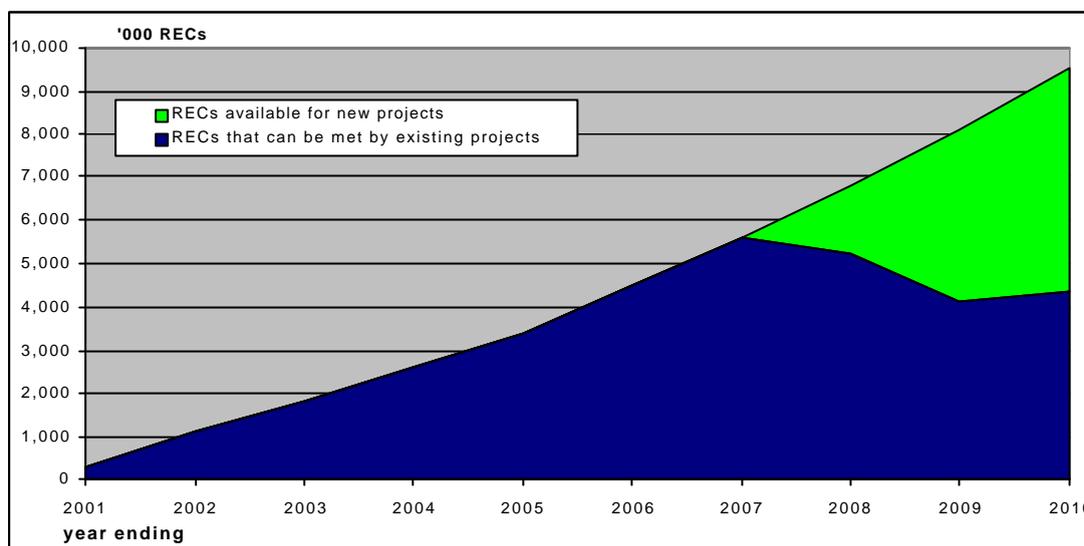
AEA analysis reveals that baselines for some pre-existing large-scale hydro generators appear to be set at levels well below their long run average system yield. This means they will be able to generate RECs without undertaking any new generation investment. They will also benefit from the annual variability of hydro generation as they will be eligible for RECs in the years when their generation is above their baseline but will not have to hand them back in years when it falls below.

A fundamental tenet on which MRET was based was that the measure would stimulate **additional** greenhouse gas abatement from **new** investment in renewable energy projects. This report shows that baselines have been set for existing large-scale hydro generators such that:

- The substantial majority of the additional Renewable Energy Certificates (RECs) required to be purchased by electricity retailers to 2007 inclusive will be able to be supplied by existing hydro generators without those generators spending capital on new plant.
- Beyond 2007, the RECs attributable to these existing hydro generators will continue to supply over 20 per cent of the annual MRET market for each of the remaining 13 years of the scheme without undertaking any new investment, representing payments of over \$60 million per year.

- The equivalent of 600 MW of new wind and other new renewable generation, representing over \$1 billion in investment, will not be required. This results in a loss of 400 to 500 direct sustainable jobs that otherwise would have been created, most of which would have been in regional Australia.
- Electricity consumers will pay more than \$1.1 billion for RECs that will have been generated without any new capital investment and without delivering material additional greenhouse abatement.

### No new projects needed until 2008



This report identifies the REC market available for new renewable power projects. It assesses the RECs old large-scale hydro projects can be expected to produce given the way baselines have been set, those that are likely to be created by upgrades to old large-scale hydro projects, and RECs that will be produced from currently committed post-1997 projects and RECs from the sale of solar water heaters. When all of these sources are included the study concludes that no new renewable projects are needed to meet the MRET market until 2008.

RECs (million MWh <sup>1</sup> )	Total to 2010		Total to 2020	
RECs from "old" large-scale hydro				
(i) - because of low baselines	8.0	} 35%	16.4	} 23%
(ii) - because of averaging <sup>2</sup>	7.1		15.1	
<b>Total "old" hydro (no new investment)</b>	15.1		31.5	
RECs from refurbishment and upgrades to "old" large-scale hydro	3.7		13.0	
RECs from small pre-existing projects	3.4		7.4	
<b>Total from pre-existing projects</b>	22.2	51%	51.9	37%
RECs from committed new power projects	5.4		11.1	
RECs from sale of solar water heaters	5.4		13.4	
<b>Total committed RECs</b>	33.0		76.4	
MRET Target	43.7		138.7	
<b>Available for new renewable power projects</b>	10.7	24%	62.3	45%

<sup>1</sup> 1 REC is equivalent to 1 MWh

<sup>2</sup> Also referred to as "unders" and "overs", where RECs produced when a generator's production is above its baseline do not have to be returned when production is below the baseline.

RECs that can be generated by old large-scale hydro operators without undertaking any new generation investment amounts to 23% of the total MRET target and is of major concern. By significantly reducing the MRET market available to new projects, there is a very real risk that confidence in MRET will be undermined. This risks failure of the Prime Minister's key objectives in announcing the scheme, namely to:

- accelerate the uptake of new renewable energy;
- establish a larger base for development of commercially competitive renewable energy, and
- develop internationally competitive renewable industries.

The AEA believes that the magnitude of RECs created through baseline setting was not understood as the legislation was developed. As such, it is vitally important that this issue be addressed urgently, and not wait until the MRET review scheduled to be completed in 2004. To delay is creating significant uncertainty, making it difficult for new renewable power projects to proceed.

Other schemes have addressed baseline issues to ensure that new projects and investment occur.

The renewable energy program implemented in the United Kingdom, which borrowed heavily from Australia's MRET scheme, does not allow pre-existing large-scale hydro to create renewable certificates.

The Australian Government's Greenhouse Gas Abatement Program requires project proponents to demonstrate that greenhouse abatement is beyond "business as usual" before funding support is provided.

The AEA has been and continues to be a strong supporter of MRET. However, the baseline setting process must be addressed urgently so as not to undermine confidence in the MRET measure and to ensure that the renewable industry development objectives of this innovative initiative are achieved.

***For more information contact the Australian EcoGeneration Association on 03 9898 4200.***

The full report "MRET, Baselines and Industry Development" is available for AEA members at [www.ecogeneration.com.au](http://www.ecogeneration.com.au) in the members section.