



24 July, 2009

The Secretary
Senate Economics Legislation Committee
PO Box 6100
Parliament House
CANBERRA ACT 2600

SUBMISSION CONCERNING THE RENEWABLE ENERGY (ELECTRICITY) AMENDMENT BILL 2009

The Australian PV Association

The objective of the Association is to encourage participation of Australian organisations in PV industry development, policy analysis, standards and accreditation, advocacy and collaborative research and development projects concerning photovoltaic solar electricity.

APVA provides:

- Up to date information on PV developments around the world (research, product development, policy, marketing strategies) as well as issues arising
- A network of PV industry, government and researchers which undertake local and international PV projects, with associated shared knowledge and understanding
- Australian input to PV guidelines and standards development
- Management of Australian participation in the IEA-PVPS, including:
 - PV Information Exchange and Dissemination
 - PV Services for Developing Countries;
 - Urban Scale PV Applications
 - PV Hybrid Systems within Minigrids.

Current Association members: Alice Solar City, ANU, BP Solar, BT Imaging, Bushlight, CAT Projects, Clear Security, Conergy, CSG Solar, CSIRO, Dan Ross, Dyesol, Ecopower Technology, Ergon, GE Trading, Graham Mills, Green Solar Group, Greenbank, Greg Watt, GSES, Honda, Ingenero, IT Power Australia, LJW Solar, Novolta, Peter Gorton, Rainey Electrical Services, RISE, Roth & Rau, Selectronic, Solarfarm, Solarfuture, SA Government, Suntech, Sustainability Victoria, Solco, Sowilo Engineering, Spark Solar, TindoZ, Trina Solar, Xerocoat, UNSW.

The Association receives \$40,000 per year from the Australian Government to assist with the costs of IEA PVPS membership and Task activities.

The Extended Renewable Energy Target

The Australian PV Association (APVA) is fully supportive of the Government's proposal to extend the national Renewable Energy Target (RET) to 45,000 GWh per year by 2020. This will provide much needed stimulus for



renewable energy generation in the heavily coal dominated Australian electricity sector. We provide some comments on selected aspects of the Target:

Solar Credits

The exposure draft proposes a REC-multiplier to support small generators. For photovoltaics, this would replace the Solar Homes & Communities grants, which have now ceased, and it would also support micro-hydro, wind and other small generators that have previously received support only for off-grid applications.

The APVA is generally supportive of the Solar Credit mechanism, although does not provide the investment certainty afforded by grants or feed-in tariffs. The benefit available will vary with REC price and location and may be half or less what was available via the Solar Homes and Communities Plan. In addition, the 1.5 kW limit for multiple RECS is considered too low. It will tend to encourage PV systems which are much smaller than Australian household loads require to meet their electricity demand, and will provide no stimulus to the commercial PV market. The latter could provide load-matching supply with economies of scale, which in turn would push system costs per kW down. Facilitating commercial systems would also encourage the construction of PV systems on distribution networks with a matching load profile, and so help reduce network costs. The small size limit will also disadvantage most Australian made wind generators, as these are typically rated at 5 kW or larger.

For PV systems, a size limit of 3 kW would be more useful for residential applications, while a separate category for larger systems, based on REC multipliers of 3 instead of 5 for deemed systems up to 100kW should be considered, if feed-in tariffs for this market are not introduced. This would stimulate private sector investment in commercial building and farming applications. For systems larger than 100 kW and up to 1 MW, which are not eligible for deeming, a multiplier of 2 should be available, to stimulate interest in power stations for larger applications, such as shopping centres, airports and townships. The suggested schedule is shown below. Nevertheless, the APVA would advocate a feed-in tariff mechanism for the commercial scale PV market, in conjunction with investment incentives, such as tax benefits.

System Size (kW)	REC Multiplier 2010-2012	2013	2014	2015	2016
Up to 3	5	4	3	2	1
3-100	3	3	2	2	1
100-1000	2	2	2	2	1

One aspect that is not clear is how the additional (or “Phantom”) RECs created by the multiplier are to be returned, so as to prevent the dilution of the RET target and unnecessary conflict between advocates of the various renewable technologies. This should be addressed so as to maintain the integrity of the target, regardless of the number of RECs involved. A simple calculation based on the number of PV systems installed each year would suffice. Alternatively, a means of labelling RECs derived via the Solar Credit mechanism could be instigated, so as to track the “phantom” RECs through the system and so allow only an appropriate number to count towards the target. Given the recent very high uptake of PV systems under the Solar Homes and Communities Plan, and the current high uptake of solar water heaters¹, returning the Phantom RECs to the target will be important, as the Target is likely to be significantly eroded otherwise.

Unlimited Project Time

Key issues remaining include the unlimited time that generators can claim RECs, so that, for instance, old hydro generators which registered in 2000 can continue to generate RECs until 2030. Introducing a 15 year

¹ Although these are not awarded phantom RECs, they do not produce electricity and so reduce the amount of renewable electricity generated because of the Target



time limit would facilitate the installation of new generators, with minimal cost to the scheme. This would also reduce the impact of potential baseload errors in hydro allocations, reduce the risk of windfall profits going to selected generators and ensure that the Australian community gains maximum benefit from its investment in this market.

Orderly Development of the Industry and Long Term Renewable Energy Targets for Australia

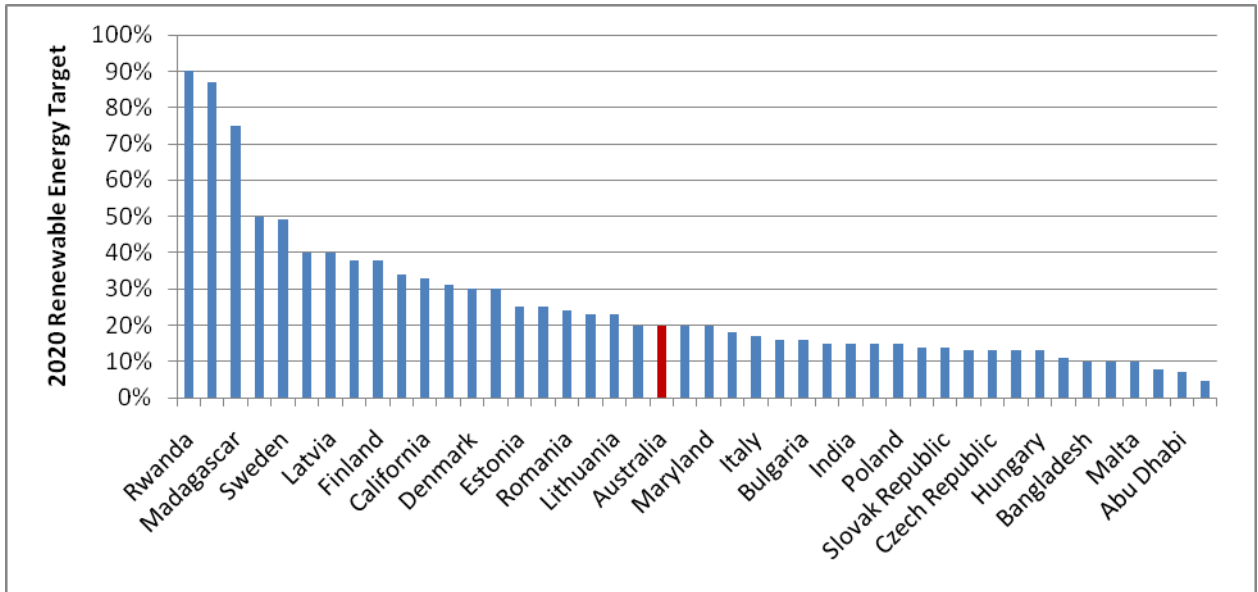
There appears to be little consideration given to the need for orderly development of the industry and orderly transition to the CPRS or other markets. Unlimited banking of RECs potentially exacerbates this.

The RET target is increasingly referred to as if it were a ceiling, when in fact, over the longer term, Australia will need to continue to increase the renewable energy component in our electricity system. While the Government is of the view that the CPRS will take over from RET as a driver for renewables, there are some risks in this new approach. The MRET mechanism, on the other hand, has successfully delivered an increase in renewable electricity in Australia much faster and at lower cost than originally anticipated.

Renewable energy targets for Australia should therefore be set for the longer term, to provide investment certainty and a strong industry base. Otherwise there is every chance the current target will be met with largely imported components and with no lasting industry establishment. As before, once the target is close to being met, in the absence of price parity, the industry may collapse. Setting increased targets for 2030 and beyond would reduce the likelihood of this occurring, while the REC price would readily accommodate market signals from the CPRS, if this mechanism does begin to work, as electricity prices will increase because of the carbon price, and the REC price required to make renewables cost-effective will decrease. Hence, the lowest risk for Australia, and that which provides the most robust and resilient response to the uncertainties of the future, would be to maintain the RET until the orderly transition to a low carbon electricity system has been achieved.

Concessions for Energy Intensive Trade Exposed Industries

It is of concern that, under the proposal for the extended RET, large energy users, which were specifically included in the original MRET, because they would otherwise not be covered via electricity purchased from retailers, have been granted exemptions on the basis that they would be disadvantaged on the international market. This raises two issues; the first that many of our trading partner countries have renewable energy targets similar to or higher than that proposed for Australia (see a sample below), so there is no need for exemption; and the second that the exclusion of this sector will mean the cost of the Target for the remaining electricity users will rise. This creates inequity which will be exacerbated should the CPRS be implemented in its proposed form, since these industries again receive concessions which are not available to other consumers.



2020 renewable energy targets in selected countries:

Yours Sincerely

Dr Muriel Watt
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