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Submissions
Climate Change Authority
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Review of the Renewable Energy Target

The Energy Supply Association of Australia (esaa) welcomes the opportunity to make a submission to the Climate Change Authority's (CCA) Review of the Renewable Energy Target (RET).

The esaa is the peak industry body for the stationary energy sector in Australia and represents the policy positions of the Chief Executives of 34 electricity and downstream natural gas businesses. These businesses own and operate some \$120 billion in assets, employ more than 51,000 people and contribute \$16.5 billion directly to the nation's Gross Domestic Product.

This review of the RET comes at a challenging time for the energy industry given that a previous review panel, chaired by Dick Warburton, has already completed a review earlier this year. The esaa understands that this is a legislated review that the Climate Change Authority is required to undertake. Our comments to the Authority are largely based on our [submission to the Warburton Review](#).

Australia's electricity supply system is undergoing unprecedented transformation. The RET needs to be understood in the context of this transformation.

Advances in technology are fundamentally changing the way electricity is made, moved and consumed. Consumers have also experienced sharp rises in electricity prices in recent years as the electricity system keeps pace with peak demand requirements, strict reliability standards and a range of other cost pressures, including environmental policies. Declining electricity demand coupled with the rapid uptake of solar PV has created new challenges for the traditional electricity supply model. The existing RET settings are exacerbating and contributing to these challenges.

There is currently around 10,000 MW of excess capacity in the market. This is suppressing wholesale prices and making investment difficult in all technologies. Maintaining the RET at its existing level exacerbates this problematic situation, but reducing the target will not in and of itself solve the problem. The level of the RET therefore needs to be considered as one part of the issues affecting Australia's energy markets as a whole.

Since the RET was legislated, demand forecasts for 2020 have declined significantly from around 300 TWh to 230 TWh, while the Small-scale Renewable Energy Scheme (SRES) forecast has increased from 4 TWh to around 11 TWh. These forecasts mean the RET is now set to deliver around 29 per cent renewable electricity by 2020, rather than the 20 per cent originally envisaged.

Based on current settings, and without a carbon price to contribute to the economics of large scale projects, it is unlikely that the 41 TWh large scale target will be met through new build. Therefore the credibility of the whole scheme is at risk.

The problem of oversupply

The primary problem affecting investment in Australian electricity generation is that there is an oversupply of generation capacity in the National Electricity Market (NEM). The esaa commissioned Oakley Greenwood to undertake modelling to investigate the impacts of oversupply in the NEM earlier this year. As part of this, Oakley Greenwood also considered the level of renewable generation that an “economic” Large-scale Renewable Energy Target (LRET) would deliver. An economic LRET is where certificate prices do not rise above the penalty price, given that the rational response of liable parties (mostly electricity retailers) in that situation is to pay the penalty price if it costs less than buying certificates. A key outcome from the modelling project is that current policy settings do not support the level of transformation of the electricity generation sector that the current target aims for. Specifically, persistent low wholesale prices under all the scenarios examined, result in the RET not being met. The [final report](#) is included as an attachment.

The current level of oversupply in the wholesale market has suppressed prices. Low wholesale prices are not only affecting existing thermal plant, but are also deterring investment in new renewable plant. If we reach a point where paying the penalty price may represent the least worst option compared to underwriting uneconomic new renewable build, it would be a substantial policy failure. There is therefore an opportunity to consider policy settings that could support a transformation of the energy sector by helping to meet the RET as well as reducing the oversupply of generation.

Oakley Greenwood’s modelling shows that, based on the current market environment – low demand, low wholesale prices and an oversupply of generating capacity – the existing RET is unlikely to be met economically. Wholesale prices have become unbalanced because falls in demand have not been matched by falls in supply. Aside from the LRET requiring new entrant plant, existing plant is not exiting in a timely manner. This is due, in strong measure, to the significant barriers to exit that exist.

The modelling does not represent the only possible outcome if the target remains at its current level. Rather, it shows a plausible set of outcomes and highlights the risks associated with failing to recognise the fundamental shifts occurring in Australia’s energy markets. The esaa contends the current RET should be recalculated to reflect the new conditions in Australia’s energy markets. It should factor in the impacts of lower demand forecasts and higher levels of small-scale generation and displacement technology. The Government should also consider approaches that

can return Australia's wholesale electricity markets to a sustainable supply-demand balance that will support the required level of investment.

Any changes to the RET must ensure that existing investments are kept whole. Any change to the target needs to account for the substantial overhang of certificates that remain. In order to address this, it may be sufficient to re-profile the targets in the years prior to 2020.

SRES

The Government has announced its intention not to change the small-scale renewable energy scheme (SRES). Nonetheless, it is important to note several issues relating to the SRES.

Firstly, the 4 TWh non-binding target has almost certainly already been reached. According to the Clean Energy Regulator, as at 4 November 2014 there was 3,792 MW of small-scale solar PV capacity installed in Australia.¹ This can be expected to generate more than 4 TWh of energy annually. AEMO's 2014 National Electricity Forecasting Report estimates that solar PV generated 3,951 GWh in 2013-14. Once generation from WA is added to this, the 4 TWh target will have been exceeded. Due to the lag between installation and the reporting of data, the actual level of PV capacity and generation is higher still. In addition, there are 891,000 solar water heaters installed as part of the SRES.² Clearly, the 4 TWh SRES target has been met.

The existing 100 kW maximum threshold for eligibility for the SRES should also be reconsidered. In the esaa's view, this should be shifted to a lower level, providing that the threshold for up-front deeming is also moved to the same level. We consider that this would provide better incentives. It would allow households and businesses installing small systems to continue to receive the benefits of deeming, while ensuring certificates for larger systems were allocated more accurately on actual generation. Moving medium size solar PV (or other) systems into the LRET would also create a more level playing field across the range of renewable technologies as they develop further.

There is also a strong case to reconsider arrangements for "displacement technologies" such as air-sourced heat pumps and solar water heaters. These technologies do not result in any renewable generation but rather reduce conventional generation. They have more in common with energy efficiency measures than renewable energy generation. Including them in the SRES distorts hot water appliance markets by providing an effective subsidy. Excluded technologies are penalised, as they become relatively more expensive from a customer perspective, irrespective of their ability to reduce greenhouse gas emissions.

¹ Clean Energy Regulator, SGU/SWH Postcode Data.

² Clean Energy Regulator, *ibid*.

Additionally, credits for these systems are based on the displacement of a 2001 model electric resistance heater. Given that Minimum Energy Performance Standards (MEPS) for electric hot water heaters were increased in 2005, there is a strong case to reassess the level of support provided for displacement technologies if not their place in the SRES in the future.

Conclusion

Encouraging investment in renewable energy goes beyond the level of the RET itself. A stable investment environment for the energy market as a whole will be crucial to underpinning investment in renewable technology in the long term. New investment in any generation capacity looks unlikely given the current oversupply in the market and the lack of a bipartisan approach on the major issues affecting the energy market.

Addressing the current oversupply in the NEM will be essential for the market to stabilise and for investor confidence to return to the renewable energy sector. Fixing the oversupply will have an important impact on the level of investment in renewable energy irrespective of the level of the RET.

The balance between the risks of adding further capacity into the market need to be weighed against the threat to investment confidence and sovereign risk of changing the level of the RET. On balance, the esaa considers that the RET should be amended to a level that better represents 20 per cent of electricity generation at 2020. Any changes to the target must recognise and protect existing investments and allow these assets to earn an appropriate return. This is likely to require consideration of the existing overhang of certificates. Higher than previously expected rates of PV generation should also be factored into setting this target.

Any questions about our submission should be addressed to Kieran Donoghue, by email to kieran.donoghue@esaa.com.au or by telephone on (03) 9205 3116.

Yours sincerely



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