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Submissions
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Climate Change Authority 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 36 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.

The Renewable Energy Target was legislated in 2009 to deliver 20 per cent of Australia's stationary energy from renewable energy sources by 2020. To deliver this proportional target, the legislation applied a fixed and measurable quota of 45,000 gigawatt hours (GWh) of renewable energy. Estimation of this nominal quota of energy supply was based on best available independent forecasts of energy demand in Australia at the time.

A 20 per cent RET was seen at the time as, and remains, an ambitious target, delivering a significant shift in Australia's stationary energy supply as a frontline response to the threat of dangerous climate change. At the time of legislating, the RET was designed to take up the majority of new generation capacity expected to be needed over the proceeding decade.

Notwithstanding that the stationary energy sector is one of the most directly affected by climate change policy, the esaa strongly supports efficient and effective policy action to address the risk of dangerous climate change. The esaa supports the introduction of a well-designed emissions trading scheme in Australia. The energy supply industry supported the introduction of a single, national RET in Australia in 2009. This policy continues to have our support.

The RET has already been substantially amended since it was first legislated in 2009. The most recent reform has resulted from an unexpected scale up of small-scale photovoltaic (PV) installations. This resulted in a flood of credits into the scheme and damaged the long-term investment signals for large-scale renewable energy projects. The subsequent split of the RET into the Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES) has helped to remedy this up to a point. Nevertheless, it represented a significant change in policy direction.

Since then, aggregate demand for electricity in Australia has fallen significantly below projections, the volume of certificates created under the uncapped SRES has exceeded the government's expectations and some state governments have introduced planning regimes which are restricting the growth of the most cost-effective forms of renewable energy. If energy demand continues to taper, the existing target will represent more than 20 per cent of electricity generation anticipated. Some analyses have concluded that the existing target as legislated will in reality represent closer to 26 per cent of electricity generation.^{1,2} Moreover if demand is flat or falling, then the RET will be introducing new capacity into a market that does not require new sources of supply.

Taking these factors into account, the esaa considers that the RET should be amended so that it represents 20 per cent of electricity generation at 2020 rather than the current fixed target which is considered likely to deliver a greater proportion than 20 per cent. This approach allows the target to reflect changes in demand; if demand recovers, it follows that the target will rise again potentially beyond 41,000 GWh.

The CCA should note that this submission represents the views of a majority of the esaa's members. There are a range of views within the Association with a minority of members supporting the retention of the existing target.

This diversity of views about the mechanisms of delivery does not diminish the industry's continued support for a RET that delivers 20 per cent renewable energy generation by 2020.

Large-scale Renewable Energy Target (LRET)

The importance of policy certainty

Energy generation assets are long-lived and capital intensive. Their cost-effectiveness is thus highly dependent on their ability to attract finance at as low a cost as possible.

Continual changes in policy undermine investors' confidence in the sector and lead them to either avoid the sector or to require higher returns on their capital. This sector is already grappling with challenges such as uncertainty over carbon policy, the possibility of a structural shift in aggregate demand, subsequent softening of wholesale prices and onerous planning requirements (some of which are specifically targeted at wind farms, which to date have been the biggest large-scale contributor to fulfilling the RET). Transmission frameworks are also under review and may be subject to significant change.

In the light of these challenges, policy certainty and stability commands a significant premium. Changes should not be made lightly. The costs and benefits of adjusting policy settings to reflect significant changes in operating conditions needs to be assessed in each case against the costs and benefits of continued policy stability.

The challenges of a fixed target with uncertain demand

¹ The Australian, 9 July 2012, 'RET to trump carbon slug on power bills, says Origin'

² ACIL Tasman, 2012, 'Achieving a 20% RET: Costs of current legislation and possible modifications. Prepared for TRUenergy'.

The expanded renewable energy target was the outcome of a policy commitment to ensure that “at least 20 per cent of Australia’s electricity” is generated from renewable sources by 2020. In order to do this, a fixed target of achieving 45,000 GWh of *additional* renewable electricity by 2020 was legislated, premised on the electricity demand forecasts for 2020 prevailing at the time. Under these demand scenarios, renewable electricity plant was expected to provide much of the new capacity necessary to meet demand growth.

However, demand projections have been revised downwards since the legislation was drafted because of a number of factors including lower than anticipated economic growth, the uptake in residential solar photovoltaic capacity and increased energy efficiency. It is possible that demand will remain relatively flat over the coming decade. In this case, the 60,000 GWh of total renewable electricity implied by the RET³ would represent a target far greater than 20 per cent.

There is a specific problem that with electricity demand being flat or even declining, the LRET will start to cannibalise existing supply. Thus, instead of directing necessary new capacity investment into renewables rather than fossil fuel plant, it runs the risk of driving new capacity that is not required to meet demand. This will make the marginal cost to the overall economy of the new renewable supply even more expensive, as it will be displacing existing low cost generation. It will also undermine the financial viability of incumbent generators. This increases the risk of disorderly exit from the market.

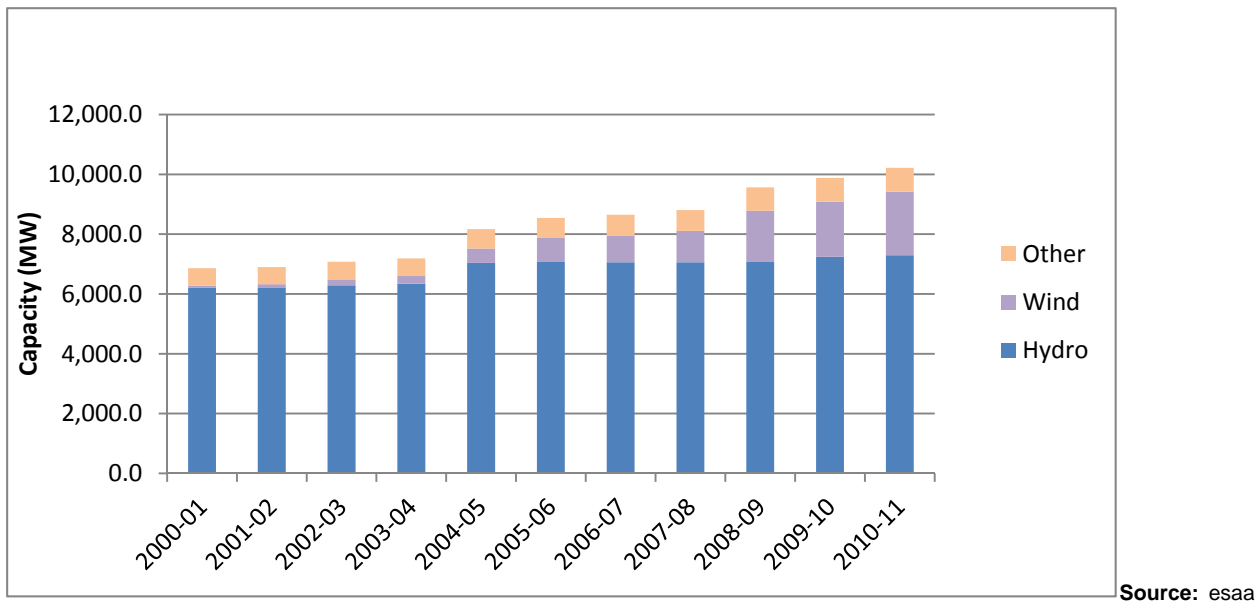
A rapid increase in the rate of renewable capacity development is required

Additionally, the industry faces challenges in installing the capacity needed at the rate required to meet the LRET. As noted in the issues paper, an estimated 11 GW of additional renewable generation capacity will be needed to reach the target. The esaa’s *Electricity Gas Australia 2012* shows that as of 30 July 2011, there was 10.2 GW of existing renewable capacity in Australia⁴. Much of this is existing hydro power generation which does not contribute to meeting the LRET until annual generation is above 1997-historic baseline levels. Growth rates of renewable capacity over the past 10 years have been much lower than rates required to meet the targets to 2020. This has largely been driven by the oversupply of small-scale credits as a result of the Solar Credits Scheme and by policy uncertainty. Installed renewable capacity over time can be seen in Figure 1.

³ Based on 15,000 GWh of pre-existing renewable generation, 41,000 GWh of production under the LRET and projections of 4,000 GWh of small-scale production. Since the latter is not a fixed target, the total could be higher still.

⁴ This does not include rooftop solar PV or solar hot water, as these form part of the SRES.

Figure 1 - Renewable energy capacity (MW) 2001-2011



Electricity Gas Australia 2002-2012

An additional 11 GW of capacity represents more than double the existing renewable capacity, while just 3.4 GW of renewable capacity has been added in the past 10 years.

The impact of planning restrictions

Furthermore, several state governments have introduced, or are considering the introduction of planning regimes aimed at restricting new wind turbine developments. While projects which have already received approval can still proceed on the existing approval, gaining approval for new or amended projects will be challenging.

The Association considers that the RET should be met at the lowest cost. The esaa is a fuel and technology neutral association; introducing restrictions based purely on disadvantaging one particular technology, which also happens to be one of the most cost-effective options at this stage, will only drive up the cost of meeting the RET. This will flow through to higher household energy bills. The review panel should be aware of the impact of such policies on the ability of the energy industry to meet the RET at least cost. The restrictions placed on wind projects and long-standing opposition to building new dams may also be a factor in the coming years.

The esaa is certainly not arguing that the RET should be changed because of these planning regimes. On the contrary, it is partly because of these planning regimes that the existing target will be difficult and costly to reach.

The future of the RET

In light of these considerations, the majority of esaa members consider that the RET should be able to respond to changes in demand so that it represents the policy intent of 20 per cent of electricity generation to come from renewable energy.

A target that changes with demand also reduces the need to review the level of the target every two years as the REE Act requires. While there could be scope to look at the administrative side

of the RET this regularly, questions around the level of the target or eligibility of technologies should be less frequent in order to promote greater policy certainty.

As noted, while this is the position of the majority of esaa's members, some consider that the existing target should remain unchanged in order to give policy certainty to the sector.

Small-scale Renewable Energy Scheme (SRES)

Splitting the SRES away from the overall target has seen long-term investment signals return to the large-scale renewable generation market. As previously mentioned, the Solar Credits Scheme and associated multiplier, combined with the addition of generous state government feed-in tariffs (FIT) and a fall in costs, meant that solar PV dominated the RET market. The multiplier and the deeming rules meant that the actual amount of electricity generated was considerably lower than that implied by the number of eligible certificates created.

State governments have for the most part now moved towards allowing the retail electricity market to determine a fair and reasonable FIT. The Solar Credits multiplier has also been reduced and the Association notes that it will end on 30 June 2013. These represent positive steps towards sustainable policy settings for the small-scale renewable sector.

However, even with these policies winding down, solar PV panel prices are falling, and installation rates are still strong. The announcement from the Queensland Government that their generous solar feed-in tariff was going to end led to a rush of applications to install solar PV. 110,000 applications were made in the final week before for the 44c/kWh FIT closed.

The impact of this will be seen gradually as installations take place and more small-scale technology certificates (STC) enter the market. The Small-scale Technology Percentage (STP) is currently at 23.96% for 2012. The government's own estimations for 2013 are that the STP will be 7.94%. Following the surge in applications in Queensland, and another likely surge in June 2013 before the multiplier drops back to one, it is very probable that the STP for 2013 will in fact be well above the current estimation.

These high STP levels mean that the SRES is currently contributing more to the retail cost of electricity than the LRET⁵. This will likely continue to be the case following the surge in applications.

With the increase in penetrations rates of solar PV, some electricity networks are struggling to cope with balancing the variable supply from rooftop solar PV. These networks were not designed to manage significant two-way power flows. Some Association members have informed us that they have already suspended applications for new PV systems in certain areas as a result. The continuation of the SRES such as it is currently designed may lead to these problems becoming more widespread.

The esaa is concerned about the potential impact of the SRES due to its uncapped nature and that deeming is used to allocate certificates up-front. We understand the role that the SRES plays in helping to reduce the up-front cost of solar PV for households, but the Association considers that under the current circumstances it should be replaced by a more appropriate

⁵ IPART (2012), *Changes in regulated electricity retail prices from 1 July 2012* and QCA (2012), *Final Determination: Regulated Retail Electricity Prices 2012-13*.

policy rather than an uncapped scheme which is ultimately funded by consumers. Options could include reducing the up-front subsidy or capping the total amount of subsidy available, or encouraging solar PV in commercial areas where solar PV could have a real effect in reducing local network peaks compared to in residential areas.

Impacts of a change to the RET

We recognise that there are many risks associated with both leaving the RET unchanged and amending it. These impacts will be spread across a range of affected parties depending on the policy decision taken. These impacts should be considered in determining the path forward for the RET.

There is currently a fundamental disconnect between the growth in energy supply and underlying energy demand. Thousands of MW of supply will be required to meet the RET, despite the possibility of future energy demand remaining flat or even falling. This situation could undermine the viability of existing supply.

Owners of incumbent plant understand that there are risks in the market that they must manage, the current RET exacerbates such risks. On the other hand, many participants in the electricity system have invested based on the target as it stands, and their assumptions and investments will be undermined by change. The costs of change should be minimised by taking account of existing commitments in any change to the target.

Existing renewable energy producers (aside from those pre-dating the introduction of the RET) will have an expectation of the future prices of the RECs they generate, to the extent these are not fixed via a long-term contract. Similarly, many project developers have invested in planning and permits based on the current target. Changing the existing RET will have an impact on these businesses, their investments and on the electricity market as a whole.

In particular, providers of finance to these businesses may require a higher return due to a perception of greater regulatory risk arising from another change to the RET framework. This would increase the REC price necessary to meet a particular quantum of renewable electricity.

Retailers, as buyers of RECs, would also be affected. Some retailers may have invested in a long-term supply of certificates based on the existing target, and thus there is a risk that they may be disadvantaged relative to competitors who have taken a more short-term perspective.

It is also important to take into account the impact of change or no change to the RET on consumers. It is ultimately they who are paying for the RET to be achieved, and this will only increase as the target increases over time.

Diversity of renewable energy access

The issues paper raises the prospect of using policies such as caps, banding or multipliers to increase the diversity of technologies contributing to the RET. The Association considers that the policy settings should allow the RET to be reached at the lowest cost. This can be best achieved through a technology neutral approach. Introducing other mechanisms distorts the market and can lead to inefficient investments and/or higher overall costs. Consequently, the esaa does not support the introduction of such options.

Introducing bands, caps or multipliers reduces certainty for industry. Repeated changes to the Solar Credits Scheme provide a strong example of the problems with such arrangements. Providing certainty to the renewable energy industry through stable policy settings will lead to far more efficient outcomes than by distorting the market through measures to encourage particular technologies.

If increasing the diversity of technology options contributing to the RET is seen as critical, then consideration should be given to further funding of research, development and demonstration (RD&D) for the industry. This would be a far better way to stimulate the growth of other technologies rather than distorting the RET market once again.

Conclusion

The esaa supports the ongoing development of renewable energy and the policy of a renewable energy target designed to deliver at least 20 per cent renewable energy generation by 2020.

As outlined in this submission, there are a range of risks to the RET that have created uncertainty and that make delivering the existing RET challenging. The major factors are a fall in projected demand and restrictive planning regimes which will inhibit the development of least cost renewable generation. These challenges could potentially result in higher electricity bills for consumers.

The Association supports a 20 per cent renewable energy target. However, the impact of falling or flat demand combined with the addition of the uncapped SRES, means that the fixed 41,000 GWh target is likely to result in the proportion of electricity generated from renewable sources being greater than 20 per cent. While some esaa members support retaining the fixed target, the majority favour a RET which will deliver 20 per cent of Australia's electricity generation through renewable energy rather than a potentially higher and more costly proportion.

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

A handwritten signature in black ink, appearing to read 'Matthew Warren', with a large, stylized flourish at the end.

Matthew Warren
Chief Executive Officer