

23 November 2012

Anthea Harris Chief Executive Officer Climate Change Authority GPO Box 1944 Melbourne Vic 3001

Dear Anthea

Thank you for the opportunity to provide the EUAA's perspectives on the Climate Change Authority's Discussion Paper on the Review of the Renewable Energy Target.

The EUAA's membership includes many of Australia's largest energy users. EUAA members are very concerned about rising electricity prices. Rising network prices account for much of the retail price rises, for all but the very biggest energy users. However renewable energy policies, and particularly the small scale renewable energy scheme, have delivered very poor outcomes for energy users.

We have analysed the modelling undertaken by the CCA and its advisors. From this analysis we have concluded that the Renewable Energy Target (RET) is not in the interests of electricity users, or the national interest. Neither do we think that it will deliver the Government's objective of an efficient and sustainable response to the emission reduction imperative. The rationale underlying our conclusions is set out in Appendix A. In Appendix B we address various administrative issues relevant to EUAA members.

As set in more detail in Appendix A, we do not think the CCA's modelling that the RET will substantially reduce wholesale electricity prices is credible. As such we do not think that the RET will substantially pay for itself, as the CCA believes it will. Instead, we suggest that the RET will continue to be a significant impost on retail electricity users in future as it has been so far.

To be clear, the total cost of renewables subsidies (the small scale and large scale schemes) will be around \$13/MWh in 2012, before adjusting for emission-intensive trade exposed partial exemptions. This is equivalent to a 31.4% increase in the demand-weighted spot price in the National Electricity Market for 2012 to-date. A large part of this (around \$5bn since 2010) has been to subsidise residential photo-voltaics. This has made many households

Energy Users Association of Australia ABN 83 814 086 707 Suite 1, Level 2, 19-23 Prospect Street, Box Hill, Victoria, 3128 Phone: (03) 9898 3900 Fax: (03) 9898 7499 Email: <u>euaa@euaa.com.au</u>

www.euaa.com.au

profitable but highly inefficient electricity producers, but evidently at significant cost to all other energy users.

This outcome was avoidable. In 2010 our Association wrote to the Minister for Climate Change suggesting that her Department had badly underestimated the rate at which small scale certificates would be created; that the scheme would result in significant cost to 9 million energy users; and therefore that it should be capped. Unfortunately for energy users, history has proven us right. You might therefore understand our concern that such bad mistakes are not repeated. In our opinion, the CCA's current recommendations will prove to be another such mistake if implemented.

While the CCA might not agree with our criticism of its modelling (and the consequential conclusions we draw), it might at least agree that it can't be sure that its own analysis is right. In light of this uncertainty, and considering the importance of this policy to the government and to energy users, we would like to propose an alternative approach for the CCAs consideration. Our alternative approach will deliver:

- almost exactly the same amount of renewable generation capacity in Australia by 2030 as would be the case if the RET was in place.
- 215 million tonnes of greenhouse gas emission reduction that would not otherwise occur (the same amount that the CCA says the RET will deliver).

To achieve this we propose that the CCA should advise the Government to discontinue the RET and instead deliver the emission reductions that the CCA says the RET will deliver, by purchasing emission abatement.

This could be purchased from existing and new renewable electricity generators and/or from emission certificates such as Emission Reduction Units (ERUs) issued under the EU Emission Trading Scheme. ERUs can currently be purchased for around \$11 per ERU. Purchasing 215 million ERUs would cost around \$2.4bn.

Furthermore, since the CCA's modelling shows that almost the same amount of renewable capacity will be installed by 2030 without the RET as would be installed with the RET, discontinuing the RET will make no difference (according to the CCA's modelling) to the level of renewable capacity installed by 2030.

We suggest that our approach could also save energy users around \$35.8bn (\$38.2bn that the CCA says the RET will cost users less \$2.4bn for ERU purchases). Perhaps some part of this saving could be used in further research and development of renewable generation technologies in Australia, and to fund policy research relevant to the sector.

We believe the CCA should give our proposed alternative further detailed consideration before it finalises its RET review. We would be pleased to discuss this further with the CCA.

Yours sincerely

BGreen

Brian Green Chairman

Appendix A: EUAA analysis of the CCA's modelling

The modelling undertaken for the CCA says that electricity users will pay subsidies of \$38.117bn over the eighteen years from 2013 to 2030 as a result of the RET.

In spite of this subsidy, the CCA projects that by 2030, the total Australian renewable generation capacity will be just 400 MW higher than if there was no RET. The CCA's modelling therefore concludes that the RET essentially makes no meaningful difference to the level of Australia's installed renewable capacity by 2030.

Instead, the modelling shows that the RET brings forward investment in renewables that would occur anyway albeit a little later. The difference between the installed capacity in renewables under the "RET" and "no-RET" cases is at its greatest in 2022. After this date, investment in renewables, even without the RET, catches up with the investment that occurs with the RET so that by 2030, total investment is approximately the same whether or not the RET was in place.

It is clear therefore, that the circa \$38bn of subsidy can not be justified on the basis of the total renewable capacity installed by 2030. Instead, if there is a case for this subsidy, it will need to be justified by the net benefits in the period from 2013 to 2030.

The CCA's modelling shows that, despite additional charges to users of \$38bn, average retail electricity prices over the period from 2013 to 2030 will be just 0.8% higher with the RET than they would be if there was no RET. The reason for this negligible retail price impact is, according to the CCA's modelling, that the RET will substantially reduce wholesale electricity prices – by 10% on average between 2013 and 2030 (peaking at a 32% price reduction in 2022).

If the CCA's modelling is a reasonable expectation of what lies ahead, then there seems little reasonable basis for users to oppose the RET, because it will reduce prices by almost the value of the subsidy so that on average electricity users are no worse off. The decision to support the RET (or not) therefore reduces to confidence (or not) in the CCA's calculation that the RET will reduce wholesale prices by 10% over the period from 2013 to 2030. In the rest of this Appendix we explain why we are not confident in the CCA's calculation.

The CCA's modelling shows that the installed capacity of all non-renewable generating technologies is essentially the same over the period 2013 to 2030 with or without the RET. The only difference the RET makes is to bring forward investment in renewables. It does not therefore, according to the CCA, affect investment in other generating technologies.

We can estimate the cost of bringing forward this renewable investment by assuming an average installed cost of \$3m per MW of renewable capacity, and determine annualised financing and depreciation charges based on a capitalisation factor of 15%. Based on the installed capacity in the CCA's modelling (with and without the RET) the total financial cost of bringing forward investment in renewables (i.e. amortising and financing assets) is therefore calculated to be \$12bn.

Against this additional cost, the brought-forward renewable generators will deliver savings in emission costs and fuel costs, both of which would otherwise be incurred. The CCA's modelling has valued the savings in emission costs attributable to the RET at \$5.8bn. The savings in fuel costs – again based on the CCA's modelling of fossil fuel production with and

without the RET - is around \$3.5bn. Therefore, bringing forward investment in renewables produces total production cost savings of around \$9.3bn.

It is clear from this that the additional financing costs of bringing forward investment in renewables (\$12bn) exceeds the benefits of lower production costs (\$9.3bn). As such, it is not economically efficient to bring forward the investment in renewables. This is uncontentious: after all if it was economically efficient to bring forward renewable investment, subsidies would be unnecessary. Put simply, it is not clear how a more expensive technology, that would not be viable in the absence of subsidies, will reduce prices.

A remaining possibility is that bringing forward renewable generation, by increasing the supply of low variable cost generation, will displace more expensive generation in the spot market and thereby reduce wholesale prices as the CCA's has projected. The likelihood of this rests on the assumption that generators will have no choice but to accept the loss of margin attributed to the significant wholesale price reduction that the CCA projects that the RET will bring i.e. that they will not respond by withdrawing capacity from the market in order to reduce supply and therefore raise prices. The CCA's modelling suggests that although renewable generators displace coal generation, there is no capacity withdrawal and generators therefore will accept lower prices, rather than respond by reducing supply.

We suggest this is unlikely. In the last six months moth-balling and closure of brown and black coal generation in South Australia, Victoria and New South Wales has been announced. This has occurred as a result of reduced demand for fossil fuel production attributable to many factors including the increase in renewable electricity generation in South Australia. This has depressed wholesale prices, particularly during peak periods. Not only has the CCA's modelling failed to take account of the capacity withdrawal that has already occurred, but it has assumed that such withdrawal will not occur at all in the period to 2030, despite very significant increases in renewable generation. This seems to be obviously implausible on first principles considerations of the economics, and also in view of the recent evidence. It follows that we can not be confident in the CCA's calculation that the RET will reduce wholesale prices by 10% on average over the period from 2013 to 2030.

We consider it is likely that additional renewable capacity could result in generally short-lived wholesale market price reductions, but that this will provoke a competitive response resulting in capacity withdrawal and hence higher spot prices. In our opinion, a generous view would be that these temporary wholesale market price reductions might be sufficient to off-set the additional expenditure attributable to a greater amount of open cycle generation and transmission capacity associated with a significant expansion in renewable capacity. But the price reductions would not be sufficient to offset the RET subsidies between 2013 and 2030, which the CCA has estimated will total \$38.117bn.

On the basis of these assumptions, the 215 millions tonnes of greenhouse gas emissions that the RET will avoid (based on the CCA's analysis) will be costing energy users \$177 per tonne. We note that Emission Reduction Units (ERUs) from Europe can currently be purchased for around 1/16th of this price.

The analysis to this point has been based on the CCA's modelling. For completeness we would like to record that we consider many aspects of this modelling highly implausible. This includes:

- that the RET will not affect the need for additional fast response open cycle gas generation. This seems completely unrealistic considering the introduction of more than 18,000 MW of additional variable renewable generation;
- that significant transmission augmentation will not be required. Again this seems remarkable considering the geographically remote location of most renewable capacity.
- that the industry is capable of delivering 14,500 MW of new renewable capacity in just 7 years, of which 9,500 MW is wind generation. It has taken the industry more than a decade to deliver just 2,000 MW of wind generation. The CCA's modelling implies that the industry will be able to deliver wind generation in future at more than seven times the rate it has in the past. This seems unlikely.

Appendix B: Administrative issues

Small Scale Renewable Energy Scheme

We maintain the view that the SRES should be scrapped. Alternatively the SRES should at least be capped to reduce the subsidy as outlined in our submission to the Issues Paper.

At the minimum, mechanisms that reduce the subsidy from SRES should be adopted such as recommendation R. 8 which would give the Minister the power to reduce the multiplier to below 1 and recommendation R. 9 which would allow the Minister to apply or reduce a discount factor under certain conditions.

Clean Energy Finance Corporation (CEFC) funding

We do not believe that it is appropriate for the LRET to be expanded so renewable generation funded by the CEFC will be able to create additional Large Scale Generation certificates. This would increase the burden of the scheme on energy users as discussed in our submission to the Issues Paper.

Emission Intensive Trade Exposed (EITE) exemptions

We support maintaining the current assistance rates in line with the assistance rates under the Jobs and Competitiveness Program (JCP) in the Clean Energy Futures (CEF) package.

We also support recommendation R.18 making Partial Exemption Certificates tradable. PECs are issued in the name of the electricity retailer. Should there be a change in retailer the PECs have to be reissued in the name of the new retailer. This has caused problems for both customers and retailers. The current arrangements make it difficult for an EITE business to change their energy retailer during a calendar year as the exemptions are issued in current retailer's name for the whole of the year. We bring these issues to the CCA's attention in developing arrangements that ensure PECs are fully tradable.

Opt-in Liability Arrangements

We support recommendation R. 12 to allow large electricity consumers to opt-in and allow them to assume their own liability for the RET obligations. As mentioned in the Discussion Paper there are templates for opt-in arrangements that can provide a guide to developing an appropriate opt-in mechanism for the RET such as the opt-in arrangements in the New South Wales Greenhouse Gas Abatement Scheme (GGAS). Allowing large electricity consumers to assume their own liability may assist with making PECs tradeable as PECs would be issued in the name of the entity that has chosen to opt-in allowing a value to be placed upon the PECs.

Streamlining Processes between the Jobs and Competitiveness Program and the RET

We support recommendation R. 19 to streamline the application, data and auditing requirements of the JCP and the RET. EUAA members have seen increased compliance costs associated with the various legislative requirements associated with the emissions reduction and renewable energy policies that they have been exposed to. Processes that streamline the administrative burden and reduce compliance costs should be encouraged.

Setting the Renewable Power Percentage and Small-scale Technology Percentage

The EUAA also supports the setting of the liability for the LRET and SRES in the year prior to the commencement of the relevant compliance period. EUAA members have stated that the current arrangements make budgeting for increases in electricity prices from the RET difficult.