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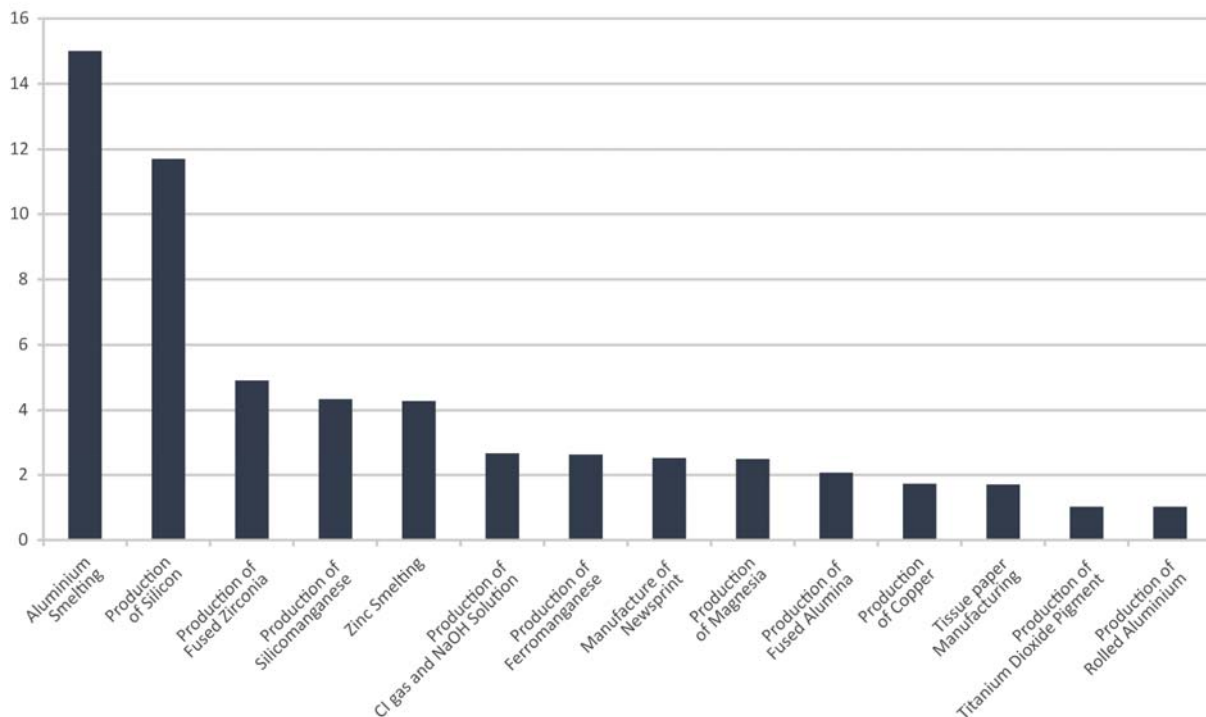
### Issues Paper: Renewable Energy Target Review

I write in response to the release of the issues paper for the Climate Change Authority's review of the Renewable Energy Target. This submission is made on behalf of Australia's aluminium industry.

#### Industry Context

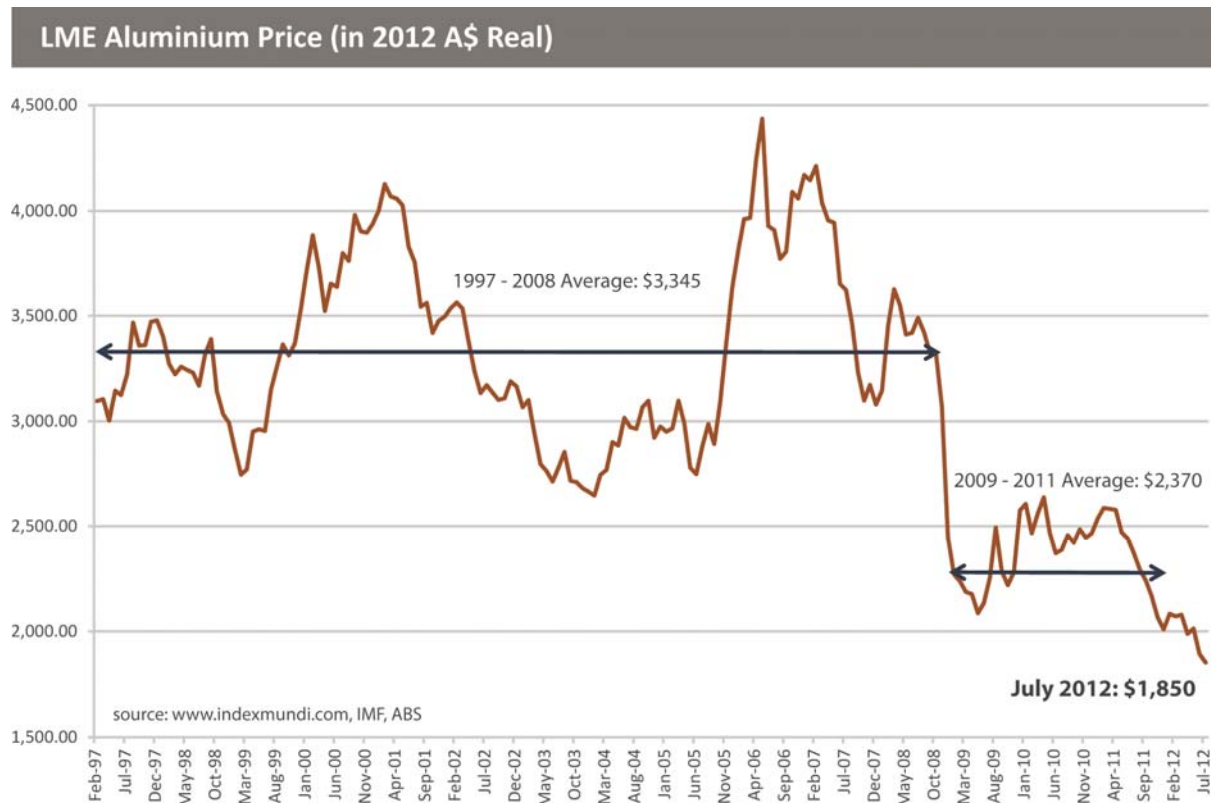
The aluminium industry uses approximately 13% of Australia's electricity. Aluminium smelting is the most electricity-intensive component of the Australian economy. As such, we have an exposure to the Renewable Energy Target (RET) that is greater than any other electricity user.

Electricity Intensity of EITE Activities (EP MWh/t)



Australia's aluminium industry exports approximately 80% of production and, globally, sales of aluminium are linked to the price set on the London Metals Exchange (LME). There is no ability to pass on increased costs incurred in Australia to global customers.

As a result of the high Australian dollar and low LME price, the Australian aluminium industry is currently loss making. One of Australia's six smelters – Hydro Kurri Kurri – has announced that the facility will be closed in the second half of 2012.



The graph above shows the combined impact of the low metal price and high Australian dollar. The current price is 20% lower than over the previous two years, which in turn was 30% lower than the average of the prior decade. The current effective price in Australian dollars is at an exceptionally low level.

### Policy Context

The Renewable Energy Target seeks to deliver on the Government's commitment to ensuring "the equivalent of at least 20 per cent of Australia's electricity supply comes from renewable sources by 2020".

The target is met by requiring entities that purchase wholesale electricity to surrender certificates representing renewable energy generation. The quantitative requirement for permits ensures the target is met. The tradable nature of permits creates a market that provides a return to investors in renewable energy generation and seeks the least-cost solution within the definitions of the policy.

The returns to renewable energy generators are funded by existing electricity users either through direct participation in the wholesale electricity market (and hence a RET obligation) or by cost pass through from their electricity retailer who bears the RET obligation.

The Government's policy of an electricity generation mix (20% renewables) is being achieved by a wealth transfer from existing electricity users, including industry, to investors in renewable generation. In the case of trade-exposed, industrial electricity users, the costs of the RET scheme damage their position with respect to competitors in other countries; while the increase in renewable energy generation provides no tangible financial return.

Since inception of the (M)RET scheme the aluminium industry has paid approximately \$300 million in RET payments. This is a direct transfer of funds to the renewable energy industry from the aluminium industry. The effects of this outflow of cash have been severe over the last four years as the Australian aluminium industry has been financially stressed, and are particularly so at current loss making aluminium prices.

It should be noted that the aluminium industry does not gain any short or long term benefit from electricity generation that is established through RET. The vast majority of RET investment has been in small-scale solar and wind and this trend is likely to continue. Neither of these electricity sources is suitable for aluminium smelting which requires large, consistent, stable and secure electricity supply, and the only suitable renewables are hydro or large scale geothermal. Globally, there is no existing aluminium smelting capacity based on wind or solar power and this will not change based on current or emerging technologies.

#### EITE Exemption Context

To address the loss of international competitiveness of domestic industry, the RET scheme includes a partial exemption for emissions-intensive trade-exposed (EITE) industry. However, the partial exemption applies only to the amount of the target in excess of 9 500 GWh, leaving a substantial residual cost. In effect the headline exemption of 90% is greatly reduced leaving the trade exposed sector facing significant costs that currently threaten the financial viability of Australian smelters. This situation is exacerbated by volatility impacts caused by the flexible SRES component. Practically, this approach has translated to an actual exemption which varies around 70%. Because of the industry's electricity intensity, the residual RET costs that smelters are exposed to is disproportionately high compared to other EITE activities.

*We estimate that the cost of the RET policy on Australia's aluminium industry will be approximately \$80 million per annum through to 2020, or \$40 per tonne of aluminium. This cost is being paid by facilities that are currently not profitable and whose long-term viability is under question. Continued operation of the industry will only be assured if significant production costs can be removed.*

*The operators of Australia's five continuing aluminium smelters will be forced to continue actions including reducing employment and foregoing investment in order to manage the loss of competitiveness resulting from costs imposed externally by the RET scheme.*

#### The Target

The targets within the RET have always been expressed in percentage terms – 20% renewables by 2020 – including by the operators and participants in the scheme. However, as the issues paper notes

*“This is a policy commitment and is not directly referenced in the REE Act, which sets rising annual targets in gigawatt hours, rather than percentage of electricity supply.”*

The 45,000 GWh target, and its subsequent split into SRES and a 41,000 GWh LRET target were implemented at a time when Australia's electricity demand was expected to reach 300,000 GWh by 2020. The gigawatt hour targets would have achieved the "20% by 2020" target based on those predictions.

Since the last review and amendments to the RET scheme most forecasts, including those of the Australian Energy Market Operator, are predicting electricity demand in 2020 that is significantly lower than 300,000 GWh, indicating that SRES, plus the 41,000 GWh LRET, plus generation from baseline renewables, will significantly exceed 20% of electricity supply.

A sizable component of the lower expected increase in electricity demand is reduced demand from the industrial sector, of which aluminium smelting is the largest representative example (for example, the closure of the Hydro Kurri Kurri smelter). Rising power costs (attributable to factors broader than just RET) combined with a high Australian dollar are forcing industrial electricity users to curtail production and/or close facilities.

The RET costs impose a significant burden on electricity-using trade-exposed industry. Yet the policy is likely to exceed its objective, at least partly due to the negative impact of RET costs on domestic industry. The potential over-achievement of the targets provides some flexibility to meet the policy objective but reduce the cost and negative impacts of the RET scheme, particularly on the most impacted electricity-intensive sectors.

There are at least three components to consideration of the target:

- The form of the target – percentage or gigawatt hours;
- The level of the target;
- Circumstances for changing of the target;

The Australian Aluminium Council (AAC) is of the view that the LRET target should continue to be expressed in terms of gigawatt hours rather than percentages, in order to provide stability to both the investors in renewable energy and the liable parties (and electricity users). The Council accepts that the scheme would become unnecessarily complex and uncertain if the target were expressed in percentage terms.

However, given that there has been such a large and consistent shift in expected electricity demand, there should be a one-off re-setting of the Scheme targets to a level that more closely reflects the still-stated objective of "20% renewables by 2020". While this would be a change in the rules on which investment in renewable electricity is based; we believe the extent of the cost burden on domestic industry is sufficient to warrant the change; and there is time to implement the change such that any minor impacts will be in regard to future investment decisions that are not yet locked in.

If expected future electricity demand is of the order of 260-270,000 GWh then there is flexibility to reduce either SRES or LRET targets by as much as 6,000-8,000 GWh and still achieve the objective of "20% by 2020". This reduction in the target provides the opportunity for more comprehensive relief to electricity-intensive, trade-exposed industry. ***The Australian Aluminium Council therefore recommends the LRET be reduced from 41,000GWh to no more than 35,000GWh.***

## Small-scale Renewable Energy Scheme (SRES)

The issues paper notes:

*“In 2010, when the RET scheme was separated, the SRES was ‘assigned’ around 4000 GWh of the then-total 45,000 GWh 2020 target. Based on recent installation data obtained from the Clean Energy Regulator, it is likely the SRES will generate more than 4000 GWh by 2020. Due to the uncapped nature of the scheme, the greater than expected uptake has led to greater liability for liable entities.”*

The extract above is, to say the least, an under-statement. The cost burden on electricity users of the SRES component of the scheme has been many times greater than the modelling that was used by the Government to undertake the separation and the nominal “assigned” target of 4000 GWh for the SRES. Any statement or modelling about future SRES permit generation levels will therefore be treated with a healthy amount of scepticism.

Liable entities under the RET scheme have had to deal with not only the high cost of the SRES component, but also the volatile nature of the SRES liability from year to year; an open ended cost of compliance; and the lack of any alternatives as would exist in a real market.

The separation of SRES from RET included many components to ‘protect’ uptake of small-scale investment – the deeming arrangements; multipliers; and uncapped certificate generation. This was despite the existence of other arrangements, such as high feed-in tariffs in some states and territories that already gave sizable protection. The result has been a large blow-out in costs borne by electricity users.

The SRES component struggles to measure up against criteria of economic efficiency and environmental effectiveness given the relatively high cost and unknown quantity of abatement. These higher costs are borne by electricity users, including unprofitable businesses that are unable to pass costs on to customers, bringing the equity of the SRES component into question. The extent of each of these deficiencies against the criteria is open-ended due to the uncapped nature of the SRES component.

In 2010, the Government separated SRES from RET and made policy adjustments based on the best available modelling of certificate generation. The modelling has turned out to be significantly off-the-mark, and the policy adjustments have had to be rapidly readjusted (reduction in multipliers). ***If the SRES is to continue in any form, and particularly if it is to be ‘adjusted’ again, then the SRES liability on wholesale electricity purchasers must be capped to ensure costs on electricity users are constrained and predictable.***

***One way this could be achieved is by reducing the multiplier to less than 1, effectively limiting the SRES scheme without significantly altering the nature of the scheme.***

***Alternatively, given the SRES was assigned 4000 GWh of the previous 45,000 GWh target, the obvious level for a cap is 4000 GWh. If the cap were to be set at any other level there must be a corresponding reduction elsewhere in the RET to prevent a ratcheting up of targets.***

## Self-Generation Exemption

The issues paper notes:

“Certain self-generators are not liable under the RET... To be exempt, self-generators must produce the electricity themselves, consume it and deliver it on transmission/distribution lines which operate solely for the purpose of transferring electricity between those two points. An entity cannot sell any part of the electricity to a third party...”

The self-generation exemptions are an essential component of the RET to cover situations where a project has little choice but to generate its own electricity, or where this is of clear benefit to all parties. Self-generated electricity is usually lower emissions-intensity than grid electricity and this is certainly the case within the alumina refining industry.

There are multiple reasons for the Government to encourage self-generation of electricity including the development of remote resource projects, efficient distribution of electricity, and lower emissions intensity. When the self-generation provisions were recently reviewed by the Council of Australian Governments they supported the existing arrangements over a number of options to extend the exemption.

The COAG Review judged that the narrowly defined exemption was “to avoid creating perverse incentives for companies to structure their operations to avoid RET liability.”

However the existing rules – particularly the limitation that the transmission/distribution lines must operate solely for the purpose of transferring electricity within the entity - creates a perverse incentive of its own.

In many resource projects there are related services (e.g., emergency services, telecommunications) or communities that have few alternatives for electricity other than the self-generated electricity supply for the resource project. The company is left with a perverse incentive to either incur a significant RET liability (by supplying electricity to the services and communities), or seek to save costs by disconnecting related services that use a minor amount of electricity.

This perverse incentive could be removed while maintaining the policy intent by ***exempting all self-generated electricity if the supply to a third party is incidental (telecommunications, emergency services, community radio, and local water supplies). In other cases, all self-generated electricity used by the end-user should be exempt, and the distance limit should be extended to include the generating plant and the facility or facilities it supplies, irrespective of whether distribution lines are shared or dedicated. “Self-generation” should be where the corporation that owns the power station is a member of the same corporate group as the corporation that owns the assets that use the electricity.***

This would extend the self-generation exemption to a limited additional quantity of electricity.

Previous reviews around a proposal such as this (the COAG Review) raised the shifting of burden to other electricity users and a possible advantage for self-generating businesses over grid-connected businesses.



However, self-generating electricity is a business decision, driven by the lack of alternative electricity supplies, which incurs both capital and ongoing costs. It is undertaken to overcome or minimise a disadvantage – lack of sufficient available electricity – or to capture the efficiency benefits of cogeneration. Rather than shifting a policy burden on to other users, self-generation achieves many of the same public policy outcomes – reduced emissions, increased energy security – but at a cost to the business involved.

As the Western Australian Government noted in their response to the COAG review of Specific RET Issues, the RET Scheme design was intended to apply to large grids with multiple customers and generators where the liable party can exercise choice between a range of competing generators, and was not intended to apply for off-grid generation or stand-alone resources projects.

### Optionality

The Australian Aluminium Council encourages the consideration of any measures that would increase the number of options available to electricity intensive industries to manage their RET liability. Two possible measures that the AAC would be supportive of, subject to the details around how they would be implemented, include trading of Partial Exemption Certificates and opt-in arrangements.

Partial Exemption Certificates (PECs) are currently not tradeable, which creates a situation where their value may be significantly reduced, depending on the particular provisions in an EITE's electricity supply agreements. Removing this restriction and allowing a market to develop in tradeable PECs would remove a potentially significant distortion and help ensure the true value of PECs is always recognised in the transfer from an EITE to the electricity supplier.

In terms of opt in arrangements - under the current situation, RET costs are often passed onto electricity users with the users having little say over the price they pay for the RET component. This greatly limits the opportunity for electricity users to find more competitively priced methods of meeting the RET requirement they ultimately fund.

Allowing for end users to 'opt into' the RET scheme and meet the RET liability directly would significantly increase flexibility, reduce the potential for price exploitation and create an opportunity to minimise cost without reducing the incentive for renewable energy uptake. The Authority is encouraged to consider such a change.

### Exemptions for Emissions-Intensive Trade-Exposed Activities

RET imposes costs through increased costs of electricity. In a similar way, the carbon price imposes costs on emissions of greenhouse gases - including in the generation of electricity where the costs are passed through to electricity users. In both cases, many industries are unable to pass the increased costs on to customers due to their trade exposure (from competitors not facing comparable costs).

To prevent the loss of competitiveness of those industries and their 'leakage' offshore, the Government implemented partial free permit allocation (for the carbon price) and partial exemption (from RET). Access to the relief is based on an activity's emissions-intensity in both cases.

Emissions-intensity is a direct measure of the proportional increase in an entity's costs under carbon pricing. It was extended to RET, as the issues paper notes, to "recognise the additional cost of compliance borne by entities carrying on EITE activities in the context of a carbon price".

However, emissions-intensity is not a direct measure of the “additional cost of compliance” due to the RET scheme. The Australian Aluminium Council has always contested, and maintains, that the *electricity-intensity* of an activity is the measure of its exposure to RET costs. Carbon pricing increases costs of emissions; RET increases electricity prices; carbon pricing exemptions are based on emissions-intensity; RET exemptions should be based on electricity intensity.

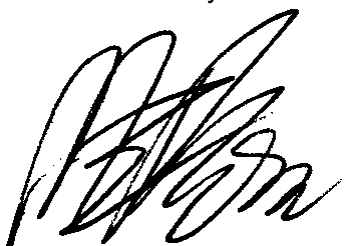
The issues paper and almost every participant in the RET scheme and associated debate fail to recognise that the 90% and 60% exemptions apply only to the amount of the target in excess of the original MRET of 9,500 GWh. The current exemption is both insufficient and highly volatile year on year leaving the trade exposed sector exposed to a high and variable cost. This formula translates to an actual exemption which varies around 70% for a highly electricity-intensive activity.

As noted earlier, even with the existing exemptions, RET costs the aluminium industry approximately \$80 million per annum or \$40 per tonne of aluminium at a time when the Australian aluminium industry is loss making and the viability of most facilities is under question and requiring severe cost reduction strategies in order to survive. The RET review should seriously consider the prospect that the \$80 million per annum wealth transfer from the aluminium industry to the renewable energy generation industry will not continue into the future.

If the revenue stream is not reduced by a stronger exemption provided to aluminium smelting as the most electricity-intensive activity in the economy, then there is a significant risk it will be reduced by more closures of aluminium smelting capacity with associated negative impact on jobs, communities and exports.

Thank you for the opportunity to provide comments on the issues paper for the Climate Change Authority’s review of the Renewable Energy Target. We would welcome the opportunity to meet with staff from the Authority to discuss the issues raised in this submission. We also look forward to further opportunities to comment on the Discussion Paper to be released by the Authority in October. Please contact me if you have any questions regarding our submission.

Yours sincerely



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