

24 May 2010

The Secretary  
Senate Standing Committee on Environment, Communications and the Arts  
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**Submission to the Senate Standing Committee on Environment, Communication and the Arts  
– Inquiry into the Renewable Energy (Electricity) Amendment Bill 2010 and related Bills**

Alumina Limited (Alumina) welcomes the opportunity to make this submission to the above inquiry. Alumina also supports the submissions of Alcoa of Australia Ltd (Alcoa) and of the Australian Aluminium Council (AAC), including the draft amendments to the Bill proposed by the AAC that that would address Alumina's concerns below.

**Background to AWAC**

Alumina is a 40% shareholder in Alcoa and a 40% interest holder in the Alcoa World Alumina & Chemicals business (AWAC). Energy is a critical input to AWAC's business and represents up to 30% of the cost structure of activities such as aluminium smelting.

Policy initiatives such as the Renewable Energy Target (RET) can significantly increase the cost of operating in Australia and therefore reduce the international competitiveness of AWAC's Australian facilities. Alumina believes it is important to provide incentives for the renewable energy industry yet without harming the competitiveness of Australia's trade-exposed aluminium industry.

AWAC undertakes several energy-intensive activities in Australia through operation of Australia's largest integrated aluminium business. This network includes:

- two bauxite mines, three alumina refineries and two ship loading facilities in Western Australia; and
- two aluminium smelters, port facilities and a power station and mine in Victoria.

**Energy efficiency improvements & emissions reductions**

AWAC has already made significant improvements in energy efficiency and carbon emission reductions. For example:

- AWAC's aluminium smelters have reduced direct greenhouse gas emissions per tonne of product by 61% since 1990.
- AWAC's Australian alumina refineries are amongst the most efficient in the world and have still been able to reduce greenhouse gas emissions per tonne of product by 12% from 1990 levels.
- Since 2000 AWAC's Australian alumina refineries have achieved more than a 6% improvement in energy efficiency.

- Portland and Point Henry aluminium smelters have achieved a 4.3% and 3.1% reduction respectively in the amount of electricity required to produce one tonne of aluminium since 2000.

### **Concerns with the RET Bill**

Alumina has three main concerns with the RET as proposed in the Renewable Energy (Electricity) Amendment Bill 2010, as follows:

1. The overwhelming electricity intensity of the aluminium smelting process (as shown in Figure 1 below) means these facilities will be impacted more than any other activity, consequently they should receive a true 90% exemption from the impacts of the RET;
2. Linkages of RET exemptions to the now delayed Carbon Pollution Reduction Scheme (CPRS) should be removed;
3. The uncapped volume of the Small-scale Renewable Energy Scheme (SRES) poses a significant and disproportionate risk to large electricity users.

Each of these concerns is discussed in more detail below.

#### **1. A true 90% exemption for aluminium smelting**

The overwhelming exposure of the aluminium industry to RET cost impacts was recognised by the Government in the release of the February, 2009 COAG Working Group on Climate Change and Water Discussion Paper: Treatment of electricity-intensive trade-exposed industries under the expanded RET scheme, as follows:

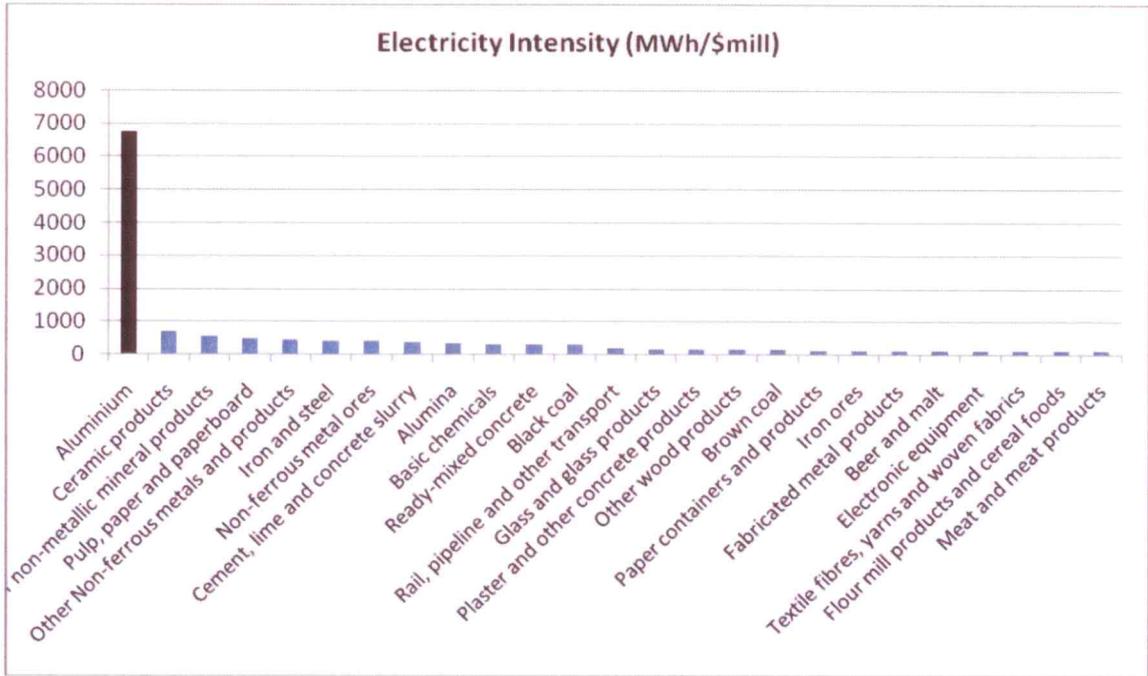
*“Preliminary analysis of electricity intensities at industry level, expressed per unit revenue, indicates that aluminium stands out strongly as the most substantial electricity intensive industry, being an order of magnitude higher than the next rung of industries.”*

*“It (the analysis) indicates that the RET cost as a proportion of revenue in 2013 would be in the order of 1.5 percent for the aluminium industry, rising to around 4 percent in 2020.”*  
*Australia’s six aluminium smelters consume 10 to 15 percent of Australia’s electricity and would bear a similar proportion of the total RET burden.”*

At that time Government canvassed the idea of providing assistance to the most electricity-intensive activities or RET Affected Trade Exposed (RATE) activities. Because of its electricity intensity (Figure 1) aluminium smelting would be exposed to far greater RET cost impacts than any other emissions-intensive activity.

Government subsequently decided to provide assistance to all emission-intensive trade-exposed activities, presumably for consistency with the proposed CPRS. This meant that aluminium smelting was exposed to RET costs far greater than what other industries would have experienced without any assistance (Figure 2).

Alumina believes this disproportionate impact of the RET on aluminium smelting should be reduced by providing aluminium smelting with a true 90% exemption from all RET costs. The current RET proposal would provide a 90% exemption for the expanded RET volume, however, a significantly lower exemption is provided for the first 9,500GWh of the RET.



Data source: Department of Climate Change

Figure 1. Electricity intensity of various EITE activities

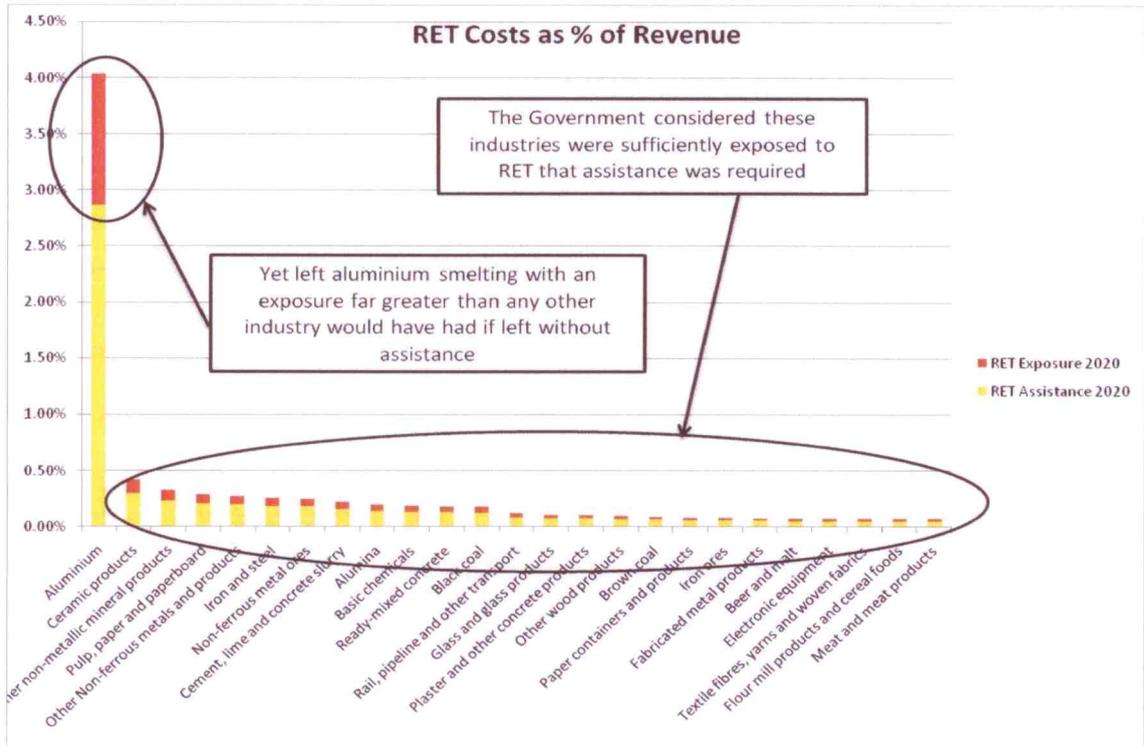


Figure 2. Disproportionate cost impacts of the RET on aluminium smelting

## 2. Linkage of exemptions to the CPRS

Part of the EITE exemption proposed by Government in the RET regulations (in relation to the first 9,500GWh and REC prices above \$40) will only come into effect if the CPRS legislation is passed by both Houses of Parliament. Given that the Government has decided to postpone further consideration of the potential introduction of the CPRS until 2013 at the earliest, and the Government has also indicated that the content of the scheme may be reviewed based on the position of the rest of the world at that time, it seems both appropriate and fair that the linkage between the CPRS and exemption now be removed. The importance of this issue has been increased by the Government's proposed increase of the shortfall charge to \$65. Failure to remove this barrier will only serve to reduce the competitiveness of electricity-intensive trade-exposed Australian facilities.

## 3. An uncapped SRES

The Explanatory Memorandum to the Renewable Energy Amendment Bill recognises a significant risk to business in "...the possibly open-ended commitment to small-scale generation with cost impacts for the liable entities." Liable entities (and consequently their customers) are required to meet a share of both the LRET and SRES in proportion to their share of the national wholesale electricity market. However, the SRES portion is an uncapped volume which is a risk as to certainty of costs placed entirely on large energy users in favour of small-scale renewable generators.

Transferring this risk to liable entities significantly reduces their ability to predict RET cost impacts over the life of an investment and therefore may dampen investment activity in electricity-intensive activities. This uncapped impact can be avoided by limiting the exposure of highly electricity-intensive EITE activities to the SRES (or by capping the SRES pool).

As the rapid growth of the small-scale renewable energy market is expected to continue, the potential RET cost for liable entities become increasingly significant and concerning. The more electricity-intensive an activity is, the higher the SRES volume risk. Alumina believes this risk justifies a cap being placed on the SRES exposure borne by the most electricity-intensive activities, such as aluminium smelting. This would provide more certainty to the electricity-intensive trade-exposed industries without reducing their international competitiveness, while still promoting the policy of encouraging investment in renewable energy.

Should you require any additional information or clarification from Alumina please do not hesitate to contact me or Andrew Wood.

Yours faithfully

**JOHN BEVAN**  
**CHIEF EXECUTIVE OFFICER**