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**Senate Select Committee on Electricity Prices**

This submission to the Senate Select Committee on Electricity Prices is made by the Australian Aluminium Council (AAC) on behalf of Australia's aluminium industry. This submission deals primarily with transmission costs for large industrial electricity users.

Industry Context

The AAC is the peak body representing the aluminium industry in Australia. Members operate in bauxite mining, alumina refining, primary aluminium smelting, as well as downstream processing (rolling and extrusion). Australia is the world's leading producer of bauxite (75mt), second largest producer of alumina (20mt) and fifth largest producer of primary aluminium (1.9mt).

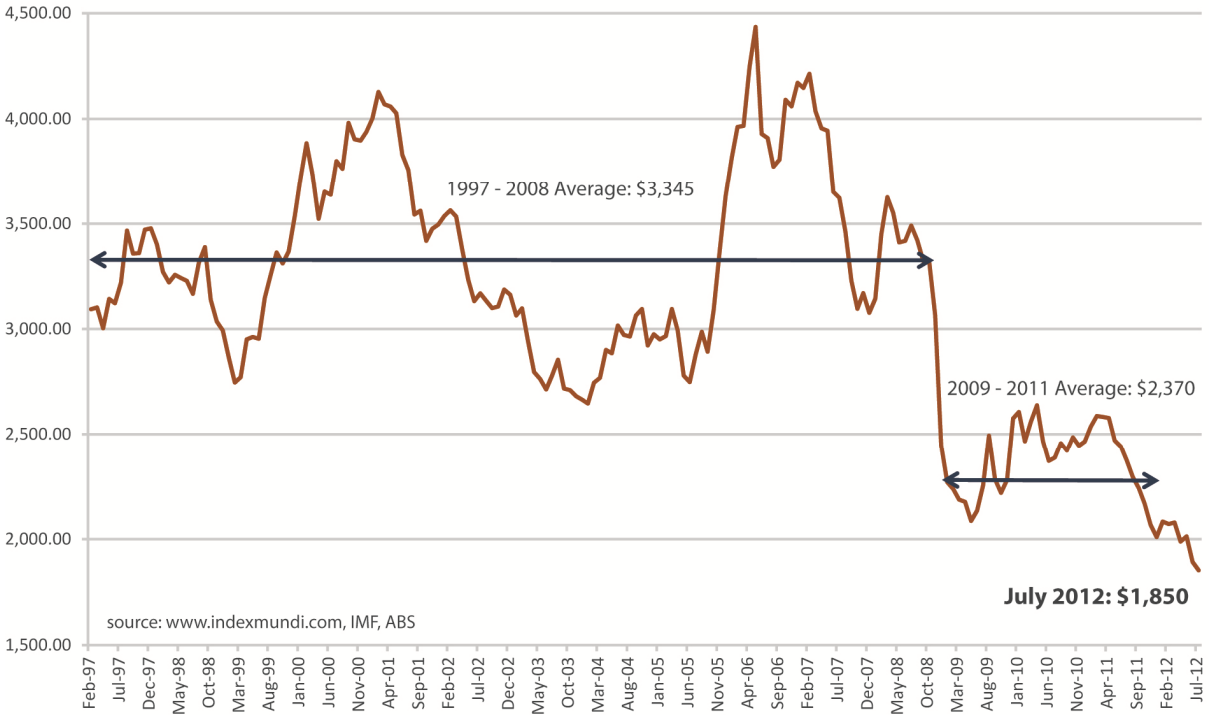
The industry employs more than 17,000 people predominantly in regional areas such as Hunter Valley, South-west Western Australia, Gladstone, Geelong, Portland and Tasmania. Through flow-on impacts the industry sustains more than 65 000 families who live long-term in regional communities.

Australia's aluminium industry exports approximately 80 per cent 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 following graph shows the combined impact of the low metal price and high Australian dollar. The current price is 20 per cent lower than over the previous two years, which in turn was 30 per cent lower than the average of the prior decade. The current effective price in Australian dollars is at an exceptionally low level.

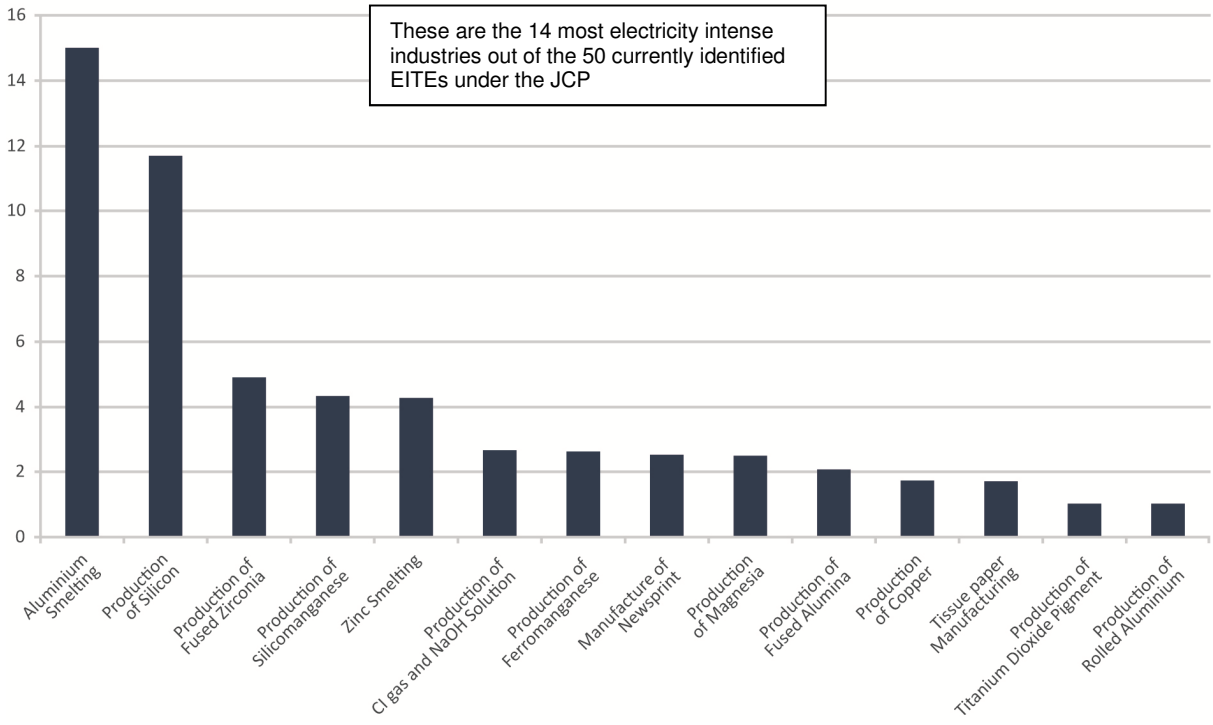
## LME Aluminium Price (in 2012 A$ Real)




Electricity Use

Aluminium smelting using the Hall-Héroult process requires large amounts of electricity. The aluminium industry uses approximately 13 per cent of Australia's electricity, making it the most electricity-intensive component of the Australian economy. As such, we have an exposure to electricity prices that is greater than any other industry sector.

## Electricity Intensity of EITE Activities (EP MWh/t)



Electricity use represents approximately 30-40 per cent of the production costs of aluminium and, in highly competitive global markets, the cost of electricity is a critical factor in determining international competitiveness.

The long-term viability of smelters in Australia is under question. Continued operation of the industry will only be assured if significant production cost reductions can be achieved.

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 that results from increasing electricity costs.

Transmission Costs

In the Australian context transmission is likely to account for up to 30 per cent of electricity costs for a typical aluminium smelter, making it a significant item in its own right. Transmission costs alone can be tens of million dollars per year for an aluminium smelter.

Transmission networks are built to handle peak events, however costs are charged on an electricity use basis. Electricity users with stable demand are implicitly subsidising the transmission costs of users with greater variability in demand, as the variability requires larger transmission capacity to handle the peak demand.

The unique nature of aluminium smelting demand (large, long-term constant loads) in fact helps underwrite network stability and the investment cost of transmission networks.

Aluminium smelters are typically located close to electricity generation sources due to the need for large quantities of secure and stable electricity. Given the high proportion of production costs attributable to electricity, transmission losses and reliability of power would be a significant factor if a smelter was located distant from generation.

While the total electricity load for smelting is high as a proportion of total electricity demand (as are the transmission costs); the distance that the electricity must be carried over is, in most cases, short; and the variability in demand is low.

On a per megawatt hour basis the transmission task for aluminium smelting is far lower than for domestic electricity users or other business users where transmission distances will be longer and the variability in demand greater. Aluminium smelting carries a much higher proportion of transmission costs in the NEM than is justified by the network required for electricity transmission to the smelters.

Investment in Transmission Networks

The burden of transmission costs is exacerbated by guaranteed returns that accrue to the operators of transmission networks. At a time when aluminium smelters are losing money and being forced to aggressively reduce costs internally and in conjunction with suppliers, electricity transmission costs seem immune to the same level of scrutiny or response to commercial realities.

The process of: determining future levels of transmission network investment; providing and responding to incentives to undertake that investment in an efficient manner; and

appropriate rates of return on the investment to reflect relative risk; must all be made more transparent and responsive to customer needs than the current opaque process.

Reducing Electricity Demand

The drivers of transmission costs described above are heightened by the declining growth in electricity demand in Australia. It appears that networks are being proposed, regulated and funded to cater for the possibility of one (high) scenario for future electricity demand while the cost of the investment will be charged to users at a much lower level of demand and therefore higher unit cost.

This situation is exacerbated by a surge in investment in network infrastructure, which is being spread over the same lower demand scenario.

It should not be assumed that the current aluminium smelting capacity in Australia will be sustained. The Senate Committee should seriously consider the prospect that the transmission costs and payments by electricity-intensive activities such as aluminium smelting may not continue at current levels.

Concluding Comments

If there is to be any review of electricity transmission pricing arrangements it should be done in a way that reduces costs to electricity-intensive trade-exposed activities.

Aluminium smelting already carries a disproportionate share of transmission costs and, given the Australian aluminium industry is currently loss making and struggling to carry existing costs, is certainly not in a position to shoulder increases.

Thank you for the opportunity to make a submission to the Senate Select Committee on Electricity Prices. We would welcome the opportunity to further discuss the issues raised in this submission. Please contact me if you have any questions regarding our submission.

Yours sincerely

**MILES PROSSER**
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AUSTRALIAN ALUMINIUM COUNCIL