An Overview of the Australian Aluminium Industry

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Australia is a significant player in global aluminium supply chains in the bauxite, mining, alumina refining and aluminium smelting sectors. These sectors have a particular export focus with approximately 80% of production destined for overseas markets. Australia also retains a downstream aluminium industry but this has a greater focus on domestic markets and faces competition from a significant level of imports.

Recent investments and announcements describe the quite different current trends within each sector:

Aluminium smelting
The Kurri Kurri smelter closed in September 2012, leaving five smelters operating in Australia at an approximate annual production of 1.7 million tonnes. The Point Henry smelter and the Bell Bay smelter were both subject to viability reviews by their owners. Both smelters remain operating in the short term, albeit with the assistance of a Government package in the case of Point Henry. All smelters, including Portland, Tomago and Boyne Island are subject to significant cost restraint.

Australia’s aluminium smelting sector is showing declining production levels in the face of increasing operating costs.

Alumina refining
There have been recent expansions in the Australian alumina refining sector in both greenfields facilities (such as Yarwun) and expansions of existing sites (Worsley and Yarwun). These expansions have built on Australia’s relative strengths of: bauxite availability; energy resources; and stable political and investment environments.

With a high Australian dollar and rising energy and project costs - and the Yarwun and Worsley expansions now completed - there are not expected to be further expansions or new facilities in the immediate short term. The Gove refinery is currently seeking to switch from fuel oil to gas as a means of reducing production costs.

Bauxite mining
There have been steady increases in the rate of bauxite mining over the last decade along with recent increases in the quantity of bauxite exported. This trend is expected to continue, if not increase, with the development of the South of Embley project and the current process to allocate and develop the Aurukun resource.
Whether the current trends of declining aluminium production, stable alumina production and increasing bauxite exports continue will depend on the future path of a range of market and policy factors.

Key market factors include the value of the Australian dollar, energy (electricity and gas) costs, the aluminium price, and any differing trajectory for alumina and bauxite prices.

Key policy factors include carbon pricing (or other emissions reduction policies), the Renewable Energy Target, energy market reform and regulatory approval processes.

**Conclusion**
The Australian industry will remain a significant global player in the bauxite mining, alumina refining and aluminium smelting sectors. The coming years are likely to see a shift up the supply chain to greater levels of bauxite mining, lower levels of aluminium smelting and an uncertain trend for alumina refining. These macro trends will be influenced by market and policy factors with the most significant in each sector being:

- **Aluminium smelting**: Australian dollar, renewable energy target, carbon pricing, electricity costs;
- **Alumina refining**: Australian dollar, gas costs;
- **Bauxite mining**: Regulatory approval processes.

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**Biography of Presenter**

**MILES PROSSER**
Miles Prosser is the Executive Director of the Australian Aluminium Council, the peak association for the bauxite mining, alumina refining and aluminium smelting industry sectors. Miles has twenty years experience in industry policy issues. He has previously worked for the pulp & paper and forest industries on a range of issues relating to resource allocation, sustainability and climate change. Miles has experience in the development and implementation of policy from the perspective of Government, resource suppliers, major processing companies and industry associations. The priorities of the Australian Aluminium Council include an effective response to climate change, energy policy and the reputation of the aluminium industry and its products.