

14^h February 2014

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Dear Mr Ryan

Australian Aluminium Council Submission to the Energy White Paper - Issues Paper

The Australian Aluminium Council (AAC) welcomes the opportunity to provide an industry-based consumer view on the issues paper as part of the broader Energy White Paper (EWP) process. As Australia's most significant energy customer, our industry has a clear interest in the development of an EWP that optimises the benefits to all Australians from our natural energy endowment. This submission catalogues the challenges and issues facing AAC member businesses in Australian energy markets.

The EWP process is critical for all stakeholders in the energy market and the Australian alumina and aluminium industries are significant customers in both the domestic electricity and gas markets. Australia is the world's leading producer of bauxite (79.4 Mt), second largest producer of alumina (21.6 Mt) and fifth largest producer of primary aluminium (1.87 Mt). These market positions are only possible through accessing internationally competitively priced domestic energy.

The development of the EWP should be consistent with renewable energy and climate change policies to achieve the following outcomes:

1. Australian Energy Policy
 - An elevated role for customers in both the electricity and gas markets.
 - Consideration of the importance of energy in production processes to value adding industries.
2. Electricity Market
 - Energy policy delivers efficiently priced electricity for households and industry.
 - Cost of transmission to large industry should reflect the cost of supply.
 - Investigate the degree to which cost shifting in electricity prices has taken place and explore possible solutions.
 - Energy policy does not add to cost pressures facing value adding industry sectors in the Australian economy.
3. Domestic Gas Market
 - Gas Market Reform Agenda
 - The inclusion of the Western Australian gas market to deliver a national gas policy to 2020.
 - Increasing gas supply to the Australian domestic market.

- Promote Gas Supply Competition
 - Increased gas exploration.
 - Increasing competition in the domestic gas market through the removal of joint marketing.
 - Improve Commercial and Regulatory Environment for Infrastructure
 - Increasing gas pipeline capacity.
 - Market Data and Transparency
 - A transparent domestic gas market.
 - Role for Interventions in the Market
 - A policy or set of policy responses that encourage a liquid, efficient, effective and competitive domestic gas supply market.
 - Ensuring that non-government-intervention approaches lead to reforms that address the current issues facing domestic gas consumers.
4. Consistent Policy Approach
- Elimination of energy efficiency programs that lead to compulsory reporting for business.
 - Consideration of disproportionate impact of the RET on the competitiveness of Australia's aluminium smelters.
 - In terms of the Emissions Reduction Fund (ERF):
 - There must be mechanism to offset the period of higher electricity costs for emissions-intensive trade-exposed industry if the carbon price is repealed after 1st July 2014;
 - The ERF should impose a low regulatory burden to encourage participation;
 - Direct Action must facilitate emissions reductions in the context of the necessary economic growth and rejuvenation of Australian manufacturing that are also objectives of this Government; and
 - The 'compliance mechanism' must be based on forward looking baselines and not penalise normal business decisions.

Thank you for the opportunity to provide an energy user perspective to the study. The AAC is happy to discuss any aspect of the submission.

Yours sincerely



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Appendix 1

AUSTRALIAN ALUMINIUM COUNCIL SUBMISSION TO THE ENERGY WHITE PAPER - ISSUES PAPER

1. Australian Energy Policy

The alumina refining, aluminium smelting and aluminium rolling industry is a critical player in national energy markets. Australia's energy resources have long been a source of competitive advantage for these value-adding activities.

1.1. Role of Customers

It is critical that the development of policy and the operation of energy markets are driven by the needs of energy consumers. Customers ultimately pay for the provision of goods and services and Australian energy markets should ensure that customers can access the desired quantity and quality at a realistic price.

Outcome: An elevated role for customers in both the electricity and gas markets.

1.2. Energy Market as a Key Input to Value-Adding Industries

Energy typically represents 20-30 per cent of the operating cost of an alumina refinery. In Australia, the alumina industry uses ~150 PJ of gas per annum. A \$1/GJ increase in the cost represents an additional \$150 million per annum. Price increases of \$4-6/GJ could add \$600-900 million per annum to the cost of producing alumina in Australia.

Manufacturing Australia¹ argues: "secure, low cost natural gas is an important part of the cost base of many Australian manufacturers. For example natural gas makes up 15-40 per cent of the cost base of fertiliser, alumina, cement, float glass, brick and roof tile production". The potential impact on industry of an increasing gas price may impact almost \$30 billion in value added production on the east Australian coast².

Supplies of gas are critical to manufacturing business across the Australian economy. Long-term supplies are especially critical to the alumina and aluminium sectors. In a 2013 study, the Ai Group³ asked their members how long they would prefer gas contracts to run for. It was found that more than 25 per cent of respondents preferred short term contracts of one to two years duration, while 33 per cent sought three year contracts.

Twenty-three preferred five year gas contract arrangements and contracts of eight years or more, which are generally associated with the largest and most intensive gas users, were sought by 20 per cent of respondents to the Ai Group study. Over 40 per cent respondent indicated that long-term contracts were critical to their operations.

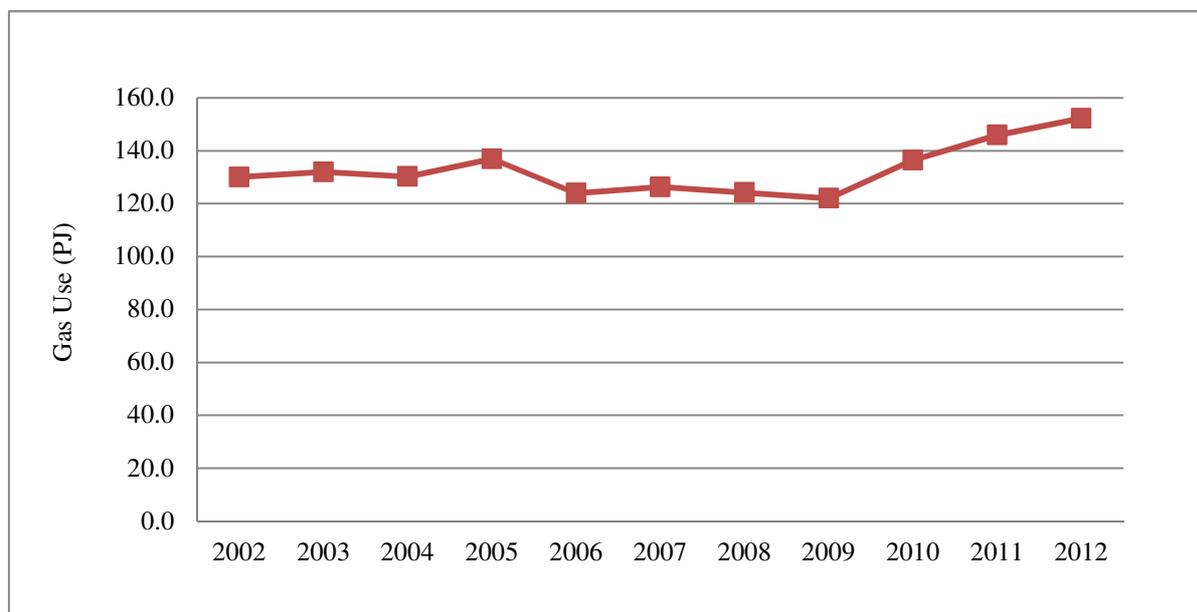
¹ Manufacturing Australia (2013, p.3), *Impact of gas shortage on Australian manufacturing*.

² Manufacturing Australia (2013, p.5), 'If managed well, \$29.5B of annual at-risk value added can be saved by supporting our manufacturers (including both \$12.6B of direct manufacturing and \$16.9B in flow-on effects throughout the economy through the spend of suppliers, employees and other connected entities)'.

³ Ai Group (2013, p.9), *Energy shock: the gas crunch is here*'.

The Aluminium and Alumina sectors are significant users of gas and since 2009 there has been a steady increase in the use of gas as energy source. Growth in gas usage amongst alumina refineries and aluminium smelters combined has grown by almost 20 per cent.

Figure 1
Gas usage across the Alumina Refinery and Aluminium Smelting Sectors – 2002 to 2012



Source: 2002-2012 Australian Aluminium Council Sustainability Reports.

Outcome: Consideration of the importance of energy in production processes to value adding industries.

2. Electricity Market

Aluminium smelting using the Hall-Héroult process requires large amounts of electricity. The aluminium industry uses approximately 12 per cent of Australia’s National Electricity Market (NEM), 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 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.

2.1. Market Power and Pricing

In late 2013, the Grattan Institute⁴ examined falling electricity demand in the NEM noting that, ‘extraordinary fall in demand has not led to a fall in price, as would occur in a conventional market’. The Grattan Institute’s research also indicates that since 2009-10, electricity consumption in the NEM has fallen by 4.5 per cent⁵. Approximately 30 per cent is sold to

⁴ Grattan Institute (2013, p.1), ‘Shock to the system: dealing with falling electricity demand’.

⁵ Grattan Institute (2013, p.4).

households, with the remaining sold to commercial and industrial users. The aluminium sector has a strong interest in ensuring industry is not unreasonably cross-subsidising infrastructure in the NEM.

Despite falling demand across the NEM, high electricity prices have led to negative market consequences for the aluminium industry. Boyne Smelters have reduced aluminium production by around 14,000 tonnes for the first three months of 2014 due to high Queensland electricity prices over the summer months making production uneconomic in current market conditions⁶. The decision follows several months of negotiations with Queensland electricity suppliers to try to secure a competitive price for 15 per cent (140 MW) of the smelter's electricity load⁷.

Boyne Smelters Ltd invested \$750 million in their facility, yet could not secure an electricity contract. The consequences of looking for contracts in the current electricity market in Queensland may curtail or restrict future investment.

Outcome: Energy policy delivers efficiently priced electricity for households and industry.

2.2. Transmission Costs

Electricity costs are rising for a number reasons including: (1) falling consumption, (2) increase in alternative energy sources such as solar (3) regulated monopolies not exposed to and unresponsive to market forces, (4) regulators have allowed these companies to earn excessive profits by setting tariffs that are too high given the low risk they face as monopolies and (5) an overinvestment in infrastructure in some states⁸.

Outcome: Cost of transmission to large industry should reflect the cost of supply.

Outcome: Investigate the degree to which cost shifting in electricity prices has taken place and explore possible solutions.

2.3. Aluminium smelting is an electricity-intensive trade-exposed industry

Our industry members are large users of electricity; our facilities are geographically close to generation sources, limiting the transmission task. A steady demand profile supports high utilisation of transmission infrastructure. Aluminium smelting is an electricity-intensive trade-exposed⁹ activity and in this context increasing electricity prices will continue to apply pressure on domestic value-adding industries.

Outcome: Energy policy does not add to cost pressures facing value-adding industry sectors in the Australian economy.

⁶ Boyne Smelter (December 2013), '*Boyne Smelters reduces production due to increasing Queensland electricity prices*', media release.

⁷ Ibid.

⁸ Grattan Institute (2013, p.1).

⁹ Manufacturing Australia (2013, p.53), 'competing with imports or exports from lower cost countries, often with access to lower cost domestic gas (e.g., US, Middle East, Russia) – putting the earnings, investment and overall viability of our domestic manufacturers at risk'.

3. Domestic Gas Market

Gas is a critical input to alumina refining in Australia. Australia's seven alumina refineries use more than 14% of Australia's domestic gas consumption. As well as a source of competitive advantage, cogeneration and fuel-switching to gas are important opportunities for carbon emissions reductions and cost minimisation within the sector. The desired outcomes below are extracted from the AAC submission to the Eastern Australian Gas Market Study.

- **Gas Market Reform Agenda**
 - **The inclusion of the Western Australian gas market to deliver a national gas policy to 2020.**
 - **Increasing gas supply to the Australian domestic market.**
- **Promote gas supply competition**
- **Increased gas exploration.**
- **Increasing competition in the domestic gas market through the removal of joint marketing.**
- **Improve Commercial and Regulatory Environment for Infrastructure**
 - **Increasing gas pipeline capacity.**
- **Market Data and Transparency**
 - **A transparent domestic gas market.**
- **Role for Interventions in the Market**
 - **A policy or set of policy responses that encourage a liquid, efficient, effective and competitive domestic gas supply market.**
 - **Ensuring that non-government-intervention approaches lead to reforms that address the current issues facing domestic gas consumers.**

4. Consistent Policy Approach

A consistent policy approach is one that aligns energy, renewable energy and climate change policies.

4.1. Energy Efficiency

- The energy white paper process should consider the impact of the Energy Efficiency Opportunities (EEO) Program which imposes costs and rigid assessment and reporting obligations on businesses that already have effective internal systems and consider energy efficiency within a portfolio of business issues.
- The EEO Program is a cost burden that provides no real benefit at the business level for energy intensive industries. The program:
 - Has not increased the already high levels of internal energy efficiency expertise or expanded the implementation of energy efficiency projects;
 - Is overly prescriptive in the form of assessments and reporting, meaning that existing internal systems must be modified or duplicated; and
 - Has cost hundreds of thousands of dollars in company resources to meet compliance obligations.

Outcome: Elimination of energy efficiency programs that lead to compulsory reporting for business.

4.2. Renewable Energy Target (RET)

As indicated in separate submissions to Government, the RET is a significant impost on trade-exposed, electricity-intensive industries such as aluminium smelting. As Australia's most electricity intense sector, the aluminium industry faces very high costs under RET.

Since the RET was introduced the industry has paid more than \$300 million in RET costs. This is not sustainable. Indeed the current RET cost on average is \$40 per tonne of aluminium – a total of \$80 million per annum across the industry.

Outcome: Consideration of disproportionate impact of the RET on the competitiveness of Australia's aluminium smelters.

4.3. Carbon Pricing

The AAC has also made submissions on the repeal of the carbon tax and implementation of the ERF.

Outcomes:

- **There must be a mechanism to offset the period of higher electricity costs for emissions-intensive trade-exposed industry if the carbon price is repealed after 1st July 2014;**
- **The ERF should impose a low regulatory burden to encourage participation;**
- **Direct Action must facilitate emissions reductions in the context of the necessary economic growth and rejuvenation of Australian manufacturing that are also objectives of the Government; and**
- **The 'compliance mechanism' must be based on forward looking baselines and not penalise normal business decisions.**

Appendix 2

Bauxite, Alumina and Aluminium Industry

Our industry directly employs more than 13,000 people and sustains the livelihoods of more than 50,000 households, most in regional Australia. We make up a substantial part of the economic activity in regions where we operate, including Gladstone, south-west Western Australia, Hunter Valley, Geelong, Cape York, north-east Arnhem Land, Portland and Tasmania.

A recent study has shown the critical role played by our industry in regional economies including:

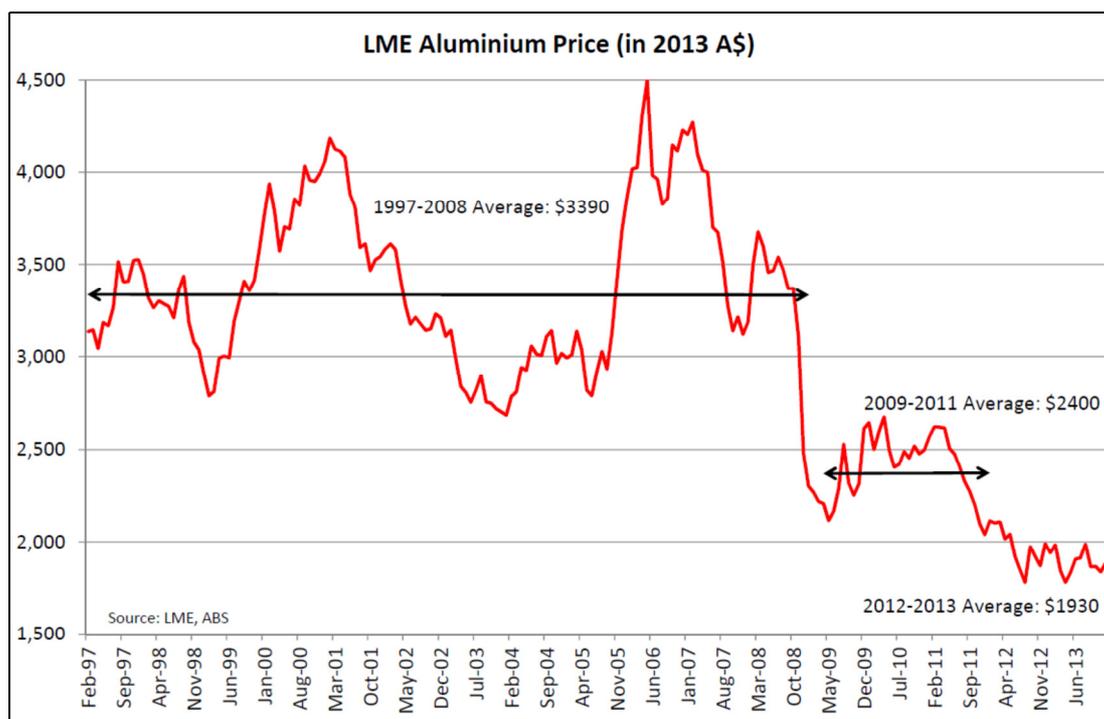
- Australia's second highest paid industry (after mining);
- Responsible for a significant percentage of local economic activity – South-West Western Australia (7 per cent), Gladstone (20 per cent), and Portland (30 per cent);
- Essential to the existence of local community and infrastructure in areas such as Weipa;
- High employment numbers, economic diversification, and stable long-term employment in industrial centres such as Gladstone and Hunter Valley;
- Significance to the overall state or territory economy – particularly facilities such as Bell Bay (Tasmania); and
- A substantial multiplier effect due to its critical position in supply chains – for example the Yennora rolling plant in Sydney.

Operations in the Australian alumina and aluminium industries have a replacement value of over \$50 billion and annually produce more than \$14 billion of product, of which more than \$8.5 billion is exported.

Industry Background – Short-term

The Australian aluminium industry is facing considerable pressure due to the high Australian dollar and low commodity prices. Over the last four years since the global financial crisis (GFC), the industry has been barely break-even at best.

One of Australia's six smelters – Hydro Kurri Kurri – closed in the second half of 2012. The combined impact of the low metal price and high Australian dollar means that the 2012 and 2013 price was approximately 20 per cent lower than over the previous two years (during the GFC), which in turn was 43 per cent lower than the average of the previous decade.



Industry Background – Long term

Australia is currently a global force and technological leader in the production of bauxite, alumina and aluminium. Despite some disadvantages, with the right policy environment, Australia should expect to see continued expansion and investment in these sectors based on our strengths of resource availability (including 25 per cent of world bauxite reserves and abundant energy sources), skilled labour force, available land, and stable investment conditions. Around 80 per cent of the alumina and aluminium produced in Australia is exported for use in global markets and economies.