

2<sup>nd</sup> July 2015

Australian Competition and Consumer Commission  
East Coast Gas Inquiry  
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**AUSTRALIAN ALUMINIUM COUNCIL**  
**Submission re: ACCC East Coast Gas Inquiry**

Thank you for the opportunity to respond to the questions posed in the ACCC issues paper for the East Coast Gas Inquiry. The Australian Aluminium Council makes this submission on behalf of the bauxite mining, alumina refining and aluminium smelting sectors.

The Council is concerned that the Australian domestic gas market is currently neither efficient nor deep. The alumina and aluminium industries consider the following as evidence that the current domestic gas market is not functioning effectively:

- There is insufficient diversity of supply in most regions;
- There is limited long-term contracting available in the market;
- Pricing is not transparent; and
- A large proportion of the current supply is not exposed to the domestic market, regardless of price and terms.

The Council suggests that a range of potential solutions need to be considered, including:

- A national interest test;
- Removing joint marketing arrangements;
- Greater scrutiny of retention leases;
- Establishment of a gas market index;
- Increased gas supply, particularly where suited to the domestic market; and
- Policy harmonisation.

The questions posed by the Issues Paper are focussed on specific commercial experiences. As an industry association, we are more appropriately able to offer general observations on the situation. The Council notes that the ACCC Inquiry will be in a position to shed light on some key questions that have been unanswered for some time, including around the available supply and contractual commitments of LNG projects. Improved quantity and quality of information on these questions will lead to a more informed, more transparent and better functioning gas market.

Thank you for the opportunity to provide a gas user perspective to the inquiry.

Yours sincerely

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# AUSTRALIAN ALUMINIUM COUNCIL SUBMISSION TO THE ACCC EAST COAST GAS INQUIRY

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## INTRODUCTION

The Council and its members are seeking **an efficient, effective and deep Australian domestic gas market** – a market that is comprised of many buyers and sellers who are able to negotiate contracts where both sides can obtain a fair return and where, for example, shortages in supply lead to higher prices, which in turn bring on additional supply to satisfy this demand. This latter step is not taking place in the current domestic gas market.

## THE PROBLEMS AND EVIDENCE

The following symptoms contribute to our view that the Australian domestic gas market is not effective.

### *Problem - Not enough suppliers in the domestic gas market*

There are very few potential suppliers in any given region. The limited number of suppliers operating may be further reduced by cross-ownership, joint marketing arrangements, or limited availability of supply from some. In the current environment, it is common for a domestic customer to be faced with a monopoly or with no suppliers able to discuss potential contracts.

Making the problem more acute on the East coast of Australia is a growing trend towards liquefied natural gas (LNG) producers entering the domestic market as customers and purchasing significant quantities of gas to cover for shortfalls in their own gas positions<sup>1</sup>. These producers often require larger volumes than domestic businesses and are able to use this to further leverage their positions.

At a national (or at least an East coast) level, gas supplies are plentiful. However, these supplies are more than matched by equivalent or greater commitments to export sales. This produces a result, by some predictions, of a 40 PJ per annum shortage in the gas market<sup>2</sup>, as LNG exporters source supply to meet commitments.

### *Problem - Limited long-term contracting available in the market*

There are currently difficulties for consumers in concluding long-term domestic contracts. Prevailing market conditions suggest that securing long-term contracts will continue to be difficult. As operators, and particularly as investors, in capital-intensive facilities, alumina refinery operators are seeking supply over timeframes that can underpin their investment.

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<sup>1</sup> 'Supply is squeezed due to LNG projects', Pritchard, R., & Orchison, K. (2013: p.2). Getting gas into a market - any market. Energy Policy Institute of Australia. Public Policy Paper, Paper 3/2013.

<sup>2</sup> Morphet, S. (2013). 'Gas policy must consider manufacturing', Financial Review.

An investment in switching to gas, expanding production levels or in cogeneration will clearly only be made if the gas supply is available over a long enough time period to make a return on the up-front capital investment. Likewise, the terms and conditions of the gas supply contract are critical for investment. For example, the ability to bank supply from one year to the next could be particularly important.

Currently, there are few instances where long-term supply is realisable, because the terms and conditions being proposed are:

- Impractical for an investor in domestic processing; and
- Presented on a take-it-or-leave-it basis.

There are clear squeeze points developing in gas supply in the East coast market starting from now and on the West coast from 2020.

In the time between the ramp-up of LNG exports and before other gas sources can be feasibly unlocked; it is likely that there will be rising prices and short supply in the domestic market. This has significant potential to cause contraction in some energy intensive sectors.

### *Problem - Pricing is not transparent*

A lack of transparent prices makes it difficult for gas users to assess whether prices will rise or fall.

There has been progress towards short-term markets, including: short-term trading markets operated by Australian Energy Market Operator, the Victorian gas wholesale market, the National Gas Bulletin Board and the gas trading hub in Queensland.

This does not provide domestic gas users with the ability to examine price over the short and long term. A transparent market (including a gas price index, for example) would necessitate the involvement of LNG exporters.

The Australian domestic gas market is in need of greater price transparency and, more broadly, market transparency. This could help to deliver efficient market entry for new suppliers, the ability for suppliers and infrastructure providers to trade capacity, and a better opportunity for all market participants to manage investment risk.

### *Problem - A large proportion of the current supply is not available for domestic use*

A significant proportion of current supply is not exposed to the domestic market, irrespective of price and terms. There is also increasing evidence that there is limited gas available beyond existing export contracts, with reserves being controlled to cover possible future shortages in export supply or potential expansion<sup>3</sup>.

This significantly impacts the domestic supply of natural gas as LNG exporters ensure export contracts are met. In the medium term, LNG exporters are managing their ability to meet existing export contracts. For the longer term, these projects are controlling reserves to provide options for

<sup>3</sup> Bethune, G. (2013). 'LNG and the East Coast gas supply,' Gas Today. Chambers, M. (2012). 'Gas shortage looms as LNG demand grows', The Australian. Chambers, M., & Hepworth, A (2012). 'Origin Energy secures record gas price', The Australian.

expansion. Therefore, risk of insufficient gas supply is effectively transferred to the domestic market.

LNG trains designed for export markets are expensive, capital-intensive facilities. They are only constructed on the basis of secure long-term contracts for LNG. Once a project proceeds, that gas capacity is essentially unavailable to the domestic market at any price (due to contractual arrangements and the risk of idle capital investment).

It may previously have been thought that the development of LNG export supply chains would provide additional gas for the domestic market as an ‘overflow’. However, what is currently occurring is that gas that might otherwise flow to the domestic market is being used to cover possible shortfalls in export supply or being held as a buffer for future expansion or shortfalls.

While Australia has enough reserves to supply both the expanding foreign demand and its domestic obligations, short term production uncertainty and delays are causing a transition period where contractual commitments are not yet matched by ability to deliver gas. The size and long-term time frames of export LNG contracts will require access to as much supply as possible. The implications for the domestic gas market are clear – uncertain supply, higher prices and shorter-term contracts.

## POLICY OPTIONS

The AAC and its members are seeking a functioning, efficient and deep domestic gas market. This section of the submission provides some policy options for consideration by the ACCC.

The policy debate regarding the suite of solutions that will address the deficiencies in the current Australian domestic gas market is still in its infancy. The table below provides a range of options available to government policy makers and reflects this industry’s perspective on the market.

Desired outcome	Description	Possible policy mechanism
Increased gas supply to the domestic market	At this stage, other than in the WA context, there is no mechanism that ensures gas flows to the domestic market. Increasing production and, more critically, supply to the East coast domestic markets necessitates market reform, government intervention or changes in behaviour from LNG exporters.	<ul style="list-style-type: none"> <li>National interest test</li> <li>Increase unconventional gas exploration</li> <li>Remove policy impediments to increased domestic supply</li> <li>Stop warehousing and apply to new reserves</li> </ul>
Greater diversity of suppliers	Joint selling arrangements, which significantly reduce competition between independent producers selling into the domestic market, should cease.	<ul style="list-style-type: none"> <li>Remove joint marketing arrangements</li> </ul>
Consistency of gas policy	Some gas supply is held back by policy impediments in certain jurisdictions and inconsistent and inefficient regulation.	<ul style="list-style-type: none"> <li>Policy coordination needed to improve gas supplies entering the domestic market</li> <li>Role for the Standing Council on Energy and Resources</li> </ul>
Pipeline capacity available to meet	Domestic consumers and new gas suppliers require pipeline capacity to meet incremental demand	<ul style="list-style-type: none"> <li>Maintain third-party access rights for new gas</li> </ul>

Desired outcome	Description	Possible policy mechanism
incremental domestic demand growth	growth. This can be met by negotiated/regulated access to existing pipelines, or the incremental expansion of existing capacity. Unfortunately, the new pipelines to LNG plants in Gladstone have spare capacity for which the Federal Government has approved National Competition Council “no coverage” declarations for 15 years. Thus, the pipeline owners may sell capacity to third parties, but there is no obligation to do so. As a result there is a higher commercial risk to any substantive expansion of the existing regulated pipeline, and one or two LNG exporters are uniquely placed to purchase new gas supply from third parties.	pipelines
Greater market transparency	Unlike the national electricity market, there is no mechanism in place on the East Coast that allows market participants to track the ebb and flow of gas market prices. At this stage, Australian domestic gas users are forced to rely on a myriad of international prices for gas.	<ul style="list-style-type: none"> <li>• Establish a gas price index</li> </ul>

## ANNEX A: ALUMINA REFINING – A GAS DEPENDENT INDUSTRY

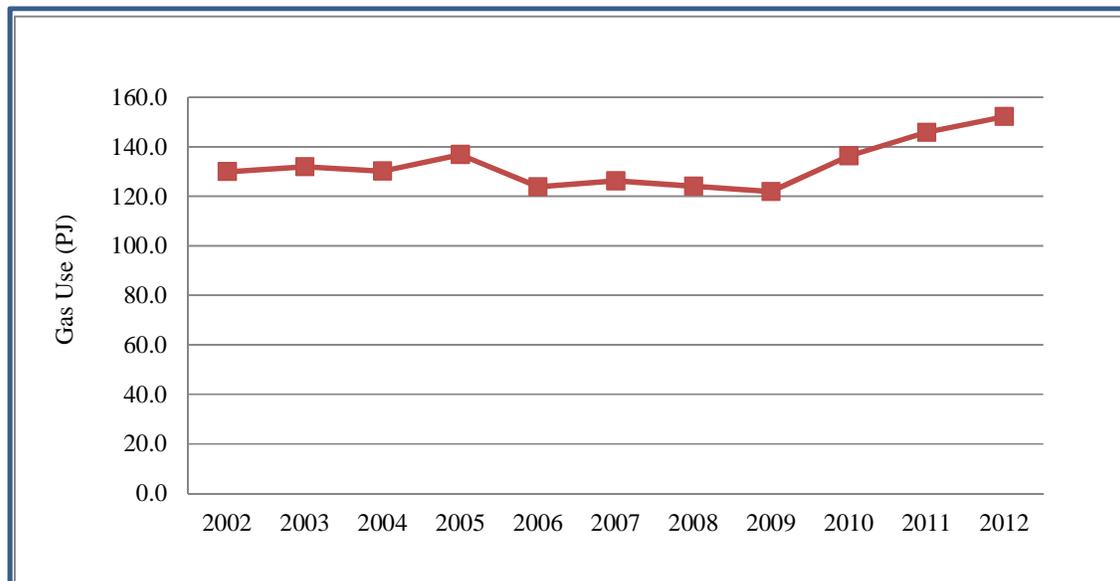
The bauxite mining, alumina refining and aluminium smelting industry directly employs more than 13,000 people and sustains the livelihoods of more than 50,000 households, most in regional Australia. This industry makes up a substantial part of the economic activity in regions where we operate, including Gladstone, south-west Western Australia, Hunter Valley, Cape York, 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 (7.6%), Gladstone (20.3%), and Portland (30.4%);
- 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; and
- Significance to the overall state or territory economy – particularly facilities such as Bell Bay (Tasmania).

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 \$9 billion is exported.

Energy typically represents 20-30% of the operating cost of an alumina refinery. In Australia, the alumina industry uses ~150 PJ of gas per annum (see Figure 1). 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. Having long-term gas supplies is essential for making investment decisions due to the high-levels of sustaining capital required to maintain alumina refineries in Australia.

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



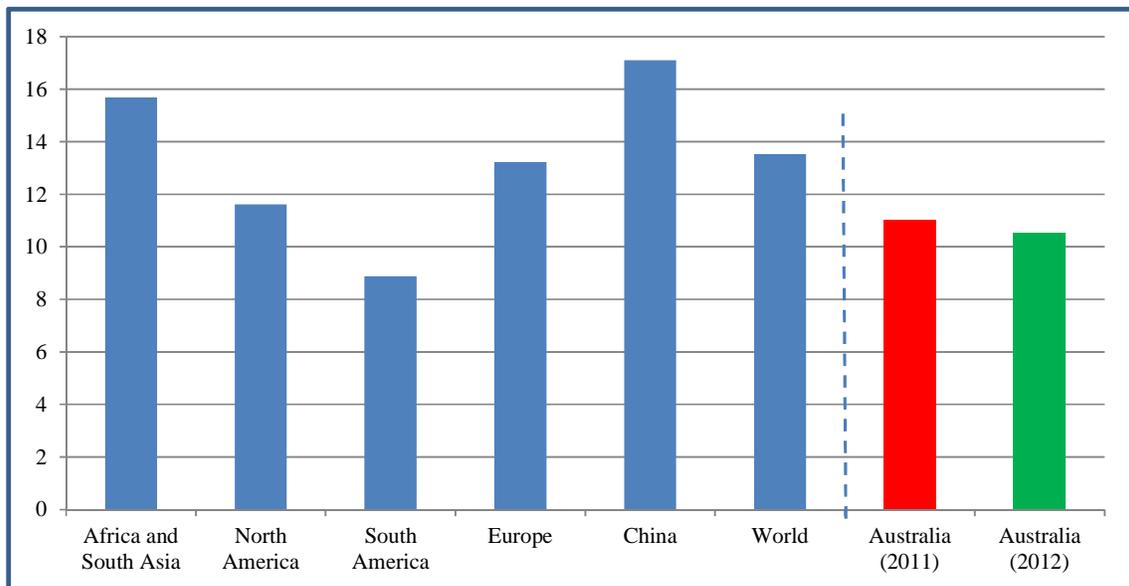
Source: AAC Sustainability Report Data 2002-2012.

In Western Australia, where Alcoa has its alumina refining operations, gas supplies are expected to become tight towards the end of the decade, when supplies from the North West Shelf start to run-down. Recognising this problem, Alcoa has begun to secure its own supplies of gas. To date, Alcoa has provided over \$100 million in support for the exploration and development of new gas supplies. Alcoa is not a traditional oil and gas company and this has introduced non-traditional risk into its operations in Australia.

If the alumina refining industry in Australia is unable to secure long-term cost competitive supplies of natural gas, then fuel switching becomes more of a reality. The capital cost associated with fuel switching is large, with coal being the only real competitive alternative fuel source. This would have the impact of substantially increasing greenhouse emissions from what is currently one of the lowest carbon footprint producing countries in the world.

Australia is presently able to produce alumina with fewer greenhouse emissions compared to many other countries, such as China. This sustainability advantage would be lost if Australia’s alumina refineries had to convert to coal - see Figure 2.

Figure 2  
Alumina: Energy used per metric tonne produced (gigajoules)

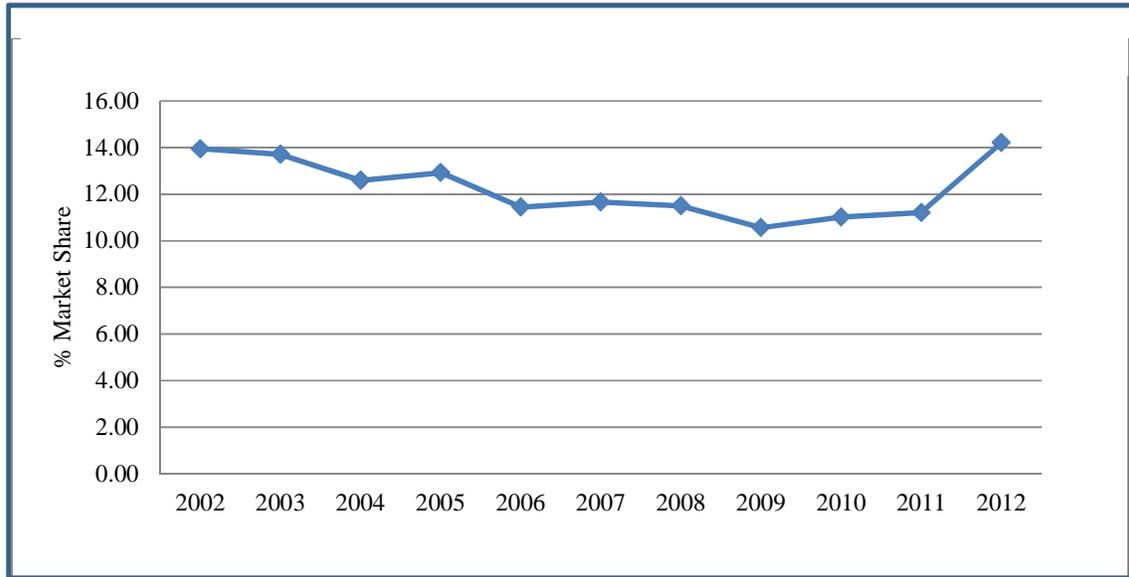


Source: International Aluminium Institute (2012); AAC Sustainability Report 2011 and 2012.

Data drawn from AAC Sustainability Reports and outlined in Figure 3 notes that gas use for alumina refineries as a percentage of total domestic gas has been consistently high over the past 10 years. From 2002 to 2012, the average share of the Australian domestic gas market represented by alumina refining was approximately 12.3 per cent. An industry high was reached in 2012, with 14.2 per cent of the gas market consumed by industry.



Figure 3  
Percentage domestic gas market share used by Australian Alumina refineries



Source: AAC Sustainability Report Data 2002-2012. US Energy Information Service, International Energy Statistics.