The Australia Institute
Research that matters.

$2.9 billion CSG surcharge

The cost of gas price rises for Gladstone

Policy Brief No. 54
July 2013
ISSN 1836-9014

Mark Ogge

The Australia Institute

Research that matters.

About TAI

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals, memberships and commissioned research. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

Our philosophy

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

Our purpose—'Research that matters'

The Institute aims to foster informed debate about our culture, our economy and our environment and bring greater accountability to the democratic process. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. As an Approved Research Institute, donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at https://www.tai.org.au or by calling the Institute on 02 6206 8700. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

LPO Box 5096
University of Canberra, Bruce ACT 2617
Tel: (02) 6206 8700 Fax: (02) 6206 8708
Email: mail@tai.org.au
Website: www.tai.org.au

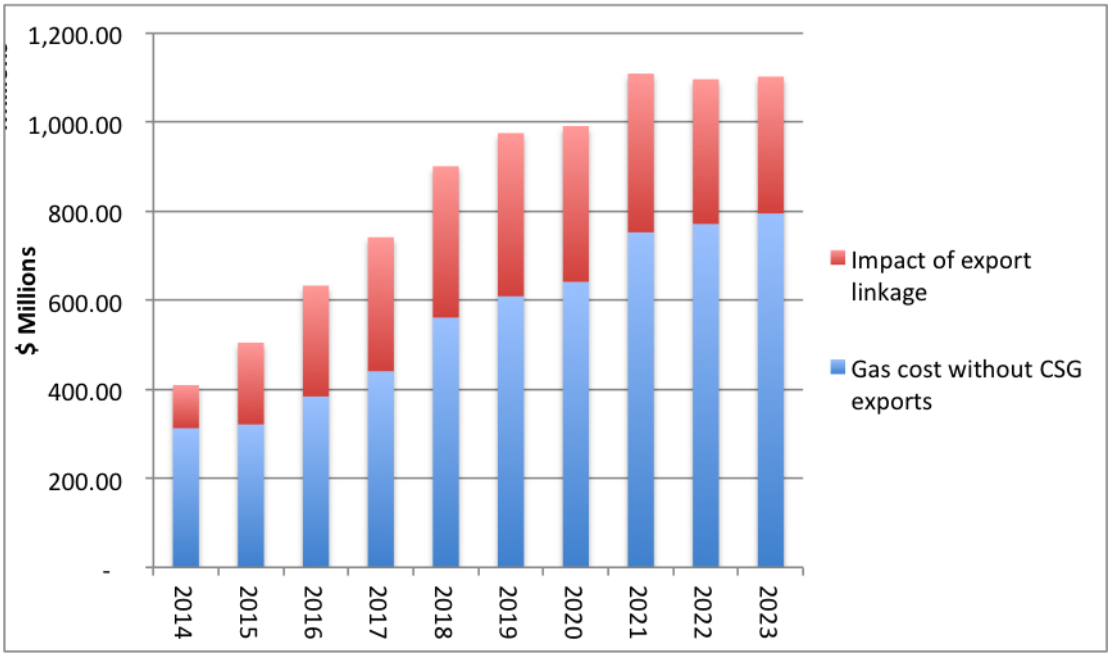
Introduction

Gladstone's manufacturing industry is likely to pay up to $2.9 billion more for gas over the next 10 years than it otherwise would have, as a result of gas exports from Curtis Island.

This is on top of the impacts of the resource boom already being felt by the region's manufacturing industry, including the high Australian dollar and skills shortage.

Figure 1 shows the projected increase in the cost of gas to Gladstone's manufacturing industry using the high demand scenario over the next ten years.

Figure 1 Projected increase in gas costs for Gladstone region.



Source: Australia Institute analysis based on SKM MMA gas price and AEMO gas demand projections for the Gladstone region.

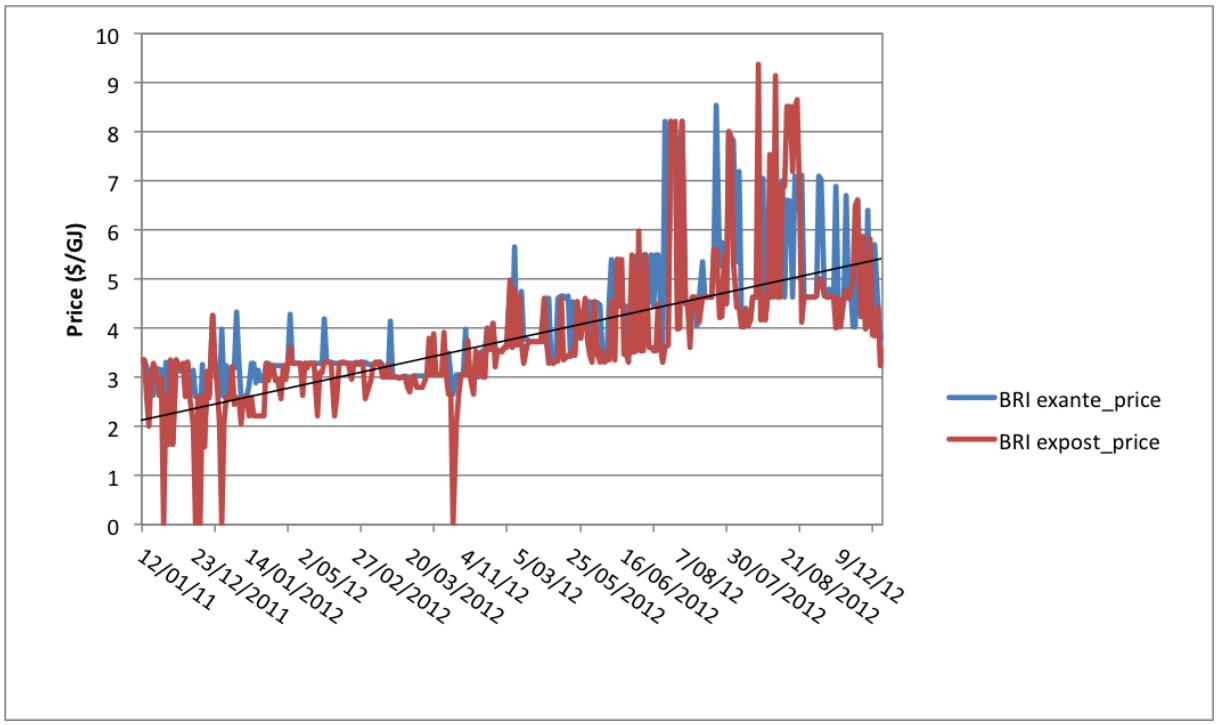
Over the next few years, the three large coal seam gas export facilities now under construction on Curtis Island will begin operation, effectively tying local gas prices to Asian market prices.[1]

Queensland gas prices were around $2 per Gigajoule in early 2011 and are currently around $5 per Gigajoule in anticipation of export price linkage.[2] Figure 2 below shows wholesale gas prices for Queensland over the last 2 years.

[1] Grudnoff, M (2013), *Cooking up a gas price rise*.

[2] Historic gas price data specifically for the Gladstone region is not available, and Brisbane data is only available from 2011.

Figure 2 Brisbane region wholesale gas prices 2011-2012



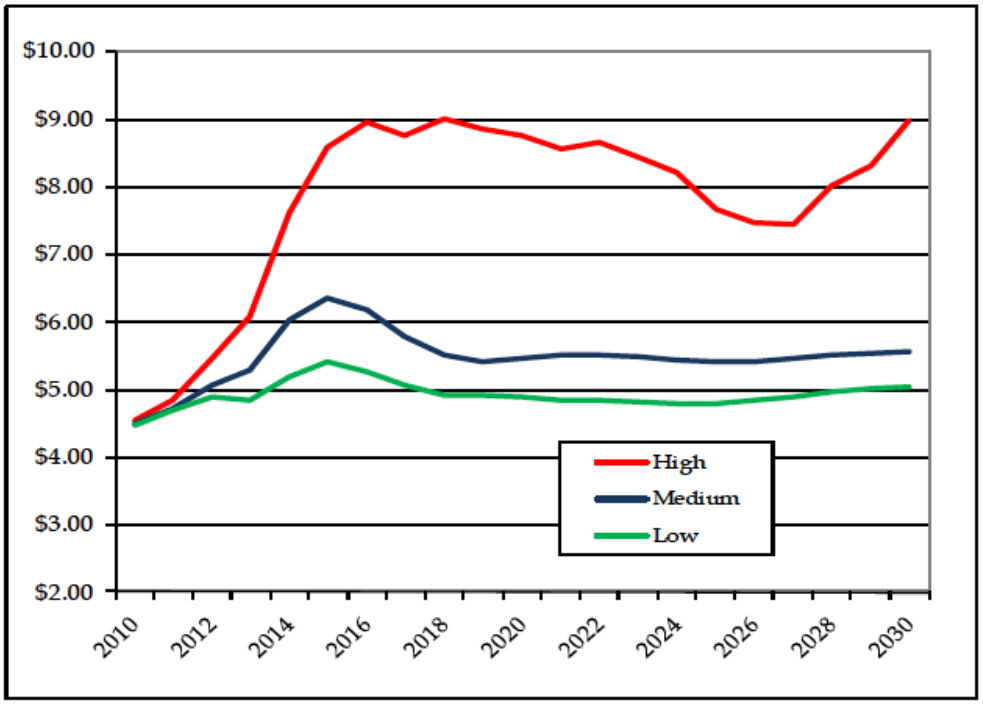
Source: Australian Energy Regulator. *State of the Energy Market 2012*. Melbourne: Australian Energy Regulator, 2012.

The price of gas to the Gladstone region is projected to reach around $9 per Gigajoule[3] when LNG exports begin operation in 2014. This is roughly equivalent to the "netback" price, which is the Asian market price less the cost of liquefaction and transport.[4]

[3] Gas Market Modelling for the 2011 Gas Market Review, SKM 2011, p 116.

[4] Grudnoff, M (2013).

Figure 3 SKM Projections of new contract prices for Gladstone zone.



Source: Gas Market Modelling for the 2011 Gas Market Review

The Gladstone region is supplied by the Queensland Gas Pipeline (QGP). This pipeline supplies major industrial customers in the region including the three aluminium smelters, QAL, Rio Tinto and Boyne, as well as Orica's Yarwun plant and Queensland Magnesia at Packhurst.

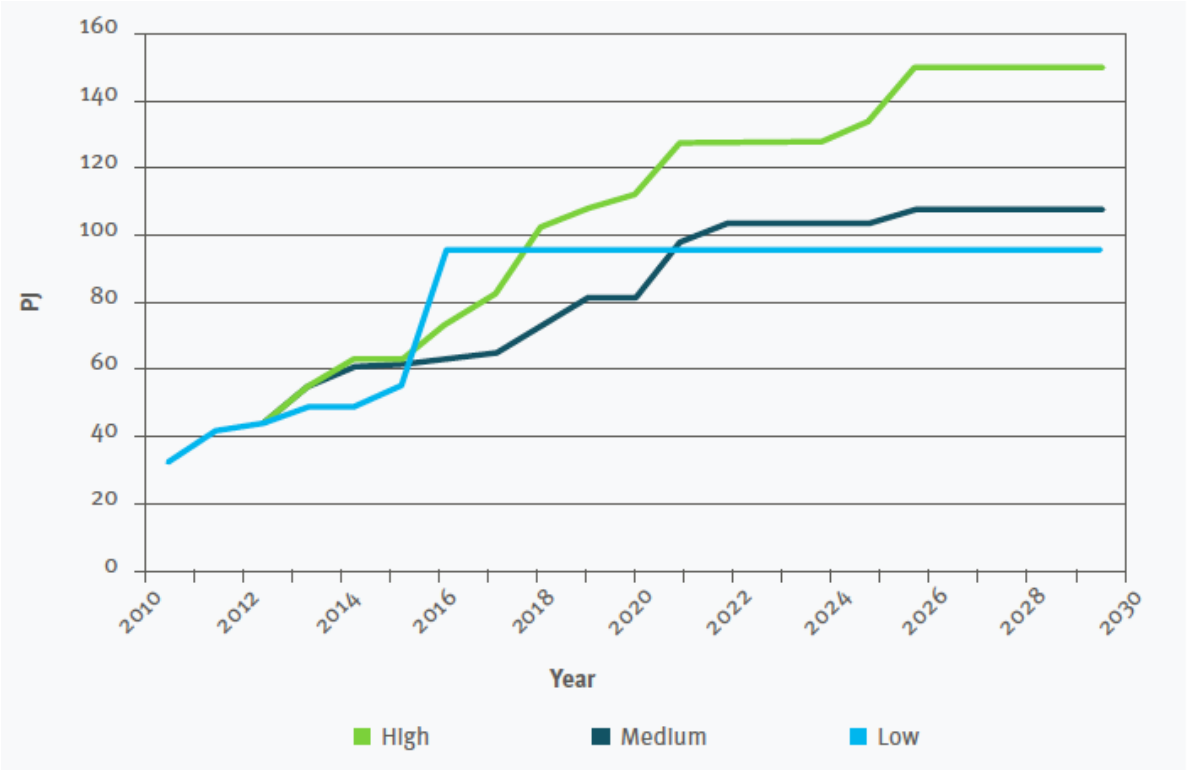
Engineering consultancy Sinclair Knight Merz (SKM) modelled three possible gas price scenarios for the Queensland Government's Gas Market Review (GMR) in 2011 (shown in figure 3 above). The "High" scenario is being born out in reality with Santos reporting that it is already signing new gas contracts at close to export parity[5].

SKM also modelled large industrial gas demand for the region (shown in Figure 4 below). Under this scenario gas demand from domestic users in the region is expected to increase up to threefold over the next decade[6], increasing the regions exposure to price increases driven by the export facilities.

[5] Chambers, M. (2013). 'Gas price soars as Santos signs domestic deals'.

[6] Gas Market Modelling for the 2011 Gas Market Review, SKM 2011, p 32.

Figure 4 Large industrial gas demand projections for Gladstone.



Source: Sinclair Knight Merz, Gas Market Modelling for the 2011 Gas Market Review

Using these price and demand projections, Gladstone industries can be expected to pay $2.9 billion more for gas over the next ten years than it would have if the Gladstone LNG export facilities had not gone ahead.

SKM also modelled two other gas demand scenarios. These included a medium and low scenario for gas demand. If these demand scenarios are used then the cost to Gladstone in increased gas bills is $2.6 billion for the low demand scenario and $2.3 billion for the medium demand scenario.

This means that the cost to Gladstone of the higher gas prices brought on by exporting CSG will be between $2.3 billion and $2.9 billion.

Additional impacts

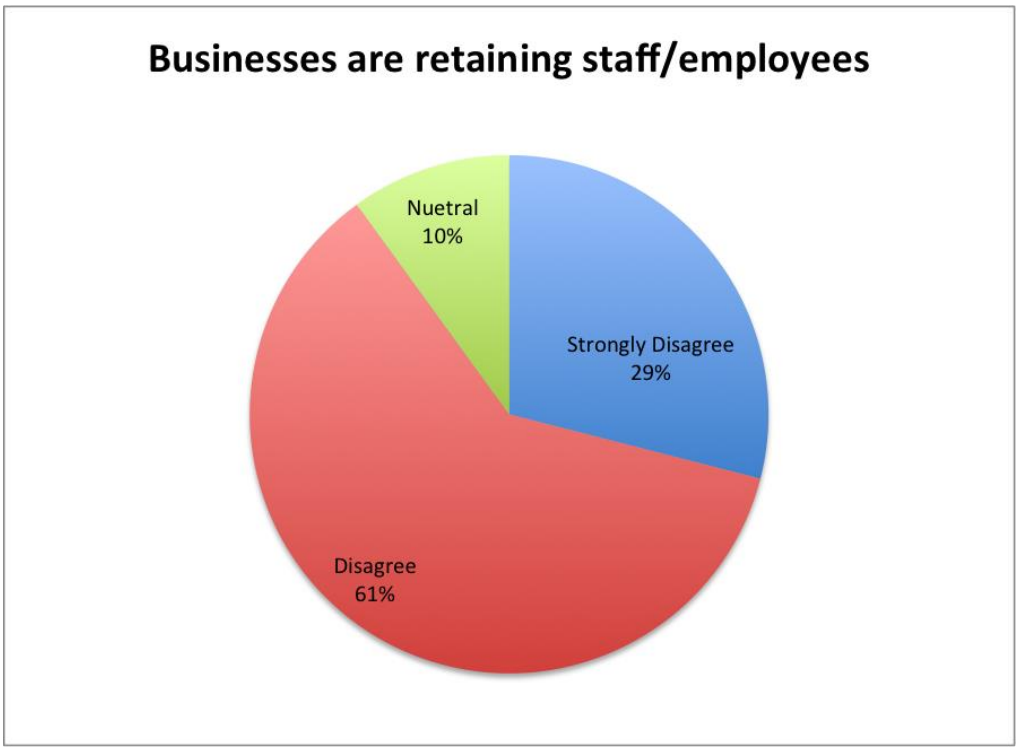
Rising gas prices are not the only impact of the resource boom on the manufacturing industry in Gladstone and elsewhere.

Three enormous coal seam gas LNG projects and several huge new coal projects and mine expansions are being constructed simultaneously. These projects have created unprecedented demand for skilled labour and forced the manufacturing and agricultural industries in particular to compete with the LNG industry for the skilled workers they require to operate.

This has made it difficult for these industries to recruit and retain staff, and forced them to compete with the high wages being paid by the mining industry.

These effects have been felt acutely by businesses in Gladstone. A recent survey reported that 90 per cent of local businesses responded that they were having difficulties retaining staff.[7]

Figure 5 GCCI staff/ employee retention survey



Source: Gladstone Chamber of Commerce and Industry survey on staff retention in small to medium enterprises, 2013.

The Gladstone Chamber of Commerce and Industry has reported that reasons given by local business people for the high rates of business closures in the region included; "there is no work for small businesses in Gladstone", "people just aren't buying locally", "commercial rentals are just too high to make the business viable" or "we just can't get or keep staff".[8]

Another impact of building so many coal and gas projects in the region simultaneously is that it contributed to driving the Australian dollar to record highs over a sustained period. Although the dollar has dropped over recent months, it is still 20 per cent higher than its 20 year pre-boom average of 70c US.[9] Most of this can be attributed to the resource boom.

This has had a devastating impact on export-oriented businesses in Australia. Manufacturers have found themselves losing international competitiveness for in export markets, and at the same time having to compete with far cheaper imports as a result the high dollar.[10]

The gas industry itself admits to these impacts, with the proponents of the proposed Arrow LNG project acknowledging that this project alone would cost around 1600 jobs in non-resource industries across Australia, including around 1000 in manufacturing.[11]

[7] Gladstone Chamber of Commerce and Industry website.

[8] Gladstone Chamber of Commerce and Industry website.

[9] Reserve Bank of Australia historic exchange rate data.

[10] Denniss, R and Grudnoff, M (2012), *Too much of a good thing? The macroeconomic case for slowing down the mining boom.*

[11] Grudnoff, M (2012), *An Analysis of the economic impacts Arrow Energy's Gladstone LNG Plant*.

Conclusion

The gas export projects under construction on Curtis Island will dramatically increase wholesale gas prices in Eastern Australia.

Gladstone is Queensland's most important industrial region, with a concentration of industries that rely heavily on gas. Ironically, the massive flow of gas into Gladstone for export via Curtis Island will lead to billions of dollars of increased costs for these industries.

This is in addition to the pressures currently being felt by the skills shortage and high Australian dollar resulting largely from the huge and rapid expansion of resource projects gas projects across Australia. The expansion of coal and gas projects in Queensland is a major part of this expansion.

Good economic management requires balancing the interest of the mining multinationals operating in the region with those of our long term industries, particularly manufacturing, tourism and agriculture.

Allowing even more resource projects to go ahead at this time will exacerbate the impacts already being felt by these industries and businesses, and lead to more business closures and job losses.

Methodology

Estimating the additional cost of gas for Gladstone because of the export of CSG is done using AEMO predictions of gas prices and gas demand for Gladstone. AEMO have used three gas demand scenarios, High demand, medium demand and low demand. Estimates for the cost of gas to Gladstone have been calculated for each scenario.

Estimates for gas prices are also done using AEMO data. These estimates include the expected big price increases that will occur due to the linking of the eastern gas market with the world market. Estimates for gas price increases in the absence of the Gladstone LNG facilities were derived by taking the AEMO price data from 2010 and adding an average inflation rate of 2.5 per cent to the price.

The additional cost under each of the growth scenarios is then derived by taking the difference between the cost of gas using AEMO price projects and the price projections assuming the eastern market was not linked to the world market.[12]

[12] AEMO Gas Statement of Opportunities 2010, see Chapter 5: Demand Projections.

References

AEMO *Gas Statement of Opportunities* 2010, viewed 19 July 2013 <http://www.aemo.com.au/Gas/Planning/Gas-Statement-of-Opportunities/Previous-GSOO-reports/2010-Gas-Statement-of-Opportunities>

Australian Energy Regulator. *State of the Energy Market 2012*. Melbourne: Australian Energy Regulator, 2012.

Chambers, M. (2013). *Gas price soars as Santos signs domestic deals*, The Australian, February 23, viewed 14 June 2013 <http://www.theaustralian.com.au/business/mining-energy/gas-price-soars-as-santos-signs-domestic-deals/story-e6frg9df-1226583836782>

Denniss, R and Grudnoff, M (2012), *Too much of a good thing? The macroeconomic case for slowing down the mining boom*, Policy Brief No 37, March, The Australia Institute.

Gas Market Modelling for the 2011 Gas Market Review, SKM 2011.

Gladstone Chamber of Commerce and Industry Staff Retention survey, 2013 viewed July 17 2013 <http://www.gcci.com.au/sme-backfilling>

Gladstone Chamber of Commerce and Industry website, Viewed 17 July 2013 <http://www.gcci.com.au/research>

Grudnoff, M (2013), *Cooking up a gas price rise*, Policy Brief No. 53, July, The Australia Institute.

Grudnoff, M (2012), *An Analysis of the economic impacts Arrow Energy's Gladstone LNG Plant*, Submission, May, The Australia Institute.

Department of Employment, Economic Development and Innovation, viewed 19 July 2013 <http://www.dews.qld.gov.au/energy-industry/gas/annual-market-review>

Reserve Bank of Australia historic exchange rate data, viewed 17 July 2013 <http://www.rba.gov.au/statistics/hist-exchange-rates/>