

LOCK THE GATE ALLIANCE

AUSTRALIANS WORKING TOGETHER TO PROTECT OUR LAND, WATER, AND FUTURE

1 November 2019

Lock the Gate Submission to the Inquiry into Australia's oil and gas reserves

Thank you for the opportunity to make a submission into this important Inquiry.

By way of background, Lock the Gate Alliance is a national grassroots organisation made up of over 120,000 individuals and over 450 local groups who are concerned about unsafe or inappropriate mining. The mission of the Lock the Gate Alliance is to protect Australia's agricultural, environmental, and cultural resources from inappropriate mining and to educate and empower all Australians to demand sustainable solutions to food and energy production.

Our organisation has a long running concern with the conduct of onshore gas mining companies in Australia, and the negative impacts on regional economies and communities. It is the experience of our network that gas companies, particularly coal seam gas (CSG) operations designed to feed into the export terminals in Gladstone, have caused much hardship and negative economic consequences. This should be avoided into the future.

This submission briefly outlines feedback with regard to some of the negative impacts of onshore gas operations, pricing structures, royalty and taxation policies that are currently in place. We offer this to provide analysis of what is not working for Australians, in order to assist the Inquiry to consider the improvements needed.

Please note, we have also provided two fact sheets at the end of this submission, covering off on further detail surrounding our concerns and suggestions for improvement.

Context for considering changes to gas policies needed:

Acil Allen were measuring and forecasting supply problems due to new liquified natural gas (LNG) export facilities back in 2014, where they stated¹:

The simultaneous construction of seven large LNG projects has resulted in a severe shortage of experienced and skilled labour and a rapid escalation in wages costs. In Eastern Australia the anticipated surge in gas demand for LNG has seen domestic users facing tight gas supply and rapidly rising prices. Given the issues involved in ramping up CSG production to the required levels, domestic gas supply in Eastern Australia is likely to remain tight for some years.

¹ Acil Allen Consulting, (2014), <https://www.acilallen.com.au/insights/australias-lng-boom-opportunities-and-challenges>

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For several years, the Qld Government has been approving massive new CSG developments across the state to service the three new LNG export terminals in Qld. Yet the CSG failed to deliver in terms of volume, meaning the companies exporting LNG proceeded to suck gas out of the domestic Australian gas market. This pushed up gas prices and limited gas supply to Australian homes and businesses in the domestic market, all while running roughshod over the food growing regions of Qld, forced to host the thousands of gas wells across the landscape.

Just this week, the Qld Government opened up a parcel of land nearly as big as Belgium (30,000km²) to new gas exploration. The CSG industry has already drained dozens of farming water bores across the western Darling Downs, and any new projects will only make the situation worse. Farmers and regional communities will bear the brunt of this policy failure.

Sacrificing more regional communities and productive agricultural land to gas mining will not change the situation. As demonstrated by the data below, the increase in CSG mining in Australia has only led to higher gas prices and tighter supply for Australian gas users.

Risks to existing property rights from onshore gas extraction:

The negative impact of gas mining on property rights and the rights to shared natural resources have been notable, particularly in Queensland where the onshore gas industry is most advanced. These impacts include encroachment on good farming land, disruption of other land uses and industries, clearing of bushland, air pollution, contamination or depletion of ground or surface water, pollution of waterways, and health impacts on workers and nearby residents. These all come at a cost to the productivity of the broader economy.

In Qld, the Surat basin has been an experimental sacrifice zone for coal seam gasfields. Latest evidence compiled by the Qld Office of Groundwater Impact Assessment, Department of Natural Resources, Mines and Energy in May 2019 shows that coal seam gas is having a notable negative impact on dewatering water bores across the region.

The report found²:

- *The existing and planned CSG production area has increased by 17% since 2016. A total of about 21,000 CSG wells are now projected. This is around two-third of the wells proposed when the projects were approved.*
- *A total of 574 water bores are predicted to be impacted in the long term – an increase of about 10% compared to 2016 predictions. About 80% of those bores are in the CSG target formations and the remainder are in the surrounding aquifers.*
- *In the next three years, 101 water bores are predicted to be impacted, for which responsible tenure holders are identified for follow-up make good arrangements.*

² <https://www.business.qld.gov.au/industries/mining-energy-water/resources/landholders/csg/surat-cma/consultation-draft-uwir>

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- *Eight groups of springs are predicted to be impacted by more than 0.2 m of pressure decline in their source aquifer. Of these sites, six are assessed as high risk and require mitigation actions, which are assigned to responsible tenure holders.*

Farmers in our network argue there is no way to 'make good' on an aquifer that is depleted or polluted due to CSG mining activities.

On the broader matter of compensation for disruption to property rights, the current system leaves much to be desired. It is our position that adequate and full compensation to land holders is not carried out across Australia. We further note that if the landholder is diverting their attention to the petroleum title holder's business (which is often the case), they are in effect subsidising the petroleum industry.

The principle should be "*the landholder/occupier must be no worse off as a consequence of the petroleum title holder's proposed activities on the land*". This principle encompasses compensation to landowners for the time they take away from their business operations to consider the requests of the petroleum title holder's use of their land. All landholder costs and landholder expert costs should be paid by the petroleum title holder (ie hydrologist, hydrogeologist, valuer, accountant, legal and landholder time should be paid by the petroleum title holder as per the terms of invoice). That includes costs related to breaches by the petroleum title holder of the access arrangement, and any court and appeal court costs. This change should be implemented before any further onshore gas activities are permitted in Australia.

Further calculations of the devaluing of agricultural land through research undertaken by CSIRO is included in the fact sheet below. We cannot understate the localised and often un-costed negative impacts to landholders.

Taxation is inadequate:

It is increasingly well understood that Australia is missing out on fair or adequate taxation from the gas industry. Please see the below fact sheet for an overview of our taxation concerns. We also note that the Tax Justice Network Australia did a detailed submission to Treasury on the issue of the PRRT and improvements needed, and found in summary the below³:

Very few entities currently pay any PRRT and there is limited transparency on PRRT payments through the ATO's annual Report on Entity Tax Information and the annual Taxation Statistics publication. As PRRT payments are a profit-based royalty on the exploitation of Australia's commonly-owned finite natural resources, the public's right to know about payments and existing credits from each company and/or project outweigh

³ Tax Justice Network – Australia, (2019), https://treasury.gov.au/sites/default/files/2019-07/c2019-t364690-tax_justice_network-_australia.pdf

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any concerns about corporate privacy. The ATO should look at publishing a range of information related to the operations and forecasts of the PRRT regime beyond the current annual disclosure of PRRT payments by entity. Greater disclosure would enrich the public debate and help inform public policy. It is worth noting that the Callaghan Review, had to rely on purchasing data from an industry consultant because the government did not have the necessary data to evaluate the PRRT.

Moving to a modified netback only approach to determine the gas transfer price in the PRRT would ensure a fairer return to the Australian community while achieving greater simplicity, transparency and ease of compliance. This would help achieve greater public accountability and ensure that Australia's PRRT regime remain extremely competitive by global standards.

Royalties from onshore gas are likely to be far less than forecast:

The Federal Government can look to Qld for actual figures on the onshore gas industry and contribution to the economy through royalty payments. The uncomfortable reality is that Qld has reaped very little of the economic royalties promised by industry and forecast by Treasury.

Lock the Gate did a comparison calculation a few years ago. The QLD Treasury mid-year review in 2013-14 forecasted \$482M for petroleum royalties to flow during 2015-16⁴. However, the reality showed that in Queensland, the Mid Year Fiscal and Economic Review reported actual royalties from onshore oil and gas were \$36M in total from all CSG and conventional gas⁵. That equates to only 7.5% of projected royalty payments, compared to what was expected just three years earlier. The reality was down by \$446M.

A deeper look shows that those royalty payments were made from 5,127 coal seam gas wells that were producing that year⁶. Further, the Qld government was pressured by the CSG and mining industries in the lead-up to the state election in 2015 and committed to a royalty freeze (no increase in rates), which is still in place. As reported in the Australian Financial Review on 28 April 2016, the royalty spat between the Queensland government and a major gas consortium flared up with a petroleum exploration company claiming big liquefied natural gas producers used transfer pricing to reduce their royalties bill.⁷

⁴ QLD Treasury, 2014, <https://www.treasury.qld.gov.au/publications-resources/mid-year-review/mid-year-review-2013-14.pdf>

⁵ Queensland Government's [Mid Year Fiscal and Economic Review](https://www.treasury.qld.gov.au/publications-resources/mid-year-review/mid-year-review-2016-17.pdf#mid-year) 2016-17, <https://www.treasury.qld.gov.au/publications-resources/mid-year-review/mid-year-review-2016-17.pdf#mid-year>

⁶ Queensland Government data: [CSG Production, 6 Monthly Statistics](https://data.qld.gov.au/dataset/petroleum-gas-production-and-reserve-statistics/resource/63a8a6cc-7fb6-4040-b4e7-9d453b14d3ed) <https://data.qld.gov.au/dataset/petroleum-gas-production-and-reserve-statistics/resource/63a8a6cc-7fb6-4040-b4e7-9d453b14d3ed>

⁷ AFR 2016, <http://www.afr.com/news/politics/origin-lng-consortium-used-transfer-pricing-to-cut-taxes-20160426-gofb0q>

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Gas reservation policy for new gas exploration projects alone will not help:

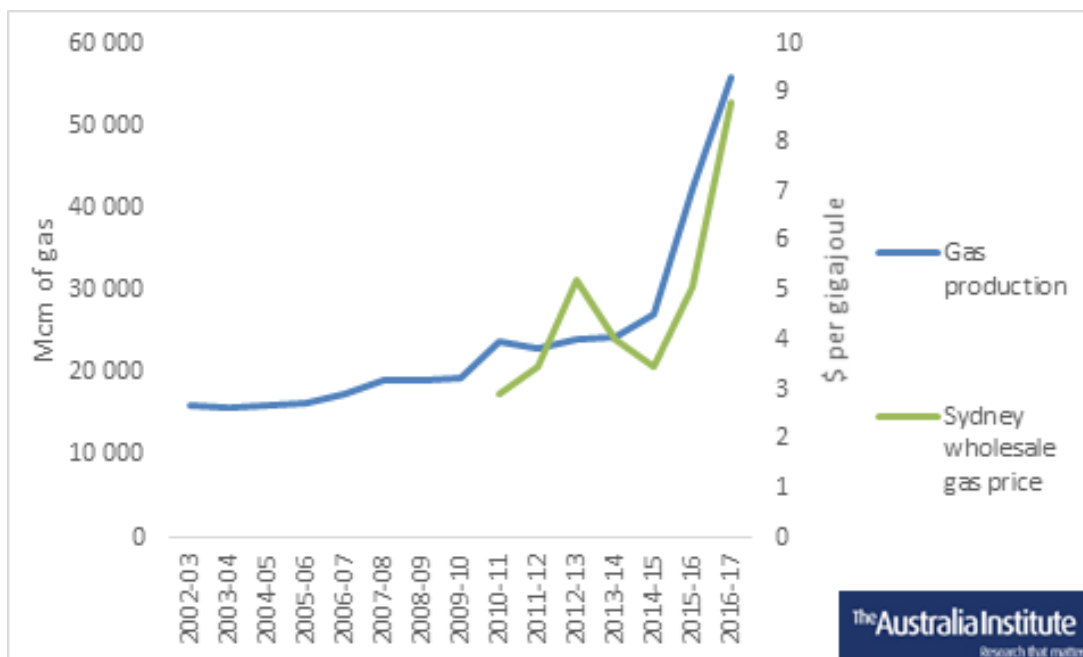
With regard to maximising the benefits to the Australian public, we want to clearly note that gas reservation for the east coast for new gasfields not yet in production will not work. It will only serve to keep gas prices high, and the costs to local communities high. This is because the gas price crisis is being felt now, and future onshore gas developments will take years to come online, and will typically include the more expensive, harder to access gas – locking in high gas prices for years to come.

Supply is not the issue with the Australian East Coast gas ‘market’, or ‘cartel’ as labelled by some economists. Price is the governing factor. New gasfields and increased gas production in eastern Australia won’t do anything to bring down gas prices. The amount of gas produced in eastern Australia has tripled since 2015, and rather than going down, domestic gas prices have tripled over that period. The only thing that will stop the price gouging would be for the Government to set strict price controls at approximately \$5/GJ for the domestic market.

The price vs supply issue is helpfully outlined in the below graph, composed by the Australia Institute using data from the Department of Environment and Energy, Australian Energy Statistics.

Figure 1 below shows domestic gas prices tripling as production has tripled over the last few years, demonstrating that increasing production does not lower gas prices.

Figure 1: Australian gas production v price



Source: Australia Institute calculations from Department of the Environment and Energy, Australian Energy Statistics, Table Q, August 2018

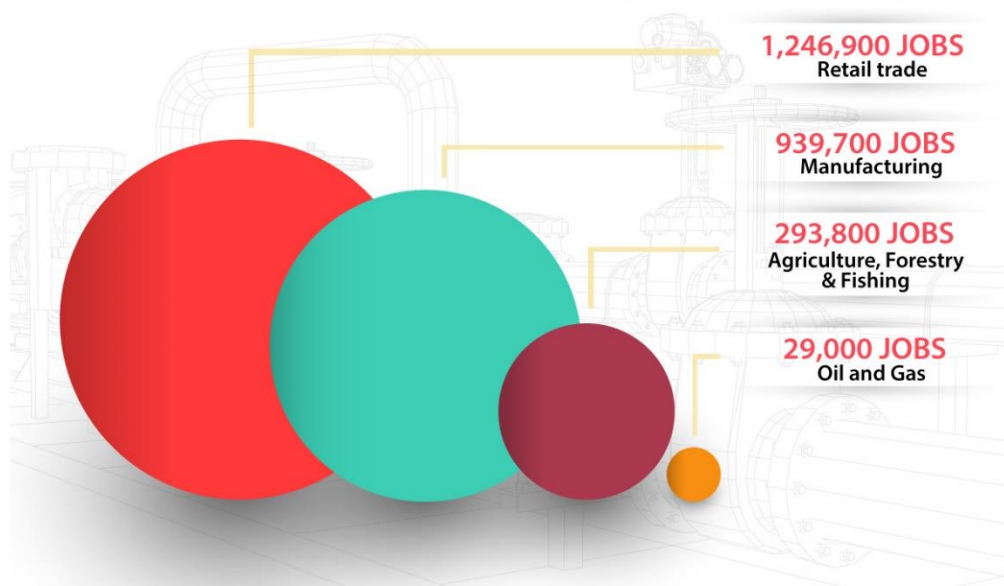
Unconventional Gas Facts: Jobs and Economy

Employment Impacts:

Limited Job Creation

While gas companies and governments spruik the promise of more jobs for local communities, in reality, the gas industry is a highly capital-intensive industry that provides relatively small numbers of long term jobs. The Office of the Chief Economist estimates that **the entire oil and gas industry in Australia employed just 29,000 people in 2015/16¹, which is less than one quarter of one per cent of the total Australian workforce.** By comparison, in 2016, Australian agricultural industries employed more than 10 times as many people as the oil and gas industry combined.

The Australian Oil and Gas industry is a small employer



Comparison between oil and gas industry jobs and other sectors

Source: Australian Bureau of Statistics data for November 2016

Boom and Bust Cycle

The majority of unconventional gas industry jobs are required for the short initial construction phase only, with a large proportion discontinuing once gasfields, pipelines, waste treatment facilities and processing plants are established. According to the Office of the Chief Economist of Australia, **the three major unconventional gas projects in Queensland employed 16,000 people during their brief² construction phase, with employment falling by over 80% to 3,000 as the projects entered their operational phase.³** This represents less than 0.13% of Queensland's total workforce of over 2.3 million.⁴

Queensland Treasury figures⁵ reveal the speed at which the bust happens, with the non-resident worker population in the Surat Basin dropping from a peak of 14,490 in June 2014 down to 5,420 just one year later, and down again to 3,820 in June 2016, as the large fly-in, fly-out (FIFO) or drive-in, drive-out (DIDO)

¹Office of the Chief Economist, Resources & Energy Quarterly, March 2017 Historic data: <https://industry.gov.au/Office-of-the-Chief-Economist/Publications/Pages/Resources-and-energy-quarterly.aspx>; viewed 20th May 2017.

² The length of the construction period varies between the projects. In the case of Gladstone LNG, the construction period was 4 years. URS (2009) GLNG Economic Impact Statement.

³ Office of the Chief Economist, Resources and Energy Major Projects, [Projects list October 2015](#).

⁴ ABS Labour Force Statistics.

⁵ Queensland Treasury, Queensland Government Statistician's Office, [Surat Basin non-resident population projections 2017 to 2023](#)

construction workforces of the major coal seam gas (CSG) projects were replaced by smaller operational workforces.

Few spill over jobs

The gas industry often makes claims⁶ about delivering substantial job 'spill overs' (or multipliers) in regional communities i.e. employment opportunities that develop in other sectors. Job multipliers, particularly in the services industry, are frequently used to derive large employment estimates for planned gas projects⁷. However, research into the local economic impacts of unconventional gas development in the Surat Basin, the epicentre of the Queensland CSG boom, provides evidence which disputes those claims.

In one of the largest and most rapid resource expansions ever seen in Australia, researchers found that job spill over into non-mining employment following Queensland CSG development was "negligible"⁸. Whilst they note that the CSG industry generated more construction employment and technical jobs (such as electricians and mechanics), retail trade and manufacturing showed minimal growth whilst other local services jobs declined. The study also found that agricultural jobs had been negatively affected by the CSG boom, with farm workers likely to have migrated into the CSG industry and associated construction and technical jobs. **Overall, 9 jobs were lost in the services sector for every 10 new CSG jobs, whilst 18 agricultural jobs were lost for every 10 people employed in the CSG industry.**⁹

Transient Workforces

Existing unconventional gas developments in Australia have relied extensively on the use of FIFO and DIDO workforces- made up of predominantly male non-residential workers living in workers camps on the outskirts of rural towns. The wide ranging social impacts of FIFO and DIDO workforces have been detailed in a number of Federal and State Parliamentary Inquiries¹⁰.

Negative influences of FIFO/DIDO workforces on local communities include: decline in local resident populations with flow on effects on local schools, essential services and volunteer organisations; reduced community cohesion; impacts on housing availability and affordability; increased rents and other living expenses; detrimental impact on local businesses; and social problems such as violence and crime in 'host' communities. The documented impacts on the workers themselves include fatigue, mental health problems, elevated drug and alcohol use, and family and relationship issues¹¹.

Negative Economic Impacts on Local Businesses:

In a 2013 study¹² of the social and financial impacts of the CSG industry in the Darling Downs region of Queensland, people working in non-gas industry employment in local businesses, agriculture, government and the community sector were interviewed. **These respondents consistently reported a deterioration in financial capital, local skills and knowledge, local infrastructure and social cohesion as a result of CSG**

⁶ E.g. APPEA: [Our Natural Advantage](#).

⁷ For more info. refuting these claims see: <http://www.factsfightback.org.au/did-the-gas-industry-create-100000-jobs-last-year-check-the-facts/>

⁸ Fleming, D & Measham, T (2015a) ["Local economic impacts of an unconventional energy boom; The coal seam gas industry in Australia"](#). *The Australian Journal of Agricultural and Resource Economics* 59(1) pp 78-94.

⁹ Ibid

¹⁰ House of Representatives Standing Committee on Regional Australia. [Cancer of the bush or salvation for our cities? Fly-in, fly-out and drive in, drive-out workforce practices in regional Australia](#). Canberra: Commonwealth of Australia, 2013. Queensland Parliament: Infrastructure, Planning & Natural Resources Committee, *Inquiry into fly-in, fly-out and other long distance commuting work practices in regional Queensland*, October 2015; West Australian Parliament, Education and Health Standing Committee, [The Impact Of FIFO Work Practices on Mental Health](#).

¹¹ Ibid

¹² Everingham, J., Collins, N., Rodriguez, D. Cavaye, J., Vink, S., Rifkin, W. & Baumgartl, T. (2013) *Energy resources from the food bowl: an uneasy co-existence. Identifying and managing cumulative impacts of mining and agriculture. Project report*. CSRM, The University of Queensland: Brisbane: <https://www.csrn.uq.edu.au/publications/energy-resources-from-the-food-bowl-an-uneasy-co-existence-identifying-and-managing-cumulative-impacts-of-mining-and-agriculture>

development. The main reasons cited for these social and financial impacts were the loss of skilled staff to the gas industry and the increased cost of labour, rent, transport, and goods and services for local businesses.

Farming businesses can suffer from a range of significant impacts as a result of unconventional gas development. In 2016, the CSIRO released a report¹³ into the total losses to gross revenues incurred by farmers who host unconventional gasfields on their properties. **The report found that the alienation of productive farmland for CSG infrastructure in Queensland results in losses in gross economic returns of up to 10.9%, with landholders losing an average \$2.17 million in revenue as a result¹⁴.** The methodology used in this study estimated economic losses based solely on reduction in land area and did not attempt to quantify losses resulting from disruption to operations, dust generation, stock losses, spills and leaks of wastewater or the spread of weeds. Therefore, total losses to landholders will undoubtedly be far higher.



Limited Economic Benefits for Australia:

Gas companies often cite the amount of money they invest or the value of the gas they sell as proof of the economic benefits of their projects. However, these numbers say little about benefits for Australians if the money invested in a project is spent on equipment from overseas, profits flow to foreign investors and the companies pay little tax or royalties.

The oil and gas industry in Australia is over 80% foreign owned¹⁵, which means that the vast majority of the profits flow to overseas owners and are not spent in the local economy – a fact that much of the industry’s economic modelling typically ignores. To date, the unconventional gas industry in Australia has shown a preference for sourcing materials and equipment from overseas, thereby denying any benefits to Australian manufacturers. For example, the huge LNG export facilities at Gladstone in Queensland were entirely designed and built overseas by global oil and gas engineering company Bechtel¹⁶.

¹³ O. Marinoni, J. Navarro Garcia, 2016, [A novel model to estimate the impact of Coal Seam Gas extraction on agro-economic returns](#), *Land Use Policy*, Volume 59 31 December 2016, Pages 351–365.

¹⁴ The study authors note that “the estimated gross figures do not account for any compensation payments received by farmers”.

¹⁵ Grudnoff, M., The Australia Institute, [Fracking the Future: Busting Industry Myths About Coal Seam Gas](#).

¹⁶ [Bechtel website](#)

Tax & Royalties Revenue Shortfalls

The gas industry, in an attempt to gain a social licence, often claims that it pays substantial amounts of tax and royalties, however, the reality is very different. There are two ways in which Australian government's levy the petroleum sector for its inputs so that Australia (theoretically) receives a revenue for the nation's finite reserves of oil and gas – through resource taxation and through royalties. (In addition, oil and gas companies are subject to corporate and other taxes that are paid by all companies in the economy.)

All *onshore* oil and gas projects in Australia are subject to State or Commonwealth royalties of 10%. They are also subject to the Petroleum Resource Rent Tax (PRRT), a profit-based primary resource tax. According to the Tax Justice Network¹⁷, a decade ago the PRRT system worked reasonably well and collected a significant share of the revenues generated, however, changes to the PRRT system have expanded loopholes and combined with aggressive tax avoidance, the effectiveness of the PRRT system has been gutted. The situation has become so bad, Australia is now practically giving away its natural resources to multinational corporations for free. [The ABC reports](#) that almost 60% of resource and energy companies paid no tax in 2014/15.

As the Tax Justice Network notes, a comparison of Australia's top competitors in the growing LNG export industry shows that Australia is falling far behind in its ability to capture sufficient public benefit from private exploitation of oil and gas resources: "By 2021 Australia will eclipse the Persian Gulf state of Qatar to become the world's biggest exporter of liquefied natural gas. In that year, Qatar's government will receive \$26.6 billion in royalties from the multinational companies exploiting its offshore gasfields. According to Treasury estimates, Australia will receive just \$800 million for the same volume of gas leaving our shores."

Gas industry contributions to the Australian nation via royalty payments are also falling well short of expectations, with Queensland reaping very little of the royalties that it was promised and that QLD Treasury forecast. The QLD Treasury mid-year review in 2013-14 forecasted \$482M for petroleum royalties to flow during 2015-16¹⁸. However, the Mid-Year Fiscal and Economic Review for QLD reported that actual royalties from onshore oil and gas were just \$36M in total from all CSG and conventional gas in 2015-16¹⁹. That equates to only 7.5% of projected royalty payments, compared to what was expected just three years earlier. The reality is down by \$446 Million. Those royalty payments were made from 5,127 coal seam gas wells that were producing in that year²⁰.

Corporate Tax Avoidance

Based on figures from the Australian Tax Office (ATO), the Australia Institute reports that the oil and gas industry as a whole paid \$1.3 billion in corporate tax on profits of \$20.2 billion in 2013²¹. This means it paid an effective corporate tax rate of just six per cent, well below the theoretical corporate tax rate of 30 per cent. In late 2016, the ATO revealed that a number of large companies in Australia paid no corporate tax in the 2014/15 financial year, including two of the gas companies with CSG projects in Queensland and exploration tenements across the country. **ATO figures show that Origin Energy Ltd (total taxable income 12,200,600,757) and Santos Ltd (total taxable income \$3,389,399,798) both paid zero corporate tax in 2014/15²².**

¹⁷ Tax Justice Network: *PRRT: The tax that doesn't raise revenue*: <http://www.chevrontax.info/prrt>

¹⁸ Qld treasury 2014, <https://www.treasury.qld.gov.au/resources/>

¹⁹ Queensland Government's [Mid-Year Fiscal and Economic Review](#) 2016-17.

²⁰ Queensland Govt data, [CSG production 6 Monthly Statistics](#)

²¹ Grudnoff, M., The Australia Institute, *Fracking the Future: Busting Industry Myths About Coal Seam Gas*.

²² ABC report based on ATO data, December 2016, <http://www.abc.net.au/news/2016-12-09/tax-data-transparency-ato/8106178>

Unconventional Gas Facts: Gas Supply, Demand and Price

The development of an export gas industry based on coal seam gas (CSG) production in Queensland has led to dramatic changes in the eastern-Australian gas market.

Since the three new liquefied natural gas (LNG) plants in Gladstone came online in 2015-16, domestic gas prices in eastern Australia have increased by up to 500%¹, causing significant hardship for Australian consumers.

Rising gas prices are a direct result of three factors: linking of the Australian market to the historically more expensive North Asian market; redirection of domestic gas resources overseas to fulfil long term supply contracts; and cartel-type behaviour by gas companies.

According to the Melbourne Energy Institute (MEI)², high prices are here to stay, however implementation of gas-demand-management options would relieve pressure on Australia's dwindling gas reserves and ease the transition to higher prices.

Higher than export-parity pricing

For decades, the eastern-Australian gas market was a captive domestic "buyer's" market³. Consumers enjoyed access to some of the cheapest gas in the developed world, with wholesale gas prices in the range of \$3 to \$4 per gigajoule. However, once the Gladstone LNG export plants became operational, the economics of gas in eastern Australia changed and an internationally-linked "seller's" market prevailed. It was expected that "domestic gas" prices would be linked to higher international prices, enabling gas companies to charge Australian consumers 'export-parity' prices. However, Australian gas prices have increased relentlessly to levels unseen virtually anywhere else in the world. For example, in early-2017, Australian gas was sold in Japan for \$A10.41/GJ, whilst at the same time, the price being offered to Australian businesses was \$20/GJ⁴.

Regulatory failure and gas industry manipulation have now led to the extraordinary situation where in the midst of a global gas supply glut and falling international prices, contract prices for gas in Australia are skyrocketing far beyond parity with export prices. Rising wholesale and retail gas prices are adding to household energy bills, impacting negatively on the industrial sector, and feeding into higher electricity costs.

Increased gas demand

The second factor impacting gas prices after the start-up of the new Queensland CSG-to-LNG industry was the huge jump in demand for gas once projects came online. As the Institute for Energy Economics and Financial Analysis (IEEFA) explains⁸, industry found that when it went to drill for gas - *after* securing gas contracts and building the export plants - the CSG fields that were expected to supply the plants failed to produce the gas expected. In particular, gas company Santos has been unable to adequately supply its LNG plants from its CSG production fields and is buying large volumes of third-party gas out of the east coast domestic market to fulfil long term export contracts⁹. IEEFA notes that the purchase of third-party gas for export is putting significant pressure on domestic prices.

¹ Sydney Morning Herald, [Higher Energy Prices have little to do with gas shortages researchers say](#).

² Melbourne Energy Institute (MEI), [Switching off gas: An examination of declining gas demand in Eastern Australia.](#) & [A Short-lived Gas Shortfall: A Review of AEMO's Warnings of Gas Supply Shortfalls.](#)

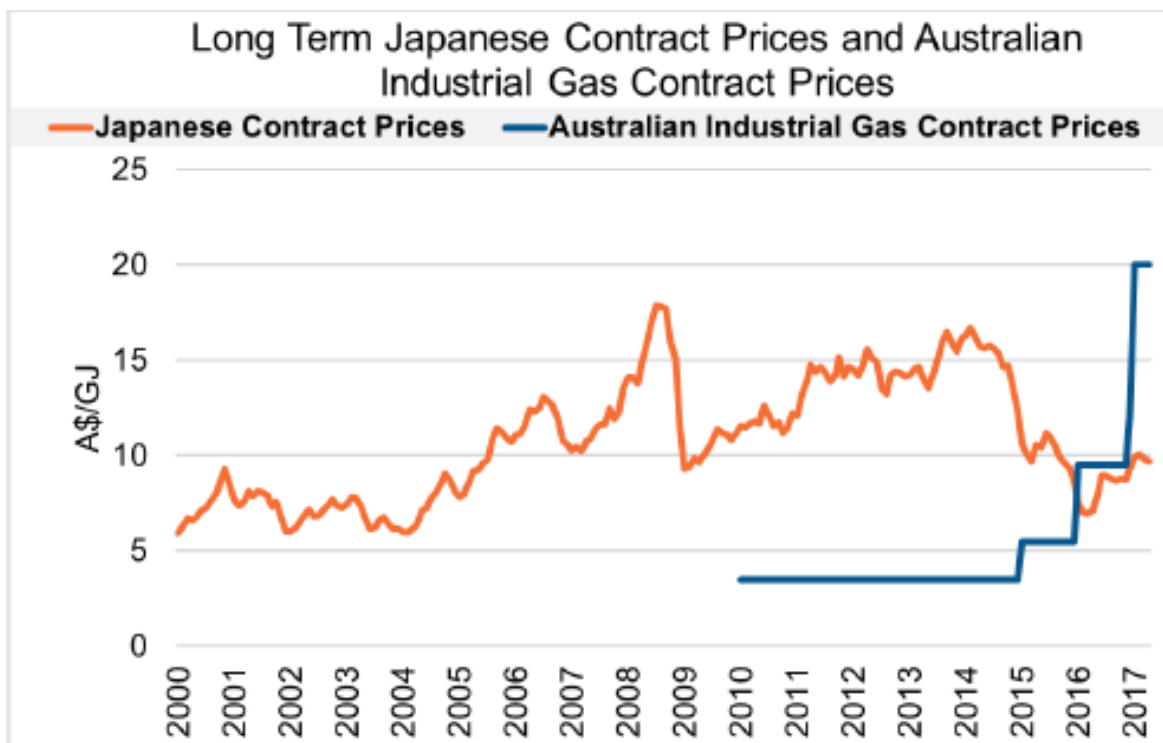
³ Ibid

⁴ Institute for Energy Economics and Financial Analysis (IEEFA), [How Australian gas companies are gouging Australians.](#)

⁸ Institute for Energy Economics and Financial Analysis (IEEFA), [Australia's Export LNG Plants at Gladstone: The Risks Mount](#)

⁹ Ibid

Furthermore, a 2017 Australian Competition and Consumer Commission (ACCC) report¹⁰ into gas supply issues has revealed that gas exporters also shipped a lot of extra gas overseas in addition to the gas they were contractually obliged to export. The commission says that in 2018 the big three gas exporters are planning to export 64.3 petajoules of gas that they are not contractually required to export. (One petajoule is enough to supply the residential needs of a city like Warrnambool, Wollongong or Penrith for a year; or enough to supply one very big industrial user.)



Sources: Reserve Bank of Australia (RBA) Brent Crude prices, Australian Industry Group, IEEFA calculations

Source: Institute for Energy Economics and Financial Analysis (IEEFA), [Australia's Export LNG Plants at Gladstone: The Risks Mount.](#)

Gas supply scenarios

As gas prices steadily rose, the gas industry and the Australian government aggressively promoted the false notion of a ['gas supply crisis'](#)¹¹. This concocted 'crisis' has been used to try to force an expansion in unconventional gas development across the country and roll back state government controls implemented in response to community pressure. In the midst of heated national debate on this issue, in May 2017 the MEI released a detailed review¹² of gas supply in the east coast gas market. The MEI report notes that "the volume of eastern-Australia's gas reserves and resources is significantly in excess to what is required for both domestic use and LNG export". Similarly, in March 2017, the head of APA Group¹³, the nation's biggest gas transporter, declared that the domestic market remained as consistently and fully supplied as ever, noting that "we do not have a gas supply crisis....what we have is a bitter division between suppliers and customers over what it is costing to get the gas they need."

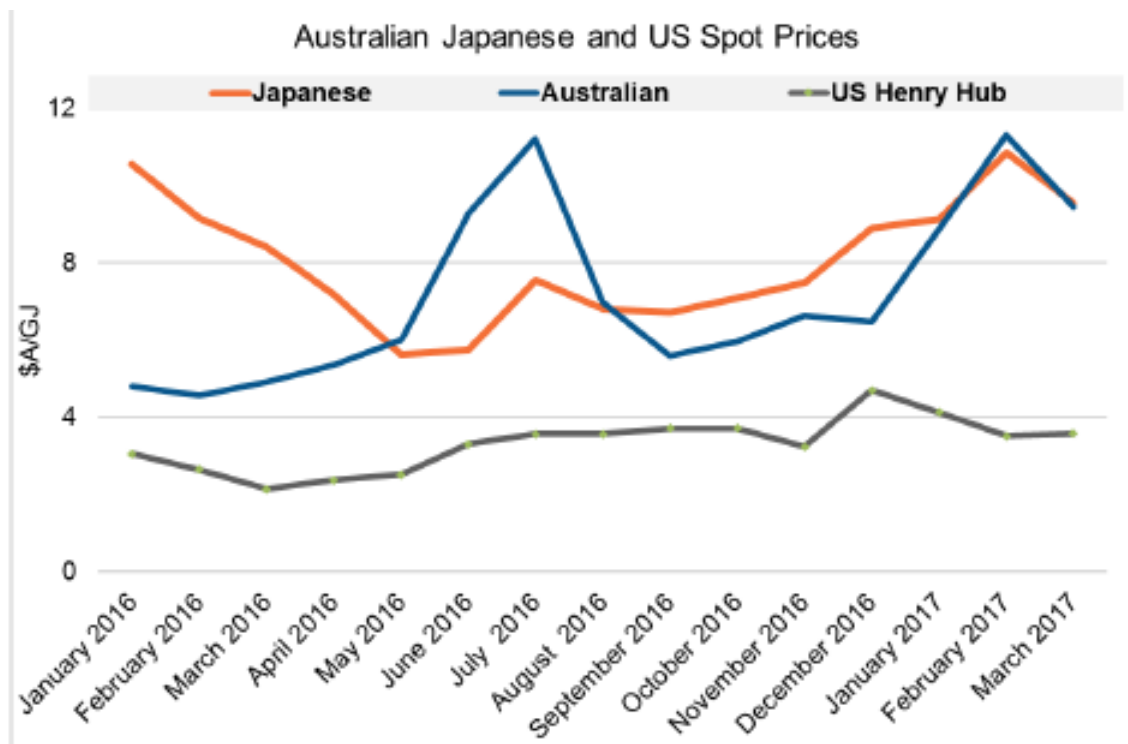
¹⁰ Cited in this article: [No easy answers as the world's second biggest gas exporter prepares to run short](#)

¹¹ See for example Michael West's article [Gas Crisis: A Crisis of Guile and Greed](#) and Australian Financial Review article, [Gas crisis is about price not supply.](#)

¹² Melbourne Energy Institute (MEI), [A Short-lived Gas Shortfall: A Review of AEMO's Warnings of Gas Supply Shortfalls.](#)

¹³ Australian Pipeline Association CEO, quoted in the Australian Financial Review article: [Gas crisis is about price not supply.](#)

A mid-2017 [report](#)¹⁴ from the Institute for Energy Economics and Financial Analysis (IEEFA) highlighted the fact that record high gas prices in Australia are coinciding with a global gas supply glut. In this report IEEFA noted that weak demand growth and large increases in LNG production capacity worldwide has led to an expanding glut on world markets that could last till the mid-2020's.



Sources: Australian Energy Market Operator (AEMO), Ministry of Economy, Trade and Industry (Japan), US Energy Information Administration, Reserve Bank of Australia (RBA), IEEFA calculations.

Source: Institute for Energy Economics and Financial Analysis (IEEFA), [Australia's Export LNG Plants at Gladstone: The Risks Mount](#).

In September 2017, the Australian Energy Market Operator put out an updated Gas Statement of Opportunities report after one gas company indicated a drop in production. New figures showed that because massive volumes of gas were caught up in export contracts, there might not be enough for Australian users next year. According to the ACCC, it would be possible for the exporters to ship out less than they are planning to without breaking contracts, and whilst moves have been made in that direction, it is “unclear” why they have not done more¹⁵.

The Gas Cartel

Another factor cited¹⁶ by the MEI as contributing to rising gas prices is the lack of a competitive and transparent domestic gas industry¹⁷. In Australia¹⁸, data on gas markets, including prices, gas reserves and production costs, is a closely guarded industry secret. The market in Eastern Australia is controlled by four players who operate like a cartel: BHP/Exxon, Origin Energy, Santos and Shell. They divulge as little information as possible and withhold supply to domestic spot markets, enabling them to control pricing

¹⁴ IEEFA, [Australia's Export LNG Plants at Gladstone: The Risks Mount](#)

¹⁵ Cited in this article: [No easy answers as the world's second biggest gas exporter prepares to run short](#)

¹⁶ Melbourne Energy Institute (MEI), [Switching off gas: An examination of declining gas demand in Eastern Australia](#).

¹⁷ The industry was the subject of an Australian Competition and Consumer Commission Inquiry in 2015: [East Coast Gas Inquiry 2015](#).

¹⁸ IEEFA, [Australia's Export LNG Plants at Gladstone: The Risks Mount](#)

into the domestic Australian market. As IEEFA Energy Analyst Bruce Robertson notes¹⁹: “the Australian gas cartel is restricting supply to the domestic market in order to force up the price.” Robertson blames state and federal governments for failing to develop a proper energy policy in Australia to avoid these problems.

According to Robertson²⁰, the gas cartel is losing money in the export business due to the downturn in global gas prices and are making that money back by gouging Australian gas consumers. Robertson suggests: “What we have here is an industry holding Australia to ransom [and] using this leverage to try to open up new coal seam gas fields.”

Gas demand-management

The MEI reports²⁹ that rising gas prices and other factors are driving “economic fuel-switching” from gas to electricity, reducing demand for gas. Since 2012, the amount of gas consumed in eastern Australia has declined each year and will continue on a declining trend³⁰. As eastern Australia enters the new era of high-price gas, there are many opportunities available to manage demand and extend the life of conventional gas reserves- including economic fuel-switching and improving energy-efficiency in the residential, commercial and industrial sectors.

Residential fuel switching options include: increased use of heat pump water heaters, using reverse cycle air conditioners for heating and replacing gas appliances with induction cooktops. Improved household energy efficiency measures such as insulation, draught-proofing, and improved windows and window treatments would also reduce demand. The MEI notes: “In eastern Australia, there are potentially 500,000 to 1,000,000 homes where residents are unaware that they can immediately start to save hundreds of dollars per year on their heating bill by using their existing reverse-cycle air conditioners (RCACs) instead of gas. This economic fuel-switching frees up gas for industry.”

Regulatory Failure

The Queensland Government’s original [“Blueprint for Queensland’s LNG Industry”](#)³¹, published in September 2009, acknowledged that the development of the Queensland LNG export industry had the potential to negatively impact domestic supply. Likewise, in 2013, the potential that the creation of gas-export capability would lead to higher gas and electricity prices, which would in turn lead to energy demand destruction and associated losses in manufacturing output, was forewarned by the Australian Industry Group in 2013³³. However, both State and Federal governments ignored the warnings and failed to develop a proper energy policy- instead giving industry free rein to do as it pleased³⁴.

IEEFA notes the need for urgent changes to energy policy in Australia - including the implementation of a Federal Government enforced price trigger to ensure provision of domestic gas at a reasonable cost. They also recommend that Australia adopt standards and rules similar to those in operation in the US to regulate the operation of the Australian gas market including. These measures include the requirement for reserves to be calculated using the same oil price as well as disclosure rules that mandate reporting of average sales prices for oil and gas produced and average production costs for each operating gasfield³⁵.

¹⁹ IEEFA Energy Analyst Bruce Robertson quoted in News.com article: [Gas cartel is pushing prices up in Australia.](#)

²⁰ Ibid

²⁹ Melbourne Energy Institute (MEI), [A Shortlived Gas Shortfall: A Review of AEMO’s Warnings of Gas Supply Shortfalls.](#)

³⁰ Australian Energy Market Operator (AEMO) quoted in [A Shortlived Gas Shortfall: A Review of AEMO’s Warnings of Gas Supply Shortfalls.](#)

³¹ <https://www.cabinet.qld.gov.au/documents/2009/aug/lng%20impacts%20review/Attachments/LNG%20Industry.pdf>

³³ Melbourne Energy Institute (MEI), [A Shortlived Gas Shortfall: A Review of AEMO’s Warnings of Gas Supply Shortfalls.](#)

³⁴ IEEFA Analyst Bruce Robertson in News.com: [The ‘absurdity’ of Australia facing a gas shortage.](#)

³⁵ IEEFA, [Australia’s Export LNG Plants at Gladstone: The Risks Mount](#)