

Inquiry into Australia's Oil and Gas Reserves

Submission from
AUSTRALIAN WORKERS' UNION

14 MAY 2020

About the Australian Workers' Union.

The Australian Workers' Union ('AWU') is the nation's oldest union, and also one of the largest. The AWU has wide coverage in many blue-collar industries, such as steel, aluminium, chemicals, plastics and building materials manufacturing, oil and gas extraction and processing, metal ore mining, agriculture and civil construction.

Inquiry Terms of Reference

- a. arrangements used by other countries to maximise the benefit to the public of national oil and gas reserves;
- b. arrangement that could be considered to maximise benefit to the public of Australia's national oil and gas resources, cognisant of:
 - i. sovereign risk,
 - ii. existing property rights, and
 - iii. federal and state jurisdictions; and
- c. any related matters.

Prelude

The AWU maintains industrial coverage across all aspects of the oil and gas supply chain.

The AWU also maintains significant coverage and membership across heavy industrial manufacturing, where baseload electricity power remains one of the largest input costs. This includes the milling and export of steel product, alumina and aluminium, chemicals, fertilisers, fuel refining, and building materials manufacture.

The Australian manufacturing sector employs almost 1 million working Australians. It comprises many of the AWU's members employed at heavy industrial work sites such as Bluescope Steel at Port Kembla, Alumina smelting in Western Australia and Aluminium refining across the East Coast, Whyalla Steelworks, Viridan Glass in Dandenong, Victoria, OI Glass in Queensland and New South Wales, and many more.

Across the Oil & Gas supply chain, the AWU represents members working on coal-seam gas extraction in Queensland, gas transmission in Moomba, South Australia, every oil refinery in Australia, offshore oil and gas extraction in Western Australia and southern East Coast states, and more.

As a significant input cost, gas production (and its bearing on electricity as another significant input cost) in NSW is of interest to the AWU not only for the purpose of creating jobs in the civil construction and gas supply sectors, but importantly for preserving the job security across our heavy industrial manufacturing sector.

The AWU have intimate knowledge on how the extraction, processing and export of oil and gas can create high-paying, high-skilled jobs for the Australian economy. It also understands that substantial economic opportunities can be found within balancing these prospects with delivering competitively priced energy to our industrial sector at home.

1. List of AWU Recommendations

Recommendation 1: The federal government work with the NSW government, as well as other states where relevant, to develop an East Coast Gas Reservation framework that ensures any new gas project produces a domestic economic benefit, rather than solely serve to increasing our LNG exports.

Recommendation 2: the federal government provide the funds for materially expanding the capacity of the pipeline infrastructure between the Northern Territory Betaloo Basin reserves and the Queensland and southern state markets.

Recommendation 3: The Federal Government implement a use-it or lose-it policy.

Recommendation 4: The Federal Government engage the West Australian Government to establish support measures to expand the manufacturing sector in Australia.

Recommendation 5: the Federal Government revise the ADGSM to include a price trigger so that the domestic gas price does not exceed the export price.

Recommendation 6: the Federal Government immediately institute a gas export regime that controls for prospective gas reservation, ahead of working on a broader solution alongside state governments.

Recommendation 7: the Federal Government and the Treasurer reject any prospective acquisition of Caltex by Alimentation Couch-Tard or a any other foreign buyer.

2. Gas reserves as a public benefit

It is common for the benefits of gas extraction to be pitched as a two-dimensional economic opportunity borne from job creation and government royalties. Indeed, it is how the economic benefits of Australia's booming LNG export sector are often framed.

The reality is far more nuanced and consequential. While the benefits of a major gas and oil export industry are obvious, competitively priced gas for the domestic market can function as a country's economic arteries, helping to power the broader industrial and consumer sectors. This includes as a significant input cost for manufacturing, its bearing on the wholesale electricity price, and the commercial and residential consumption of energy.

Whilst Australian public policy is divided on this issue, other countries have gotten on with the job of having their cake and eating it too. **No country – other than Australia – has a gas export industry without a gas reservation program.**

Despite warnings, Australia built a world-class gas export industry without a national gas reservation program to deliver competitively priced energy. As a result, gas prices across the east coast tripled and industrial manufacturing has contracted under the weight of the associated cost burden. Despite the global collapse in oil and gas prices, the industrial sector still cannot get access to affordable energy prices.¹

During the same year Australia became the largest exporter of LNG in the world, Harvard University ranked our country at 93 for economic complexity. As the

¹ <https://www.afr.com/companies/energy/sims-questions-out-of-kilter-gas-prices-20200117-p53shn>

world's richest resource-exporting nation, we have failed at providing the affordable energy prices required to underpin an adequate manufacturing and other ancillary industries.

The physical construct of the gas market – as well as the different legislative jurisdictions that govern it – make for achieving a public benefit a complex task.

Gas extraction is required to produce gas supply, and that can occur offshore and onshore (which depending on the type of onshore gas, is subject to different regulations). These distinctions make a jurisdictional distinction between federal and state government remits. In addition, gas supply requires physical infrastructure which is funded by both state and federal governments. Furthermore, certain Australian states take part in different gas markets, and whilst all are mostly beneficiaries of any type of gas supply, not all regulate gas extraction equally.

For this reason, anything short of federalising all regulations with respect to gas extraction, sale and market monitoring requires measures to coordinate efforts to ensure a well-functioning gas market. This means that whilst the federal government has several opportunities available to it within its jurisdictional remit, it can also do much to assist state governments in participating in the market effectively and equitably.

2.1. New South Wales

There are no approved commercial gas projects in New South Wales (NSW).² Despite this, NSW consumes approximately 30 per cent of total gas demand across

² NSW's last gas project, the Camden Gas Project, has been progressively decommissioning wells since February 2016.

the East Coast market.³ As a free rider beneficiary for decades, NSW is the largest consumer of domestic gas despite not going through any of the environmental, regulatory, and political obstacles of extracting it locally.

NSW is home to some of the largest steelworks and heavy industrial manufacturing sites in the country, and responsible for the export of the finished products. Employing close to 250,000 workers, the NSW manufacturing sector is unreservedly underpinned by the economics of gas (directly and indirectly through its bearing on the electricity price).

After the discovery of substantial Coal-Seam Gas (CSG) reserves in NSW, there was an upsurge of unconventional gas exploration activity across the state after 2007. Due to several instances of rogue operators contributing to environmental degradation at local sites, public support for unconventional gas extraction diminished considerably. In 2014 the NSW Government bought-back almost all exploration licences, and set about regulating the industry more vigorously.⁴

Since then, several government-led scientific reviews across the country have provided a pathway forward for unconventional gas extraction. In particular, the governments of Western Australia, Queensland, Northern Territory, and NSW have all published reports supporting the science of safe unconventional gas extraction. Particularly, the NSW Chief Scientist conducted an Independent Review of Coal Seam Gas Activities in NSW in 2014, and made 16 recommendations for the environmental, social and economic viability of coal-seam gas in NSW.

³ https://www.aemo.com.au/-/media/Files/Gas/National_Planning_and_Forecasting/GSOO/2019/2019-GSOO-report.pdf

⁴ <https://www.theaustralian.com.au/inquirer/exploration-under-the-gas-pump-in-victoria/news-story/eab0318343f00b1b706e0afc233aac19>

The status of these recommendations (and the state Government's policy response) has become a source of controversy as activists seek to derail any initiative to grant production licences for coal-seam gas in the state.

Just recently a NSW upper house inquiry released a report into the matter, asserting that many of the recommendations by the Chief Scientist had not been implemented. These findings are contrary to the public service's position, which in a state budget estimate's testimony revealed that in fact 14 of the 16 recommendations had been implemented.

It is clear that despite the evidence and regulatory controls (those now in place and proposed), public support for unconventional gas extraction in NSW has been undermined – with the risks exaggerated and the benefits downplayed. It is clear that there is a loud cohort of activists that oppose coal-seam gas extraction on ideological grounds or misinformation, rather than on the scientific evidence.

The commentary surrounding the most politically and economically viable project in NSW – the Narrabri Gas Project (NGP) – is a case in point.

For instance, reporting by the [media](#) and [opinion pieces](#) by purported analysts consistently refer to the potential of *hydraulic fracturing* at the NGP. Santos – the proprietor of the NGP – has not submitted a licence for hydraulic fracturing in their Environmental Impact Statement (EIS). Gas at Narrabri can be extracted as if it were conventional gas due to the coal seams having already been fractured naturally over time.

Misinformation and ideology will not reward NSW the substantive economic benefits it could potentially extract from its resource riches.

This has resulted in an outcome whereby elected officials are reluctant to offer support for a prospective project that has considerable gas reserves, would benefit local and downstream economies and communities enormously and would have a relatively small imposition on local communities and the state of NSW.

The NSW Government has progressed the production licence application for the NGP through to its Independent Planning Commission (IPC), and has also improved improving the regulatory environment since the Chief Scientist's report.

The NGP could potentially contribute 70 Petajoules of gas per year to the East Coast market, which is more than 50 per cent of NSW's entire annual demand. Importantly, Santos has publicly committed to selling 100 per cent of the Narrabri gas to the domestic NSW economy, which would put downward pressure on gas prices for households and industry.

There is no doubt that approving the NGP would prove beneficial to the domestic economy. The Federal Government's \$2 billion energy program, released on 31 January 2020, which focuses on the need to increase gas supply, was a positive step towards achieving this outcome.⁵

However, there remains a risk that in the absence of the appropriate reservation framework, Australia's east coast could miss out on achieving the total potential economic benefits of the NGP.

Whilst Santos's commitment to sell domestically serves as a gesture of good faith, it is non-binding and should be prescribed by a gas reservation framework to ensure compliance.

⁵ <https://www.pm.gov.au/media/nsw-energy-deal-reduce-power-prices-and-emissions>

However, even if the NSW Government were to implement such a scheme, there remains another inhibitor to economic benefit.

Ensuring the Narrabri Gas Project delivers public benefit

The NSW gas market is situated within the broader East Coast Gas Market and comprises Queensland, NSW, Victoria, and South Australia.

Gas in the East Coast is transported through pipelines that cross state borders. Importantly, most pipelines are connected to a distribution station in the far north-east of South Australia, in a company-town called Moomba. For NSW, a pipeline from Moomba to Sydney transports gas to the coast line.

Almost all gas supplied in NSW is sourced from other states.

Theoretically, the NSW economic advantage in approving the NGP is borne from increasing the supply of gas to NSW and in turn placing downward pressure on the NSW wholesale gas price.

There remains a risk that in the instance the NGP is approved, the new gas supply would merely replace existing contracted volumes traditionally sourced from interstate. This would temper the expected surplus of gas in NSW.

By reducing the significance of the surplus the expected downward pressure on the NSW wholesale gas price would dissipate. This would temper the predicted economic benefits of approving the project. This problem can be overcome via appropriate regulation and market safeguards.

Recommendation: The federal government work with the NSW government, as well as other states where relevant, to develop an East Coast Gas Reservation framework that ensures any new gas project produces a domestic economic benefit, rather than solely serve to increasing our LNG exports.

2.2. Northern Territory

Over the last decade there have been substantial shale gas reserves discovered across the Northern Territory, or in the Betaloo Basin.

In December 2016 the Northern Territory Government introduced a moratorium on gas extraction and commissioned an Independent Scientific Inquiry into Hydraulic Fracturing of Onshore Unconventional Reservoirs, which concluded and released its report in March 2018.⁶ The report made several recommendations on how to improve the regulatory environment, and surmised that unconventional gas extraction could operate without degradation to the environmental and natural resources.

In response to the report, the Chief Minister, Hon Michael Gunner, lifted the moratorium in April 2018, and committed to implementing all actions required to fulfil the 135 recommendations made by the Independent Scientific inquiry.

Under the new regime, 49 percent of the Territory was carved out as unextractable, including Indigenous protected areas, areas of environmental, cultural or agricultural significance and residential areas.⁷

⁶ <https://frackinginquiry.nt.gov.au>

⁷ <https://www.abc.net.au/news/2018-04-17/fracking-to-resume-in-the-northern-territory-moratorium-lifted/9666022>

There are two companies that own the majority of exploration licences in the Territory; Santos and Origin.

The extraction costs of the gas in the Betaloo Basin are projected to be extremely low, drawing comparisons to the Shale Gas reserves that underpin the most competitively priced gas market in the world; southern United States.

However, it is also argued that the Betaloo Basin reserves could prove a lifeline for the east coast market as the supply of gas in the Bass Strait continues to decline.⁸

As it stands, the economic benefit of gas extraction in the Northern Territory will be to deliver a cheap domestic gas price for the Territory, and state and federal royalties as the rest of the gas reserves are exported.

The most consequential project the Federal government could pursue to maximise the economic benefit of Australia's gas reserves is to connect the Betaloo reserves with the East Coast gas market and enforce a reservation scheme.

Currently, the pipeline linking the Northern Territory to Queensland allows for 90 TJ per day, which would need to be expanded considerably if it were to deliver material volumes of cheap gas to the east coast market.

Before the 2019 federal election, the Labor Party announced a policy to provide \$1.5 billion in funding for the construction of a pipeline linking gas fields developed in the Betaloo Basin of the Northern Territory, as well as the Galilee and Bowen basins in north Queensland. The Coalition government have also pledged support

⁸ <https://www.smh.com.au/business/the-economy/from-beetaloo-to-the-bight-the-search-is-on-for-the-next-gas-frontier-20190411-p51d9h.html>

for the development of the NT's onshore and offshore gas resources, but has been less unequivocal about this critical infrastructure project.

If the expansion of pipeline infrastructure was successfully achieved, the federal government would also need to use its legislative authority over export jurisdiction to ensure a material portion of gas reserves is sold domestically, rather than result in unrestrained exports.

Recommendation: the federal government provide the funds for materially expanding the capacity of the pipeline infrastructure between the Northern Territory Betaloo Basin reserves and the Queensland and southern state markets.

2.3. Western Australia

Western Australia's gas market operates in isolation to the rest of the economy.

Traditionally, the appetite of successive Western Australian Governments for sanctioning gas projects – particularly with the appropriate regulatory regime, has served the state's economy very well.

WA's success in achieving a significant portion of the LNG export industry as well as an advantageous gas price and the manufacturing industries it underpins is attributable to three factors.

- **Early adoption** – the WA Government helped underwrite the establishment of the LNG export industry in the 1970s with the North West Shelf (compared to the East Coast's export industry over forty years later).
- **Geological advantage** – favourable shale gas reserves which have proven cheap to extract.

- **Regulatory framework** – successive WA governments' willingness to work with gas production companies in achieving both a substantive gas production industry and delivering benefits for domestic industry and consumers. This includes a well-regarded and operating reservation policy.

The Western Australian gas market is facing several nuanced challenges that underpin existing jobs in the gas sector, and opportunities that could create thousands more in end-user manufacturing.

Firstly, the Scarborough Offshore Gas Project – which contains 6 offshore gas wells – could produce more than 250 petajoules of gas per year. The project is slated to attract close to \$17 billion in investment, and generate 2000-3000 construction jobs.⁹

The final investment decision for the project has been stalled due to arduous commercial negotiations between the project's two proprietors; Woodside Petroleum (75 per cent) and BHP (25 per cent).

There is substantial speculation by analysts and government sources that the project is being stalled by some of the parties due to several self-interested pursuits. The retention lease for the Scarborough offshore gas project will approach renewal in 2020, and the federal government should use it as an opportunity to pressure private interests into achieving an FID, or revoke and resell the lease.

Recommendation: The Federal Government implement a use-it or lose-it policy.

⁹ <https://www.abc.net.au/news/rural/2020-03-06/coronavirus-threat-to-browse-gas-field-development/12028548>

The second challenge is the declining gas supply to the North-West Shelf LNG Project, which if not replaced would render some LNG trains obsolete. Alarming, this could threaten thousands of jobs in the gas sector.

The prospective Browse Offshore Gas Project provides an opportunity to fulfil declining gas volumes, saving incumbent jobs across the platforms but also creating hundreds of jobs. There is a critical time imperative that could render the prospective project too late or just in time. The Federal Government should put pressure on the proponents of the project to fast-track a FID before the expected decline of gas volumes post-2021.

The third challenge embodies an opportunity to generate manufacturing jobs in Western Australia. The West Erregulla Gas Project is a prospective onshore gas project in Perth Basin that is projected to produce more than 50 petajoules of gas per year at US\$2-3/GJ.

Western Australia's 15 per cent gas reservation policy means that if the West Erregulla Gas Project is successful, it would need to reserve close to 10 petajoules a year for the domestic market. Government and sources have raised concerns that there is not enough domestic demand capability to service this additional demand.

This presents an opportunity for the Western Australian Government to generate new manufacturing capabilities on account of potential gas reserves.

Recommendation: The Federal Government engage the West Australian Government to establish support measures to expand the manufacturing sector in Australia.

2.4. Victoria

Offshore gas wells in the Bass Strait have been a staple of Australia's East Coast gas market for decades. The gas fields are in decline and the two main proprietors – ExxonMobil and BHP – have made public commentary on the declining value of the production assets, and their likelihood of sale.¹⁰

There is, however, no *onshore* gas production in Victoria. It is the only state in Australia that until recently has maintained a ban on onshore conventional and unconventional gas. This is despite 80 per cent of Victoria's households being connected to natural gas, more than any other state in the country.¹¹

The Victorian Government's recent announcement to lift the moratorium on onshore conventional gas exploration and production is a positive step towards reversing these economically-damaging restrictions in the past.¹² The concurrent banning of unconventional gas measures, despite overwhelming scientific evidence indicating the safety of those extraction measures by state and federal government inquiries, is unfortunate.

The Victorian Government's discovery of 830 petajoules of gas in the Otway Basin and Gippsland presents an opportunity to supplement the declining gas supply in the Bass Strait. However, it will take several years of commercial prospecting, further environmental process approvals and other commercial activities before gas can be extracted.

¹⁰ <https://www.smh.com.au/business/companies/bhp-considers-sale-of-bass-strait-assets-as-oil-fields-decline-20191111-p539cu.html>

¹¹ <https://www.energymagazine.com.au/victorian-opposition-supports-a-lift-on-gas-ban/>

¹² <https://www.abc.net.au/news/2020-03-17/victoria-lifts-ban-on-onshore-gas-exploration-but-bans-fracking/12063196>

Recommendation: the Federal Government incentivise the Victorian government, as it has with the NSW Government, for producing greater gas supply as a result of its new policy, so as to reduce the lead time before gas extraction can realistically be achieved.

2.5. Australian Federal Government

The Australian federal government has the legislative remit to sanction offshore gas projects and issue export licences to gas companies.

CSG production in Queensland and the subsequent unrestrained gas export licences in Gladstone has been widely conceded as a monumental public policy failure by regulators, domestic industry participants, and politicians of all persuasions.¹³

The overcommitment of gas export contracts by proponents of the three gas joint-ventures resulted in a significant portion of pre-existing domestic gas volumes being exported to overseas customers, with domestic consumers bearing the cost of high energy costs. For a country that is now lauded as the largest LNG exporter in the world, the resulting situation where domestic industry has to wait for oil price shocks for energy price relief is a travesty.

Australia's domestic energy prices should be the most competitive in the world, not the driver of a manufacturing exodus that has materialised over the last 24 months.

¹³ <https://www.abc.net.au/news/2020-02-27/gas-giants-misled-governments-accs-boss-rod-sims-says/12004254>

Whilst political consensus on the public policy failure is widespread, there remains a heightened degree of anxiety over retrospectively applying gas reservation due to concerns of sovereign risk.

The result was a largely notional, ineffective export control regime called the Australian Domestic Gas Security Mechanism (ADGSM), announced by the Turnbull government. This initiative sought to institute a framework around the amount of additional gas that producers can export, in lieu of imposing a restriction over their current gas contractual commitments.

Much of the public criticism of the ADGSM has been that it has been ineffective in salvaging the potential public benefit our gas resources could have provided the country if an appropriate gas reservation framework was in place prior to sanctioning the projects. A particular argument involved the stipulation that the ADGSM would not impose controls on exports if the domestic gas price increased beyond the international gas price, but rather only if a gas supply shortage was determined.

Amidst the highly fractured and complex nature of energy markets and distribution infrastructure the conventional economic principles of supply and price do not always hold. Factors that erode at these principles include the irregular distribution of gas contract terms across the private sector, the spot market's ineffectuality as a barometer of the east coast gas market, the long distance of pipeline infrastructure and associated costs across Australia's horizontally-vast East Coast, and many others. In short, a gas shortage does not have to exist for the domestic gas price to increase.

For this reason, the Australian east coast saw gas sustain a price well above \$10-12 per gigajoule up until recently, much higher than the export price (or the 'netback

price') and in spite of no shortage being announced by the Government or the ACCC. In February 2020, the ACCC noted that despite LNG netback prices decreasing, domestic prices remained high.¹⁴

Prior to the federal election, the Opposition Labor Party announced a policy to revise the ADGSM trigger to stipulate a price, where export controls would be enacted if the domestic price increased beyond the netback price.

This was a formidable policy announcement and should be adopted by the current federal government. However, to truly maximise the public benefit of the Australia's gas resources, we must institute a framework that ensures Australia's domestic gas price is shielded from the volatility of international commodity prices.

Recommendation: the Federal Government revise the ADGSM to include a price trigger so that the domestic gas price does not exceed the export price.

The only way to truly achieve this is by mandating that a portion of gas reserves that are extracted in Australia are sold in Australia, as has been achieved by all other gas exporting nations in the world.

The only way to achieve this immediately is by instituting such a policy *retrospectively*. Naturally, many proponents of political parties argue that there remains a considerable degree of sovereign risk associated with such interventionist measures.

After the federal election the Federal Government announced its intention to introduce a *prospective* gas reservation policy. This policy would have to be

¹⁴ <https://www.accc.gov.au/media-release/east-coast-gas-prices-appear-too-high-and-future-supply-is-uncertain>

coordinated in conjunction with state governments given differing legislative jurisdictions and remits.

This is an important step to realising the public benefit of any new gas reserves in the future.

It is important that this policy is enacted before any new substantial gas projects are approved across the East Coast, particularly in jurisdictions where there are no state-government enforced reservation measures. An example of this is the Narrabri Gas Project in NSW, which is approaching the mature phase of its regulatory approval process. In the absence of instituting such a policy in the immediate timeframe, and as explored in section 2.1. of this submission, there remains a substantial risk that the additional gas supply finds its way to export.

This illuminates a timing imperative that could prove consequential. In the absence of a prospective gas reservation scheme, the same sovereign-risk concerns perpetuated since the approval of the Gladstone export facilities will arise once projects such as Narrabri are approved.

Recommendation: the Federal Government immediately institute a gas export regime that controls for prospective gas reservation, ahead of working on a broader solution alongside state governments.

Despite these imperatives, it is unlikely that a prospective gas reservation regime will put downward pressure on the domestic gas price in the very short-term.

Fortunately, gas prices have reduced dramatically in the short-term given a range of economic and geopolitical circumstances influencing the price of crude oil.

For these events to translate to lower energy prices for the industrial sector, the low gas price has to remain for at least 12 months so the terms in contracts allow for a readjustment of price. However, they also require gas companies to be willing to contract to the domestic sector for appropriate term lengths.

The dramatic reduction in term lengths of gas contracts means that businesses are more exposed to the volatility of commodity markets, which has eroded at business investment confidence in the capital-intensive industrial sector.

The Federal Government and the ACCC should put pressure on the business community to ensure that gas producers and wholesalers are providing business customers with reasonable term-lengths. Furthermore, complete transparency in the market is necessary to ensure accurate understandings of price, supply, contracts and reserves in the market. This data should be publicly available.

3. Oil reserves as a public benefit

There are not many resources or commodities that are as integral to the functioning and wellbeing of the Australian economy and its welfare as refined crude oil products.

Australian industry and consumers need refined oil products to facilitate vital government services required to survive, such as in healthcare and emergency services, the facilitation of education activities, and countless more. It also needs fuel to service its military and defence activities, import perishable and non-perishable goods both by airfreight and sea freight, as well as the facilitation of our export industries such as mining, manufacturing, and many others.

Given its reliance on road transport for logistical support to primary and secondary industries, Australia is almost uniquely reliant on liquid fuels to run its economy – making Australia's sanguine approach to fuel security all the more baffling.

Indeed, given Australia's goods-heavy export profile (only 2 service industries in the top 20 exports), Australia's large export flows and current account deficit, as well as its relative geographical isolation, it is likely Australia's economic dependency on oil is greater than any other country in the world.

This fact is only more pressing given the increased geopolitical tensions emerging in the Asia-Pacific in recent years. The COVID-19 pandemic has shown how overly reliant Australia is on just in time supply chains and made clear the case for a stronger sovereign capability and manufacturing policy. Liquid fuel security must be at the centre of this.

In short, Australia like many other nations needs refined oil products not only to sustain its economy, but to sustain any acceptable living standard sustained by first world countries in the twenty first century.

Sensibly reducing the carbon profile of transport emissions – which accounts for approximately 17 per cent of total emissions in Australia – is an important step for Australia in pursuit of achieving net-zero emissions by 2050.¹⁵

However, none of these policies should come at the expense of our national welfare and security.

For instance, whilst electric vehicles will be the predominate transport vehicle of the future, internal combustion engines are likely to continue to be a material portion of

¹⁵ <https://www.climatecouncil.org.au/wp-content/uploads/2017/09/FactSheet-Transport.pdf>

Australia's car fleet for at least 20 years. Goals to increase EV uptake are centred around the purchase of new cars, and not the existing fleet of cars. There are just over 1 million new car purchases in Australia each year, and the total fleet is approximately 19.5 million. The percentage of new cars to the existing fleet has also been declining year-on-year as cars have become more reliable and the second-hand car market more mature across Australia.¹⁶ For these reasons, Australia will be relying on refined petroleum product to power its car fleet for at least a few decades, and definitely not by any reliable statistic within the next 10 years. For at least the next 15-20 years, Australia's car fleet will overwhelmingly depend on petroleum products over electric vehicles.

The need to service Australia's fleet of trucks, emergency vehicles, tanks and every other military vehicle with refined petroleum oil makes the question of fuel security absolutely central. The pace of technological change in small sedan vehicles has not been mirrored for larger and heavier vehicles. Notwithstanding the slower pace in adoption for the new technology, the replacement of the entire defence force capability to be powered by electric vehicles would require a multi-decade expenditure program beyond any reasonable stretch of present recurrent defence expenditure.

Global aviation's dependency on refined crude oil cannot be salvaged by technological advancements in electric flying automobiles. Suffice to say, the likelihood of replacing the several trillion dollars' worth of commercial and carrier plane assets across the globe with a cleaner alternative that is not commercially viable within the next 20 years is dim. In fact it is next to impossible. This reality is also true of ship cargoes and more.

¹⁶ In the 12 Months to December 2019, new car sales dipped by almost 8 per cent. 2018, 2017, and 2017 figures also declined. www.carsguide.com.au.

To be clear, there is plenty of work Australia's federal and state governments should be pursuing to reduce Australia's carbon footprint. These initiatives and the public discourse surrounding them should not, however, occur at the expense of accounting for our national security and welfare prerogatives.

Unfortunately, that is exactly what has happened.

There remains an international guideline developed and managed by the International Energy Agency (IEA), of which Australia is a member, to ensure each country holds an oil stockpile of 90 days of the previous years' daily net imports.¹⁷

The IEA is an intergovernmental organisation that coordinates information and standards for ensuring reliable and affordable energy for its 30 member states, and it requires countries to maintain stockpiles to coordinate a collective response to major disruptions in global oil supplies and prevent economic consequences. Indeed, so that countries like Australia do not experience the catastrophic risk of not being able to deliver essential goods and services to its population.

Australia is the only IEA country that does not comply with the oil stock obligation, and has not been compliant since 2012. While estimates of stockpiles change depending on the assessment period, one figure of Australia's current stockpile sits at an estimated 58 days.¹⁸ A liquid fuel security review in 2019 stated that it had 18 days of 'consumption' cover when it comes to petrol, 22 days for diesel, and 23 days for jet fuel.¹⁹ More recently it was reported that Australia has only 28 days of crude oil.²⁰

¹⁷ <https://www.iea.org/areas-of-work/ensuring-energy-security/oil-security>

¹⁸ <https://thenewdaily.com.au/finance/finance-news/2019/09/17/fuel-supply-critical-australia-saudi/>

¹⁹ <https://www.afr.com/companies/energy/caltex-refinery-crucial-to-couche-tard-bid-approval-20191127-p53eku>

²⁰ <https://www.theguardian.com/australia-news/2020/mar/08/australia-to-sign-petrol-and-oil-deal-with-us-to-boost-emergency-stockpile>

In addition, refining in Australia has structurally declined over the last ten years as it has closed refineries. These include Port Stanvac in 2009, Clyde in 2012, Kurnell in 2014, and Bulwer in 2015.²¹

Australia consumes approximately 380,000 barrels of crude oil per year to service its transport fuel needs.²² Approximately half is imported from other countries, and the other half of Australia's transport fuels are refined from its four remaining domestic refineries.

- Caltex Refinery, Lytton, Queensland.
- BP Refinery, Kwinana, Western Australia.
- Mobil Refinery, Altona, Victoria.
- Geelong Refinery, Viva Energy, Victoria.

These refineries are integral to the domestic supply of all of our sectors and economy, retaining a diverse distribution to all aspects of fuel use (see Table 1 below).

²¹ <https://rogermontgomery.com/why-our-oil-refineries-are-shutting-down/>

²² <https://www.ceicdata.com/en/indicator/australia/oil-consumption>

Table 1: the proportion of refined product by Australian refineries²³

Refined oil product	Local refining
Petrol	45%
Diesel	35%
Jet Fuel	13%
Fuel Oil	2%
LPG	3%
Other Products and Chemical Feedstock	2%

The domestic refining industry's structural decline in Australia limits its ability to further service its existing IEA obligations.

For instance, the IEA does not specify whether oil stocks should be held in the form of crude or refined products. Indeed, it states that countries with a large refining industry provide greater flexibility in times of crisis.²⁴

There are several reasons sometimes perpetuated in public discourse to argue why Australia should not meet these obligations blindly.

One is the purported arbitrary nature of the 90-day determination.

Another concern relates to the accounting methodology of stockpiles, which according to IEA standards do not allow for members to count tankers transporting fuel at sea (known as 'stock on water') towards their oil stock levels. It is estimated that accounting for these stockpiles would increase reserves to 86 days throughout 2019, which is closer to its 90-day requirement.²⁵

²³ <https://www.aip.com.au/sites/default/files/download-files/2017-09/At%20a%20Glance%20Australian%20Oil%20Refineries.pdf>

²⁴ <https://www.iea.org/areas-of-work/ensuring-energy-security/oil-security>

²⁵ <http://www.lowyinterpreter.org/the-interpretor/australia-has-iea-problem-not-fuel-security-problem>

These risks are perhaps best framed with two questions:

1. What could be the length of a crisis-induced self-isolation scenario for Australia based on current international security threats and economic possibilities?
2. Could a crisis render 'stock on water' immaterial?

The 2020 COVID-19 crisis and its implications of biosecurity measures stalling import and export restrictions is a timely case in point. The uncertainty and disruption to global trade flows, as well as forecast crisis periods of several months, is enough to render the arbitrary argument void.²⁶ Indeed, biosecurity threats and supposed measures remain irrespective of whether stock is on water or not. It is worth reflecting that Australia was perhaps lucky that Singapore – as a primary source of refined fuels – has been lightly touched by the crisis.

Whilst in scale it is proving uniquely disastrous, the current crisis is not unprecedented. Other health epidemics that have manifested themselves across the developed world in the twenty first century include SARS in 2002-04, Swine flu in 2009, and Ebola in 2013-16, and many others in between. Indeed, the deaths associated with those crises are not dissimilar to the current statistics and trend for the Coronavirus, albeit it is still early on. Needless to say, the implication on global trade was significant.

Other crises include national security crises, which remain a significant threat and which were the hallmark of much of the twentieth century, and economic trade wars, of which the world experienced only very recently. The strategic tensions

²⁶ <https://www.foodnavigator-asia.com/Article/2020/02/11/Totally-catastrophic-China-s-coronavirus-crisis-sees-global-F-B-authorities-react-with-varying-degrees-of-caution>

between the US and China and the increased militarisation of the South China Sea by the PRC are case in point of the threats emerging.

Federal Energy Minister Angus Taylor has recently signed a deal for Australia to secure access to the US Strategic Petroleum Reserve.²⁷ This deal in isolation is a positive step toward securing greater avenues to servicing our oil requirements. However, it should not substitute our efforts to achieve domestic stockpiles that comply with the IEA 90-day obligation. Emergency supplies from the US would take 40 days to arrive in Australia, and could not be protected from biosecurity constraints and import-export restrictions in the event of a global health crisis.²⁸ Indeed, these fuels might be stranded due to the nature of the crisis – such as a military event in the South China Sea – that has induced the Australian fuel shortage.

It is important the Australian Government develop a policy program that expands our naval or infrastructure capacity to retain enough domestic reserves to comply with IEA guidelines. The collapse in the global price for oil places an additional pressure on Australia's domestic refining fleet and thus it is more critical than ever for a coordinated policy response. Low prices – as noted by Minister Taylor – may also present opportunities for Australia to secure its domestic needs, though it is critical that any storage capacity is retained in Australia's sovereign territory.

Recommendation: The Australian Government develop a national fuel security program that increases Australia's domestic refinery capacity as well as its capacity to store sufficient quantities of crude oil. This strategy should ensure Australia is

²⁷ <https://www.theguardian.com/australia-news/2020/mar/08/australia-to-sign-petrol-and-oil-deal-with-us-to-boost-emergency-stockpile>

²⁸ <https://www.theguardian.com/australia-news/2020/mar/08/australia-to-sign-petrol-and-oil-deal-with-us-to-boost-emergency-stockpile>

able to withstand economic and national security threats to its fuel supply and guarantee that Australia – at a minimum – fulfils its IEA obligations.

3.1. Caltex

Caltex Australia is an ASX-listed petroleum refining and retailing company. It owns and operates the Lytton Oil Refinery in Brisbane, which is one of four lasting oil refineries in Australia. Caltex also own and/or operate more than 1,900 service stations across Australia out of a total of 6400.²⁹ This makes Caltex a significant market proponent within the Australian oil refining and petroleum retailing markets.

Presently Alimentation Couche-Tard (hereafter “Couche-Tard”), a French-Canadian multi-national retailing business, is part-taking in negotiations to acquire Caltex.³⁰ These negotiations have been going on for several months and have recently been prolonged on account of the dramatic drop in the Brent Crude Oil price.³¹

While the deal has fallen through for now, Calex has been subject to ongoing acquisition speculation for some time. It is likely that this will return when markets normalise.

Any deal would have to be approved by the Foreign Investment Review Board (FIRB) and the Australian Competition & Consumer Commission (ACCC). Naturally, there will be many factors considered by FIRB and the ACCC when coming to a determination on the potential acquisition of Caltex.

²⁹ https://content.knightfrank.com/resources/knightfrank.com.au/commercial/service-stations/kf_nsw-service-stations-insight-feb17.pdf

³⁰ <https://www.afr.com/companies/energy/couche-tard-still-keen-on-caltex-but-at-lower-price-20200319-p54bml>

³¹ <https://edition.cnn.com/2020/03/18/business/crude-oil-prices-coronavirus/index.html>

One of those considerations will be the implications it may have on local competition. Regulators have proven actively concerned about fuel market competition in Australia, where only recently the ACCC rejected BP's proposed acquisition of Woolworths service stations.³²

In this instance, it is likely the ACCC would be unable to rule against a prospective acquisition on competition grounds (due to Couche-Tard's limited market presence in Australia).

However, there remains significant implications for the domestic market in the instance the vertically-integrated Caltex business is acquired, and business decisions by Couche-Tard result in the closure of the Lytton Refinery. Independent analysts have suggested that Couche-Tard will have no interest in maintaining the Lytton Refinery given it is primarily a retail business.³³ Some analysts believe Couche-Tard will want to lock in a fuel supply deal with the refinery, but not own it.

The closure of the Lytton Refinery will have a devastating effect on competition in the Australian petroleum. A heavier reliance on imported oil will reduce Australia's ability to service the Australian economy with its own capabilities – making Australia a price taker in much of its east coast market – and also have a devastating impact on the hundreds of workers at Lytton.

Any risk of the Lytton Refinery closing would be devastating for the Australian East Coast economy and further exacerbate the Government's incapacity to meet stockpile obligations.

³² <https://www.accc.gov.au/media-release/accc-to-oppose-bps-acquisition-of-woolworths-service-stations>

³³ <https://www.afr.com/companies/energy/caltex-refinery-crucial-to-couche-tard-bid-approval-20191127-p53eku>

Despite substantive speculation that a Couche-Tard acquisition is unlikely to retain the refinery business, the ACCC is unlikely to be able to rule against the potential acquisition in the absence of Couche-Tard expressly making that a condition of the acquisition. In short, without Couche-Tard being clear about its intentions – in which case it is unlikely to have to be or willing to be – the ACCC will be unable to consider that risk in its assessment of the acquisition. The ACCC have to make an assessment based on face-value.

If the acquirer decided to sell the refinery rather than close it, the ACCC would then be able to make a ruling on the potential of a new purchaser. However this eventuality does not and cannot account for the risk of Couch-Tarde *closing* the refinery.

Another material consideration must be to assess whether the eventuality of Couche-Tard selling the refinery reduces the financial viability of the refinery (due to it potentially no longer being part of a vertically-integrated petroleum business), which also reduces its life.

For instance, in the event of an acquisition, and a hypothetical sale of the refinery by acquirer Couche-Tard, the only government regulation protecting against a bad public policy outcome is that the ACCC will likely rule against an existing market participant wishing to acquire the Lytton refinery. Perversely then there remains a significant risk that an independent entity that owns and operates the Lytton refinery on its own would be less financially viable and/or able to withstand fluctuations in the oil price. It is thus likely the new operator would be capital constrained, sweat the existing asset for the remainder of its useful life and then close or convert it into an import facility. Given the unacceptable risk presented to Australia's security, this is clearly an unacceptable outcome.

Fortunately, FIRB's remit to consider competition implications in the national interest and impose conditions is greater. The Foreign Acquisitions and Takeovers Act 1975 creates a national interest framework that allows for competition considerations.³⁴ In addition, FIRB can impose conditions on account of sale, however enforcement of those conditions are a critical component of protecting that national interest.³⁵

The Australian Government's means to mitigate the risk of reducing the refinery's life will reduce dramatically in the event of approving the sale. However, it remains in the national interest to ensure the Lytton refinery continues to operate into the foreseeable future to service both the economy but also the national security prerogatives of Australia.

If the commercial negotiations between Caltex and Touche-Card result in an accepted bid offer the Australian Government, through FIRB, will have a unique opportunity to protect the national interest. It is unlikely that the Australian Government could subject Couche-Tard to a condition to continue to operate the Lytton Refinery, given it is largely a commercial decision. As such, in the event of an assessment, FIRB should expressly reject a potential acquisition of Couche-Tard.

Recommendation: the Federal Government and the Treasurer reject any prospective acquisition of Caltex by Alimentation Couch-Tard or a any other foreign buyer.

³⁴ <https://firb.gov.au/sites/firb.gov.au/files/inline-files/2020-foreign-investment-policy.pdf>

³⁵ <https://www.smh.com.au/business/companies/a-black-box-that-needs-an-overhaul-how-has-firb-escaped-scrutiny-20200306-p547h3.html>