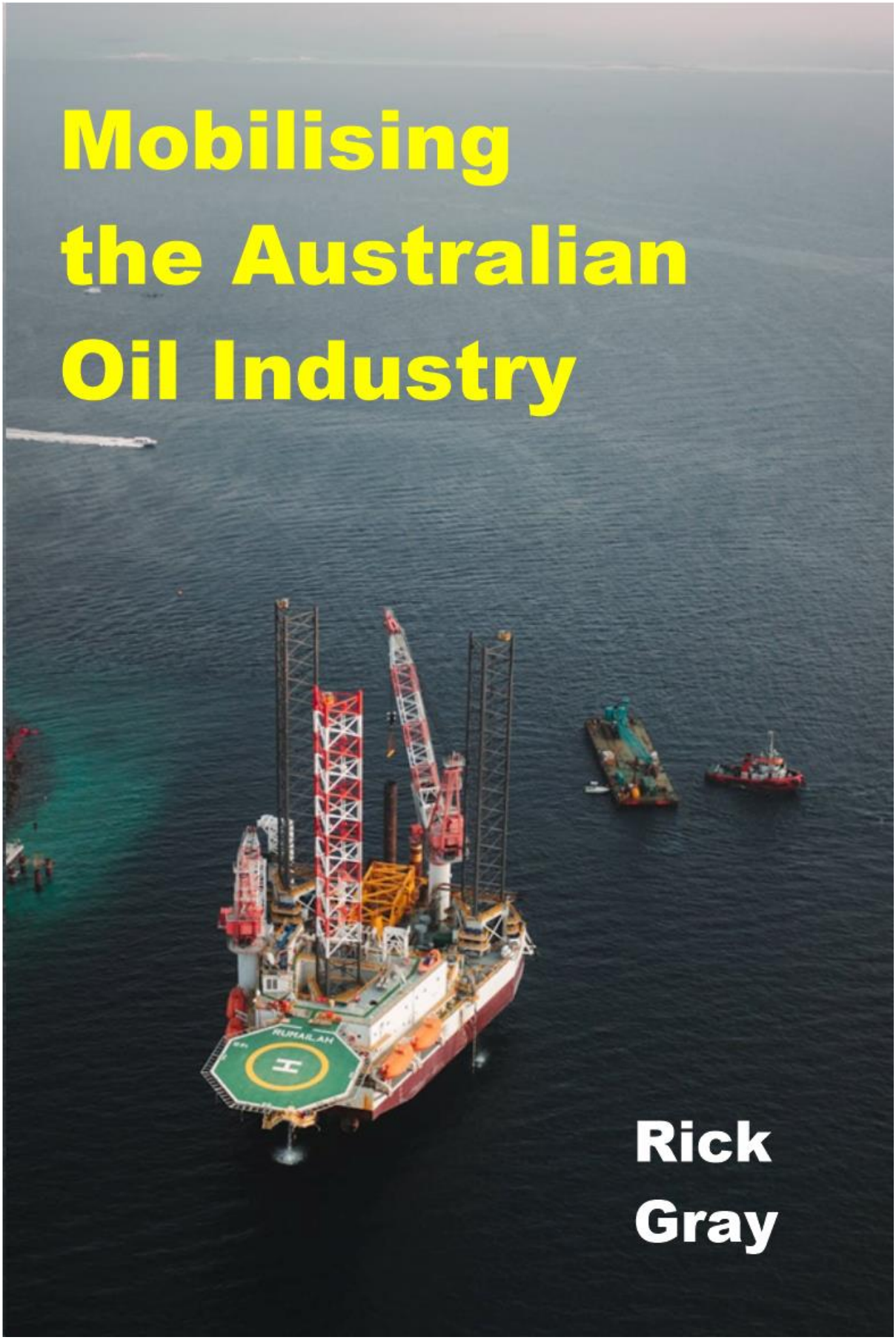

Mobilising
the Australian
Oil Industry
Rick
Gray

Contents

Mobilising the Australian Oil Industry

Prologue

History is repeating itself!

On 28 February 2026, the United States (US) and Israel launched coordinated air strikes on Iran as a further escalation of the latest ongoing Middle Eastern conflict. The photo above shows a tanker burning in the Gulf of Oman. (BBC News, 2026). As a result, oil shipments through the Straits of Hormuz have been halted due to direct attacks on tankers, insurance companies refusing to cover shipping in the area, and tanker owners refusing to sail. This has caused an immediate rise in petrol prices and looming diesel shortages in Australia, along with growing concerns that shortages will worsen.

Australia should not be surprised – we have been here many times before - with 8 major global oil crises since 1956. History is repeating itself!

History identifies 8 major global oil crises since 1956 (Manuel, 2026), with the shortages experienced during the 2020 COVID pandemic being the most memorable for Australians. We have been in this situation before, and each time, pious politicians have vowed to ensure long-term fuel security. Had this occurred, today's fuel crisis in Australia could have been better contained. At present, the immediate future is very uncertain, and we can only hope for a speedy resolution to the conflict and a return to a steady supply.

Some statistics are revealing

.

- The Strait of Hormuz is the world's largest oil chokepoint, with ***about 20% of global oil supply*** passing through it.

- Australia doesn't import much ***crude oil*** directly from the Middle East as most of our crude comes from Malaysia, Vietnam and North America.

- Australia does, however, import ***about 80% of its refined fuels*** from Asian refineries, especially in Singapore, South Korea, Japan, and China, and these refineries rely heavily on Middle Eastern crude, which reaches them via the Strait of Hormuz.

- Australia is therefore ***indirectly and significantly affected*** by the current military efforts by Iran to close the Straits of Hormuz.

- On average, Australia consumes about ***1 million barrels*** of transport fuels daily.

- The most recent publicly available figures (13 March 2026) provided by the Department of Climate Change, Energy, Environment and Water (DCCEEW), under the Minimum Stockholding Obligation (MSO) for liquid fuels are:

  Petrol 36 days – Diesel 34 days - Jet fuel 32 days.

- Overall, there is roughly ***one month*** of coverage across all major transport fuels.

These statistics will fluctuate each month, but at best, Australia remains dangerously vulnerable to supply chain disruptions.

What is wrong with this picture?

Putting it Crudely.

Crude oil is the lifeblood of the world and the Australian economy. It is absolutely essential for powering industry, driving transportation, and enabling the standard of living we take for granted. It should therefore be a cause for concern that Australia is approximately 90% dependent on foreign oil imports, with much of this dependence either direct or indirect and originating in the Middle East.

Until the early 2000s, Australia had 8 oil refineries; today, only 2 remain, both of which need Federal subsidies of at least $250 million each year to stay open.

Given these circumstances, it would be reasonable to expect the Australian Government to take urgent steps to prepare Australia for a potential disaster if oil supplies were stopped or severely reduced for more than two months.

Perversely, despite the recent COVID pandemic, ongoing major wars in Ukraine and the Middle East and a belligerent People's Republic of China, Australia remains complacent about our oil supply vulnerability. This precarious situation has persisted so long that the nation now accepts it as normal and is in denial that this fragile state could ever change.

The Australian Government conducted a comprehensive ***Liquid Fuel Supply Review*** (CoA, 2020). and released its Final Report in October 2020. The report concluded that although the Australian market has sufficient fuel supplies and operates efficiently, there was less confidence in the current infrastructure and management approach's ability to deliver a reliable supply amid some of the threats facing the oil market. While not exactly a “business as usual” response, there was no attempt to instil a sense of urgency into the national response.

Contrast this fatalistic acceptance with the national response to the threat of catastrophic anthropogenic climate change and the millennium drought.

Regarding climate change, Australia has embarked on a crusade to phase out fossil fuels and transition to renewable energy, all based on computer models that predict events in the distant future, giving us plenty of time to adapt if needed.

During the millennium drought, State Governments responded by establishing an emergency program to build desalination plants to convert seawater into fresh water. The threat was, however, both medium-term and part of Australia's natural climate cycle. The nation has faced similar situations many times before.

The national response to possible catastrophic manmade climate change and to actual severe drought clearly demonstrates that Australia is capable of mobilising resources on a national scale when the perceived need arises and there is the political will to do so.

Today, Australia faces two alarming facts:

- we have about 1 month of reserves across all major transport fuels, which could stretch to no more than a 2-month supply with rationing; and
- the obvious fragility of the oil supply chain.

This combination represents a clear and immediate economic and strategic threat to the nation.

The national response must therefore be driven with the same sense of urgency and resolute manner as the Australian response to climate change and drought.

Australia stands at a historic crossroads regarding its sovereign oil industry. We face the stark reality that we are now utterly dependent on foreign interests and that, statistically, the oil supply chain will inevitably be disrupted at some stage.

We've been here before - we're here again today - and it'll happen again in the future.

The time has now come for the nation to answer a simple question. Does Australia want or need a sustainable, reliable and resilient oil industry? If the answer is NO - we are almost there, and no further action is needed. If the answer is YES - then now is the time for decisive action**.**

This paper proposes a way ahead to support the YES decision.

Aims

The aims of this paper are as follows.

- **Highlight** Australia's current economic and strategic vulnerability due to almost complete reliance on foreign oil imports.
- **Identify** that the oil industry and the economic hub associated with it are essential for the development of Australia's industrial base and economic complexity.
- **Raise** the oil industry mobilisation flag.
- **Outline** a practical approach to revive and promote a vibrant future for the Australian oil industry.

Structure

Australia today is utterly reliant on imported supplies of crude oil and refined products. As current events regarding oil supplies highlight, Australia, as a middle power and economy, is driven by World events. An examination of the oil industry, therefore, cannot be done in isolation and must be done within the context of the strategic influences that shape the nation.

Part 1 - of this paper, therefore, looks at the bigger picture driving the Australian economy, including:

- the military outlook;
- the economic outlook;
- the political outlook; and
- the concept of mobilisation.

Part 2 - examines the Australian oil industry today.

Part 3 - builds the framework for the future.

Part 1 - The Big Picture

The Military Outlook

The strategic outlook for Australia today is more uncertain than it has been since the end of World War 2 (WW2). The emergence of a belligerent China, both militarily and economically, has alienated its neighbours and most Western nations. China has often declared its intention to reunify the Republic of China (Taiwan) with China by military force if necessary.

Essentially, China sees itself on a historic mission to avenge past injustices, reassert its dominance over Asia, and establish itself as a global superpower. If Xi Jinping's rhetoric is to be believed, the timeline for achieving these goals is during his presidency, possibly over the next 10 years. Should China attack Taiwan, the US and its allies, including Australia, will be drawn into the conflict.

The dilemma for Australia is that today, China is Australia's biggest export customer, its main source of imports, and its largest strategic threat. This stark reality has all the ingredients of a perfect storm - what could possibly go wrong?

Furthermore, the current Russia-Ukraine "Special Operation" is among the most violent conventional wars since WW2 and serves as a stark reminder of how peace can suddenly turn into war at short notice. The more recent Palestine-Israel-Iran-US conflict also graphically highlights the speed at which war can occur and the devastating consequences. Both of these wars are ongoing and are now directly affecting Australia.

In February/March 2025, a Chinese naval flotilla circumnavigated Australia and conducted live firing exercises whilst underway. The strategic intention of this event was to telegraph to Australia in no uncertain terms, Chinese naval capabilities. They achieved their aim.

However, they have done Australia an unintended favour. This gunboat diplomacy has dramatically demonstrated Australia's vulnerability to Chinese naval incursions should they so desire, and Australia's impotence to resist them. Perhaps this will be the trigger event that shocks Australia out of its military complacency.

The one positive is the election of US President Trump. His muscular leadership style, determination to end the decline of the US military and his resolve to end the wars in Ukraine and the Middle East may be a compelling factor in deterring China from its expansionist ambitions. Time will tell.

The Economic Outlook

Australia has traditionally lived off the sheep's back and has additionally been blessed with enormous reserves of iron ore, coal, bauxite, natural gas, uranium, rare earths and other minerals. Since the 1950s, mining and primary products have increasingly provided a bonanza of export income, making Australia a wealthy country.

While this has been a good fortune, it has also been a poisoned chalice, as it has made the nation complacent and in denial that it could ever end. The mineral boom has also hidden the deterioration of the country's industrial base to the point where today Australia must import nearly all industrial and consumer products, including petroleum.

Beyond mining and agriculture, Australia has become a nation of importers and service industries, with little remaining manufacturing capacity. This has led to the loss of thousands of jobs and related economic benefits. Other global trends include the Just-in-Time inventory approach and online consumer purchasing. As a result, there are minimal local stock holdings, and long lead times for imported products are now standard.

Manufacturing peaked as a share of the Australian economy in the early 1960s, when the sector grew to 30 per cent of the economy and of employment. In 2026, the figure is about 5%.

De-industrialising Australia

Since around 2000, the oil industry has steadily declined, along with Australia's aircraft, vehicles, electronics, telecommunications, electricity, steel, defence, and most other manufacturing sectors. The oil industry's downturn highlights a broader issue facing the country: Australia's slow de-industrialisation.

This lack of diversity is now having a profound effect on our economic resilience, job markets and training opportunities and has significant defence implications in times of conflict. The decline of the oil industry, therefore, cannot be viewed in isolation; its revival must be assessed in the context of Australia's strategic outlook, the wider economy, and our vulnerability to import and export disruptions. The oil industry must therefore be part of a long-term vision of national self-reliance, sustainability and survival, in an uncertain world.

This paper, therefore, not only proposes a way forward for revitalising the Australian petroleum industry but also offers a template that could be used in other sectors of Australia's industrial base.

It is also apolitical and does not aim to promote any political ideology; instead, it takes a long-term perspective focused on the nation's best interests. In doing so, it also unapologetically challenges Australian political sacred cows and vested interests.

The tank is nearly empty as far as the Australian petroleum industry is concerned. The one positive however, is that the nation can now start with a blank sheet of paper, upon which to chart the way ahead.

Economic Complexity

Economic Complexity is a measure of the number of capabilities and know-how that go into the production of any given product. The more complex the product (aircraft vs shoes), the more complex is the infrastructure, supply chain, skill base and workforce.

The Harvard Growth Laboratory's (Harvard Lab, 2024) ***Atlas of Economic Complexity*** data tool generates an ***Economic Complexity Index*** that **r**anks 145 countries by economic complexity. According to the latest profile, Australia is on a downward slide, with its ranking falling from 63 in 2000 to 74 in 2026, behind economic powerhouses such as Moldova, Kyrgyzstan, and Uruguay!

The Index highlights that Australia is a high-income country, ranking as the 9th wealthiest economy per capita out of 145 surveyed, with a per capita GDP of around A$65K. While exports have increased in value by nearly 10% annually over the past five years, the main exports are low and moderate-complexity products. Australia is considerably less complex than expected, given its income level.

As a result, Australia's economy is expected to grow at a slow pace. The Growth Lab's 2034 Growth Projections predict an annual growth rate of 1.24% for Australia over the next decade, placing it in the lower half of countries worldwide. This lags behind our usual peer nations – Japan, Germany, the UK, and the US. These data will change over time; however, a troubling picture of both a lack of diversity and economic vulnerability is already clear.

Productivity Sea Anchors

Much has been written about Australia's declining productivity performance, especially recently, as the cost of living starts to bite, not only for the average wage earner but also for all sectors of the economy. Over the years, many strong arguments have suggested that Australia couldn't compete in manufacturing because labour and overhead costs were too high; therefore, there has been no unified effort to revive the manufacturing industry.

In summary, here is an overview of some of the issues.

- **Electricity**: Australian electricity has gone from some of the cheapest in the World to some of the dearest, driven by the climate change scare campaign and ideology. The solution is a return to coal supported by gas and an eventual transition to nuclear.

- **Gas:** Australia sits on a vast supply of gas; however, we have managed to make gas prohibitively expensive and scarce, particularly in Victoria, once again driven by climate change and ideology rather than economics. The solution is to ensure that Australian industry and the public have access to affordable gas through a national pipeline network.

- **Water:** Water is expensive, as we have opted for desalination rather than dams where possible.

- **Over Government:** Australia is burdened with three levels of government- Federal, State and Territory and Local. There are 227 Federal politicians, 666 State and Territory politicians, and approximately 5670 Local Government councillors. Australia can no longer afford the cost, waste, duplication, and political machinations of three levels of government. With modern communication systems, a single level of government that combines the functions of the Federal, State, and Local governments can handle the job today.

- **Bureaucracy:** One of the few growth industries in Australia over the last 50 years has been bureaucracy, with its associated red, green and black tape, which have collectively acted as a sea anchor on development. The handmaiden of over government is bureaucracy. The enlightened purpose of bureaucracy is to enable the most efficient use of people and resources through a structured administrative framework. Although a degree of bureaucracy is essential for society to function, bureaucracy has become an end in itself, with a propensity for perpetual growth and excessive regulation.

- Across federal, state, and local governments, Australia now has an army of bureaucrats—including the ADF - totalling about 2.5 million - almost 1 in 6 of the total workforce. The solution is to reduce the size of the Public Service through natural attrition. It must also reverse the tide of red, black, and green tape by implementing a two-for-one rule that eliminates two regulations for every new administrative regulation introduced.

- **Unions:** One factor in the high cost of Australian labour is the power and militancy of unions. Their demands have effectively priced many Australian industries out of existence, with shipping and the oil industry being classic examples. Union power must be curtailed, and they must become part of the solution rather than part of the problem. This, of course, is a dilemma for the unions and the Labor Party, however, the issue must be confronted and accepted if there is to be any chance of resurrecting the Australian oil industry and, by extension, the Australian industrial base.

The lawn bowls fraternity sums up the game as ***"Line, Length and Luck",*** suggesting that to win, you need to master the basics and then rely on a bit of luck. In truth, this analogy fits well with a nation's fortunes. The book ***"The Lucky Country"*** by Donald Horne (Horne, 2008) has become a nickname for Australia and is generally used in a positive light. However, Horne intended to show that Australia's rise to power and wealth was mainly due to luck rather than the strength of its political or economic systems, which Horne believed were "second-rate".

What went wrong, you may well ask, and what is the answer? As one federal politician once quipped: "We all know what is required to fix the economy, however if we did that, we would never get elected!" Therein lies the dilemma and the moral challenge for Australian politicians.

Australia has two options:

Option 1: Dramatic productivity improvement.

Option 2: The default option – is to wait until the economic wheels fall off - and hope that it does not occur on your watch! Unfortunately, this could also be described as the national suicide option, and Australia appears to be sleepwalking in this direction.

Improved productivity is fundamental to the resurgence of the Australian economy. We are now faced with a simple choice:

- ***Wait for the economic wheels to fall off in which case Australia will become the Banana Republic that Paul Keating warned of many years ago. We are currently on this trajectory.***
- ***Walk away from economic suicide and institute the necessary but painful changes that can Make Australia Great Again.***

The Political Outlook

The Australian political landscape is now dominated by hard-left socialist Labour and Green ideologies and their activist agendas. This has occurred for several reasons.

- The Nation has not experienced an existential event since WW2, and the current generation has no comprehension that the fragile military and economic status quo can change literally overnight.
- There is no coherent conservative opposition. The LNP coalition is equally divided between left and right sentiments and has lost its conservative values. Consequently, they are regarded as a vanilla reflection of the Labor Party and are currently unelectable.
- The majority of Labor and Green politicians have little practical commercial and industrial experience. They, almost without exception, emerge from a leftist university system, then a work life in a trade union or Government. They consequently have no appreciation of business realities and view the economy as a magic pudding.
- There remains a class mentality in federal, state, and local governments that private enterprise, as the wealth-generating part of the economy, is controlled by gouging capitalists intent on exploiting the working class. This has fostered the belief that private enterprise, industry, and commerce have endless capacity to absorb ever-increasing taxes, charges, and bureaucratic imposts without suffering harm.

The overall impact of politically opportunistic agendas, such as the recent Voice Referendum, and a lack of understanding of real-world economics, exemplified by the

renewable energy agenda, is rising national and state debt, steep increases in the cost of living, declining productivity, and higher taxes in various forms.

It seems that the only definite outcome from the recent Labor "productivity conference" will be a road user charge for electric vehicles, which will inevitably be passed onto all other vehicles and become another pseudo tax. The new synonym for "productivity" is "tax".

Mobilisation

Mobilisation is a total national commitment and is associated with a potentially existential strategic crisis, such as war, a pandemic, natural disasters, or economic shocks. It is not narrowly focused on the military's defence needs, but on the broader economic and industrial requirements necessary to sustain the nation for as long as necessary.

It reallocates national resources with this purpose in mind, away from social and welfare agendas. By definition, it will be accompanied by unaccustomed austerity and economic belt-tightening. As such, it can only be implemented with the willing acceptance and support of the people; thus, the psychological conditioning of citizens to accept the necessary economic changes is a critical element. This, in turn, can only be achieved by visionary political leadership and strong bipartisan agreement, without which nothing can be achieved.

The concept of mobilisation is foreign to Australia today as the nation has not been confronted with an existential threat since WW2. However, such threats both military and economic, are now on the radar – the storm clouds are now clearly evident on the horizon.

In 1982, as a newly promoted Major, I was posted to the Army headquarters in Canberra, and I took the opportunity to follow up on one of my military interests – that of mobilisation of the nation for war. I eventually located the mobilisation office and, in due course, gained access, and there, before my eyes, lay the mobilisation plans for the nation.

It consisted of rows of filing cabinets and dusty stacks of mouldering military manuals, files and telephone books, going all the way back to WW2. There was only one part-time public servant tasked with maintaining this office, and his duties simply entailed placing any document vaguely related to mobilisation in the office. There was obviously very little interest in the matter.

I had unearthed the mobilisation mausoleum and entered the crypt containing its fossilised bones. Mobilisation was dead as far as the Australian Defence Force (ADF) and the Government of the day were concerned.

Mobilisation, as a concept, has been slowly resurrected in various guises over the years within the Government and the ADF. The problem today, of course, is that the Australian industrial base has been eroded to the point of non-existence. In this

context, we face the inconvenient truth that, more than most nations, Australia relies on imported fuels for survival.

Such a change can only be achieved through visionary political leadership and strong bipartisan agreement, without which nothing can be accomplished. The idea of mobilisation is foreign to Australia today, as the nation has not faced an existential threat since World War 2. However, such threats - both military and economic - are now on the radar; storm clouds are clearly visible on the horizon.

If ever there was a compelling case for mobilising national resources to address a problem of national importance, then the resurrection of the Australian oil industry is it.

Australia is now faced with the inconvenient fact that the nation:

- relies upon a fragile foreign-owned supply chain for most of our petroleum products;
- has no more than 2 months' supply of transportation fuel in reserve; and
- has only 2 remaining oil refineries that require significant subsidies to continue operating.

Australia is now at a crossroads in the future of its oil industry.

What is now required is no longer the mobilisation of existing resources, but the resurrection of a new industrial base from the ashes of the old. The oil industry must be a core component of this transition.

Part 2 - The Australian Oil Industry

The importance of liquid fuel

Liquid fuel is the backbone of the Australian economy. It underpins every aspect of our daily lives, from our groceries to our commute and emergency services. On average, each Australian uses nearly three times as much energy from liquid fuel as from electricity.

As a very large country, it relies on planes, trains, trucks, and cars, and the transport sector accounts for about 75% of total liquid fuel demand. Both mining and agriculture are over 90 per cent reliant on diesel, which partly drives the growth in demand for diesel.

Diesel also supplies emergency backup for many of our essential services, including water and sanitation, when other energy sources are unavailable. Remote areas of Australia depend on liquid fuel for power generation.

Crude oil and condensate are refined into petrochemicals and used in manufacturing to produce everyday household items like plastics, make-up, and superglue.

The previous global commitments to renewable energy have now plateaued and, in many countries, are now in decline or even over. The global conventional refining industry is set for substantial growth between 2025 and 2030, driven by rising energy demands in emerging markets and strategic investments in refining infrastructure. Major players in the global petrochemical industry, such as BP, Shell, and Equinor, have all announced a significant shift in strategy, reducing investments in renewable energy and refocusing on oil and gas production.

Australia will follow suit when the rising cost of living prompts a serious review of the renewable energy mantra.

Fuel Security

Notwithstanding the current oil crisis, many Australians have never experienced a major fuel shortage or disruption. As a nation, we have enjoyed over 50 years of relatively stable supply. We have become complacent and in denial about the possibility that this Goldilocks state could ever change.

Australia is an energy superpower in coal, gas, and uranium, but not in oil. We import roughly 60% of our refined products and 80% of the crude oil feedstock needed for our domestic refineries. Australia contributes only 0.4% to global oil production and holds just 0.2% of the world's proven oil reserves. Our demand accounts for about 1% of global consumption. The oil we have cannot satisfy our needs. Australia's oil production is now about 60% lower than at its peak in 2000. Forecasts suggest that, overall, Australia's domestic oil output will likely decline until at least 2030 unless new reserves are discovered.

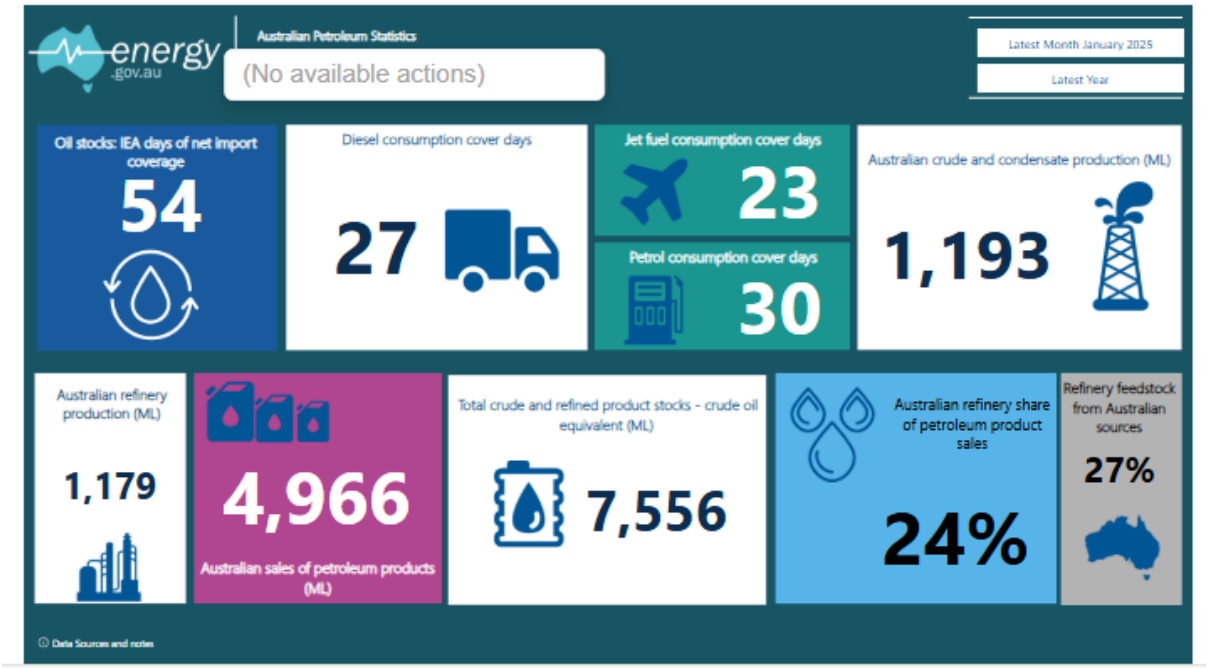
Australia's resources are a natural advantage and offer numerous opportunities for alternative fuels. Options to diversify our fuel sources include biofuels, electric

vehicles for the light passenger fleet, hydrogen fuel cells, or liquefied natural gas (LNG) for heavy vehicles and machinery. Development of this industry may also have broader economic effects for Australia, such as fostering a hydrogen export industry.

The Australian Government has previously adopted a policy of minimal interference in the oil industry; however, this is rapidly changing as our vulnerability to supply disruptions becomes more evident. Under the ***Petroleum and Other Fuels Reporting Act 2017***, the industry must now report its stock holdings monthly.

In comparison, Japan, a net importer, has industry-mandated minimum stockholdings and also holds additional government stocks. They also maintain high-level monitoring of the liquid fuel market, including analysis and forecasting.

An example of the reporting graphics issued by the ***Department of Climate Change, Energy, the Environment and Water, Australian Petroleum Statistics,*** is displayed below (DCCEEW, 2026).



This graphic has now been changed to reflect the strong interest in the actual weekly reserves and is updated weekly – see DCCEEW, Minimum stockholding obligation (MSO) for liquid fuels: statistics.

History

Kerosene was used extensively in the mid-nineteenth century and early twentieth century as a fuel for lighting homes and streets. With the advent of the motor car, crude oil came into demand as a fuel. By 1911, petrol surpassed kerosene in sales as the fuel for most vehicles.

Most petroleum consumed in Australia was imported, but between 1865 and 1952, several companies produced a small amount locally from oil shale.

Deposits of Coorongite, a resilient, rubber-like, organic-rich sediment found in the Coorong, were mistaken for oil seeps, leading to failed attempts to find oil in the area. Australia's first oil rig was built there in 1866.

Between the 1920s and 1950s, Shell and Vacuum Oil sold petrol through single-brand service stations, while Golden Fleece, Independent Oil Industry, and Commonwealth Oil Refineries Ltd operated through multiple-brand stations. In 1936, Sir William Gaston Walkley founded the Australian Motorists Petrol Company Limited (later Ampol).

The first oil discovery in Australia was made near Lakes Entrance, Victoria, in 1924. The West Australian Petroleum Pty Ltd (WAPET) joint venture found Australia's first flowing oil in 1953 on the NW Cape and in 1964 discovered the first commercial natural gas field in WA.

Key Data

Geographic factors.

- Australia has limited identified conventional oil resources, which are being depleted at a faster rate than they are being replaced by new discoveries (DCCEEW, 2025).
- Australia's domestic crude oil production continues to rapidly decline, and without new discoveries or developments, production will continue to fall sharply, because remaining reserves are small and mature fields are depleting.
- About 80% of Australia's petroleum and gas reserves are offshore, with reserves concentrated in the Bonaparte, Browse, Carnarvon and Gippsland basins.[4]
- The grades of domestically produced crude oil are generally not suitable for local refineries compared to other internationally sourced oil.

Economic factors

- Liquid fuels make up about half of Australia's final energy use, and over 90% of our liquid fuel is imported (directly as refined products and indirectly as crude sent to refineries) (DCCEEW, 2024).
- Australia's fuel trade is handled by foreign vessels, with 750 to 1000 fuel tanker arrivals each year (about 2-3 deliveries daily), sourcing crude oil and refined products from various countries.
- There are no Australian tankers that carry crude oil or petroleum imports or exports.
- 80,000 Australians work either directly or indirectly in the petroleum industry.
- About 25% of Australia's refined production consumption is supplied by domestic refineries. The remaining 75% of petroleum is imported directly.
- Key sources of refined products for Australia include Singapore, Korea, India, Malaysia, Japan and Taiwan.
- Key sources of crude and other refinery feedstock for Australia include Malaysia, Brunei, Vietnam, the United States, Libya and New Zealand.

- Among the three main transport fuels (petrol, diesel, and jet fuel), diesel is the most vital. Australia relies more on diesel energy than on electricity.
- Many sectors of the economy depend on diesel, including transport (especially freight), mining, agriculture, essential services, and Defence. Recent shifts in electricity and gas markets have also emphasised diesel's vital role in electricity generation.

Government factors

- Australia's fuel security framework involves supporting sovereign refining capability, increasing storage capacity, and establishing a legislative framework that allows the Government to create domestic fuel reserves through an industry stockholding obligation.
- Australia has multiple liquid fuel import terminals situated throughout the country, an efficient fuel market, and diverse international supply chains for liquid fuels.
- While Australia's liquid fuel market has remained resilient in handling limited-scale events, it is susceptible to prolonged, high-impact incidents.
- Fuel prices in Australia follow international benchmarks and are among the lowest in the OECD, due to comparatively lower taxes on fuel.

Industry Associations

- Australian Institute of Petroleum
- Australian Energy Producers

Legislation

- Liquid Fuel Emergency Act 1984 (CoA, 1984). [RG1]
- The Fuel Security Act 2021 (CoA, 2021), which consists of;
  - A Fuel Security Services Payment (FSSP);
  - Minimum Stockholding Obligations (MSO); and
  - Capital contributions towards refinery upgrades to allow the production of ultra-low sulphur gasoline (LSG).

Industry

- Until the early 2000s, there were 8 oil refineries in Australia.
- In 2025, only 2 refineries remain, the Viva Energy Geelong Oil Refinery and the Ampol Lytton Oil Refinery in Brisbane.
- The retail downstream business is dominated by Ampol, which has possibly 1,900 stores across the country as of October 2025. This also includes 540 co-branded stations operated by EG Australia.
- Viva Energy operates retail outlets.
- BP operates around 1400 outlets.
- A number of other industry retailers operate a further 2000 outlets.

Oil Reserves

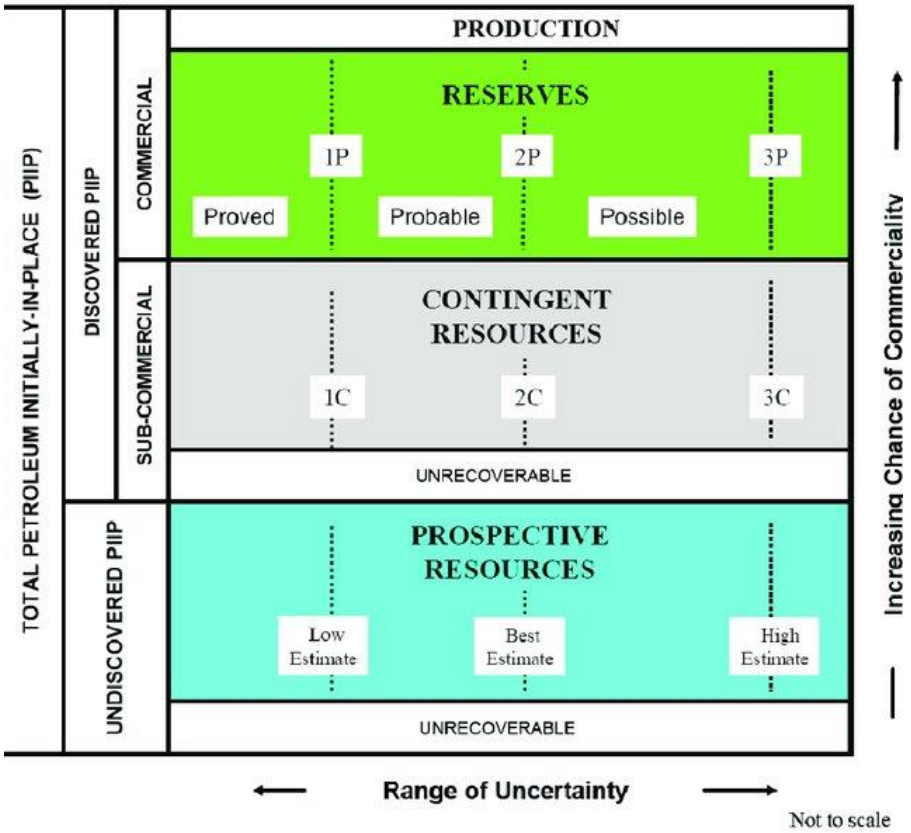
In this report, “oil” refers to any hydrocarbon liquid. This includes **conventional** crude oil, condensate, and liquefied petroleum gas (LPG), and unconventional resources, including shale oil, oil shales, coal oil, tight oil, and the natural gas liquid component of basin-centred gas resources.

Upstream activities generally encompass the exploration and appraisal, development, construction, and production of oil and gas. The sector in Australia is dominated mainly by international companies such as Apache, BHP, Chevron, ConocoPhillips, ExxonMobil, Santos, Shell, and Woodside. Santos and Woodside are Australian-based and listed on the Australian Securities Exchange (ASX).

Most onshore and offshore production licences are granted to multiple parties through joint ventures. For example, the ***North West Shelf Venture*** includes BHP, BP, Chevron, Shell, Woodside Petroleum, Mitsubishi, and Mitsui.

After upstream activities, petroleum products are sold to downstream customers such as oil refineries, gas retailers, and international markets.

A diagram of the oil resource classification from Geoscience Australia (GSA, 2025) is shown here.



Reserves are commercially recoverable amounts of petroleum that remain in known accumulations. Oil resources are reported as the best estimate of ***Reserves (2P)*** (Proved plus Probable) and the best estimate of ***Contingent resources (2C).***

Australia's 2P conventional oil reserves in 2023 (the latest figure available) are estimated at 1,231 million barrels (MMbbl) (GSA, 2025). This is a significant reduction from 2021, when Australia produced 1,490 MMbbl of crude oil, condensate and LPG.

Contingent 2C resources represent the best estimate of potentially recoverable petroleum quantities within known accumulations. These resources are not yet deemed to be commercially recoverable due to one or more technical, commercial, or other factors. Australia's 2C contingent conventional oil resources in 2025 are estimated at 1,741 MMbbl (GSA, 2025).

Australia possesses substantial untapped potential for unconventional oil resources, including shale oil, tight oil, oil shale, and basin-centred natural gas liquids. Oil shale is the only unconventional oil resource that has been exploited so far. At present, there is no commercial production of oil shale resources in Australia.

Identified oil resources

Identified resources are those that have been discovered, and their locations, quantity, and quality are known from measurements. Most of the remaining identified offshore oil resources are found in basins from either NW or SE Australia. Onshore, the Cooper–Eromanga basin in South Australia and Queensland contains the largest amount of identified remaining conventional oil resources. In 2025, around three-quarters of all oil production came from offshore fields in Western Australia.

Crude oil

Australia's domestic crude oil supply is limited. The best-case scenario is that crude oil resources (2P plus 2C) could last for 18 years. However, the remaining 2P reserves can only support 12 years of production at current rates (GSA, 2025).

Condensate

Australia still has substantial condensate resources. The optimistic estimate is that these resources (2P plus 2C) could last around 36 years (GSA, 2025).

LPG

Australia's LPG resources in 2025 are substantial. The best-case scenario is that LPG (2P plus 2C) would have a lifespan of at least 20 years.

Unconventional petroleum

Australia has significant potential for unconventional liquid petroleum resources hosted in oil shales, shale oil and tight oil accumulations.

- **Oil shale** requires mining and refining to produce oil. Oil shale exploration has a long history, with sporadic small-scale production dating back to the 19th century.
- **Shale oil** is liquid oil that can be extracted from shale using drilling and hydraulic fracturing.
- **Coal oil** is oil or condensate that is generated within coalbeds and then retained as a self-sourced reservoir system.

- **Tight oil** is hosted in low porosity and/or permeability reservoirs and also requires hydraulic stimulation for production.

Oil Refineries

Domestic oil production

Australia accounts for about 0.3 per cent of the world's oil production. We hold only 0.2 per cent of the proven global reserves, which are shrinking faster than new finds can replace them. At present, we extract roughly 250,000 fewer barrels per day than we did in 2010. The decline in production in Bass Strait has contributed to this reduction, and few new fields have been brought into production. Australian political parties have deliberately played a role in this decline.

If all our current crude and condensate production were processed in Australia, it would constitute just over 50% of Australia's total demand for refinery feedstock. Considering the refining process, this would account for roughly 25% of our total liquid fuel consumption.

Australia's production is mainly concentrated off the northern coast of WA, with 75% of domestically produced oil exported to mega-refineries in Asia. This is because of the proximity of Asian refineries and the fact that the type of oil we produce isn't well-suited to Australian refineries. In an emergency, the condensate produced in Australia could be processed by our refineries, but it's not commercially viable under normal market conditions.

Australia's domestic oil production is projected to continue declining until at least 2030 unless significant new discoveries are made.

Mega-refineries in Asia are generally more competitive than Australian refineries. Already, refineries in major Asian fuel hubs are better suited to process the type of oil Australia produces on the North West Shelf. Asian refineries also benefit from significantly lower labour costs than those in Australia.

This indicates that any large new refineries in Australia are unlikely to be cost-effective. If market conditions change, local oil firms might decide to shut down existing refineries, as it would be more commercially sensible.

Other countries, such as Australia, have taken various steps to enhance their fuel security. These include increasing stockpiles maintained by industry or government, improving oversight and monitoring of the liquid fuel market, and reducing reliance on liquid fuels by shifting to alternative transport energy sources.

Oil refining is essential for turning crude oil into useful fuels like petrol, diesel, jet fuel, and LPG. Nearly half of the crude oil processed in Australia is used for petrol. Although Australia produces some crude oil, most of it is imported to sustain the country's oil reserves.

In 2026, Australia's daily consumption of petroleum products, mainly petrol and diesel, is about 1 million bpd (MMbpd). The country's oil refinery capacity, however, is only around 250,000 bpd (250 Mbpd) at refineries such as Viva Energy and Ampol. This results in a shortfall of 750,000 bpd that must be covered by imports.

Australia's ability to process crude oil raises concerns. Many refineries have closed since 2000 due to increased competition from foreign mega-refineries, such as those in Singapore, and the COVID-19 pandemic, which drastically reduced consumption. At present, only two refineries are operational, and they depend heavily on government subsidies to stay open. Alarmingly, the operators of these refineries remain open to the possibility that local refining might not be viable in the future and may decide to import all fuels if that proves more cost-effective.

From 1 July 2023, the Government legislated the ***Minimum Stockholding Obligation*** (MSO, 2021). This required Australia's two remaining refineries and major importers of refined fuels to hold baseline stocks of petrol, diesel, and jet fuel sufficient for approximately 30 days. This was a prudent initiative; however, it starkly exposed one of the major issues with Australia's national liquid fuel supply chain: a lack of domestic bulk storage capacity.

According to the ***Australian Petroleum Statistics*** (DCCEEW, 2026), Australia's total stockholdings of oil and liquid fuels, including supplies at sea, in refineries, at terminals, and at service stations, are shown below.

- Diesel consumption for 30 days.
- Jet fuel consumption for 29 days.
- Petrol consumption for 37 days.

These figures will vary from month to month and could be stretched during emergencies; however, they paint an ominous picture of vulnerability to serious supply interruptions.

Since 2000, there have been numerous reviews of the oil industry, followed by reports and political promises. Despite all of this, the number of Australian refineries has steadily declined. Equally, the economic rationale for this decline has always been that Australian refineries could not compete economically against foreign refineries due to the relatively small domestic market and higher operating costs. Consequently, rational foreign interests have voted with their feet, and Federal Governments of all political persuasions have clearly proven impotent in arresting or reversing the trend.

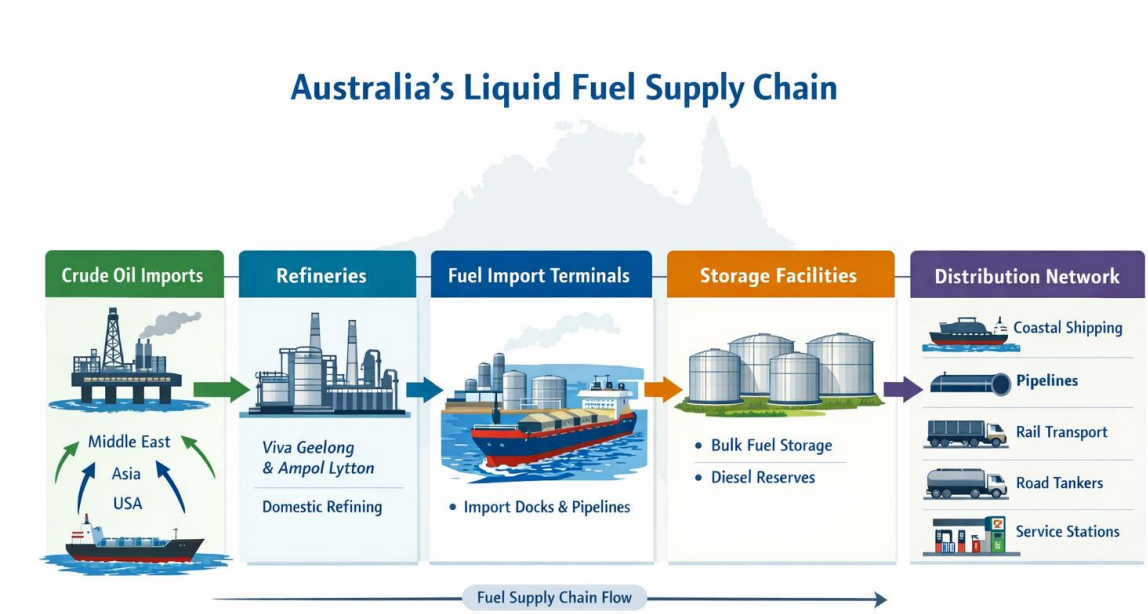
Throughout the long history of the oil industry, dating back to the 1850s, there has always been a sovereign oil sector capable of meeting national needs. Today, this vital national strategic asset is struggling to survive and faces the risk of vanishing entirely unless fundamental reforms are implemented to secure its future.

Storage capacity

Understanding storage capacity within the commercial supply chain offers insight into how much fuel can be stored and made available. This storage serves as a backup to handle disruptions. All storage in Australia is run by the industry, except for some managed by the Department of Defence. In 2026, Australia has no strategic government reserves.

Experience indicates that there is currently enough storage in the supply chain to handle daily demand fluctuations and predictable peaks, such as school holidays. However, storage is never entirely full because liquid fuel is a continuous flow system with constant throughput. When a new fuel tanker arrives at port and unloads, the terminals are nearly at capacity. Nonetheless, the drawdown from the terminal for distribution begins immediately. Looking at historical data, the industry is now holding less actual fuel product.

The following diagram depicts the Australian petroleum supply chain (DISER, 2020).



Case Study 1: Viva Energy – Geelong Refinery

The 65-year-old Geelong oil refinery was bought by Geneva-based Vitol from Shell Australia in August 2014 (Viva, 2026). The sale also included Shell's 870 retail sites, bulk fuels, bitumen, chemicals, and part of its lubricants businesses in Australia. Vitol runs these assets under the name Viva Energy in Australia. Today, it is one of only two operating refineries in Australia. The refinery supplies more than 50% of Victoria's and 10% of Australia's fuel, with a processing capacity of up to 120,000 bpd.

The refinery is one of the few in the Southern Hemisphere that produces AvGas, used by piston-engine aircraft. It also makes bitumen and solvents for mining, paint, and adhesives. It covers 235 hectares near Corio Bay in Geelong, Victoria, and employs about 700 people. It is the last major manufacturing plant in Geelong and plays a key role in the Victorian economy.

In 2020, Viva Energy Australia reported a cash loss of over $200 million and announced plans to convert the Geelong refinery into an import terminal. The reasons cited included tough global trading conditions, increased competition from Asian refinery imports, and significant demand destruction caused by the COVID-19 pandemic.

This would have left Australia with only one refinery, the AMPOL Lytton refinery in Brisbane. Australia, then, would be completely reliant on petroleum imports from international refineries for our fuel needs.

This critical situation was averted when Ampol and Viva Energy Australia reached an agreement to keep their respective oil refineries operating until at least 30 June 2027, with financial support from the Australian Federal Government. They also have a further three-year option for the companies to extend until 30 June 2030.

The Federal support package consisted of the ***Fuel Security Package (FSP)***, which consists of three main elements:

- a Fuel Security Services Payment (FSSP);
- the introduction of industry minimum stockholding obligations (MSO); and
- capital contributions towards refinery upgrades to allow the production of ultra-low sulphur gasoline (LSG), together with bringing forward the LSG specifications to the end of 2024.

Case Study 2: Ampol - Lytton Refinery - Brisbane

Photo: Ampol refinery Lytton aacs.org.au

Ampol Limited (Ampol) is an Australian public company listed on the ASX, based in Sydney, NSW (Ampol, 2026). It is the largest distributor and retailer of transport energy in Australia, operating more than 1,900 Ampol-branded service stations as of October 2022. Its only refinery is situated at Lytton, QLD.

The roots of Ampol date back to 1900. Over the past 120 years, it has experienced numerous changes in ownership and name, and today it stands proudly as Australia's leading name in the global petroleum industry.

The opening of the Lytton Refinery in 1965 marked a major milestone for both Ampol and Australia, as it gave the country its first fully owned processing facility.

Similar to Viva Energy, Ampol faced challenging trading conditions in 2020, which threatened the financial viability of both refineries. To avert this crisis, the Federal Government introduced the Fuel Security Package (FSP) to ensure both refineries remain operational until at least 2027, with the possibility of extending to 2030. However, Ampol maintains the flexibility to withdraw from the package and convert the refinery into an import terminal if refinery margins stay persistently low.

Alongside the FSSP and MSO benefits, the Federal Government offers a grant of up to $125 million to the Lytton oil refinery to undertake infrastructure upgrades for producing ultra-low sulphur petrol, in line with changes to fuel quality standards by the end of 2024. The total amount of Federal Government support to keep these two oil refineries operating up to 2030 is around $3 billion.

Proposal 1. AMPOL is to be fully involved in rebuilding the oil industry. The intent is to provide a sovereign basis for the long-term development of local exploration, refining, training, employment, and support.

Government Initiatives

Liquid Fuel Emergency Act 1984

This has been enacted to enable the Australian Government to manage a disruption event that could lead to a fuel shortage and a national crisis. In this situation, the Governor-General can declare a national liquid fuel emergency (LFE). By this stage, the market is likely to have failed. The LFE Act grants the Energy Minister powers to direct the management of industry-held stocks of both crude oil and refined products. It also provides control over Australian refineries and allows fuel to be directed to specific fuel users. The LFE Act is an extreme measure, and Australia has never had to invoke this legislative power.

Fuel Security Act 2021

The key legislation driving fuel security is the ***Fuel Security Act 2021*** (FSA, 2021).

The objects of this Act are to:

- improve security and confidence in Australia's fuel supplies;
- support sovereign capability to maintain fuel supplies;
- contribute to meeting Australia's obligations under the International Energy Agreement; and
- assist in preventing disruptions in fuel supplies.

These objects are to be achieved by:

- requiring the holding of minimum quantities of stocks of certain fuels in Australia **(Minimum Stockholding Obligation)**; and
- making payments for production of refined fuels to support the contribution made by refineries in Australia to the security of Australia's fuel supplies **(Fuel Security Services Payment (FSSP))**.

Minimum Stockholding Obligation

The national ***Minimum Stockholding Obligation*** (MSO, 2021) is a vital part of ensuring Australia's long-term fuel security. An MSO is commonly implemented in other developed economies, such as the UK and Japan. It aims to guarantee that the industry maintains minimum stock levels of transport fuels to strengthen our domestic fuel reserves.

The MSO commenced on 1 July 2023. As of 1 July 2024, major fuel importers and refiners are required to hold baseline level stocks of:

- **Petrol** (24 days for refiners, 27 days for importers).
- **Jet fuel** (24 days for refiners, 27 days importers).
- **Diesel fuel** (20 days for refiners, 32 days for importers).

Fuel Security Services Payment

The ***Fuel Security Services Payment (FSSP)*** is also intended to help secure Australia's long-term refining capabilities (FSSP, 2025). It does this by paying refiners

a production payment during loss-making periods, based on the number of litres of FSSP fuels they produce. It helps refiners manage their downside risks in exchange for them continuing to produce critical transport fuels such as diesel, petrol and jet fuel.

Under the FSSP, refiners receive government support only during downtime, not when they are profitable.

Refinery Upgrades Program

The Refinery Upgrades Program helps Australia's two refineries produce higher-quality fuel to meet new standards from 2025.

The grant program funds major infrastructure upgrades at the refineries and is being delivered over 2 phases:

- **Phase 1:** Up to $125 million per refinery available to produce ultra-low sulphur petrol. Ampol expects this support initiative to cover approximately half of the required investment at Lytton to produce ultra-low sulphur petrol.
- **Phase 2:** Up to $26 million per refinery available to produce lower aromatics petrol.

The total amount of Federal Government support to keep these two oil refineries operating up to 2030 is around $2.3 billion.

Boosting Australia's Diesel Storage Program (BADSP)

Australia consumes more energy from diesel alone than from electricity. Diesel is our most important and versatile fuel. It also serves as a backup fuel for electricity generation in critical services like hospitals, water and sanitation, and remote communities (BADSP, 2026).

The BADSP provided grants, with matched funding from industry, to increase storage capacity and support employment within the industry. The first storage tanks under the program were completed in 2023; however, funding stopped in June 2024.

Diesel Exhaust Fluid (DEF)

The Australian Government has pledged $50 million over four years from 2022 to 2026 for the domestic supply of diesel exhaust fluid (DEF). This investment will ensure Australia's diesel-dependent transport sector remains operational.

DEF is crucial for the operation of modern diesel engines equipped with selective catalytic reduction systems. Without DEF, these vehicles cannot operate, and it also helps reduce harmful emissions that are dangerous to human health and the environment. Most of Australia's DEF consumption is in the long-haul truck fleet. DEF is produced by blending technical-grade urea (TGU) with deionised water at a ratio of one-third to two-thirds.

The investment has created an emergency stockpile of TGU, supported a competitive grants program for local manufacturing, and improved market transparency through industry stock reporting. The market is currently well-stocked, and these measures provide certainty and act as a backup in case of disruption.

National Oil Reserve

On 22 April 2022, the Australian Government announced a package of measures to boost Australia's fuel security. One element of this was to establish a 30-day ***National Oil Reserve (NOR***) in the USA, held within the US Strategic Petroleum Reserve (SPR) until 2030.

The SPR was created by the US government in 1975 and is the world's largest supply of emergency crude oil. Australian access to the US SPR was granted for an initial 10-year period. It was stored in the US because Australia lacked the necessary storage capacity at the time.

Australia planned to spend $94 million to capitalise on the sharp decline in global oil prices at the time. With 2022 oil prices around $22 per barrel, $94 million could buy about four to five days' worth of crude oil. Australia eventually held approximately 1.7 million barrels of oil in the SPR.

The intent was also that the NOR would count towards Australia's commitment to hold at least a 90-day reserve of petroleum. Since then, there have been two IEA collective actions in response to the impact of the war in Ukraine on global fuel markets. The first collective action was in March 2022, and the second was in April 2022. Australia contributed to both collective actions.

In March 2022, in response to a request from the IEA for collective action, the 1.7 MMbbl of oil held in the SPR was sold to the market and apparently generated around USD$186 million in revenue. This was a good profit for Australia; however, as a result, Australia no longer has a NOR, apart from the stocks held locally.

International Energy Agency (IEA)

The IEA was established within the ***Organisation for Economic Co-operation and Development (OECD)*** in the aftermath of the 1973 oil crisis to address physical disruptions in global oil supplies. Australia is a member of the IEA and signed a 1974 treaty that requires IEA members to maintain at least 90 days of oil reserves in the event of a serious oil supply disruption. Australia currently holds significantly less than this and has struggled to meet the IEA's 90-day reserve requirement since 2012.

IEA days measure Australia's import reliance. As of January 2026, Australia had about 50 days of net oil coverage according to IEA standards. The Government has pledged to regain compliance with the IEA stockholding requirements by 2026. If we include fuel enroute to Australia, in foreign ports, or on tankers at sea, then the country holds more than the noted IEA days. Although these stocks are not counted under current IEA rules, they are owned by Australian companies and are destined for import into Australia.

Consumption cover is a measure of how long refined products would last if all supplies were cut off and demand remains at normal levels. It is considered the most appropriate measure of Australia's fuel stocks. As of December 2025, consumption days were diesel 25 days, petrol 26 days and jet fuel 20 days. Consumption cover does not count fuel held at service stations or in people's vehicles, and therefore, actual days of cover may be higher. Over the last decade, the annual average consumption cover of petrol, diesel and jet fuel has ranged between 14 and 25 days.

Part 3 - Mobilising the Oil Industry

There are several key elements in the strategy to mobilise the Australian oil industry. These are:

- Government.
- Strategic Industries.
- Strategic Partners.
- The oil industry hub.

Government

Government action is key to the way ahead. Only the Government has the resources, budget and the ability to bring all stakeholders together for the common purpose of developing the oil industry.

Since WW2, the best endeavours of past governments and oil industry stakeholders have not been sufficient to advance the industry and have indeed merely presided over its demise. A popular attribution to Albert Einstein is that:

> ***Insanity is doing the same thing over and Over Again and expecting different results!***

On this basis, it can safely be argued that a new conceptual framework for future action must be developed if meaningful progress is to be achieved. The following framework is proposed.

The Vision

The Government's fundamental responsibility is to lead, inspire and galvanise the nation into action and to chart the way ahead. The vision for the oil industry should therefore be aspirational, achievable and measurable.

Proposal 2: The vision for the oil industry over the next 10 years is to:

- ***Move from 2 to 4 active refineries.***
- ***Build an onshore strategic oil reserve of 6 months' supply.***
- ***Improve self-sufficiency by incentivising onshore and offshore oil exploration.***
- ***Pursue biofuel, coal and gas to liquids options.***
- ***Develop the national strategic oil hub.***
- ***Implement the IEA-agreed 90-day fuel reserve.***
- ***Establish a Ministry for Fuel to plan and coordinate the long-term growth of the industry.***
- ***Australian-owned and operated Petrol Tankers to be included as part of the Australian Maritime fleet.***

Bipartisan Agreement

If the vision for the oil industry is to become a reality, then political differences must be set aside, and bipartisan agreement must underpin the way forward. Foreign nations,

> ***Proposal 3: A bipartisan political approach to the way ahead for the oil industry should be agreed upon.***

almost without exception, recognise the strategic benefits of a strong sovereign oil industry and are doing whatever is necessary to achieve it. Australia has been naive over the past 50 years in this regard, and our lack of vision and policy flaws have been exploited to the point where we are today.

Long Term Planning

Australia is a resilient democracy that has endured and thrived as a nation. One of its main flaws, however, lies in the limitations of its 3-year Federal electoral cycle, where long-term planning is often sidelined in favour of political ideology and the urgency of the next election. The oil industry has been in decline for 50 years, and its revival cannot happen overnight. Therefore, a long-term plan must be agreed upon and implemented.

> ***Proposal 4: Create a 10-year plan for the oil industry in 5-year steps.***

Strategic Industries

A Strategic Industry is defined as one that the government considers essential for national security, economic progress, or societal reasons. The idea is longstanding and has been implemented in various forms by many countries such as the USA, Japan, Korea, Singapore, Israel, and Taiwan, often with considerable success. Apart from the USA, none of these nations possess the extensive natural mineral and agricultural resources that Australia is blessed with.

These industries can play a vital role in developing economic diversity, technological advancement, job creation and training opportunities, and they act as the catalyst to drive demand and productivity across the economy.

If the nation is to commit to strategic industries meaningfully, it will inevitably incur costs during the transition. Government financial commitments will be necessary, at least at first. More importantly, there needs to be an ideological shift away from short-term populist agendas towards longer-term economic objectives. One of the casualties will be the sacred cows of the Australian political landscape.

Characteristics

The following are the key features of strategic Industries.

- There must be a compelling economic, defence or social need.
- The industry should add significant value to the industrial base and be a catalyst to stimulate other sectors of the economy.

- The value added must justify the expenditure of financial and political capital.
- Targets set should be long-term, achievable and measurable.
- There must be bipartisan political agreement.
- Policy settings must enable the selected industries to be globally competitive.
- The involvement of private enterprise and its entrepreneurial drive is essential to success.
- Government policy must provide long-term certainty to encourage private investment.
- Strategic industries should be a high-priority focus for research and development by publicly funded universities and scientific agencies.
- Must be supported with protectionist policies, to prevent foreign dumping, predatory tactics and any form of exploitation of the generous supporting measures that are involved.
- Government inducements to private enterprise, such as low-interest loans backed by the government, are key to success.

Strategic Industry Policy Settings for Oil

If the oil industry were designated a Strategic Industry, the following policy settings would apply.

- Policy settings should enable the national strategic goals for the industry to be achieved.
- Financial support would include grants, low-interest loans and government guarantees.
- The industry is to be operated on a commercial basis with a focus on long-term development.
- Minimal corporate tax where those profits are reinvested back into the enterprise.
- All Federal, State and Local Government taxes and charges, where possible, are to be waived for the first 10 years. The aim is to remove all bureaucratic impediments to the maximum extent possible.
- Protectionism is to include shielding the industry from red, green and black lawfare, particularly during the exploration phase. This is a strategic asset that will benefit all Australians and must be protected from ideological agendas.
- Future taxes and charges must also be set at levels that provide a competitive advantage to local industry against foreign competitors.
- A new Federal Government Department to be created to foster the oil industry.
- Union involvement must be supportive rather than destructive. This is fundamental to the long-term success of the concept.

Proposal 5: Identify the oil industry as a Strategic Industry and enact policies, provide financial and taxation incentives, and reduce regulation to support the industry.

Private Ownership

The international oil industry is highly specialised, fiercely competitive, and requires extensive industry knowledge to compete and survive. The industry also spans exploration, extraction, transportation, refining, wholesale distribution, and retail sales.

The economics of the oil industry must also consider ownership, operation, maintenance, stakeholders, workforce, international trade, law, finance, logistics, and the politics of the countries involved in the supply chain. Mastering all these aspects is crucial for stakeholders to make informed decisions and manage risks in this complex and demanding sector.

These skills form the knowledge base upon which a successful oil business is built. The repositories of this knowledge are the mega oil companies such as Shell and ExxonMobil. Within Australia, Ampol claims about 90 years of experience in the local market and is well-positioned to serve as the sovereign foundation of the Australian oil industry moving forward. It is a high-performance business endowed with the entrepreneurial drive essential for success in a highly competitive environment, provided it receives the same level of governmental support as its international competitors.

Government Ownership

One weakness of private enterprise, however, is that registered companies can go bankrupt, and their assets might be sold off or the company may be taken over by competitors. Since the goal is to develop a strategic oil industry over the long term, there must be reasonable certainty that the assets and infrastructure remain available to the nation if the parent company fails. Although there are no perfect solutions, partial government ownership of the industry will ensure that assets and infrastructure are not simply sold off and will allow some control to keep assets for the nation.

The government should not be overly involved in daily operations, as this is not its strength. Its role is to provide the legislative framework and necessary support to nurture and safeguard the industry until it reaches critical mass and becomes self-sufficient. As a strategic sector, this is a long-term endeavour, and the economic benefits to the nation will take years to fully realise.

Proposal 6: Some form of Government ownership in the oil industry should be implemented.

Union Involvement

Unions are organisations that represent workers' interests, especially regarding pay and working conditions. They have been particularly successful in Australia in reaching these goals.

The petroleum industry was much larger 50 years ago, with about 10 active refineries, and refinery operators were some of the highest-paid workers in Australia. One reason for the decline of the petroleum industry was union activism. Through their relentless pursuit of better pay and conditions, unions not only killed the Golden Goose that supplied their well-paid livelihoods but also helped undermine the cost

competitiveness of the petroleum sector and Australian manufacturing as a whole. The CFMEU and the MUA continue their damaging actions today.

If the petroleum industry is to be revitalised, unions must change their behaviour and become part of the solution rather than part of the problem. This issue must be confronted and accepted if there is any hope of success.

As a nation, we are all passengers in the same economic boat, and we sink or swim together.

Proposal 7: Unions must change their behaviour and become part of the solution rather than part of the problem.

Case Study 3: South Korea

Economic Miracle

In South Korea, the concept of a strategic industry played a crucial role during the "economic miracle", from 1970 to today. The government identified key industries that would drive rapid industrialisation and economic growth. By focusing on these sectors, South Korea was able to transform its economy from an agriculture-based economy to an industrialised one within a few decades. It resulted in significant economic progress, and South Korea is now a global hub for technology, innovation, and heavy industry.

The keys to the economic miracle were:

- Targeted policies to promote strategic industries, which included subsidies, tax incentives, low-interest loans, access to credit and equity investments.
- The strategic industries selected were consumer electronics, automotive vehicles, heavy machinery, the steel industry and shipbuilding.
- Large investment in research and development was committed within the strategic sectors.
- Harnessing the entrepreneurial flair of private enterprise.

By the 1980s, strategic industries played a key role in the country's GDP, generating jobs and raising living standards. The expansion of these industries was often linked to chaebols—large family-run conglomerates that received government backing while also capitalising on private enterprise and innovation, which was vital in executing industrial policies.

While South Korea is a peninsula, its closed border with North Korea means that economically it is essentially an island. Within this context, maritime transport is a key aspect of South Korea's engagement in international trade, given its export-oriented economy. The parallels with Australia are clear. One of the spin-offs was the development of a large merchant maritime fleet. Korea now has a fleet of about 1,800 large vessels and ranks about 12th in the world by both quantity and tonnage.

Petroleum Refining

South Korea's rise as a global refining powerhouse is another remarkable story. With no significant oil reserves of its own, South Korea has developed a refining capacity of over 3 million barrels per day, making it the world's fifth-largest. The country depends on imports to satisfy nearly 98% of its fossil fuel needs. Since it has no international pipelines for oil or natural gas, South Korea relies on tanker shipments of liquefied natural gas (LNG) and crude oil to meet demand.

The country's economic growth is driven by exports, especially automobiles, ships, semiconductors, and petrochemicals, primarily to regional trading partners in Asia. Today, oil from South Korean refineries is processed and then exported throughout Asia and beyond.

South Korea is a worthy model for Australia to study.

Case Study 4: Singapore

Singapore demonstrates how strategic location, economic need, political determination, and industrial skill can compensate for a lack of natural resources. Despite lacking domestic oil reserves, Singapore has become the third-largest export-focused refining hub globally. Its refining capacity is approximately 1.5 million barrels per day, accounting for about 1.5% of the world's total. To reach this level, it has developed some of the largest refineries worldwide, operated by industry leaders such as ExxonMobil and Shell.

Singapore's success story comes from a mix of favourable market conditions and visionary government efforts focused on vigorous export-oriented industrialisation. Over time, Singapore's petroleum sector has gained a competitive edge in refining, storing, trading, and exporting fuels.

Today, Australia is a major customer for Singapore's refined petroleum.

The Petroleum Investment Strategy

The following factors have contributed to Singapore's success in petroleum refining.

- Political stability.
- Strategic geographical location on the global east-west maritime trade lane and deep harbours that facilitated connectivity to all countries in Asia.
- Development of a world-class maritime infrastructure for fuel bunkering, dry-docking and maintenance, vessel survey and classification.
- Government investment in advanced logistics infrastructure, such as Jurong Island, that is designed for efficient logistics and connectivity to transport networks.
- Supportive government policies, including favourable trade regulations, investment incentives, infrastructure development programs and minimising bureaucratic regulations.
- Focus on private enterprise rather than state ownership.
- An export-oriented industrialisation strategy supported by low tax policies.
- Creation of the Development Bank of Singapore to fund all forms of development.
- Identifying and fostering "pioneer industries" such as shipping and petroleum.
- Zero or very low taxation rates for the petrochemical industry.
- Removing duties from imports needed as inputs to the petrochemical industry.
- Reduced taxes on profits from exporting manufactured products.
- Anti-monopoly laws.
- Quick approval and licensing processes for private investment.
- Joint ventures between the Government and major international players in Petrochem.
- Development of the Jurong Economic Zone to support the refining and petrochemicals industry.
- Introduced the Singapore International Monetary Exchange (SIMEX) for trading futures contracts under a strong regulatory and fiscal umbrella.
- Creation of dedicated Government departments and other institutions to foster the petrochemical economic hub.

Strategic Partners

Sun-Tzu was an ancient Chinese general who wrote ***The Art of War***, an influential work of military strategy. He is often attributed with the quote:

> ***"If you do not seek out allies and helpers, then you will be isolated and weak."***

By necessity, Australia has entered into strategic long-term military partnerships through the AUKUS and QUAD arrangements, which aim to strengthen the combined military and industrial capabilities of the partners and enhance supply chain robustness and resilience. Without these agreements, it would be beyond Australia's economic capacity to acquire the weapons, technology, and manufacturing capabilities needed to sustain its sovereignty.

Equally, the AUKUS and QUAD partners are key players in the international oil business and would be natural partners in Australia's vision for its petroleum industry. Australia cannot achieve its vision of expanding the present 2 refineries to 4 over a 10-year period unless it does so through a partnership with global industry players. It must therefore seek to identify strategic partnerships.

Benefits to the Australian partner

- Access to technology, finance and expertise.
- Securing supply chains for both import and export petroleum markets.
- Reduced operational costs.
- Reduced logistic costs.
- Expanding the labour skills and training base.
- General savings flowing from economies of scale.

Benefits to the foreign partner

A partnership must, of course, be economically attractive to potential partners, who will presumably be foreign private enterprises, and the first question they will ask is: ***what's in it for us?***

The benefits to the foreign partner are similar to those above; in addition, Government-level economic inducements must be offered to foreign partners for them to embrace the arrangements. Some options are:

- Access to the Australian market.
- Reduced taxes and charges and minimised regulatory requirements.
- Buying into the existing petrochemical industry.

Proposal 8: Seek collaborative arrangements through strategic partnerships, potentially under the AUKUS or QUAD umbrellas, or with South Korea or Singapore.

The Oil Industrial Hub

The true value of an oil industry extends beyond refineries; it lies in the wider petrochemical economic hub that includes many related businesses and a skilled workforce developed over time. This point is often ignored by those opposing the value of local refining capacity, who instead prefer cheaper direct imports of petroleum.

Petrochemicals, derived from petroleum (crude oil) and natural gas through refining and chemical processes, are the foundation of modern industrial society. They serve as the feedstock for manufacturing plastics, synthetic fibres, rubber and elastomers, detergents, resins and adhesives, pharmaceuticals, agricultural chemicals, and a wide range of consumer and industrial products.

In the intricate web of global energy markets, some of the most vital players are countries that, paradoxically, have little to no domestic oil reserves. These nations have strategically built extensive refining capacities, transforming themselves into essential industrial hubs that support global industries and economies.

These strategic refining hubs show that a lack of natural resources doesn't stop a country from becoming a key player in the global energy market. By making the most of their geographic strengths, top-notch infrastructure, and careful planning, these nations have built strong refining industries that boost their economies and also support the global flow of energy. As the energy scene changes, the importance of these refining hubs will only increase, highlighting their vital role in the world economy.

Singapore and South Korea serve as proof of what can be achieved when necessity shapes the agenda.

The oil industrial hub has great potential to adopt new technologies, energy solutions, and petrochemicals on a much larger scale than currently produced in Australia. These opportunities include the following.

- Coal to petroleum conversion.
- Natural Gas to petroleum.
- Biofuels.
- Petrochemicals.

Case Study 5

Coal to Petroleum

Australia is poor in oil; however, it is rich in coal and natural gas. Australia literally sits on a bed of coal that would last for hundreds of years at the current rate of consumption.

About 70% of the coal mined in Australia is exported, mainly to Asia, with most of the remaining coal used for electricity generation. In 2019-20, Australia was the world's largest exporter of metallurgical coal and the second-largest exporter of thermal coal. Despite only providing about 50,000 mining jobs nationwide, coal generates significant revenue for governments.

The conversion of coal to oil is not new and was used in the past by Germany during WW2 and by South Africa to overcome oil embargoes. Today, medium-scale production continues in South Africa and China.

Coal-to-liquids (CTL) technology, or coal liquefaction as it is known, involves various processes that turn solid coal into liquid hydrocarbons. These hydrocarbons can then be refined into fuels such as petrol, diesel, and jet fuel. The benefits of converting coal to oil are:

- **Energy Security.** Utilising domestic coal reserves to convert CTL fuels can reduce dependence on imported oil and enhance energy security.
- **Economic Benefits.** The development of CTL technologies will stimulate local economies and create an economic hub and jobs across various sectors.
- **Environmental Considerations.** CTL technology provides a means of harnessing vast coal reserves, potentially lowering reliance on other fossil fuels.

Economic Viability of CTL

The economic feasibility of converting coal to oil is influenced by capital, feedstock, and operational costs, as well as oil prices.

- **Capital Costs.** The initial investment for CTL plants can be substantial, with costs influenced by factors such as plant size, technology choice, and location.
- **Feedstock Costs.** Nothing is cheaper than coal when it comes to the cost of feedstock. It is widely available, easy to mine, simple to transport, and the infrastructure is already in place.
- **Operational Costs.** These costs will be higher than those of established domestic oil refineries or the direct import of petroleum products.
- **Oil Prices.** The profitability of CTL processes is closely tied to global oil prices. High oil prices can make CTL more economically attractive, while low prices may hinder its competitiveness. Monitoring market conditions is crucial for stakeholders considering investment in CTL technology.

Australia must aim to diversify its energy sources, secure its supply chains, leverage domestic resources, and support sustainable development. CTL technology should therefore be seen as a viable supplement to the importation of large amounts of foreign oil.

Case Study 6

Natural Gas to Petroleum

As for coal, Australia has abundant natural gas supplies and is one of the world's largest exporters of Liquefied Natural Gas (LNG). However, there is so much natural gas globally that an oversupply exists, and fierce competition for exports is pushing prices down. This situation has sparked significant research into Gas-to-Liquid (GTL) conversion. It is also clear that Australia's tendency towards over-regulation and ideologically driven anti-fossil-fuel investment is hindering the further development of the LNG industry.

Contrary to the popular "Peak Oil" hypothesis, we are not going to run out of oil anytime soon. Over the past 20 years, the combination of hydraulic fracturing and horizontal drilling techniques has unlocked vast reserves of oil and natural gas trapped in shale formations, challenging traditional beliefs about dwindling supplies. That said, even if we reach the limit of our oil reserves, our abundant natural gas reserves can actually make up the difference thanks to chemical processes discovered more than 100 years ago. Today, natural gas can be converted into a wide range of refined hydrocarbons, including diesel, jet fuel, and petrol.

At facilities like Shell's Pearl Gas-to-Liquids (GTL) plant in Qatar, natural gas is first converted into synthesis gas (a mix of carbon monoxide and hydrogen), which is then further processed into various products using traditional refinery methods. A shift in thinking is now happening, where the clear line between "oil" and "natural gas" is gradually disappearing.

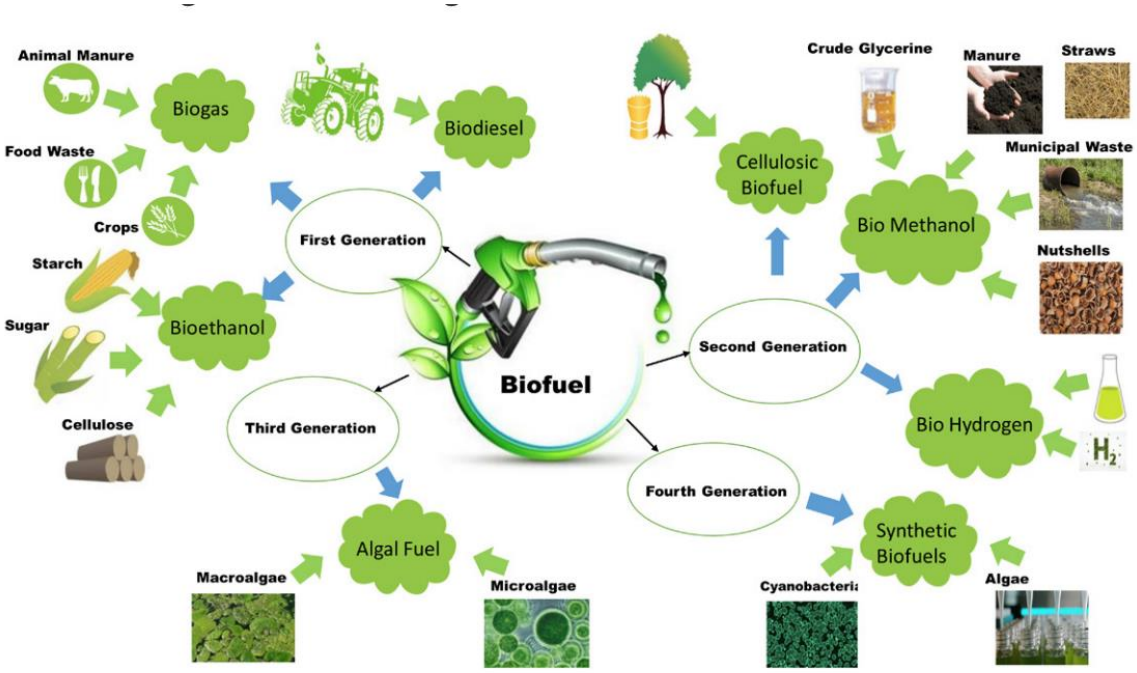
Today, converting natural gas into traditional refined products like diesel, petrol, and jet fuel is already a commercial reality. Over time, this should mean that surplus natural gas becomes a highly valued commodity. There is a future where natural gas could serve as a drop-in replacement for crude oil, reducing supply concerns, price volatility, and offering a sustainable energy future for Australia.

As the world faces ongoing challenges with energy security and sustainability, natural gas stands out as a transformative solution. Its abundance, affordability, and adaptability, combined with the innovation of chemists and engineers, establish it as the ultimate hydrocarbon equaliser – a resource capable of stabilising crude oil prices and facilitating a smoother shift towards a more diverse energy landscape.

While challenges remain, from building the necessary infrastructure to tackling environmental concerns, the merging of market forces and technological progress is creating a future where every hydrocarbon truly becomes oil, and energy abundance is achievable. As the lines between different hydrocarbon molecules continue to fade, the notion of peak cheap oil might just be a myth belonging to the past.

Case Study 7

Biofuels



The diagram above depicts the range of biofuels (Biofuels, 2019).

Biofuel is a fuel made quickly from biomass, unlike the slow natural processes that produce fossil fuels such as oil. Biofuel can be sourced from plants or agricultural, domestic, or industrial bio waste. While primarily used for transport, biofuels can also be used for heating and electricity generation. They are regarded as a renewable energy source. The use of biofuel has faced criticism over the "food vs fuel" debate, differing views on its sustainability, and ongoing issues like deforestation and biodiversity loss caused by biofuel production (US DOE, 2026).

The two most common types of biofuels in use today are ethanol and biodiesel, both of which represent the first generation of biofuel technology.

Ethanol

Ethanol is a renewable fuel that can be produced from various plant materials, collectively known as “biomass.” Ethanol is an alcohol used as a blending agent with petrol to boost octane and reduce carbon monoxide and other smog-causing emissions.

The most common ethanol blend is E10 (10% ethanol, 90% petrol) and is approved for use in most conventional petrol-powered vehicles, with E15 (15% ethanol, 85% petrol) also approved. Some vehicles, called flexible-fuel vehicles, are designed to run on E85 (a petrol-ethanol blend containing 51%–83% ethanol, depending on location and season), an alternative fuel with a much higher ethanol content than regular petrol. Approximately 97% of petrol in Australia contains some ethanol.

Most ethanol is produced from plant starches and sugars—especially corn starch in Australia —but researchers are still working on technology that would enable the use of cellulose and hemicellulose, the fibrous parts of plants that are not edible.

The usual way to turn biomass into ethanol is called fermentation. During fermentation, microorganisms such as bacteria and yeast break down plant sugars and produce ethanol.

Biodiesel

Biodiesel is a liquid fuel made from renewable sources like fresh and used vegetable oils and animal fats, serving as a cleaner-burning alternative to petroleum diesel. It is non-toxic and biodegradable, produced by mixing alcohol with vegetable oil, animal fat, or recycled cooking grease.

Like petroleum-derived diesel, biodiesel is used to power compression-ignition (diesel) engines. Biodiesel can be blended with petroleum diesel in any proportion, including B100 (pure biodiesel) and the most common blend, B20 (containing 20% biodiesel and 80% petroleum diesel).

Although both Ethanol and Biodiesel are useful fuels with their own applications, they are not without costs. Like any technology, they come with disadvantages such as excessive water use, food security issues, deforestation, fertiliser consumption, quality variations, monoculture, and technical challenges. When it comes to providing a viable alternative to petroleum for transport, they lack the economies of scale that coal-to-liquids and gas-to-liquids technologies offer.

Biofuels will be a useful but niche technology for the foreseeable future.

The demand for biofuels in Australia has remained relatively low, making up just 0.4 per cent of liquid fuels in 2017–18. This is a decline from the peak demand in 2014–15 when biofuels contributed 1.3 per cent to our liquid fuel supply.

In 2018, there was the first increase in demand for fuel-grade ethanol since 2014. This was mainly driven by state-mandated targets for higher ethanol use in Queensland and New South Wales. Favourable excise provisions boosted demand for mostly imported biodiesel from 2010 to 2014. After changes to the excise duty on imported biofuels and a drop in oil prices, biodiesel demand collapsed, partly because it could not compete with low oil prices.

Biofuels in Australia are mostly made from waste products of other industrial and agricultural activities. There is increased investment in developing advanced biofuels that use waste feedstocks to produce ‘drop-in’ biodiesel, which removes the need for engine modifications.

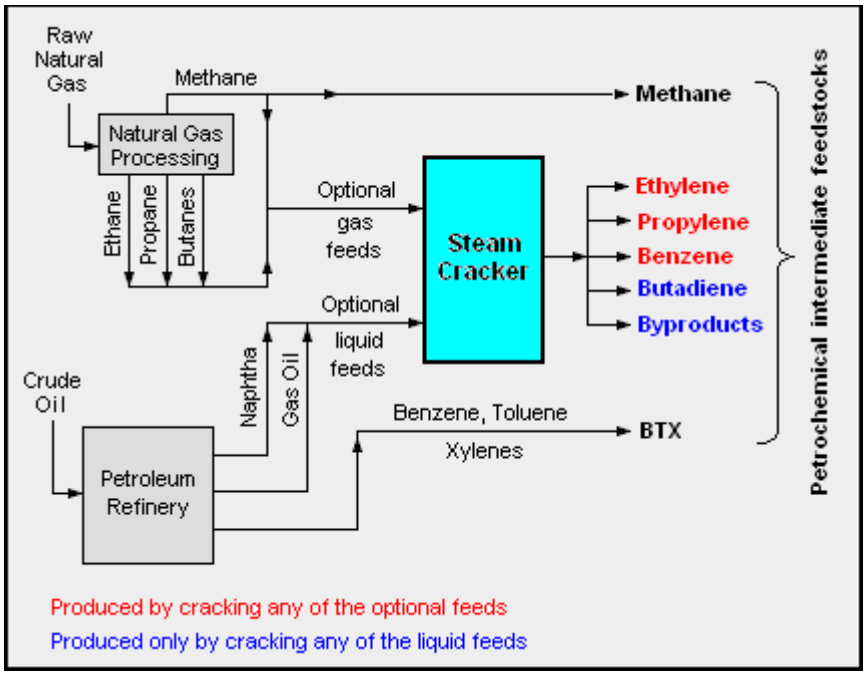
There is increasing demand for bio-jet, an advanced biofuel that can be blended with mineral oil-based fuel. Major airlines like Qantas and Virgin Australia have committed to boosting the number of flights powered by biofuels in the coming years.

There are other alternative transport fuels, including synfuels—synthetic fuels made from syngas, produced by gasifying solid feedstocks such as biomass. This technology is not yet as developed or as market-ready as biofuels.

Case Study 8

Petrochemicals

The following diagram depicts the major hydrocarbon sources and processes used in producing petrochemicals (Biofuel Basics, 2019).



The main use of crude oil and natural gas is as fuels. However, their equally important role is as the foundation for producing petrochemicals, which are other chemical products made through refining processes. Like crude oil and natural gas, petrochemicals are mostly made up of carbon and hydrogen and are known as hydrocarbons.

Petrochemicals are used to produce thousands of everyday items, including plastics, medications, cosmetics, soaps and detergents, solvents, drugs, fertilisers, pesticides, explosives, synthetic fibres and rubbers, paints, epoxy resins, and flooring and insulation materials. Furniture, appliances, electronics, solar panels, and wind turbines also rely on petrochemicals. Today, there is such a huge demand for petrochemicals that their importance to our way of life is impossible to overstate.

The Australian petrochemicals market is projected to be worth about $18 billion in 2025 and is expected to reach around A$30 billion by 2033. The market growth is driven by increasing demand for plastics, fertilisers, and synthetic materials across sectors such as construction, agriculture, and packaging. Rich natural gas reserves, government backing for downstream chemical production, and growing investments in refining and processing infrastructure could further accelerate market expansion.

Once again, however, probably about 90% of the current and future market will use imported products. The size of the local market presents a major opportunity for Australian manufacturers and the downstream oil industry if there is the national will to embrace the challenge.

Cost Estimate

The aim in this section is not to give exact costings, as these can only be determined once the specifics of the refinery, ownership, and financial details are known. Instead, it aims to offer rough estimates and an understanding of the scale of financial commitments that owners, operators, strategic partners, and the Government must undertake.

Permits and Approvals

In Australia today, national and state legislation requirements mean new refineries must meet strict air, water, and environmental standards, along with numerous building and labour requirements, while also accommodating indigenous activism and union demands. In reality, obtaining a permit to build a modern refinery would be just as challenging as the multiple mining projects Australians have faced over the past 10 years. This Australian tendency for self-sabotage is a major obstacle to any upcoming large-scale projects and must be addressed if meaningful progress is to be made in infrastructure development, such as constructing a new refinery.

Location and Crude Sourcing

The location of a refinery significantly impacts its profitability. The ideal site is near a port with world-class infrastructure that supports access by ship and the distribution of refined products. The availability of crude oil or natural gas sources also influences the choice of location; however, sourcing will undoubtedly evolve over time.

Configuration and Capacity

Oil refining has advanced from simple crude distillation to include complex technology and integrated processes. The more intricate the configuration, the higher the cost. Refining capacity indicates how much crude oil a plant can process. Refinery complexity determines the types of crude oil processed and the quality of the finished products. Utilisation rates indicate how much refining capacity is being used, which can vary depending on factors such as efficiency, maintenance, and turnaround activities within the unit.

The higher the refining capacity, complexity, and utilisation rates, the greater the production of refined products, which directly affects a refinery's construction costs and future revenue streams.

Refinery Complexity

The cost of crude oil processed by a refinery depends on crude oil market prices and the type of crude imported. The more complex a refinery is, the broader the range of crude it can process and the lower the production costs will be.

Considering the factors above and setting a minimum capacity of 100,000 bpd for the Australian market—which is small by international standards and will therefore incur a cost premium—building costs are likely to be at least $10 billion. Construction would also take 5 to 8 years at a minimum for a greenfield site, depending on the project's scope.

Proposal 9. A budget planning figure for the construction of two new refineries be set at $20 billion over the period of 10 years.

Summary

Case Studies

Case Study 1: Viva Energy Refinery Geelong

Case Study 2: Ampol Refinery Lytton, Brisbane

Case Study 3: South Korea

Case Study 4: Singapore

Case Study 5: Coal to Petroleum

Case Study 6: Gas to Petroleum

Case Study 7: Biofuels

Proposals

Proposal 1. AMPOL is to be fully involved in rebuilding the oil industry. It must be independent from manipulation by overseas interests. The intent is to provide a sovereign basis for the long-term development of local exploration, refining, training, employment, and support.

Proposal 2. The vision for the oil industry over the next 10 years is to:

- Move from 2 to 4 active refineries.
- Build an onshore strategic oil reserve of 6 months' supply.
- Improve self-sufficiency by incentivising onshore and offshore oil exploration.
- Pursue biofuel, coal and gas to liquids options.
- Develop the national strategic oil hub.
- Implement the IEA-agreed 90-day fuel reserve.
- Establish a Ministry for Fuel to plan and coordinate the long-term growth of the industry.
- Australian-owned and operated Petrol Tankers to be included as part of the Australian Maritime fleet.

Proposal 3. A bipartisan political approach to the way ahead for the oil industry to be agreed.

Proposal 4. Create a 10-year plan for the oil industry in 5-year steps.

Proposal 5. Identify the oil industry as a Strategic Industry, enact policies, provide financial and tax incentives, and reduce regulation to support the industry.

Proposal 6. A Government/private ownership model for the oil industry to be implemented.

Proposal 7. Unions must change their behaviour and become part of the solution, not part of the problem.

Proposal 8. Develop strategic partnerships, potentially under the AUKUS or QUAD umbrellas, or with South Korea or Singapore.

Proposal 9. A budget planning figure for the construction of two new refineries to be set at $20 billion over 10 years.

Conclusions

The following conclusions are made.

- Australia is almost totally dependent upon foreign interests for its petroleum products. It is increasingly vulnerable both economically and strategically to supply chain shocks.

- There have been at least 9 major global oil crises since 1956, including the latest conflict in the Middle East. The nation has been there before - it is there now - and it will occur again in the future.

- The Australian oil industry has been in decline for almost 50 years, despite many inquiries that have clearly identified the problems and have proposed solutions.

- The reasons for the decline are clear and cannot be denied. It has long been, and remains, uneconomical to operate Australian-owned and operated refineries, as Australian industrial laws, union activism, taxation policies, and excessive regulation collectively make imported petroleum cheaper than domestically produced fuel.

- The two remaining Australian refineries need substantial government subsidies to keep running and reserve the right to switch to fully imported petroleum if economic conditions justify it.

- **T**he oil industry and the economic hub associated with it are essential for the development of Australia's industrial base and economic complexity. South Korea and Singapore are but two examples of the economic benefits of fostering a vibrant oil industry.

- The Australian oil industry can be resurrected if there is political will to do so.

- The proposals set out above outline a practical and viable approach to revive the Australian oil industry. They should be the basis for discussion on the way ahead.

Mobilisation of the sovereign Australian oil industry offers the chance to:

- ***significantly boost to the nation's economy;***
- ***boost employment and training opportunities;***
- ***build a sustainable and essential part of the country's industrial infrastructure; and***
- ***ultimately ensure fuel security for the future.***

The Oil Industry Future

Australia is at a historic juncture for the oil industry, where today's decisions or lack of them will have a profound impact on our oil security and economic future.

The Australian nation now faces a simple question: Does Australia want or need a sovereign oil industry?

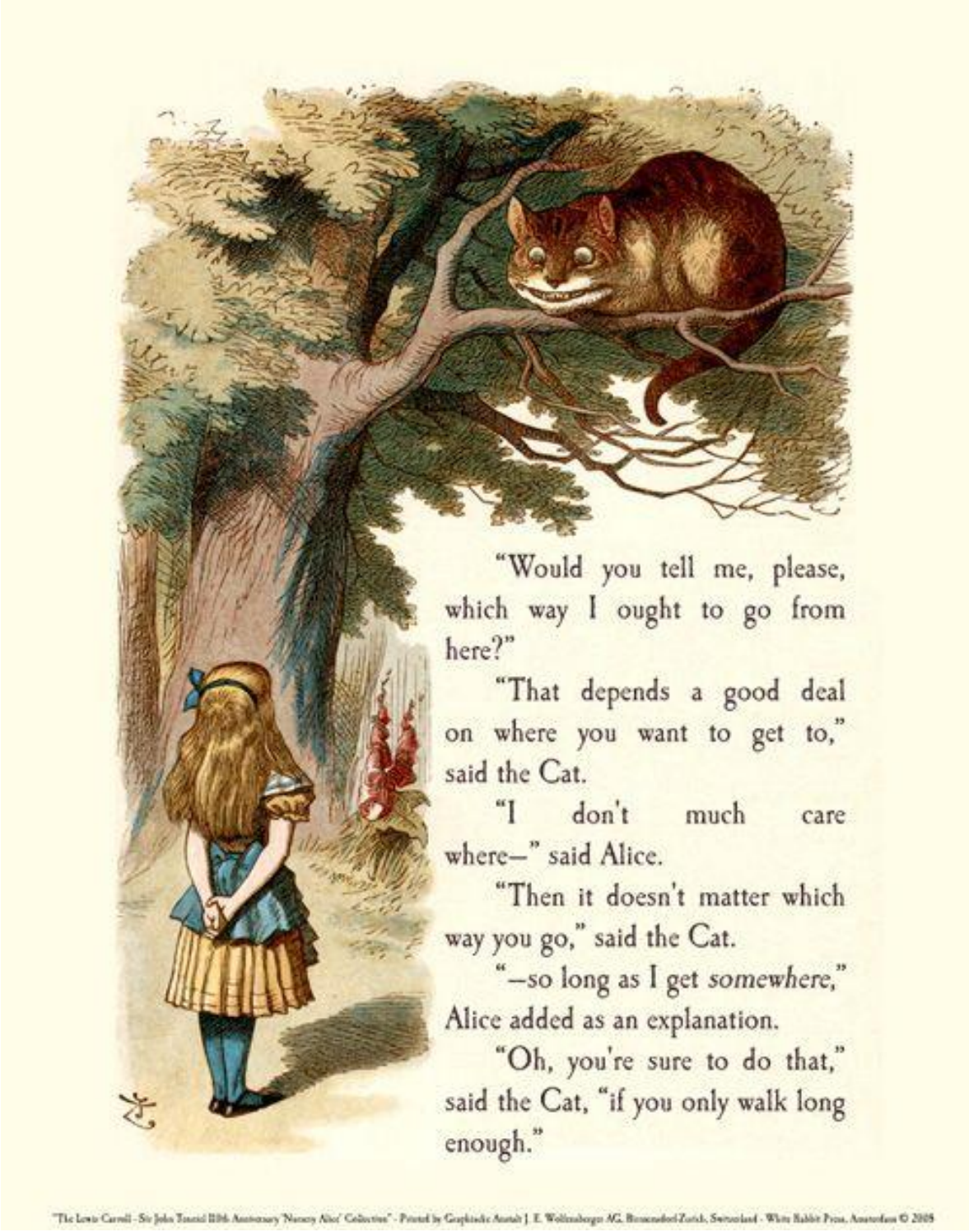
- If the answer is **NO**, then we're nearly there, and no further action is needed.
- If the answer is **YES**, then now is the time for decisive and resolute action.

The only difference between where we are today - and what could have been - or what is possible in the future - is a question of national will.

Tomorrow's History Starts today.

The Final Word

The final word goes to Lewis Carroll and his “Alice in Wonderland”. Alice is lost in the forest, where she meets the Cheshire Cat and asks for directions. It serves as a clear analogy for Australia’s current lack of an oil industry vision, direction, and decisive Government action. **We are indeed at a crossroads for the future of the Australian oil industry.**



The Author

This paper draws on the author's experience in the Australian Army and industry, including manufacturing, defence, and construction projects across Australia and internationally. He holds qualifications in Electrical Engineering, Systems Engineering, Management, and Operations Research. Now retired, he lives in Melbourne.

This paper continues the theme of earlier works that highlight Australia's current economic and defence vulnerabilities and their likely effects.

His website is at: **https://www.rickgray.info**

He is a passionate Australian who wants to see Australia remain on the right side of history.

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5. Australia's Liquid Fuel Supply Chain: DISER 2020.
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8. The Oil Industrial Hub: Pexels.
9. Biofuels: Biofuels 2019.
10. Petrochemicals: Biofuel Basics 2019.
11. The Way Ahead, Lewis Carroll, Alice in Wonderland.

Abbreviations

bbl	Barrel
bpd	Barrels per day
MMbpd	Million Barrels Per Day
Mbpd	Thousand Barrels Per Day

Conversions

1 barrel = 159 Litres (approx.)
1 million Barrels = 6.12 Petajoules (PJ)

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