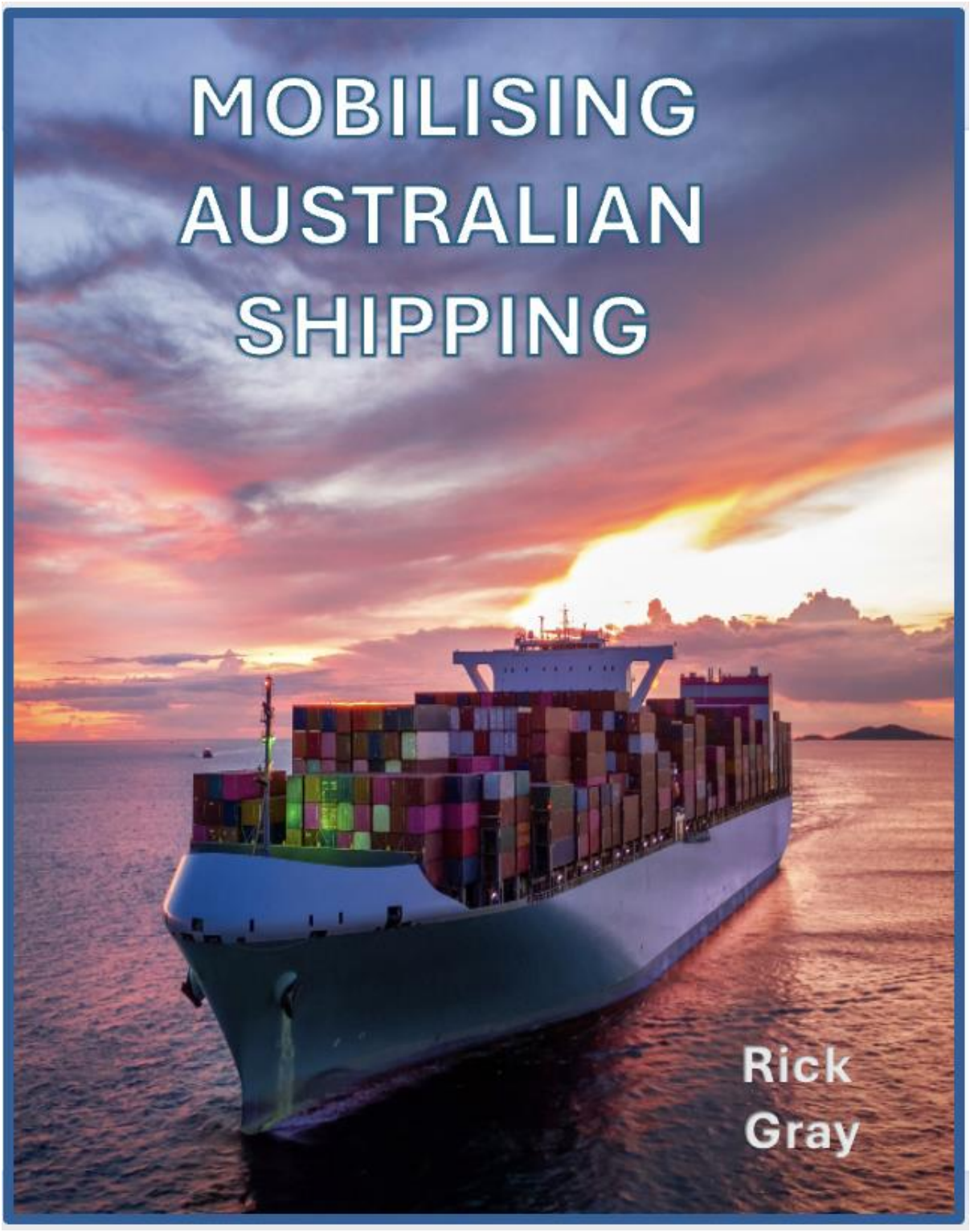

MOBILISING
AUSTRALIAN
SHIPPING
Rick
Gray

CONTENTS

SHIPS

MARITIME FLEET

Australia, an island continent, relies heavily on maritime trade for its economic prosperity. Approximately 99% of our trade by volume and about 79% by value is conducted by sea, supporting around 45% of the country's income (Naval, 2022). Notably, Australia ranks as the fifth-largest user of shipping services worldwide (Sea Power, 2026).

Given these circumstances, it would be reasonable to expect that Australia would own, operate, and man a large civil merchant fleet. However, paradoxically, Australia depends almost entirely on foreign-owned shipping for both international and coastal trade.

Since the end of World War II, more than 80 years ago, various reports, stakeholder concerns, political inquiries, and subsequent promises have addressed the Fleet. Despite these efforts, the number of merchant vessels owned, operated, and crewed by Australians has steadily declined.

The economic reasoning behind this decline has long been that Australian vessels are unable to compete financially with foreign merchant fleets. Over the years, private operators have voted with their feet, and governments across the political spectrum have struggled to reverse this trend.

Australia stands at a pivotal moment in its maritime history, venturing into uncharted waters. We face the stark reality that we are now hostage to foreign shipping interests, and the nation must confront a fundamental question.

Does Australia want or need a civil maritime fleet? If the answer is NO, then we are at this point, and no further action need be taken. If the answer is YES, then now is the time for decisive action.

Data

Geographic

- Australia has the sixth longest coastline in the world, at 25,760 kilometres (CIA, 2024).
- Australia has the world’s third-largest exclusive economic zone, with a total area of 8,148,250 square kilometres, which exceeds its land area (Wiki, 2024).
- Australia’s Maritime Search and Rescue responsibilities cover 10% of the world’s surface (AMSA, 2025).
- Australia has 17 nationally significant ports and many lesser ports.

Economic

- Sea trade accounts for 99% of all trade by volume and around 79% by value, which in turn supports 45% of national income (Naval, 2022).

- Exports account for about 90% of the volume of sea freight, mainly iron ore, coal, and LNG.
- In 2021–22, 1.6 billion tonnes of imports and exports were moved by sea, worth $755 billion in total.
- China is our largest export destination by value, taking about 32% of total exports in 2022.
- Australia has a major offshore resources sector, primarily oil and gas fields located in Bass Strait, North West WA, and the NT.
- Australia is one of the world's largest LNG suppliers, with exports reaching a record high in 2021 of about 81million tonnes.
- Australia is one of the world's largest exporters of coal, accounting for 26% of global coal exports in 2021. Coal ranks as the second-largest export commodity in terms of revenue in 2024.
- Australia depends upon imports to supply around 90% of our annual refined petroleum needs.

Shipping

- Australia is the 5th largest user of shipping services in the world (Sea Power, 2026).
- Australia generates more than 10% of the world's bulk seaborne trade (Spot, 2025).
- The following data is taken from The Strategic Fleet Final Report (Fleet, 2023).
  - In 2021, there were 26,400 foreign ship arrivals in Australia by 6,170 unique vessels.
  - The shipping industry is a significant employer offering more than 25,000 jobs.
  - Shipping meets diverse transport needs, handling over 150 thousand passengers, 6 million containers, and 500 million tonnes of bulk cargo annually.
  - As of December 2022, there are 11 Australian-flagged and crewed vessels over 2,000 deadweight tonnes (DWT) holding General Licences under the Coastal Trading (Revitalising Australian Shipping) Act 2012 that operate in Australia's coastal trade.
  - In 2021, 504 unique foreign vessels undertook 2,309 voyages under a Temporary Licence under the Coastal Trading Act.
  - Bulk carriers accounted for 56% of vessel arrivals and container ships accounted for 14%.
  - Coastal shipping is an important element of Australia's domestic freight system, carrying around 15% of domestic freight.
  - There are four Australian-registered and crewed LNG carriers operated by Shell Tankers Australia that exclusively carry LNG from WA's North West Shelf production area to customers in north-east Asia.
  - Most of Australia's imported goods come by container. Australia accounts for about 1% of the global container trade.
  - There are no Australian tankers that carry crude oil or petroleum imports or exports. Australia's fuel trade is conducted by foreign vessels, with 750–1000 fuel tanker vessel arrivals per year (2-3 deliveries per day), sourced from a variety of countries.

    - As of May 2023, there are approximately 40 foreign-flagged and 14 Australian offshore supply/support vessels operating in Australian waters.
- The Australian Government owns, operates, or charters such vessels as the Defence Marine Support Services Program and Border Protection Fleets, the Antarctic Division Ice Breaker, CSIRO research vessel, and AMSA emergency response vessels.
- The Department of Infrastructure, Transport, Regional Development, Communications and the Arts, Maritime and Shipping Branch, is largely responsible for the management of maritime issues.

Industry Associations

- Shipping Australia Ltd (represents overseas shipping lines and other associated parties).
- Maritime Industry Australia Limited (MIAL) (peak body representing Australian shipping).
- Maritime Union of Australia (MUA).
- Australian Institute of Marine and Power Engineers (AIMPE).
- Australian Maritime Officers Union (AMOU).
- Australian International Shipping Register (AISR).
- Australian General Shipping Register (AGSR).

Legislation

- Tasmanian Freight Equalisation Scheme.
- Bass Strait Passenger Vehicle Equalisation Scheme.
- Shipping Registration Act 1981.
- Coastal Trading (Revitalising Australian Shipping) Act 2012.
- Shipping Exempt Income Tax Incentive.
- Accelerated Depreciation and Roll-Over Relief.
- Seafarer Tax Offset.
- Royalty Withholding Tax Exemption.

Merchant Shipping

Throughout the nation's long maritime history, arguably dating back to 1788, there has always been a sovereign fleet. Today, the fleet of Australian-owned and operated vessels has been reduced to about 12 in various configurations. Most of these operate on coastal routes and are heavily subsidised by the Federal and State governments.

The prime example is the vessels operating across Bass Strait between Melbourne and Tasmania. These vessels are being upgraded to larger, more productive ships. The companies operating these vessels have had the confidence to invest in expensive, long-term assets and are capitalising on tax incentives for vessel renewal introduced in 2012 as part of the shipping reform package.

The key feature of this trade is that vessels operated by TT-Line, Strait Link Shipping and Searoad are eligible for the Tasmanian Freight Equalisation Scheme, and one operator (TT-Line) is eligible for the Bass Strait Passenger Vehicle Equalisation Scheme.

Combined, these industry assistance programs cost Australian governments more than $200 million per year.

Shipping is a global industry where Australian vessels face fierce competition from foreign ships. Each vessel operates under its flag state's regulations, which often provide economic benefits to foreign ships, such as lower wages, less favourable working conditions, minimal taxes, and cost savings. As a result, Australian-owned, operated, and crewed ships find it difficult to compete effectively in both international and coastal markets. This trend is similar to what is seen in the US, the UK, and most European countries, which also face fleet reductions due to comparable policy approaches. Shipping is vital not only for trade but also as a potential market for sovereign shipbuilders.

Revisions to the Coastal Trading Act have given cargo owners the option to select their vessels. However, these updates did not introduce a way for Australian vessels to gain priority access to domestic cargo through long-term contracts of affreightment. Consequently, many cargo owners who once owned or chartered their own vessels now have the chance to utilize foreign-flagged and crewed ships that operate with lower costs.

Once more affordable transportation options emerged, Australian shipping lost its competitiveness. At the same time, onshore manufacturing industries dependent on shipping, such as steel production in Newcastle, shut down, leading to a further decline in coastal cargo volume.

There have been many previous attempts by Government to maintain and rebuild an Australian Fleet, but the decline has continued.

Strategic Fleet Taskforce

On 20 October 22, the Labor Government announced an inquiry into the state of Australia's maritime fleet. Following this, the Strategic Fleet Taskforce was formed to collaborate with stakeholders and industry, collecting evidence and advising the Government on how to develop a sustainable Australian fleet.

The Taskforce tackled longstanding issues, primarily the high costs faced by Australian crews and the challenges posed by taxation and regulation, which render registering ships in Australia financially impractical.

The public version of the Strategic Fleet Taskforce Final Report (Fleet, 2023), released in November 2023, proposed creating a strategic civil maritime fleet consisting of up to 12 Australian-flagged and crewed ships. These ships would be privately owned and operated commercially, while the government would maintain the right to requisition them during national emergencies like natural disasters or conflicts.

The Taskforce noted that: “these vessels will be the start of what is hoped to be a fleet that will grow to be in the order of 30–50 in number, sufficient to provide a sustainable pool of capability”.

Overall, the report provides a thorough assessment of the industry's current challenges, and its recommendations could significantly improve operating conditions if implemented.

The taskforce estimated that the cost premium for operating an Australian-flagged and crewed vessel is $5-8 million per annum. However, Shipping Australia Ltd (SAL) stated that the actual differential is likely to be closer to $15-20 million per ship per annum.

On 6 September 24, the Government issued a tender invitation for vessels to join Australia's Strategic Fleet Pilot. This five-year pilot program will include three vessels selected through a competitive, open, and transparent process. The approximate costs to date for the Taskforce and subsequent funding total $35m.

It is clear that the Report's findings were largely predetermined to serve a political agenda. The proposed Fleet's economic viability is significantly compromised because it requires vessels to be crewed by Australian crews under Australian industrial laws, which activist unions could exploit. As a result, vessels crewed by Australians will likely struggle to compete financially.

Industry reactions varied. Maritime unions welcomed the Report, while SAL, which advocates for foreign shipping lines, criticised the taskforce's recommendations as "bad policy." SAL noted that "time and again in crisis after crisis, shipping has navigated through every challenge and kept delivering the goods. International shipping has never been halted - by disease, war, strikes, or piracy."

As of 2026, the Australian Strategic Fleet has officially begun with one vessel, ANL Kokoda, secured, while two additional vessels remain to be selected for the pilot program. The government remains committed to establishing a 12-ship sovereign fleet, but so far only one ship is operational. The ship will be Australian-flagged and crewed by Australians.

The 12 proposed vessels are a useful starting point, but the number is small relative to the actual need. The Taskforce, however, observed that 30 to 50 vessels are needed in the future.

The Government has taken initial steps and outlined a plan. However, the five-year timetable for piloting three vessels shows a lack of urgency and does not fully recognise the effort required to establish a viable fleet.

It is apparent that although the lessons of the past have been recognised, the failures of the past have merely been repackaged, and another opportunity has been lost to resurrect the maritime Fleet. History has repeated itself.

The Maritime Hub

A strategic fleet's worth extends beyond its ships to include the wider maritime economic hub it fosters. International experience shows that numerous related businesses and a workforce emerge over time, such as stevedoring, diving, ferries and tugs, bunkering, offshore oil and gas, port services, and coastal traffic. This broader economic impact is frequently ignored by critics who dismiss the importance of a strategic Fleet.

Shipping hubs are vital nodes in the global supply chain, where cargo is collected, moved, and dispatched. Their significance is immense - they act as gateways for international trade, supporting regional economic growth and development.

The existing Australian maritime hub is already significant, directly employing about 25,000 people and contributing significantly to the nation's GDP. In the Republic of Singapore, the maritime sector accounts for about 7% of GDP.

The success of shipping hubs can be attributed to several key factors:

- **Strategic Location**. Many of the world's leading ports are strategically located along major trade routes, providing easy access to significant markets.

- **Infrastructure and Facilities.** State-of-the-art infrastructure and facilities, including deep-water berths, modern container terminals, and advanced cargo handling systems, are crucial for efficient port operations.

- **Technology and Innovation.** The adoption of advanced technologies, such as automated cranes and other port solutions, enhances operational efficiency, reduces turnaround times, and improves overall productivity.

- **Logistics and Connectivity.** Efficient logistics and strong connectivity to inland transport networks, such as road, rail, and river systems, are essential for seamless cargo movement.

- **Government Policies and Support.** Supportive government policies, including favourable trade regulations, investment incentives, and infrastructure development programs, play a significant role in the success of shipping hubs.

Case Study: The Swiss Merchant Marine

Photo: Swiss Merchant Marine, www.swissinfo.ch

The Merchant Marine of Switzerland is the largest merchant marine of any landlocked country. It has a long tradition of shipping, both large and small, on its lakes, rivers, and the high seas. It was founded in 1941 to supply Switzerland with basic goods during WW2. Today, its mission remains to supply the country with goods in times of crisis (Grivat, 2016).

The sovereign conditions for flying the Swiss flag are clear. The shipowner must be Swiss, the holders of 51% of the company's shares must be residents of Switzerland, and the ship must not be sold within three years. Today, the majority of the crew on these vessels are not Swiss nationals but are foreign.

The first ships were purchased and operated by the government. After WW2, a privately owned merchant fleet emerged, spurred in part by government subsidies that covered the fleet's operations until 1953.

In 2010, a fleet of 37 major ships flew the Swiss flag; by 2022, the fleet had declined to 14 vessels.

The lesson here is that Switzerland, a landlocked country, recognises the value of the merchant marine and has more major seagoing vessels on its maritime register than Australia, a nation that is entirely dependent on international trade by sea and air.

The strategic value of a viable shipping industry is recognised around the world and indeed even Switzerland has a merchant Fleet.

Case Study: South Korea

Photo: South Korea, juldians.org.

In South Korea, the Strategic Industry concept was vital during the “economic miracle' from 1970 onward. The government identified key sectors to drive rapid industrialisation and economic growth. By focusing on these areas, South Korea shifted from an agrarian economy to an industrial powerhouse within a few decades. This shift led to substantial economic development, establishing Korea as a global leader in technology, innovation, and heavy industry (Amsden, 1989).

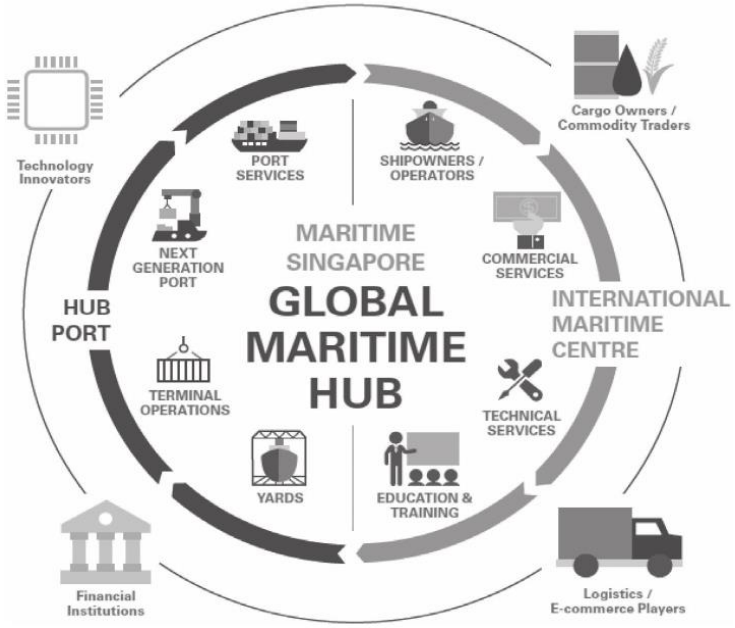
The keys to the economic miracle were targeted policies to promote strategic industries, including subsidies, tax incentives, and access to credit. The selected strategic industries were consumer electronics, automotive manufacturing, heavy machinery, the steel industry, and shipbuilding. Large investments in research and development were directed to the strategic sectors. Harnessing the entrepreneurial flair of private enterprise was a key to success.

By the 1980s, strategic industries contributed significantly to the nation’s GDP, leading to increased employment and higher living standards. The development of strategic industries was often linked to the rise of chaebols, large family-owned conglomerates that benefited from government support while harnessing the entrepreneurial flair of private enterprise and innovation, which was instrumental in implementing industrial policies.

While South Korea is a peninsula, its closed border with North Korea means that, economically, it is essentially an island. In this context, maritime transport is central to South Korea’s engagement in international trade, given its export-oriented economy. The parallels with Australia are obvious.

One of the spin-offs was the creation of a large merchant maritime fleet. South Korea now operates approximately 1800 large vessels and ranks 12th globally in both number and tonnage.

Case Study: Singapore



Graphic: Maritime Singapore

Many regard the Singapore Registry of Ships as the global 'gold standard' for shipping registers (Visiwise, 2024). It provides a range of financial benefits, simplified vessel registration, and streamlined crewing processes. These benefits include corporate and personal tax incentives, as well as support for reducing maritime greenhouse gas emissions and promoting the use of low- or zero-carbon marine fuels.

Singapore's Register of Ships was the fifth-largest in the world in 2023, according to Lloyd's List Intelligence. As at January 2024, about 4,000 vessels were administered under the register. (Singapore, 2024

The maritime hub contributes about 7% of the Singaporean GDP.

Singapore's geographical location on the global east-west maritime trade lane, with approximately 130,000 vessel transits per annum, is a competitive advantage relative to Australia. Along with its natural geographical advantage, the Singapore Government's approach to providing incentives for vessel registration on the Singapore Registry has resulted in the development of world-class maritime services, including fuel bunkering, dry-docking and maintenance, and vessel survey and classification, that maritime enterprises can draw upon.

Vessels on the Singapore Register of Ships can employ officers and crew of any nationality.

Singapore's Requisition of Resources Act 1985 enables all vessels registered under the Singapore flag, including those on the Singapore Registry, to be requisitioned if deemed necessary for the defence or safety of Singapore.

Rebuilding the maritime fleet

The Australian maritime fleet needs to be reconstructed. It should be recognized as a strategic asset, with national resources mobilized accordingly. The Taskforce proposed an initial fleet of 12 vessels designed to serve three main strategic purposes: responding to disruption events, supporting sovereign manufacturing industries, and aiding the Defence Forces. A compelling vision is to expand the fleet to 100 vessels over 20 years.

Australia cannot achieve the 100-ship target over 20 years by building its own ships. It must therefore either buy or lease vessels, or access ships through strategic partnerships.

Strategic Partners

Global maritime trade is dominated by shipping alliances, particularly in container shipping. Shipping is a low-marginal-cost industry, similar to agriculture and aviation, and alliances allow all members to access economies of scale whilst sharing resources such as ships, terminals, and routes. This collaboration leads to enhanced operational efficiency and reduced logistics costs.

Shipping alliances are the norm in maritime transport, and Australia's microscopic and embryonic fleet must enter into foreign partnerships if it is to survive and prosper. The logical partnerships are with our major allies and trading partners, the US, UK, Japan, India, and South Korea. All of these countries are key players in the international shipping business and would be prime candidates for shipping partnerships, perhaps under the umbrella of AUKUS and QUAD.

Owners, Operators and Crewing

Private Ownership

International shipping is highly specialised and ruthlessly competitive, demanding extensive industry knowledge to survive. Maritime economics spans ship ownership, operation and maintenance, stakeholder interests, manning, trade, international law and regulation, finance and law, stevedoring, logistics, and the politics of ports of call. Understanding these elements is essential for stakeholders to make informed decisions and manage risks in the complex and challenging maritime sector.

All of these skills form the knowledge base on which a successful maritime business is built. In addition, there is another ingredient that sets high-performance businesses apart from the rest. This is the entrepreneurial drive typically associated with private enterprise.

Government Ownership

One weakness of private enterprise is that registered companies can go bankrupt and have their assets sold off. As the intent is to develop a strategic Fleet over the long term, there must be reasonable certainty that the vessels will remain available to the nation if the parent company, or companies, should fail. Although there are no perfect answers, part ownership of the vessels by Government will ensure that the vessels cannot simply be sold off and will enable some control to retain the assets for the nation.

The government should not be too involved in the day-to-day operations of the enterprise, as this is not its forte. Its role is to provide the legislative framework and any support necessary to nurture and protect the industry until it reaches critical mass and becomes self-sufficient. As a strategic industry, this is a long-term project, and the economic benefits to the nation will take years to mature.

Crewing - Union Free and Foreign Crews

Unions are organisations that represent workers' interests, particularly in relation to pay and conditions of employment. They have been particularly successful in Australia in achieving these aims.

However, in international shipping, it is not economically viable for shipping companies to employ Australian seafarers who are members of the MUA, AMOU or the AIMPE, as their pay rates and employment conditions far exceed those available to foreign seafarers. This is well documented, and in a highly competitive international trade setting, Australian seafarers have priced themselves out of the market.

The MUA is a division of the CFMEU and is well established in land-based maritime infrastructure, including stevedoring, diving, ferries, offshore oil and gas, port services, and coastal shipping, where there is no foreign competition. They also proudly state on their website that they are known across the country for having the strongest and most active rank-and-file members of any trade union.

Therefore, if Australian shipping is to be competitive, it must use foreign crews and exclude Australian union members. This is a sad reflection on both the unions and the Australian Labor Party, which provides them with top cover. However, it is fundamental to the resurrection of Australian shipping. This, of course, is anathema to the unions and the Labor Party; the issue must be confronted and accepted if there is any chance of success.

The maritime unions have perhaps 25,000 members in total. If the national interest and the long-term security of Australia, with its 28 million citizens, are considered important, the vested interests of Australian maritime unions must be secondary.

In this context, if economics allow, there may be scope for a limited number of Australian seafarers in Australian-owned, operated and flagged international shipping. However, such arrangements should not jeopardise the economic viability of the Australian maritime fleet.

Cost Estimate

Shipping is an expensive and uncertain business. Equally, profits can range from zero to spectacular, with vessels paid off in only a few voyages.

The financial aspect of maritime economics covers ship markets, investment strategies, and operating expenses. Asset management is vital, focusing on the optimal timing of buying and selling ships within market cycles. Key influences on financial decisions include ship costs such as fuel, maintenance, and crew wages, alongside market factors such as freight rates and regulations.

The Taskforce cost-gap analysis revealed that crewing costs, followed by fuel and repair and maintenance, are the primary drivers of the cost gap across the identified components. Other costs were found to be less significant overall or to apply equally to both foreign and Australian vessels.

Indicative costing for the Fleet

How long is a piece of shipping string? Many variables affect shipping costs, including size, type, age, financing options, and manufacturing location. This section does not aim to provide precise cost estimates, as these depend on the specifics of the ship, ownership, and financial arrangements. Instead, it offers approximate figures and insight into the scale of financial commitments for owners, operators, strategic partners, and government.

The two vessels built in Finland for TT Line have an approximate cost of $930 million. Although considered high, this figure reflects the rising trend in vessel prices. After numerous delays, including issues with berthing arrangements in Launceston, both ferries are now scheduled to begin service on Bass Strait in late October 2026.

The Tasmanian shipbuilding company Incat, known for supplying ferries to the international market, has said it could provide two suitable ferries at approximately $200 million each. However, these vessels differ significantly from the Finnish ships and have attracted some criticism.

The Strategic Fleet Pilot Program, involving 3 vessels operating for 5 years with Australian crews, will provide a good indication of current costs; however, these figures are not yet publicly available as of 2026. Indicative capital costs for new medium-sized vessels of the recommended type, as identified by the Taskforce, are approximately $200 million per ship. Older ships would be less expensive upfront, but their maintenance costs would be higher.

Given the Fleet's 20-year vision of 100 vessels, an average of 5 vessels per year must be acquired. This equates to capital costs of $1 billion per year.

Operating costs are conservatively estimated at 20% of capital costs per year, or a further $200 million. Capital and operating costs therefore total about $1.2 billion per year.

This expense should be covered by the owners, private companies, strategic partners, and the Australian Government. On the positive side, operating profits are expected to offset or exceed these costs.

The Australian Government's yearly budget for its maritime fleet is conservatively estimated to be at least $500 million.

SHIP BUILDING

Today, shipbuilding is an Australian success story. Australian shipbuilders, both commercial and naval, are now competing successfully in the global market with an innovative range of niche vessels. Australia's shipbuilding industry is a strategically vital sector, driven by defence contracts, sovereign capability goals, and a growing focus on electrification and sustainability. Despite many challenges, the industry is expected to remain buoyed by long-term defence contracts through 2040.

The industry has experienced boom-and-bust cycles over the past 50 years due to a lack of long-term Government vision and support. In 2017, the Naval Shipbuilding Plan (Naval Plan) set out the Government's vision for Australian naval shipbuilding. The plan laid the groundwork for a continuous, nationwide National Naval Shipbuilding Enterprise in Australia.

Data

- **Market Size.** Australia's major naval shipbuilding and associated infrastructure programs sit in the order of $190–240 billion through to about 2035–36.
- **Employment:** Currently 16,000+ workers across 400+ businesses (Statista, 2026).
- The **2024 Naval Shipbuilding and Sustainment Plan** will require a workforce of around 8,500 jobs in naval shipbuilding and support by 2030.
- **AUKUS** will require a workforce of around 20,000 jobs over the next 30 years.

Key Segments:

- **Defence**
  - **Arafura-class Offshore Patrol Vessels**: $3.6 billion for six vessels.
  - **Hunter-class Frigates**: BAE Systems at Osborne, SA. - 6 frigates - cost $26 billion.
  - **Collins-class Submarine Sustainment**: Managed by ASC in Adelaide.
  - **Aukus Nuclear Submarines**: Total program at least $368 billion to 2055.
  - **General Purpose Frigates -** Mogami-Class – 11 frigates.
  - **Hobart-Class** Destroyer Replacement Program
  - **Landing Craft**
- **Commercial**
  - Includes ferries, fishing vessels, and offshore support ships.
  - **Ferries**: Led by Incat in Hobart, including the world's largest battery-electric ferry launched in 2025.
  - **Sustainment & Repair**: A growing share of industry revenue, especially for legacy naval platforms.

Key Players

- **Austal.** Henderson, WA, Patrol boats, high-speed ferries, naval vessels.
- **Incat.** Hobart, TAS, Aluminium, electric ferries.
- **ASC.** Osborne, SA, Submarines, destroyers, sustainment.
- **BAE Systems.** Osborne, SA, Hunter-class frigates, systems integration.

- **Navantia Australia.** Sydney & Osborne, design & support for the RAN.
- **Government.**
- **The RAN.**

Strategic Developments

- **Sovereign Shipbuilding Capability**: The federal government has designated Austal Defence Australia as the *strategic shipbuilder* for Western Australia, consolidating local supply chains and skills.
- **Henderson and Osborne Hubs**: These two shipyards are the backbone of Australia's naval industrial base.
- **Sustainability Push**: Incat's Hobart yard is pioneering battery-electric vessels.

The RAN

Photo: RAN

The Royal Australian Navy (RAN) is Australia's primary maritime force. Although smaller than many international navies, it remains a well-balanced and capable force composed of highly trained and dedicated personnel. It is currently expanding, with significant investments planned over the next 30 years, including nuclear-powered attack submarines as its key offensive capability.

Nuclear-powered submarines pose a major technological and workforce challenge for the RAN and for Australia as a whole. Moving to domestically produced nuclear energy is not only inevitable and overdue but also crucial for building the technological infrastructure, skills, and training needed to sustain the submarine program.

The RAN serves as the foundation for maritime skills and plays a crucial role in Australia's future shipbuilding plans. It provides a solid base for developing maritime expertise and should be the central element in the Fleet expansion strategy.

Over the past decade, many naval shipbuilding projects have been undertaken. However, since the launch of AUKUS in 2021 and the release of the 2024 Naval Shipbuilding and Sustainment Plan (NSSP 2024), the RAN is poised to grow to levels

unseen since the end of World War II. The plan outlines a 30-year schedule of significant naval construction and maintenance, valued at $123-$159 billion. It includes the development of new submarines, frigates, destroyers, patrol boats, and landing craft, as well as major upgrades to the Osborne (SA) and Henderson (WA) shipyards.

A new governance framework facilitates industrial progress by fostering close collaboration among government agencies, industry players, academic institutions, and trade unions. This initiative will require significant workforce expansion to create approximately 8,500 naval shipbuilding and sustainment jobs by 2030, with an additional 20,000 jobs over the following 30 years in support of AUKUS.

Australian Merchant Fleet

This expansion of the RAN combat fleet presents an opportunity to grow the RAN logistics fleet by adding vessels that support military missions and participate in civil coastal and international trade. These ships should be built in Australia.

The following strategy is proposed.

- Logistic and support vessels must be a key component of an expanded RAN.
- These ships should be built in Australia as part of a broader strategy to develop the local shipbuilding industry. This would provide the continuity that has been sorely lacking over the past 50 years, during which an absence of vision and forward planning has led to repeated boom-and-bust cycles for domestic shipbuilders
- Local shipbuilding will also develop the Australian support base and maintenance facilities essential for an expanding RAN.
- A key challenge for the RAN will be to attract and train suitable personnel for the future high-tech Navy. For the nuclear subs, this can only be achieved in cooperation with the US Navy or the Royal Navy under AUKUS.
- As with the Australian Army and RAAF, an expanded role for Defence Reserve personnel must be part of the solution. Another probable solution will be a new form of National Service.
- A key goal could be to replace foreign vessels currently serving Australian territories like Norfolk Island, Lord Howe Island, and the Christmas–Cocos (Keeling) Islands. Besides strengthening RAN's logistics capabilities, these vessels could also facilitate increased training and career pathways for the civilian maritime sector. Any price differential between foreign shipping and the RAN would need to be subsidised to ensure that local businesses are not penalised.
- There is also potential for RAN training facilities to train civilian seafarers within an expanded maritime Fleet, particularly if they qualify for Defence Reserve service.
- The USN Military Sealift Command and the UK Fleet Auxiliary are practical models for the RAN to follow.

Case Study: Austal

Austal Ships Ltd (Austal, 2025) is a remarkable Australian success story in the shipbuilding industry. Austal has delivered and continues to build more than 300 vessels for 100 operators across 54 countries. Founded in Henderson, WA, it is now a global defence contractor with industry-leading capabilities in developing both defence and commercial platforms.

The entrepreneur behind Austal is John Rothwell, the company's founder, long-time chairman, and driving force behind its rise from a small WA start-up to a global shipbuilding and defence prime contractor.

Austal Data

- **Founded**: 1988 in Perth, Western Australia
- **Headquarters**: Australian Marine Complex, Henderson, WA
- **Listed**: ASX 1998: ASB
- **Global Presence**: Operations in Australia, US, Philippines, and support across Europe, Asia, and South America.
- **Employees**: about 5,000 worldwide.
- Austal specialises in aluminium shipbuilding, pioneering lightweight, high-performance designs.

- Their proprietary MARINELINK and Motion Control systems offer advanced motion control and vessel monitoring.
- The company integrates modular construction and digital ship design to improve efficiency and lifecycle support.

Defence

Austal is a significant contributor to Australia's sovereign naval capability. It plays a key role in the National Naval Shipbuilding Enterprise, supporting continuous build programs and export opportunities. The company has also partnered with the Australian government on Pacific Patrol Boat programs and other regional security initiatives. Austal designs, constructs, integrates and maintains an extensive range of naval vessels, including the:

- **Cape Class Patrol Boat** Program for the Australian Border Force and RAN.
- **Guardian Class** Patrol Boat for Australia. Austal's defence vessels are built in Mobile, Alabama, US and Henderson, WA.
- **Littoral Combat Ships (LCS).**
- **Pacific Patrol Boat.**
- **Armidale-class patrol boats.**
- **Expeditionary Fast Transport (EPF)** for the US Navy.
- **High Speed Support Vessel (HSSV).**
- **Support vessels** for Australian and regional navies.
- Worldwide vessel maintenance and management services.

Founded in late 1999, Austal's US shipyard has grown into one of Mobile, Alabama's biggest employers, serving as the main manufacturing hub for the US Navy's Littoral Combat Ship (LCS) and Expeditionary Fast Transport (EPF) programs.

Commercial

Austal initially achieved success in creating high-speed passenger and vehicle ferries, offshore vessels, and windfarm support ships. Its success is built on innovative catamaran and trimaran designs, expertise in aluminium vessel construction, and the ability to adapt proven commercial platforms to specific customer needs. Austal's shipbuilding facilities are situated in Henderson, Western Australia; Vung Tau Province, Vietnam; and Balamban, Cebu, in the Philippines.

In 2011, Austal acquired a major commercial shipbuilding facility at Balamban on the Island of Cebu in the Philippines to construct high-speed passenger and vehicle ferries, offshore crew transfer, and windfarm vessels for growing SE Asia markets and beyond.

Defence vessels designed and built by Austal for the US Navy include the Littoral Combat Ship (LCS) and the Expeditionary Fast Transport (EPF). They have also built the High-Speed Support Vessel (HSSV) for the Royal Navy of Oman.

Case Study: Incat

Photo: Incat

Incat is an Australian manufacturer of high-speed vessels (HSV) and catamaran ferries. Its greatest success has been in large, sea-going passenger and vehicle ferries, but it has also built military transports and, since 2015, smaller river and bay ferries. It is based in Derwent Park, Hobart.

The company builds vessels using aluminium construction, wave-piercing, and water-jet technology. Vessels have been constructed up to 130 metres in length and 13,000 gross tons, with cruising speeds of up to 58 knots (107 km/h).

The Incat platform offers fast transit and rapid turnaround in port. Shallow draft and optional ramp arrangements can significantly increase access to austere ports. Flexibility and versatility in vehicle deck layout, plus optional helicopter decks and hangars, increase operating options. The wide beam and other design features improve passenger comfort and crew accommodation, and medical and other facilities can be installed to meet specific requirements. Minimal crewing and reliable, cost-effective operation assist with ongoing budget considerations.

In 1999, the RAN chartered an Incat 86-metre HSV for use during the East Timor crisis. As HMAS Jervis Bay, she completed more than 100 trips between Darwin and Dili, transporting personnel and equipment. With average speeds of 40 knots, the craft completed the 900-nautical-mile return trip from Darwin to East Timor in less than 24 hours.

During this time, the vessel came to the attention of the US military, enabling them to witness the potential of high-speed craft to perform various military roles. As a result, in 2001, the US Navy awarded a joint venture company comprising Bollinger and Incat US, the charter contract for an Incat 96 metre HSV X1 vessel.

The success of the Joint Venture led to more charter contracts. The 98m TSV-1X Spearhead in 2002, and HSV2 Swift in 2003.

All three vessels excelled in their humanitarian roles, with Swift's significant contribution during Hurricane Katrina standing out, often responding on short notice to support disaster relief efforts. These ships became benchmarks for future fast sealift acquisitions, thanks to their high operational speed, long-range deployment capabilities, and substantial deadweight capacity.

The Japanese Defence Forces have also utilised Incat high-speed catamarans for relief operations.

Incat is now constructing the largest lightweight battery-electric ship in the world. It is intended to be an environmentally friendly, lightweight solution for ferry operators worldwide. Hull 096 is the ninth Incat-built vessel for the South American company Buquebus, which operates between Buenos Aires and Uruguay. It features electric propulsion and will be 130 metres long, with a capacity to carry 2,100 passengers and 226 vehicles.

It does not appear that Incat is part of the **2024 Naval Shipbuilding and Sustainment Plan.** If this is the case, then this is a major oversight.

INCAT Data

- **103 vessels** in various configurations have been launched to date.
- Large wave-piercing passenger and vehicle ferries
- In 1990, Incat was one of the pioneers of large, fast catamaran ferries, and they have been its core product ever since. The type of ship was different from earlier ferries, and its instant success led to Incat becoming a major player in the industry.
- Ships in this category have been built from 74 to 130 metres long and from 3,000 to 13,000 gross tons.
- The 99-metre HSC Francisco (Hull 069) is the world's fastest ship in commercial service and can achieve speeds up to 58 knots (107 km/h; 67mph).
- **Small passenger ferries**. Incat began by building small ferries under 37 metres. In 2015, the company resumed building smaller ferries and delivered river ferries for operation in London, Hobart, Sydney and Melbourne.
- **Naval Service.** Several catamarans have been used as fast transports for both the RAN and US Navy.
- **Oil rig tender.** Several fast catamarans have been built to transfer both crews and cargo for this market.
- **Electric ferries.** In a World first, Incat is now constructing a line of electric ferries.

Today, Incat continues to excel across operational, technological, and commercial fronts. The company is in its best position in decades, fueled by the launch of the world's largest battery-electric ship, a full order book, and strong global demand for lightweight, high-speed ferries.

Case Study: AUKUS - Australia's Moonshot

Photo: USN

On 12 September 1962, John F. Kennedy, the President of the US, delivered words that unified and inspired his nation - "We choose to go to the Moon". The aim was to bolster public support for his proposal to land a man on the Moon before the end of the decade and to bring him safely back to Earth. Thus inspired, the subsequent US space program unleashed the full potential of the US industrial base and achieved the mission of landing on the Moon on 20 July 1969.

AUKUS is Australia's moonshot! It is a pivotal event that could motivate the nation and energise the industrial sector as never seen since WW2. To succeed, I will require the same sense of purpose and inspired leadership exemplified by President Kennedy.

AUKUS (AUKUS, 2025) is a trilateral security alliance among Australia, the UK, and the US, created to deploy conventionally armed, nuclear-powered submarines in the RAN fleet. This marks the largest defence commitment in Australian history.

Initially announced on 15 September 2021, the partnership comprises two lines of effort, referred to as pillars:

- **Pillar 1.** This focuses on Australia acquiring nuclear-powered attack submarines and on the rotational basing of US and UK nuclear-powered attack submarines in Australia.
- **Pillar 2.** Involves the joint development of advanced skills across six technological domains: undersea capabilities, quantum technologies, artificial intelligence and autonomy, advanced cyber capabilities, hypersonic and

counter-hypersonic systems, and electronic warfare. It also includes two overall functional areas: innovation and information sharing.

In March 2025 (DoD, 2025), the Commonwealth introduced the AUKUS Submarine Industry Strategy, a comprehensive plan to strengthen the country's defence capabilities and transform its industrial sector. The strategy sets out Australia's approach to building, maintaining, and operating a fleet of nuclear-powered submarines.

Under AUKUS, Australia is scheduled to receive at least three Virginia-class nuclear submarines from the US within the next decade, with the possibility of acquiring two more. There is also an option for Australia to obtain nuclear submarines sooner, helping to fill the gap between the ageing Collins-class fleet and the domestically produced SSN-AUKUS, thereby aiming to prevent any operational shortfalls.

The strategy aims to build a sovereign submarine industrial base that enables Australia to sustain its naval fleet and integrate into supply chains with the US and UK. This base must expand significantly to address the logistical and technological challenges of nuclear propulsion and other advanced technologies under AUKUS.

The strategy identifies lines of effort to drive industrial uplift:

- Clarifying the support and supply chain needs of the submarine program.
- Increasing investment incentives and regulatory support to encourage participation and foster engagement with the private sector.
- Simplifying industrial regulation to facilitate a smooth, simplified entry into the national defence supply chains.
- Growing the workforce that is skilled enough to handle submarine maintenance and construction.
- Embedding nuclear safety, security and managing nuclear materials and waste safely.
- Developing Australia’s two principal shipyards: Osborne in SA and Henderson in WA, so that they are capable of handling the construction and sustainment of nuclear-powered submarines.

Like any major defence initiative, this program faces considerable challenges. However, AUKUS offers the most significant opportunity yet to boost Australian industry. Achieving success will require rare bipartisan backing for a construction effort spanning the next 30 years.

Case Study: Birdon

Photo: Birdon's motor life boats for the US Coast Guard, Portland, USA.

Birdon Pty Ltd (Birdon, 2024) stands out as a significant Australian shipbuilding success story. Founded by the late **Jim Bruce** in the 1970s in Port Macquarie, NSW, it is a privately owned company that recorded annual revenues of around $10 million in 2008. By 2026, its order book had surged to approximately $2.75 billion, primarily with US clients such as the Marines, Navy, Army, and Coast Guard. Its operational reach extends across Asia and Europe. Currently, Birdon employs about 750 people, with 450 based in the US. This workforce is projected to grow to roughly 2,500 by 2027, mostly in the US.

Austal and Birdon have recently been selected to deliver Landing Craft-Medium for the Australian Army and to jointly develop defence shipbuilding capability in Henderson, WA.

In 2014, Birdon won a contract to deliver 492 Bridge Erection Boats (BEB) for the US Army, most of which have now been delivered. This design has also been selected by the Netherlands, Swedish and Brazilian Armies.

Birdon's successful BEB project led to its selection to deliver 27 Waterways Commerce Cutters for the US Coast Guard. In 2023, Birdon acquired Metal Shark Boats' existing shipyard in Mobile, Alabama, to manufacture these vessels. This purchase adds a fully equipped shipyard to Birdon's expanding network of facilities across the US, enabling the company to offer a broader range of shipbuilding and repair services.

In 2026, Birdon signed a contract for 16 Amphibious Vehicles – Logistics (AV-L) for the Australian Army. All AV-L vehicles will be built at Birdon's shipbuilding yard in Port Macquarie, NSW.

Birdon is a testament to what can be achieved in Australian shipbuilding.

Case Study: USN Military Sealift Command

The US Navy's **Military Sealift Command (MSC)** is the primary ocean transport provider for the US Department of Defence, particularly supporting the US Navy. It manages approximately 125 civilian-crewed ships responsible for replenishing Navy vessels, executing specialised missions, strategically prepositioning combat cargo globally at sea, and transporting military supplies for deployed US forces and coalition partners.

The MSC is mainly staffed by civil service mariners, who are federal civil service employees. This group includes former full-time military personnel, merchant mariners, maritime academy graduates, and qualified entry-level candidates.MSC ships comprise a core fleet of ships owned by the US Navy, supplemented by civil merchant vessels chartered for use.

Of particular interest, the Expeditionary Fast Transport Vessels (T-EPF), a core component of the MSC that provides rapid transport of military equipment and personnel in theatre, is designed and built in a joint venture between the Australian company Austal and the US Navy

The MSC is a worthy model for Australia to follow.

Case[RG1] Study: American Shipbuilding

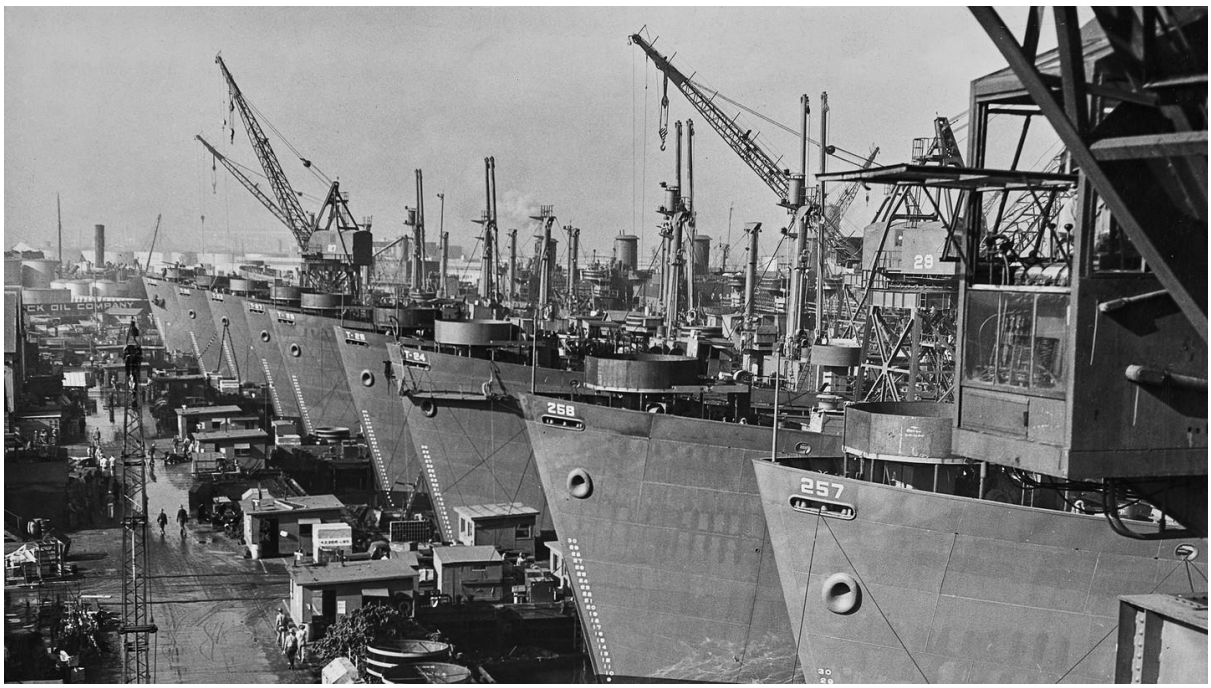


Photo: Liberty Ships WW2.

“He who commands the sea has command of everything,” said the ancient Athenian general Themistocles. By that standard, the US command of the sea has greatly declined since WW2.

Australia shares the mistake of neglecting shipbuilding with other nations. Its key strategic partner, the US, once a leading shipbuilding power, now lags behind China, Korea, and Japan. Currently, the US has fewer than 200 oceangoing vessels, of which only about 80 are engaged in international trade, compared with over 5,500 Chinese vessels. The US has fallen behind China, which now leads in global shipping and can rapidly build both merchant and military ships.

The issues Australia faces closely mirror those in the US, with some surprising facts:

- 0.2% of the world’s ships are built by the US, compared to 74% built by China.
- 0% of the containers used to move commodities around the world are built by the US, compared to 96% built by China.
- 0% of the ship-to-shore cranes in the US are built domestically, compared to 80% built by China.
- Chinese state-owned software is being installed in port operations across the US, with limited or no alternatives.

It was not always like this. During WW1, the US built more than 2,300 vessels, and during WW2, over 5,500. The photo above shows Liberty Ships, which by the end of WW2 were being produced at a rate of one every four days.

Shipbuilding in the US has almost vanished. The country now produces five or fewer large commercial ships each year, largely reliant on naval contracts. The industry faces longstanding challenges, including outdated infrastructure, workforce shortages, and strategic misalignments, which weaken both commercial and military capabilities.

The Navy struggles to meet its force structure objectives, especially amid the growing maritime rivalry with China. Meanwhile, domestic commercial shipbuilding is nearly gone, forcing the US to rely heavily on foreign-built vessels for trade and logistics.

The US acknowledges its declining capability and, under President Trump, is actively working to reverse this trend. After years of government neglect that weakened the sector, Trump is focusing on revitalising the US maritime industry to strengthen the country's economic and national security, aligning with the America First Agenda.

On April 9, 2025, Trump issued an Executive Order aimed at restoring American maritime leadership. This order establishes a Maritime Action Plan (MAP) designed to rejuvenate US maritime industries. It encompasses a wide array of policy measures, such as decreasing regulations, boosting investment in the maritime industrial base, countering China’s unfair practices in shipbuilding, and enhancing training and education opportunities.

The US government recognises the importance of collaborating with allies and successful international shipbuilders. Central to this plan is the Korean firm Hanwha, which has acquired the historic Philadelphia shipyard and is making substantial investments to modernise its infrastructure, training, and manufacturing processes. The goal is to eventually produce up to 20 vessels annually at this facility, including nuclear submarines.

An example of this new collaborative approach is the AUKUS agreement, which broadens the nuclear submarine manufacturing base across the US, UK, and Australia and is likely to eventually involve Korea and Japan.

In December 2024, the US introduced bipartisan legislation to reform the commercial maritime and shipbuilding industries and strengthen its competition with China. The legislation, called the Ships Act, would mandate the development of a national maritime strategy and establish a maritime security advisor position on the White House National Security Council. It would strengthen supply chains, reduce reliance on foreign vessels, put Americans to work, and support the Navy and Coast Guard’s shipbuilding needs.

The Ships Act is the first major piece of maritime reform since the Merchant Marine Act of 1970. It calls for the US to add 250 ships within the decade to the international fleet of US-flagged vessels, by establishing a Strategic Commercial Fleet Program.

This is a model for Australia to study.

CONCLUSIONS

Australia relies almost entirely on foreign vessels for its external and coastal trade. Sea trade accounts for 99% of all trade by volume and about 79% by value, contributing 45% of the country's income.

Almost without exception, foreign nations realise the strategic advantages of having a strong national maritime fleet and have done whatever is necessary to achieve this end.

Every major nation with a sea border, as well as some landlocked countries like Switzerland, unanimously recognises the importance of maintaining a sovereign maritime fleet and the economic benefits it delivers. Australia has been naive in this regard, and our policy shortcomings have been exploited to the point where we are today.

The Australian Fleet has been in decline for over 80 years since the end of WW2, despite many inquiries that have clearly identified the problems and proposed solutions. The reasons for the decline are clear and irrefutable. It has been and remains uneconomic to use Australian-owned, operated, and manned vessels, as Australian industrial laws, union activism, taxation settings, and excessive regulation collectively price Australian vessels out of the international market. Some Australian vessels operate successfully in the coastal market only because they are heavily subsidised and protected.

If the Fleet is to become a reality, political differences must be set aside, and bipartisan agreement must be the cornerstone of the way ahead. Shipping owned or controlled by the Australian Government is essential to revitalising Australia's industrial sector, increasing economic complexity, and securing the nation's supply chains and economic future. Global experience shows that the economic hub created by sovereign fleets will serve as the foundation for numerous supporting businesses.

Entrepreneurship has been the key ingredient to the resurrection of shipbuilding in Australia. Austal, Incat and Birdon have all been created and driven by exceptional entrepreneurs. Herein lies a salient lesson for the future.

Australian shipbuilders have demonstrated their ability to build competitive, innovative, and world-class vessels and should be actively engaged in rebuilding the maritime fleet to the fullest extent possible.

Some of these vessels will become part of the permanent RAN Fleet, and all will be available as a maritime war reserve. They can be requisitioned if necessary to support the nation during a crisis.

It is possible to resurrect the Australian international Fleet – if there is the national will to do so.

MOBILISING - SHIPS

The Vision: The maritime vision is to establish an Australian strategic fleet of 100 vessels over a period of 20 years.

Government:

- Agree on a bipartisan approach to the shipping industry.
- Create a 20-year plan to achieve the maritime and shipbuilding vision.
- Private enterprise to be harnessed and entrepreneurship fostered to build, manage and operate the fleet.
- The fleet to be jointly owned by private enterprise and Government, for at least the first 20 years.
- Enact policy and taxation settings to incentivise the sector (see Productivity).
- Establish a government department to foster the sector.
- The RAN to be a core component of the Strategic Fleet and the USN Military Sealift Command be considered as a model for expansion of the RAN logistic fleet.
- A government budget planning figure for the maritime fleet to be set at $500 million per year.
- Protectionist measures against global competition are essential. These are the tactics adopted by all nations.
- Policy settings must block domestic political ideological agendas and union activism.

Strategic Industry:

The maritime and shipbuilding sector to be declared a Strategic Industry, and national resources mobilised to support it (see Government).

Strategic Partnerships: Seek collaborative arrangements through AUKUS or QUAD, or with other allies to develop the maritime and shipbuilding sector (see Government).

Strategic Fleet:

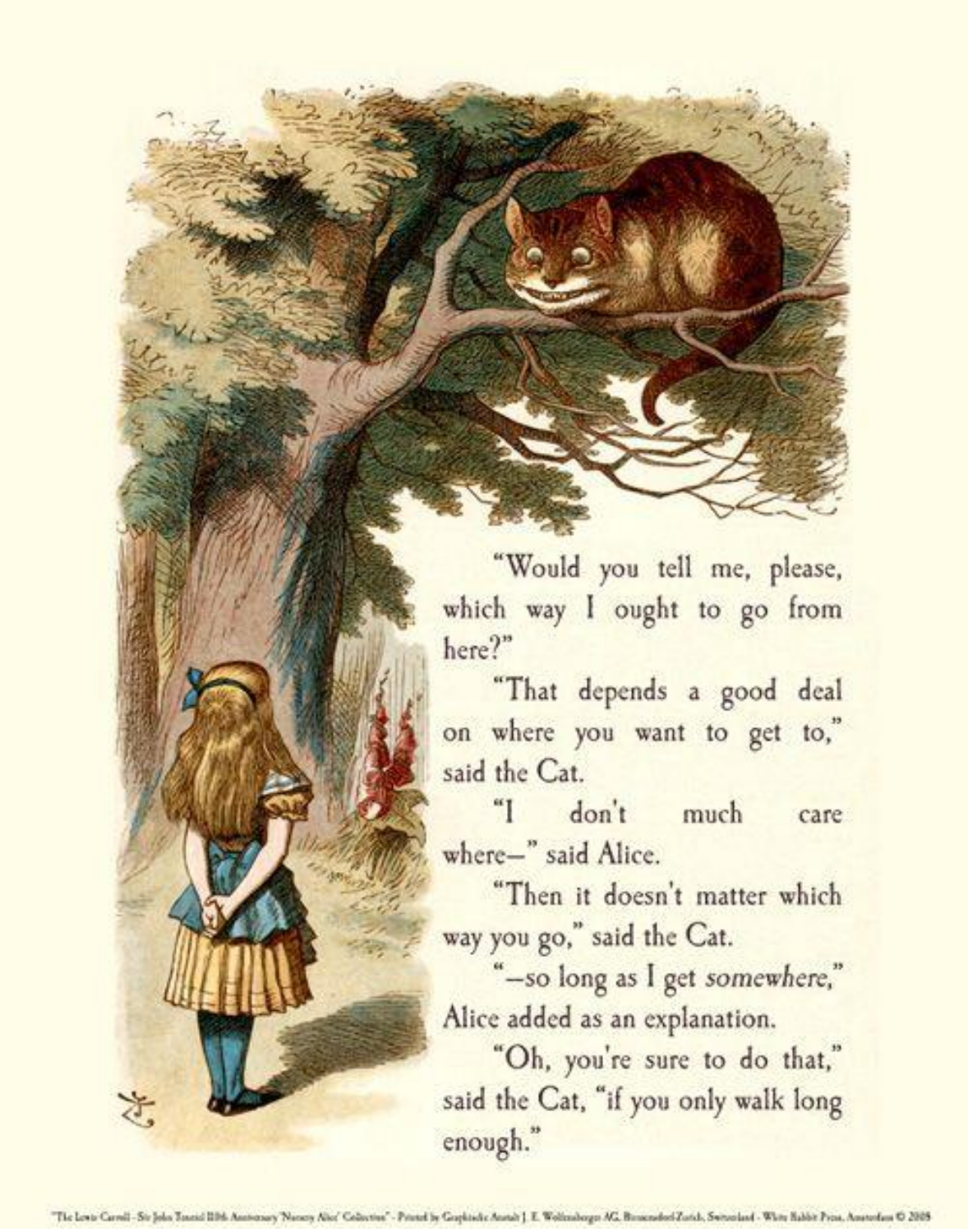
- The initial Fleet to be comprised of those vessels identified by the Taskforce.
- To be competitive, the Australian maritime Fleet must be crewed by foreign seafarers, for the foreseeable future.
- The Fleet to be operated on a commercial basis with a priority given to Australian trade.
- The RAN to be a core component of the Strategic Fleet.

Shipbuilding:

- Australian shipbuilders to be central to rebuilding the maritime fleet.
- Some of these vessels to form part of the permanent RAN Fleet and all of the vessels to be available as a maritime war reserve and to be requisitioned if it is deemed necessary, to support the nation in times of crisis.

THE LAST WORD

The last word belongs to Lewis Carroll and his “Alice in Wonderland” - Alice is lost in the forest, meets the Cheshire Cat and asks for directions. It is a perfect analogy for Australia’s present lack of a national vision, strategic planning and purposeful direction. We are indeed at a crossroads in Australian history.



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.

Tomorrows History Starts today.

The Author

This paper draws on the author's experience in the Australian Army, as well as his industry experience across manufacturing and major defence and construction projects throughout Australia and overseas. He holds academic qualifications in Engineering, Management, and Operations Research. He is retired and lives in Melbourne.

He is a passionate Australian who wishes to see that Australia remains on the right side of history.

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