

Leussink

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The Future of Australian Manufacturing in a Post-Pandemic World.

WHITE PAPER **2022**

Synopsis

The global COVID-19 pandemic has affected Australian manufacturing in many ways, particularly our dependence on offshoring and Australia's volatile supply chain.

The reliance Australian businesses have on the overseas supply chain proved to be a weakness in our local market during the pandemic. The economic shutdown that followed highlighted the vulnerability of Australia's supply lines and our dependence on manufactured goods from overseas.

This white paper aims to give an overview of the state of manufacturing in Australia and how it must change following the impacts of the pandemic, including the measures that the Federal Government is planning to take to address the problem.

This white paper is produced by Leussink, an Australian-based engineering business that provides a wide range of manufacturing services to markets around the world.



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Introduction

Like all industries, Australian manufacturing faced untold challenges when the pandemic hit. Not only were industries here affected, but the pandemic also had a significant impact on overseas businesses and the subsequent supply chains with Australia.

We saw, for example, international shortages and restrictions on the supply of essential medical equipment and personal protective equipment¹ which highlighted the need for our country to ensure it is capable of producing products that are crucial to our well-being and security.

As we emerge from the worst of the pandemic, the manufacturing industry is facing the lasting effects. Not the least of which has been a re-think of our supply chain and strengthening the security with a view to rebuild, safeguard and future-proof.

The pandemic made it clear that local manufacturing solutions are necessary to the country and to partner businesses. A strong domestic manufacturing industry helps associated industries along the supply chain.

As the effects that the pandemic has on our infrastructure ease, the good news is that overall, industry is rebounding in 2022². This is in part to the injection of money from the Federal Government and their goals for Australian manufacturing.

Manufacturing in Australia offers shorter supply chains and lead times than overseas manufacturing. It allows projects to be closely monitored and offers unimpeded communication between partners.

Australian industries are now strongly encouraged to turn to Australian manufacturers.



Australian manufacturing at a glance

From the late 1950s to the early 1980s manufacturing contributed almost 30 per cent toward our GDP and employed almost a third of the Australian workforce. Today, it has shrunk to about 5.5 per cent, employing less than 1 million people, which is considerably lower than other OECD countries and the OECD average.

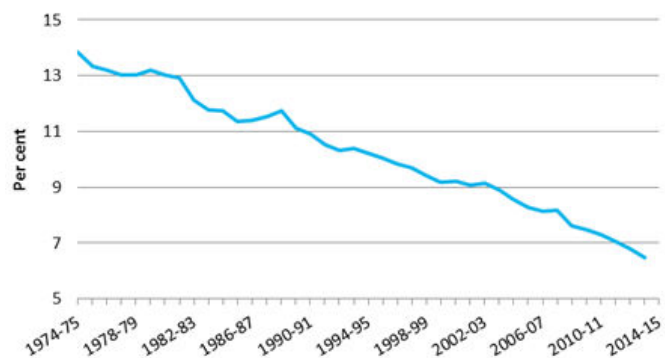
The many reasons for this decline in Australia's manufacturing industry are well documented; from the reduction and removal of protectionist tariffs, increased competition from lower cost economies such as Japan, Korea, and China, high exchange rates, to an overall disadvantage of our small-scale, high-cost operating environment.

Jim Stanford, director of The Australia Institute's Centre for Future Work reveals Australia does not fare well against its OECD counterparts³. "Most other industrial countries have manufacturing sectors that are successful and large enough to, in aggregate, meet their own domestic needs for manufactured products. In Australia's case, however, we're using more manufactured goods all the time but we're producing a smaller and smaller share of those."

Currently, Australia is only producing two thirds of the amount of manufactured goods it consumes, whereas in comparison, most developed nations produce an excess.

We are last amongst all OECD countries for manufacturing self-sufficiency at 72 per cent, which is reflected in our thirty-year downward trend in Australian manufacturing output and employment⁴.

Manufacturing industry's share of GDP



Source: https://www.apf.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1415/Quick_Guides/Manufacturing

Manufacturing Self-Sufficiency, OECD Countries, 2015

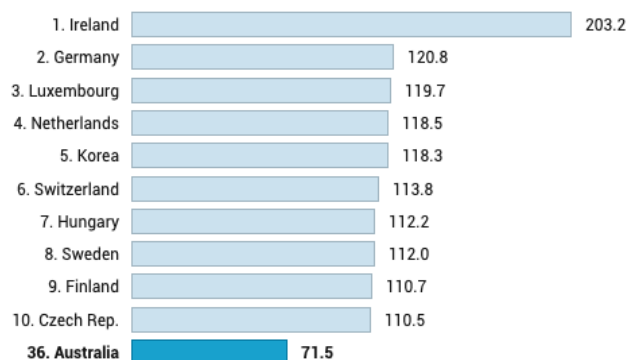


Chart: Rachel Pupazzoni • Source: Centre for Future Work, OECD 'Statistics on Trade in Value Added'

“Increasing Australia’s manufacturing self-sufficiency to 100 per cent could add another \$180 billion a year in new manufacturing output, boost GDP by \$50 billion a year and add more than 650,000 direct and indirect jobs.”

Jim Stanford, director of The Australia Institute’s Centre for Future Work.

The COVID-19 pandemic has shattered our country’s complacency regarding manufacturing, with many senior government officials conceding that Australia’s domestic manufacturing capability has declined and our reliance on global supply chains can no longer continue³.

This is now an opportune time to revitalise Australian manufacturing and our domestic manufacturing capabilities, not only across traditional industries, but also in higher technology industries through innovation and a focus on quality, reliability, sustainability, and differentiation, rather than low cost.

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Industries that are thriving post-pandemic

As we all had to change and adapt to a new way of doing things, COVID-19 created a huge shift in Australian businesses. Some suffered and perished, some pivoted to focus on alternative revenue streams, while others, especially within the manufacturing space, thrived.

The number of engineering jobs advertised increased 50 per cent in 2021. Australian engineering job vacancies are at a 10-year high, due to border closures and a shortage of skilled home-grown talent⁵. And there has been a marked increase in the employment rates in the manufacturing sector as well⁶.

Some of the industries that were able to make the most of the issues created by the pandemic included:



Health

Hospitals were not only inundated with patients, but there was added stress caused by the need to stay COVID Safe. Hospital and aged care staff were working extra shifts to cope with the extra demands. Staff who usually had second jobs were required to commit to only one to limit the possible spread of COVID from one high-risk workplace to another.

COVID testing centres and vaccination points sprang up around the country. Suppliers of equipment experienced an unprecedented increase in demand. So too did the providers of IT to these services.



Manufacturing

The reluctance to buy overseas due to doubt in the supply chain and the stronger desire to support Australian industry during the pandemic meant many Australian manufacturers experienced an increase in business due to the stronger focus on buying local.



Cleaning

More cleaners were used to protect Australians from the risk of contracting COVID-19. Businesses needed to demonstrate that they had the interests of their clientele and staff in mind. Companies increased their cleaning staff roster to sanitise common contact points, such as handrails and screens.



Home spending

With people spending more time in their homes, people turned their focus to improving their homes. Money was spent on home renovations, new appliances, and furniture, helping small contractors and the retail sector.



Platforms for online meetings

Zoom was virtually unheard of a couple of years ago, now it is a commonly used platform. Microsoft replaced Skype with Teams, which is designed for remote work meetings, and is regularly used in businesses.



Education IT providers

Education has changed dramatically. Online learning was once a small percentage of education. Now it is far more common and widespread and has permanently changed the way education is conducted. Online platforms for learning have thrived. Students needed to upgrade their equipment, so were obliged to purchase new computers and laptops.



Food and beverages

The lockdowns caused people to re-think their habits regarding food and beverage purchasing. The retail sector for groceries boomed while restaurants, cafes, hotels, and clubs struggled. To this end, food delivery services experienced an increase in trade as people were forced to dine at home instead of dining out.

The government's plan to help manufacturing

In the March 2022 Federal Budget, the Federal Government focused its attention on making the manufacturing industry more resilient in the face of the impacts of the last few years⁷.

"COVID and events in Ukraine have been a powerful reminder that we must increase our self reliance. Australia has a world class manufacturing sector. Tonight, we announce new funding to solve for vulnerabilities in our supply chains," Treasurer Josh Frydenberg said.

The Treasurer outlined specific manufacturing areas where funding will be spent:

- New funding to make Victoria the first place in the southern hemisphere to manufacture mRNA vaccines.
- New funding to drive collaboration between our universities, CSIRO, and industry to rapidly commercialise new technologies in clean energy, medical supplies, defence, and other high priority areas.
- A new patent box for the agriculture and low emissions technology sectors that will see income from new patents developed in Australia taxed at almost half the rate that applies to large companies.

"Manufacturing is an essential driver of skills, jobs, and capability. The ability to make things here and do it well is critical to our economy and our economic plan."

Josh Frydenberg, Treasurer

Among the spending, \$328.3 million has been allocated over five years to the Modern Manufacturing Strategy and its six national priority areas. A large portion of this will go to the Modern Manufacturing Initiative, a scheme that provides matched grants for manufacturing projects. Funding will also go to the Regional Accelerator Program for regional projects⁸.

The Industry Minister Angus Taylor said that the spending "will secure supply chains and jobs during a period of heightened global uncertainty," with the purpose of building a resilient manufacturing sector.

\$2.7 billion has been allocated to boosting apprenticeship commencements. Businesses that engage an apprentice may be eligible for a subsidy of 50 per cent of wages paid.



Australia's modern manufacturing strategy

Manufacturing is a key industry in the Federal Government's plan to deliver a strong, modern, and resilient economy post-pandemic. The government's vision for Australian manufacturing is to be recognised as a high-quality and sustainable manufacturing nation⁹.

Through the newly released Modern Manufacturing Strategy¹⁰, the government is looking to invest a total of \$1.5 billion into the following four pillars:



Getting the economic conditions right for business



Making science and technology work for industry



Focusing on areas of advantage



Building national resilience for a strong economy

Goals

Within 2 years:

- Create a business environment to support manufacturing jobs and encourage new investment

Within 5 years:

- Support a more industry-focused science and technology system
- Help to boost productivity, scale, and competitiveness

Within 10 years:

- Lock in productive and competitive firms with high-impact sectoral growth



9. <https://www.industry.gov.au/news/manufacturing-a-new-future-for-australia>

10. <https://www.industry.gov.au/data-and-publications/make-it-happen-the-australian-governments-modern-manufacturing-strategy>

Manufacturing Priorities

The government has identified six priority sectors for national manufacturing growth:



Resources Technology & Critical Minerals Processing



Defence



Medical Products



Recycling & Clean Energy



Food & Beverage



Space

Key Initiatives

Modern Manufacturing Initiative

Purpose:

Assist manufacturing businesses to scale up, translate ideas into commercial successes and integrate into local & international value chains.

Investment: \$1.3 billion

Supply Chain Resilience Initiative (SCRI)

Purpose:

Address identified gaps in critical supply chains.

Investment: \$107.2 million

Manufacturing Modernisation Fund

Purpose:

Deliver quick action to unlock business investment on shovel ready projects

Investment: \$52.8 million



Sovereign Manufacturing Capability Plan

Is there anything the pandemic hasn't affected? For the manufacturing industry, rightly or wrongly, offshoring was the trend pre-COVID. Australian industries used supply chains that were heavily reliant on foreign suppliers.

Going offshore for supply chains is always a risky business. The more complex the chain, the more problems that can arise that disrupt the chain. Once the pandemic set in, the offshore supply chains to Australia almost ceased, affecting virtually every business in the country. Industries that relied on foreign manufacturing were particularly hit hard. The effect that COVID-19 had on global supply chains exposed the extent to which we are reliant on China¹¹.

It has been widely known that Australian manufacturers are in an extremely volatile economic sector. The global pandemic brought this to light, affecting production in Australia as well as the way manufacturers operated their businesses.

Freight rates and costs significantly increased, leading to stress for importers and exporters, and extensive delays. Contractual obligations and customer expectations have been detrimentally affected.

Now the weakness of our reliance on offshoring has turned efforts to onshoring. The Federal Government has addressed the issue in the 2022-23 Budget, looking to safeguard access to critical products and ensure our supply chains are more resilient.

The Sovereign Manufacturing Capability Plan¹², released in July 2021, outlined potential supply chain vulnerabilities and how Australian businesses could address them, thus shaping the first tranche of the Supply Chain Resilience Initiative (SCRI)¹³.

What is the Supply Chain Resilience Initiative?

- A program of grants designed to support business and stimulate manufacturing growth by securing Australia's supply chains.
- Allows Australian businesses to co-invest in manufacturing-related capabilities, equipment, technology, skills, and processes.
- Facilitates diversification of supply options and improvements in collaboration between domestic and international manufacturers and suppliers.
- Mitigates supply chain risks for critical products and allows for enhanced visibility and transparency of the supply chain for identified critical products.
- Accelerates digitalisation and deeper integration of technology to optimise supply chain performance.
- Grants of up to \$2 million were offered to Australian businesses that were identified as being in the manufacturing supply chain, in which 27 companies received the grants¹⁴.



11. <https://apo.org.au/sites/default/files/resource-files/2022-02/apo-nid316292.pdf>

12. <https://www.industry.gov.au/data-and-publications/sovereign-manufacturing-capability-plan-tranche-1>

13. <https://www.industry.gov.au/data-and-publications/sovereign-manufacturing-capability-plan-tranche-1/building-supply-chain-resilience>

14. <https://business.gov.au/grants-and-programs/supply-chain-resilience-initiative/grant-recipients>

Three ways in which businesses can address supply chain vulnerabilities through SCRI funding¹³

1.

Augment existing domestic manufacturing capability (product and/or packaging) to ensure availability of critical products in times of crisis and enhance the ability to pivot and provide agile manufacturing capability. For example, a company may seek SCRI funding to purchase new equipment or update ageing infrastructure to broaden their existing manufacturing capabilities.

2.

Incentivise uptake of digital technology capability to assist industries in creating transparent and reliable data sources that monitor stock levels. For example, a company may seek SCRI funding to invest in a stock control system that automatically identifies the cheapest and fastest suppliers. Alternatively, a digital 'desktop' solution may be available to show the end-to-end business supply chain, at the business or sector level.

3.

Build advanced manufacturing workforce capability to address skill gaps in what will be required to set up, operate and monitor agile manufacturing facilities, delivering a future pipeline of proficient workers. For example, if a company is poised for growth with a new manufacturing facility and recruiting new employees, these employees may require specific training and/or upskilling to meet the demands of the new facility. SCRI funding may be available to support this.



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About Leussink

As a second-generation family-owned business, Leussink has been providing complete design, fabrication, engineering, and machining services and solutions for all industry sectors spanning over four decades.

Being locally based in the Illawarra region of NSW, and with a range of products, parts and accessories stored on site at our warehouse, means we can deliver a working solution to your exact specifications, when you need it. This also makes communicating and consulting far easier, and more efficient as we're open when you are.

Our capabilities

Precision
machining

Welding,
fixturing
& fabrication

Bespoke
manufacturing

Metrology
services
(in-house and on-site)

Reverse
engineering

Rolling mill
refurbishment

Mechanical
engineering
design services

Short,
medium, and
high-volume
component
manufacturing
runs

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