The U.S.-Australia Strategic Innovation Alliance

Manufacturing in Australia Factsheet

Overview

Manufacturing in Australia is undergoing a revival, driven by targeted public investment, growing demand for sovereign industrial capability, and the acceleration of high-value, innovation-led production. In 2024–2025, the manufacturing sector contributed approximately $80.6 billion to Australia's gross domestic product, representing about 5.7 percent of total national output.[1] While this share is modest compared to historical levels, real output expanded by 2.4 percent year-over-year, outpacing growth in sectors like agriculture and utilities.

The renewed momentum is largely supported by national funding vehicles like the $9.8 billion National Reconstruction Fund (NRF) and the Modern Manufacturing Strategy, which aim to build resilience and self-sufficiency across priority sectors.

Australia's manufacturing sector is projected to grow at an average annual rate of 2.8 percent through 2030, with higher performance expected in clean energy systems, medical devices, and defense-industrial supply chains. Policymakers are seeking to increase the sector's share of GDP to at least 6.5 percent by the end of the decade through targeted investment, export support, and innovation clustering.

Sector Employment and Workforce Development

Australia's manufacturing sector employs approximately 872,000 workers in 2025, making up about 6.3 percent of total employment.[2] However, the sector is grappling with structural labor shortages, particularly in digital engineering, robotics, and materials science. Vacancy rates have climbed by 11 percent year-over-year, especially in regions like Greater Melbourne and Western Sydney, which are home to advanced manufacturing clusters.

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[1] Australian Bureau of Statistics (2025). Australian National Accounts: National Income, Expenditure and Product, March 2025. https://www.abs.gov.au/statistics

[2] Australian Government Labour Market Insights (2025). Manufacturing Industry Profile. https://labourmarketinsights.gov.au

To address this, the federal government has partnered with Technical and Further Education (TAFE) programs and universities through programs such as the Workforce 2050 Skills Pathways Fund, targeting training in mechatronics, additive manufacturing, and clean energy engineering.

Growth in Advanced Manufacturing

Advanced manufacturing is at the center of Australia's industrial transformation, generating over $23.4 billion in annual value and supporting more than 250,000 high-skilled jobs.[3] The focus is on integration of next-generation technologies — including industrial AI, sensor networks, cyber-physical systems, and sustainable materials — across production ecosystems.

Key Growth Areas:

- **Medical and Biomanufacturing**: Firms such as CSL, Cochlear, and ResMed are expanding domestic production of biologics and medical devices. The Melbourne Biomedical Precinct now hosts over 40 R&D organizations and has attracted more than $780 million in public-private investment since 2022.
- **Aerospace and Defense**: Australia is actively enhancing its sovereign defense capabilities through the production of unmanned aerial vehicles (UAVs), guided munitions, and satellite components. In 2024, the Australian government allocated $37.8 billion to its total defense budget, with an acquisition budget of $9.1 billion, expected to reach $14.1 billion by 2029. This investment supports various programs, including the procurement of aircraft, submarines, naval vessels, and missiles. Key manufacturing and assembly work is occurring at Lot Fourteen in South Australia and Fishermans Bend in Victoria, underscoring Australia's commitment to strengthening its defense industry.
- **Clean Energy Manufacturing**: Australia now produces 18 percent of the electrolyzers used domestically for green hydrogen and is scaling up battery manufacturing. The Lithium Valley precinct (WA) and the Hunter Renewable Energy Zone (NSW) are attracting manufacturers in solar PV and battery storage.
- **Digital and Additive Manufacturing**: Over 750 Australian firms are now engaged in 3D printing, digital twinning, and industrial AI. The Australian Additive Manufacturing Centre (AAMC) in Melbourne is collaborating with universities and small businesses to prototype metal parts for defense and biomedical use.

[3] Advanced Manufacturing Growth Centre (2025). Sector Overview: Advanced Manufacturing in Australia. https://www.amgc.org.au

Industrial Innovation Ecosystem

Australia's manufacturing innovation system is supported by a growing network of precincts and accelerators. Notable examples include:

- **Tonsley Innovation District** (SA): Hosts over 2,000 workers in automation, renewables, and clean tech. Key tenants include Siemens and SAGE Group.
- **Advanced Manufacturing Research Facility (AMRF)** in Western Sydney: Provides prototyping, training, and testing services for SMEs in defense, transport, and aerospace.
- **Geelong Manufacturing Innovation Hub**: Repurposed from legacy automotive infrastructure to support carbon fiber, composites, and clean mobility R&D.

Australia's federal government has also expanded funding for Cooperative Research Centres (CRCs) focused on industrial decarbonization, robotics integration, and circular manufacturing. More than $270 million in combined government and industry funding was awarded to manufacturing-linked CRCs between 2022 and 2025.[4]

Challenges and Outlook

- **Skills Shortages**: With over 38,000 unfilled positions, especially in electrical engineering, automation, and digital systems integration, labor availability remains a key barrier.
- **Supply Chain Risk**: Geopolitical tensions and logistics bottlenecks continue to expose vulnerabilities in Australia's dependence on imported inputs, particularly semiconductors.
- **Digital Readiness Gap**: Adoption of Industry 4.0 technologies remains uneven, with many SMEs lacking the capital and technical capability to implement advanced systems.

[4] Department of Industry, Science and Resources (2025). Cooperative Research Centres Program Summary 2025. https://www.industry.gov.au