

ADVANCED MANUFACTURING



Melbourne is Australia's leader in advanced manufacturing and engineering with key innovation precincts in Fishermans Bend and Parkville.

24,000

Companies
in Victoria

\$24b

Victoria exports
(2022-23)

263,449

Jobs in Victoria

\$33.5b

Gross State Product
(2022-23)

Melbourne has a leading manufacturing sector

Victoria has the nation's largest manufacturing workforce and the deepest and most diverse supply chains. More than 30 per cent of Australian manufacturing jobs are in

Victoria, which is also the country's leading investment destination, attracting about \$590 million in foreign direct investment in 2022-23.

Advanced manufacturing capabilities

Defence and aerospace - Melbourne has world class aerospace design and manufacturing capabilities and is deeply integrated in global supply chains. The sector contributes \$8.4 billion to the Victorian economy, generates \$350 million in exports, and supports over 24,300 jobs.

The city is home to world leading companies including BAE Systems, Boeing, Elbit, Hanwha, Leonardo, Lockheed Martin, Moog, SYPAQ, Textron and Thales.

The world's first 3D printed engine was produced by a Monash-led project team, with its spinout company Amaero undertaking research and development and manufacturing for leading global defence companies.

Composite and advanced materials - Victoria leads the nation in carbon fibre research and development and has expertise in polymers, nanomaterial and advanced structure ceramics, advanced biomaterials and state-altering materials.

Additive manufacturing and 3D printing - Victoria has significant capabilities in additive and subtractive technologies including complex design fabrications and prototype testing and design.

The state also has expertise in material synthesis, industrial automation, advanced process design, future manufacturing and industrial optimisation.

Biomedical - Melbourne has a nation-leading medical device and pharmaceutical production capability supported by Victoria's Australian Medtech Manufacturing Centre. Melbourne is an internationally recognised leader in biotechnology, producing the world's first bionic ear and commercial 3D bioprinter. Noteworthy companies include Neo-Bionica and Planet Innovation.

Around \$3.5 billion in pharmaceuticals are exported from Victoria annually, making up 60 per cent of Australia's exports.

Melbourne's high performance is driven by strong research and development support

Victoria's advanced manufacturing industry is at the forefront of innovation, investing more in research and development than any other state, totalling \$1.79 billion in 2021-22.

The city is home to advanced manufacturing research centres that provide research translation capabilities to industry users. These include the Space Industry Hub, Bio21 Molecular Science and Biotechnology Institute, Defence Science Institute, DMTC, Materials Characterisation and Fabrication Platform, Melbourne Centre for Nanofabrication, Micro Nano Research Facility and Oceania Cyber Security Centre.

Melbourne research universities such as the University of Melbourne, RMIT, Deakin, Monash and Swinburne offer exceptional expertise for joint research and development projects.

Other noteworthy centres include the Deakin Battery Research and Innovation Hub, the Clayton Australian Manufacturing Materials Precinct, and the Australian Research Council (ARC) Research Hub for Advanced Manufacturing of 2D Materials (AM2D) hosted at Monash University.

Australian Synchrotron

Located in Melbourne, Australian Synchrotron is a world-class national research facility that uses accelerator technology to produce a powerful source of light - x-rays and infrared radiation - a million times brighter than the sun.

The facility has 10 different experimental stations, or beamlines that harness light to enable researchers to see the fundamental structure and composition of materials, on scales ranging from the atomic to the macroscopic - with a level of detail, speed and accuracy not possible in conventional laboratories.

The Australian Synchrotron supports a broad range of high-quality research, with applications in sectors from medicine and nanotechnology to manufacturing and mineral exploration.



Melbourne has world leading manufacturing precincts

The Fishermans Bend Innovation Precinct will be an internationally renowned centre for innovation in advanced manufacturing, engineering and design.

Key players include industry and research leaders in advanced manufacturing such as the Australian Government Department of Defence, Australian Road Research Board (ARRB), the Defence Autonomy Centre of Excellence by SYPAQ, Blackmagic Design, Boeing, Siemens and the University of Melbourne.

RMIT's Advanced Manufacturing Precinct has unique digital manufacturing, micro-nano-research and microscopy facilities, which provide opportunities for industry partners to access student talent, academic expertise and leading edge technology to drive innovation.

Melbourne Connect is a purpose-built innovation precinct that is home to the Telstra Creator Space, an accessible fabrication lab.



Manufacturing graduates

The University of Melbourne has the third best civil engineering degree in Australia, which ranks 22nd globally.

RMIT's Bachelor of Engineering (Advanced Manufacturing and Mechatronics) is the only one of its kind, offering the latest in mechatronics technologies, systems engineering and additive manufacturing.

Victoria is responsible for 30 per cent of the nation's Science, Technology, Engineering and Mathematics (STEM) graduates.

A favourable business environment



Incentives – Generous research and development tax incentives are available to eligible foreign investors who can receive up to 43.5 per cent as a refundable tax credit from the Australian Government.

The Australian Government and Victorian Government provide a range of grants and support programs for international companies looking to set up their manufacturing facilities in Melbourne.

These programs and services encourage research and development, innovation, value adding, capability development and commercialisation.



Access to a reduced withholding tax – available on specified distributions from management funds, enabling an internationally competitive taxation system for foreign investors.



Strong innovation competitiveness in the Asia-Pacific – ranking third most promising innovation ecosystem, underpinned by Melbourne's research and skills offering.



Multicultural labour force – with 260 languages spoken in Melbourne – ranking second in the world for inclusivity and wellbeing.



Favourable visa settings – attracting top-tier talent through dedicated visa programs such as the Global Talent Visa and Global Talent Employer Sponsored program.



Melbourne is a gateway to the Asia-Pacific – opening access for global investors looking to operate in this region, who also benefit from Australia's 17 free trade agreements.

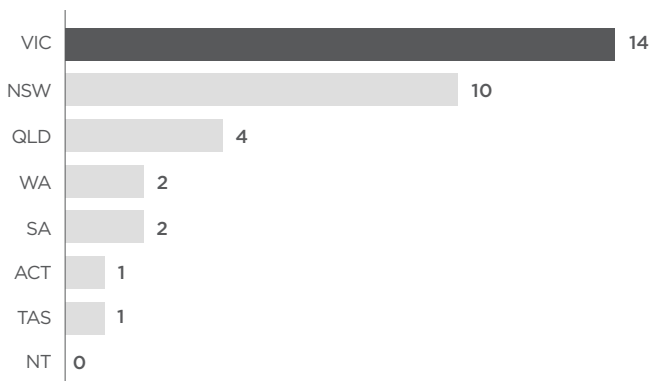


Lower business costs – industrial leases and office space rentals 35 per cent cheaper than Sydney. Victoria has the lowest business tax rate in Australia, attractive payroll tax rates and energy costs that are 45 per cent lower than Sydney.



Exceptional liveability – Melbourne is ranked as the fourth most liveable city in the world, a key drawcard for attracting and retaining top talent.

Number of engineering graduates by state (thousands, 2021)



Thinking about starting a business in Melbourne?

Visit melbourne.vic.gov.au/invest or email us at investmelbourne@melbourne.vic.gov.au.

Want help identifying products and services produced in Melbourne?

Visit melbourne.vic.gov.au/international or email us at global@melbourne.vic.gov.au.



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