

Industrials: Manufacturing Industries

PROPOSED OUTCOME

Lithgow develops an advanced, circular manufacturing sector that is an anchor of the future economy, building on the region's history of industrial innovation and leveraging its skilled workforce, transport infrastructure and potential for renewable energy production.

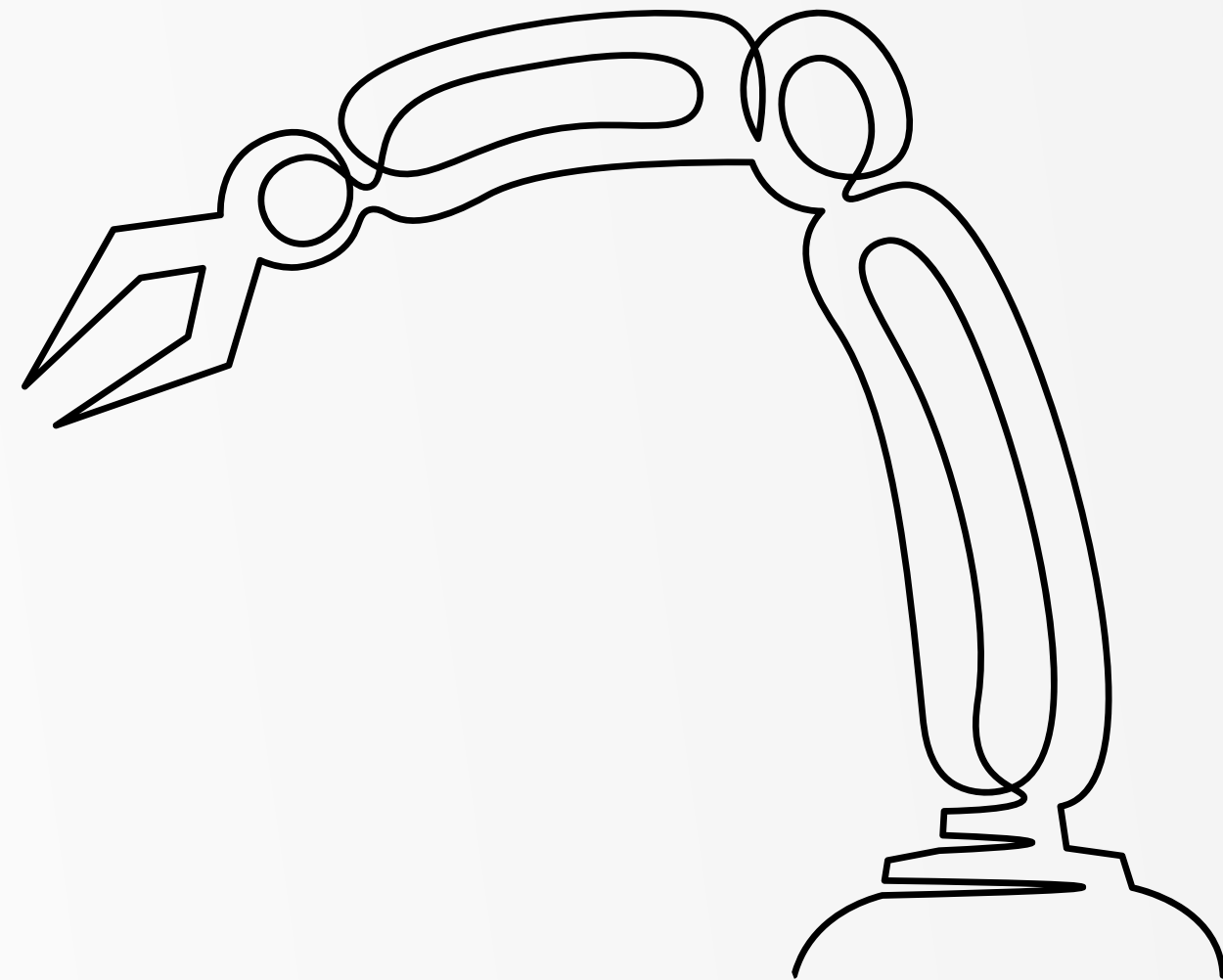
CONTEXT

Lithgow has a **proud industrial heritage** spanning more than 150 years from the first commercially viable steel mill in Australia, to cement production that Portland proudly proclaims built Sydney, to manufacturing for Australia's defence forces.

Today the Lithgow LGA is home to 46 manufacturers, some of which are large-scale, global enterprises, including Thales and Ferrero. Manufacturing in the area is focused on fabricating metal product, primarily for small arms, as well as transport equipment manufacturing. Other important manufacturing includes food product manufacturing, as well as printing and non-metallic mineral production. Manufacturing is the equal fourth largest contributor to Lithgow's economy and employs 8% of the population.

Lithgow LGA has four core areas where lands are zoned for industry and economic activity: Lithgow East and Lithgow West; Portland; Marrangaroo; and Wallerawang. However, stakeholders report challenges in accessing available and ready land that is appropriately zoned.

Manufacturing is undergoing a transformation world-wide, with a shift to advanced manufacturing, which focuses on how goods are produced to create value, driven by new technologies and business models. This includes a stronger emphasis on research and development, design, supply chain and logistics, and post-sales support and services. Manufacturing is also integrating circular economy principles into products and services – using less resources for longer through redesign, reuse and recycling.



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GROWTH OPPORTUNITIES

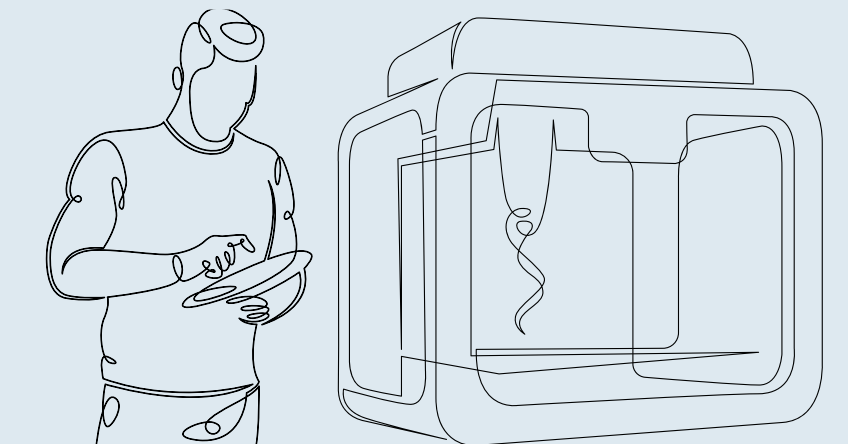
Supply chain and trade issues are prompting Australian governments to focus on building on-shore manufacturing capability. The priorities include manufacturing for defence, renewables and low emissions technologies, and transport, in which Lithgow has a competitive advantage.

Lithgow LGA offers access to affordable industrial land, water, energy and a workforce that is skilled in relevant trades. Its proximity to Western Sydney, including the new Western Sydney International Airport and Aerotropolis industry and jobs hub also presents opportunities.

Economic growth will be driven by expansion of local manufacturers and attraction of new businesses and industries, complemented by adopting advanced, clean manufacturing approaches to create high-value products and services that reach untapped markets.

In line with the NSW Government's Advanced Manufacturing Strategy and guidance from the Advanced Manufacturing Guidance Growth Centre, this will need to be supported by:

- developing precincts of related industries
- increasing collaboration and research between manufacturers and with research institutions
- promoting capital investment in advanced technologies and process improvements
- skills development.



Defence

Thales carries on a tradition of small arms manufacturing which began in Lithgow in 1912. Thales is now undertaking a modernisation of the Lithgow Small Arms site to attract associated businesses and research institutions to collaborate in the design, development and precision manufacturing of next generation weapons systems.

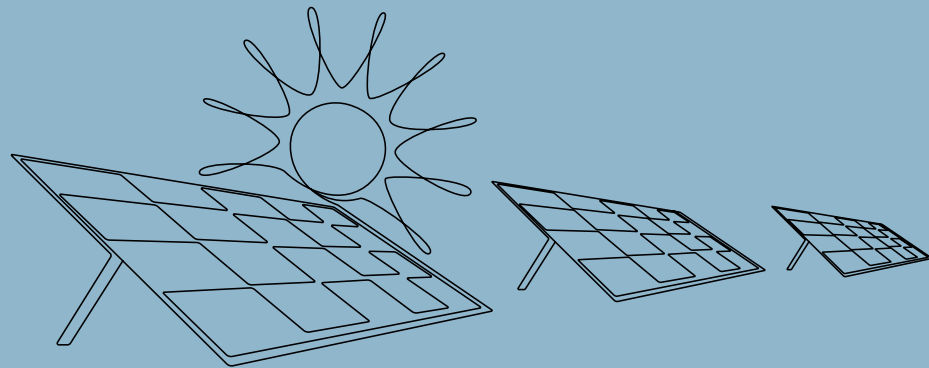
Thales has also established a Small Arms Collaboration and Cooperation Centre (C³) to help its Australian SME and industrial partners by breaking down barriers to entry and providing access to its resources, equipment, engineering skills and expertise for prototyping, test and evaluation, qualification, industrialisation and advanced manufacturing.

This expansion and modernisation lays a foundation to develop a Defence and Innovation Precinct that also attracts metal fabrication and component manufacturers and enables resource circularity.

Lithgow Railyards

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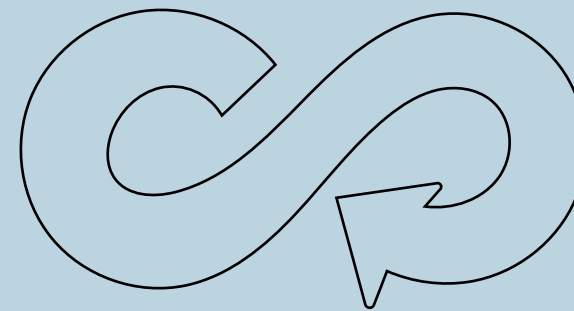
GROWTH OPPORTUNITIES



Renewable energy components and clean technologies

Proposed commercial, community and household renewable energy production in Lithgow LGA and in Renewable Energy Zones, including in Central West Orana, present opportunities to locally manufacture components required for the technology. This could include research, development, design and manufacturing of products such as solar panels and inverters, and electrolyzers for hydrogen production.

Lithgow LGA could position to become one of NSW's Clean Manufacturing Precincts to promote collaboration between new low carbon industries and decarbonising high emitters to develop and commercialise clean technologies that drive down emissions and accelerate shared access to clean infrastructure and technology. In addition to green hydrogen, this could include production of green building materials such as cement, using renewable energy and recycled materials.

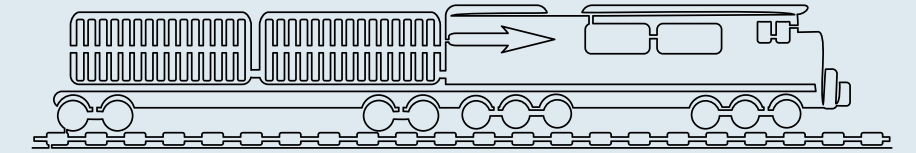


Circular economy integration

The Lithgow Community Strategic Plan 2022-32 includes a commitment to minimise the environmental footprint of the Lithgow region, live more sustainably and use resources more wisely. Key to this is developing a circular economy to minimise waste and promote reuse of resources.

High-value, innovative reprocessing of waste from local manufacturing could add economic value, such as use of ash by-product from energy production, metal and cardboard.

Other opportunities may be linked to the construction industry, such as manufacturing of household tiles made of repurposed glass and fabric. Partnerships with universities and industry, including co-location, could position this as a high-value, future industry.



Transport equipment

Lithgow LGA's location means it is well positioned to have a pivotal role as a multi-modal transport hub for the east-west transport arterials that connect Greater Sydney to the Central West of NSW.

Lithgow has opportunities to support the manufacturing of green transport solutions for the state, leveraging its historic strengths in rail rollingstock manufacturing and maintenance, and the presence of relevant companies their skilled workforces. This would be supported by projected development of hydrogen and other renewable energy production in the LGA. A Green Hydrogen Rail Conversion and maintenance facility, located on the main line, would need to be developed.

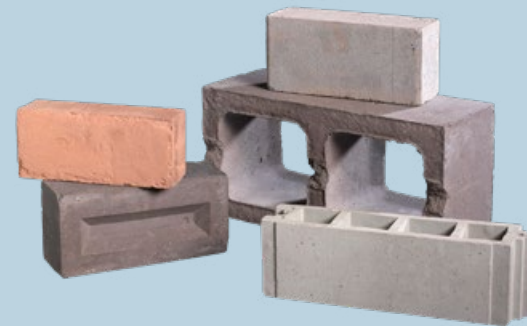
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WHAT'S HAPPENING

- Lithgow City Council and the Department of Regional NSW are partnering to develop a bespoke **investment prospectus** for the LGA, initially focused on advanced manufacturing for clean technologies and green construction materials.
- Thales and the NSW Government are co-funding **Stage 1 of the modernisation of the Lithgow Small Arms site**, which is expanding its world-leading precision manufacturing capability and local workforce to develop advanced equipment through innovative partnerships, to supply the Australian Defence Force, industrial partners and export customers.
- Planning is underway for the **Clarence to Wallerawang Pipeline Project** to construct a pipeline from Clarence Colliery to a new water treatment plant at Wallerawang. This will ensure a secure water supply for the Lithgow LGA into the future and provide water for future industrial growth and development, such as hydrogen production.

- EnergyAustralia** and **Nu-Rock** have collaborated to build the first commercial fully automated plant at Mt Piper that uses fly-ash by-product from the coal-fired power station to manufacture building materials such as blocks, bricks and pavers for use in residential and commercial properties and civil works.

Nu-Rock anticipates it will have its first permanent module operational in mid-2023 to produce commercial quantities, initially employing 35 full time jobs in operations and a further 60 in distribution. The sustainable process produces a carbon neutral and circular product that can be recycled at the end of life.



Nu-Rock building materials manufactured from fly-ash by-product from the Mt Piper power station. Photo courtesy of Nu-Rock



Lithgow Small Arms Factory.