

Comment – Manufacturing Skills Queensland

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MSQ requests that the QPC consider the critical role of manufacturing in the construction industry and supply chain and proposes that the QPC consider the impact of productivity gains in the manufacturing sector through increased Queensland Government investment in workforce, skills and training programs.

Dear Sir / Madam

RE: Initial Stakeholder Input to the QPC Construction Inquiry – Manufacturing Skills Queensland

I am writing to you provide initial stakeholder feedback in relation to the QPC Construction Inquiry.

Manufacturing Skills Queensland

Manufacturing Skills Queensland (MSQ) was established by the Queensland Government in 2022 to work strategically support the manufacturing industry with skills, training and workforce programs and services. As the leading skills, training and workforce MEIS organisation in Queensland, MSQ's constitutional remit is to: engage with industry stakeholders by providing evidence-based advice and local insights on the manufacturing needs across Queensland; assist manufacturing businesses, including those in regional areas, to grow and attract talent, and to encourage and promote diversity within the workforce; track and analyse manufacturing supply chains, industry trends and needs to inform future skilling strategies and funding; combine industry engagement and research to define annual training plans and recognised skills pathways; engage with Registered Training Organisations (RTO) to design and deliver skills training and career pathways; and deliver value-adding commercial opportunities to address strategic challenges such as seminars, workshops, forums, and conferences, to support specific industries across the sector. To deliver on this remit, MSQ:

- Facilitates collaboration between manufacturing businesses, government, peak bodies, unions and other stakeholders and seeks their input, feedback and advice in relation to the development of programs, projects and services.
- Delivers a range of programs under contract from the Queensland government including Industry Skills and Jobs Advisor and Industry Workforce Advisor for the Manufacturing Industry, Gateway to Industry Schools Program – Advanced Manufacturing, Women in Trades, and Inclusivity
- Delivers an Annual Training Plan which sets out MSQ's workforce, training and skills investment priorities under four broad categories: *Attraction and Engagement, Future of Trades and Transformation, Training and Skills, and Diversity.*

Role of Manufacturing in the Construction Industry

MSQ requests that the QPC consider the critical role of manufacturing in the construction industry and supply chain. Based on MSQ's research, a significant proportion of business involved in construction and infrastructure projects are manufacturers. These businesses, however, are often overlooked in state and federal workforce, skills and training investment and policy. This has the effect of limiting potential productivity improvements in the manufacturing sector which has a direct impact on input costs and efficiency in the construction industry. MSQ proposes that the QPC consider the impact of productivity gains in the manufacturing sector through increased Queensland Government investment in workforce, skills and training programs.

For example, manufacturing as it relates to the construction industry involves the production of building materials, components, systems, and prefabricated structures in a controlled environment—often off-site—before they are transported to construction sites for assembly. Key elements of manufacturing that add value to the construction industry includes:

- **Production of Construction Materials** – Manufacturing is central to producing essential materials such as cement, steel, glass, bricks, and concrete products, electrical components, plumbing systems, HVAC units and Insulation, roofing materials, and more. These materials are the foundation of construction, and their quality and availability directly impact project timelines and durability
- **Prefabrication and Modular Construction Including Modern Methods of Construction (MMC)** – To reduce construction time, improve quality control, and minimise waste manufacturing: Prefabricated building components (e.g., walls, floors, staircases) and Modular construction, where entire building sections are manufactured off-site.
- **Standardisation and Efficiency** – Manufacturing promotes standardised components that are easier to install, mass production, reducing costs through economies of scale, automation and robotics, improving precision and labour efficiency.

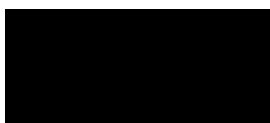
- **Sustainability** – Modern manufacturing supports green building materials (e.g., recycled steel, low-carbon concrete), energy-efficient systems (e.g., solar panels, advanced insulation) and Waste reduction through optimised production techniques.
- **Improved Safety and Quality** – Off-site manufacturing reduces on-site risks and controlled environments ensure consistent quality and adherence to specifications.
- **Innovation and Technology Integration** – Manufacturing in construction incorporates Building Information Modelling (BIM) for precision and coordination, 3D printing, advanced composites, and smart materials and use of IoT and AI in product development and performance monitoring
- **Supporting Infrastructure and Logistics** – Manufacturing ensures timely delivery of components, minimising delays and supporting just-in-time construction models.

Manufacturing plays a crucial and evolving role in Queensland's construction industry, contributing significantly to economic growth, innovation, and sustainability including:

- **Driving Infrastructure and Housing Projects** – Queensland is experiencing a surge in major infrastructure and housing developments, with a projected \$103.9 billion pipeline over the next five years. Manufacturing supports these projects by supplying essential materials and components, ensuring timely and efficient construction processes.
- **Advancing Prefabrication and Modular Construction** – The state is embracing modern construction methods, such as prefabrication and modular building, to address housing shortages and improve efficiency. For instance, DC Constructions NQ in Garbutt specialises in transportable homes, producing structures off-site that are then transported to their final locations. Similarly, PT Blink's innovative approach enabled the construction of a seven-storey apartment block in Brisbane in just 11 days by utilising off-site manufacturing techniques.
- **Economic Growth and Regional Economic Development** – Manufacturing is a significant contributor to Queensland's economy, generating \$24.3 billion in value-add in 2022–23, accounting for 5.25% of the Gross State Product. The sector's growth supports the construction industry's capacity to deliver large-scale projects efficiently. Manufacturing is deeply rooted in Queensland's regional communities, with nearly half of the workforce located outside Greater Brisbane. This regional focus supports local economies and provides employment opportunities, particularly in areas like the Fraser Coast, which has seen commercial project values increase from under \$300 million in 2019 to nearly \$3 billion in 2024.
- **Promoting Sustainability and Innovation** – Manufacturers are increasingly adopting new technology and sustainable practices to increase competitiveness domestically and internationally and require additional support to achieve this.
- **Developing a Skilled Workforce** – To meet the evolving demands of the construction industry, Queensland is focusing on workforce development in manufacturing. Manufacturing Skills Queensland invested \$5.06 million in 2024–25, with a similar amount to be invested in 2025-26 to support skills, training, diversity, and leadership within the sector. The Queensland government also supports manufacturers with further investment in Vocational Education and Training (VET) through school programs, apprenticeships and traineeships and existing worker training. Additionally, initiatives like the Women in Manufacturing strategy aim to increase female participation in the industry, fostering innovation and growth.

Manufacturing Skills Queensland thanks the QPC for the opportunity to provide initial stakeholder feedback to this inquiry and we look forward to the opportunity to provide further contribution in August 2025.

Sincerely



Rebecca Andrews
Chief Executive Officer
Manufacturing Skills Queensland