MANUFACTURING

Securing a future for Queensland’s manufacturing industry in a 21st century economy
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Manufacturing can be a sustainable resource for the State of Queensland and this report should encourage us all to look for opportunities to build on the skills that we have. We should take courage from the success of those that are out there now and build a future for our children through a manufacturing base that is built to last.
The manufacturing sector is critically important to Queensland’s economy as a source of jobs, exports, investments and innovation. Despite its declining share of output nationally, manufacturing remains the third-largest sector in Queensland’s economy.

Manufacturing has endured significant challenges in developed nations throughout the world. For Australia and Queensland in particular, a variety of domestic and international factors have contributed to a prolonged period of sluggish growth in the sector. In addition to a series of high-profile closures and job losses, these factors include Queensland’s exposure to Chinese markets and the impact of the global financial crisis, as well as uniquely Australian challenges such as high labour costs and sharp rises in energy and electricity prices.

To the detriment of the sector, national debate has been largely confined to the merits of industry assistance as opposed to crafting a policy framework to shape the future success of the industry. The notion that government can pick winners is an approach to industry policy that is unsustainable for a modern and dynamic 21st century economy. Governments must focus on developing policies that actively facilitate the emergence and success of a competitive, viable and sustainable manufacturing industry.

Manufacturing has a strong future in Queensland. Provided government at all levels collectively focus on the right type of manufacturing and make it easier for existing manufacturers to compete, the manufacturing sector has significant potential to contribute to the continued growth and diversification of Queensland’s economy in a post-mining boom environment.

It is clear that Queensland is one of Australia’s dynamic economies. It is therefore critical that as a State we continue to deliver strong growth and thereby high standards of living for Queenslanders. The manufacturing sector will no doubt play an important role in diversifying our economy at a time of extraordinary transition. By leveraging the strength of Queensland’s small and medium manufacturers, we can build upon the sector’s success and chart a course for a strong and diversified 21st century economy in Queensland.

Although it is industry that will inevitably drive our economy forward, Government plays an important role in crafting a policy framework that best positions manufacturing businesses in Queensland to capitalise on existing strengths and opportunities and overcome obstacles.

This report by the Chamber of Commerce and Industry Queensland (CCIQ), in partnership with Cook Medical, explores the ways in which government and industry can work together to secure a strong future for Queensland’s manufacturing industry in a 21st century economy, and make it easier for existing manufacturing businesses to grow, invest, and employ.
Manufacturing directly contributed over $20.3 billion to the Queensland economy (equating to 7.1%) in 2014–15 in industry gross value-added (GVA).

Around 30% of Qld’s total manufacturing GVA was generated outside SEQ.

Queensland outperformed the two largest manufacturing states of New South Wales and Victoria.

Manufacturing directly employed 169,700 persons in the December quarter 2015 in Qld equating to 19.1% of people employed in manufacturing across Australia. As at December 2015, 45% of total manufacturing employment occurs outside the Greater Brisbane area.
Over 88% of total manufacturing jobs are full-time and the sector is the third largest provider of full-time jobs in Queensland (9.1% of total full-time jobs in December quarter 2015), behind construction, and health care and social assistance.

The three largest employing segments are processed foods and beverages, metal products and machinery, and equipment manufacturing. Together, these three manufacturing segments accounted for around 59% of total employment.

Manufacturing is one of the most innovative sectors in Queensland with 79% of business innovating in 2013.

Queensland’s manufacturing industry invested $2.29 billion in private new capital expenditure in nominal terms in 2014–15. This equates to 6.5% of Queensland’s total capital expenditure and 26.5% of Australian manufacturing capital expenditure.

Over the last 10 years, Queensland manufacturing has increased its share of national industry GVA from 16.8% in 2004–05 to 19.7% in 2014–15.

There are 16,388 manufacturing businesses in Qld.
MANUFACTURING IN QUEENSLAND – IN TRANSITION
Queensland and Australia’s economy is currently facing an extraordinary time of transition.

Although a key industry in Queensland, manufacturing’s contribution to the economy has steadily declined over the last two decades. This is largely due to the significant growth in other sectors (such as resources and services industries) and key challenges such as increased international competition, declining productivity and skill shortages. Manufacturing today accounts for less than 10 per cent of Australia’s Gross Domestic Product (as compared to 29 per cent 60 years ago) due to in large part to global economic changes and economic processes of comparative advantage.

**13.2% DOWN TO 6.8%**

Australian manufacturing sector’s contribution to GDP has halved from 13.2% in 1980 to round 6.8% in 2015

**16.8% DOWN TO 7.6%**

Australian manufacturing’s total share of employment dropped from 16.8% in 1984 to around 7.6% in 2014

**10% COMPARED TO 29%**

Manufacturing accounts for less than 10% of GDP in 2015 as compared to 29% 60 years ago

These trends also reflect a broader transition in Australia’s and the Asia Pacific regions demographic and economic make-up. Shifts such as the growing Asian middle-class, the ageing population globally, significant movement in people and big data, as well as increasing sustainability demands and security requirements, all of which will provide critical opportunities for future growth in Queensland’s manufacturing sector.

Highly skilled manufacturing sectors such as professional and scientific equipment and specialised machinery and equipment have experienced strong export growth and demand

Manufacturers in niche subsectors such as aerospace, precision engineering and medical devises are also seeing success.

By 2025, a greater share of manufacturing output is likely to be in sectors such as pharmaceuticals and high value food and beverage products

Despite some current setbacks in manufacturing in Australia, we can and should have a successful and robust manufacturing sector. However, Queensland’s future manufacturing will not look the same as it does today.

The rest of the world is rapidly changing and Queensland needs to adapt to find our place in what is an increasingly globally competitive marketplace.

Government focus in manufacturing innovation has never been as exciting as it is now with the Federal Government’s Ideas Boom and the Queensland Government’s Advance Queensland Initiative.
The future of manufacturing in Queensland is dependent upon industry and government working together to create the right policy environment to allow the manufacturing sector to flourish in a 21st century economy.

In Queensland, manufacturing represents a significant opportunity to build upon existing industries and diversify our economy. Through extensive research and consultation with small businesses across Queensland, CCIQ has identified the following policy priorities to realise this vision:

**POLICY PRIORITIES**

1. **Grow the Advanced Manufacturing Industry by Investing in Research, Commercialisation, Education and Training, as well as Encouraging Collaboration and the Adoption of New Technology**

2. **Enhance Local Manufacturers’ Capacity to Access New and Existing Markets and Opportunities**

3. **Make it Easier for Queensland Manufacturing Businesses to Start, Grow, Invest, and Employ**
   - a. Tax reform
   - b. Regulatory reform
   - c. Workplace relations reform
   - d. Affordable and reliable energy supply

4. **Facilitate an Industry Perception Change and Reinvigorate Support for Local Manufacturing**

5. **Invest in Enabling Infrastructure**
Facilitate the change from traditional manufacturing to high value added manufacturing

In a 21st century globally competitive marketplace, traditional Australian manufacturing is no longer positioned to compete with low cost, high volume production on a global scale. To remain competitive into the future, Queensland manufacturers will need to make the transition from traditional manufacturing to high-value-add manufactured products. Despite the decline in traditional manufacturing, it is an exciting time for Queensland manufacturers embarking upon the world’s fourth industrial revolution (Industry 4.0).

Nevertheless, embracing Industry 4.0 will require the right policy settings to enable manufacturing businesses to focus on innovation, invest in research and commercialisation, educate and train a highly skilled workforce and encourage collaboration and the adoption of new technologies. Manufacturing businesses recognise that the landscape has changed, and that business modelling must adapt to meet the demands of a globalised marketplace. In order to capture and effectively exploit the new and exciting opportunities presented by Industry 4.0, CCIQ proposes the following reform agenda in order to develop a competitive and sustainable manufacturing sector in Queensland into the future.

Research & Commercialisation

The contribution of innovation to an individual business’s productivity growth is undeniable. One of the key ways to encourage innovative practices at the SME level is to invest in research and development (R&D). Public sector R&D expenditure has strong spill-over benefits and is an important source of gains for private sector growth. Nevertheless, businesses remain apprehensive to invest significantly in R&D due to the perception of high-risk at the expense of attending to more immediate pressures in the business cycle. Typically, small businesses have a limited ability to divert capital away from operational activity.

Government plays a critical role in incentivising investment in R&D to promote innovative business practices. The strong linkages between the levels of spend on R&D with levels of innovation and productivity at the firm level to the broader economy indicates R&D is critical to ensuring Queensland manufacturers are well-equipped to compete effectively in a global market.

Investment in R&D at both the government and firm level will be instrumental if Queensland is to become a leader in high value-add niche products. Accordingly, it is crucial that Federal and State Governments maintain support for R&D.

Government can help improve the innovation effort of small and medium manufacturing businesses through developing an effective and integrated process of commercialisation for growth. Government can play the critical role of bringing together industry and academia, to present businesses with a pipeline of well-developed innovations which are ready to commercialise. This is especially important in the context of growing competition from globalised markets, low labour cost nations and a fluctuating Australian dollar.

Importantly, government must take action to cultivate a business innovation ecosystem that will not only enable Queensland to be relevant internationally, but will help achieve a growth agenda, thereby benefitting the broader budgetary position in the long-term.

Characteristics of future manufacturers

- Low volume / high value
- Customer and export focused
- Innovative and technologically cognisant
- Goods managers of GVCs typically positioning at the pre-production stage
- Value-focused
- Highly skilled employees
- Agility to provide customised and responsive market solutions
- Tend to be small and medium enterprises (SMEs)

CEDA: Advanced Manufacturing: Beyond the Production Line (April 2014)
Highly skilled workforce

As the manufacturing industry continues to trend towards high-value niche products and services, it will require a highly skilled workforce capable of driving and embracing change and innovation. While the right policy settings in important areas such as taxation, regulation, innovation, and infrastructure will facilitate Queensland’s successful transition to an advanced manufacturing economy, it is ultimately people and their intellectual capital that will underpin Queensland’s manufacturing success into the future. Higher skill levels and genuine interaction across disciplines and specialisations will be a necessary pre-condition to Queensland securing a competitive advantage in global markets and capitalising on the opportunities of the future.

Moving to an advanced manufacturing model will inevitably require better outcomes with respect to developing foundation skills such as numeracy and literacy, as well as technical skills in STEM – science, technology, engineering, mathematics – to solidify Queensland’s position as a competitive force in the higher end of the manufacturing value chain. Trade skills will remain highly important to the sector but will come in the form of skilled trade roles as opposed to lower skilled work as was the case in traditional manufacturing.

The skills and knowledge of Queensland’s future manufacturing workforce will largely be determined by the availability of skilled labour and the ability of the sector to compete for this labour. Queensland must harness its potential and ensure that the development of foundational skills, STEM skills, non-technical skills and managerial and leadership skills underpin our educational institutions to provide critical pathways into the manufacturing sector into the future. The relationship between the manufacturing industry and the education and training system will be absolutely critical to policy achievements in this space.

Collaboration and adaption of new technologies

A business’s ability to collaborate is critical to accessing the skills and knowledge required to be competitive. Collaboration gives businesses access to new ideas, better information, and improved capabilities beyond that if a business operated in isolation. Businesses that collaborate perform better when compared with businesses that do not innovate or collaborate, with a significant majority of businesses reporting increases in productivity when collaborating with industry partners, academic institutions, or governments.

At present, Australia has the lowest rate of collaboration between research and industry sectors in the OECD, which is resulting in skills gaps for new and emerging manufacturing and decreased ability for traditional manufacturers to transfer to more advanced high-value-add practices. Collaboration is key to boosting innovation and competitiveness and Queensland is perfectly primed to capitalise on opportunities.

Further, the ability of small and medium manufactures to capitalise on the future opportunities of advanced manufacturing will depend largely on their ability to access, adapt to, and implement new technologies. In order to become highly responsive to shifting customer demands, produce customised product lines, improve operational processes, and manage big data sets (the hallmarks of successful advanced manufacturers), small manufacturing firms must be in a position to fully harness enabling technologies such as information and communication technology (ICT).

The adoption of such technology will profoundly impact productivity, competitiveness, responsiveness, and customisation at the firm level and, if effectively adapted across the entire supply chain, provide for the kind of disruptive activity that will underpin the future growth of manufacturing into Queensland’s future. Australia and indeed Queensland’s enduring and defining market such as the historical and relatively high Australian dollar, high-cost base, and lack of scale prevent the ongoing growth of traditional manufacturing. However, if viewed through the prism of opportunity, the externalities of Queensland’s position in the global market sets the foundation for a more globally connected niche-product producing, high-value and low-volume manufacturing industry.

$532 million

Manufacturing invested $532 million on research and development (R&D) in Queensland in 2013–14 which accounted for 19.7% of total business expenditure on R&D in that period

21.2% OF TOTAL R&D

In 2013–14 the most R&D intensive segments were machinery and equipment (21.2% of total R&D expenditure), processed foods and beverages (25.6%), metal products (11.5%), chemicals and polymer products (10.3%), and to a lesser extent and non-metallic minerals (5%). These R&D intensive segments also generally had the highest average wages in 2013–14

<10%

Fewer than 10 per cent of projects – or 3033 grants for $2.7 billion in R&D activity – are conducted as joint ventures. This reflects Australia’s low rates of collaboration between research and industry sectors, which is currently the lowest in the OECD

22%

of manufacturing employers report that graduates with higher level qualifications in STEM subjects have a lack of workplace experience and difficulty applying their skills

18TH GLOBAL COMPETITIVENESS INDEX

In the last 10 years Australia’s relative competitiveness in leveraging information and communications technologies (ICT) has slipped, with Australia ranking 18th in 2014, 9 positions lower than its highest ranking of 9th in 2004.
Policy Solutions

→ Incentivise innovation in existing and start-up manufacturing SMEs in Queensland through appropriate and targeted investment

→ Enhance the capabilities of an advanced manufacturing workforce by crafting education, immigration, and workplace relations policy settings to ensure Queenslanders are equipped with the skills to capitalise on the opportunities presented by advanced manufacturing

→ Deliver reliable and affordable access to internationally competitive communications infrastructure in all Queensland regions to secure the uptake of key enabling technologies

→ Enhance SMEs capacity to integrate into global supply chains particularly the pre and post production stages of the manufacturing process

→ Better target R&D investment incentives towards small and medium enterprises to encourage greater investment in R&D at the firm level

→ Increase levels of R&D to at least the OECD average in the short-medium term

→ Urge the Queensland Government to reinvent Queensland’s manufacturing policy, with a particular focus on innovation, advanced manufacturing capabilities and emerging opportunities (including securing Queensland’s competitive advantage in global value chains)

→ Increase and incentivise opportunities for collaboration between industry and research institutions to ensure greater commercialisation of outputs

→ Encourage the promotion and undertaking of initiatives aimed at enhancing the public image of the manufacturing industry and promoting it as rewarding and challenging career pathway

→ Ensure Australia’s skilled migration program allows for manufacturers to source skilled foreign workers to fulfill their skilled labour requirements

→ Urge state and federal governments to invest heavily in initiatives and programs that assist businesses to address their skills needs including apprentice incentives and funding for development of foundation and STEM skills in young people

→ Promote increased collaboration between industry and education providers to ensure training delivered and competencies achieved by graduates successfully meet the needs of the industry now and into the future
CASE STUDY 1: COOK MEDICAL
Since 1963 Cook Medical has been providing the medical community with innovative medical devices and therapies needed to produce the best possible outcomes for patients.

Cook Medical Australia was founded in 1979 to manufacture and distribute medical products for customers in markets located around the Pacific Rim and Southeast Asia. Originally focused on angiographic and interventional devices, Cook Medical Australia is at the forefront of the development of technology needed to perform in vitro fertilisation and assisted reproduction procedures. Cook Medical Australia is the only manufacturing site in the world that produces custom made stent grafts for the treatment of abdominal aortic aneurysms.

**Fostering a culture of innovation**

Cook Medical focuses on a culture of innovation by providing the right atmosphere for employees. Cook Medical offices feature innovation rooms for specific projects which are used as centres for displaying prototypes. In addition, employees are regularly sent to conferences on new technology so they can increase their knowledge of upcoming trends and developments relevant to industry.

As an example of successful collaboration and commercialisation, Cook Medical is constantly looking for new developments in the medical world to provide cures for diseases. Recently the organisation has targeted companies such as Anteo Technologies Pty Ltd, owner of the patented Mix&Go technology, which enables the attachment of biomolecules to synthetic surfaces. Cook Medical also has productive working relationships with universities throughout Australia, including the University of Queensland, University of Wollongong, University of Adelaide and University of New South Wales. This ensures continued support for research and development, and encourages ongoing innovation at every stage.

- Queensland Premier’s Export Award for Large Advanced Manufacturer in 2010
- Advanced Manufacturer of the Year award and the 2011 Queensland Japan Chamber of Commerce and Industry award
- Cook Medical Australia received top honours in The Australian Business Awards 2012, in the category of Recommended Employer
- Barry Thomas, Managing Director of Cook Australia received a 2012 Australian Export Heroes award from the Australian Institute of Export for excellence as an Australian exporter

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**Current barriers deterring growth of advanced manufacturing in Queensland: A Cook Medical perspective.**

“In Queensland, there is a significant lack of strong manufacturing operations. At Cook we outsource some of our manufacturing overseas and some companies have been forced to move their entire operations offshore.

This has resulted in few quality manufacturing operations remaining but more importantly it has resulted in the loss or many skills that cannot be replaced. The longer manufacturing is allowed to decline, the fewer skills that will remain to support other manufacturers to make prototype product for innovations let alone manufacture existing or future products. While the Turnbull Government focuses intensely on innovation, we’ve seen little focus on manufacturing as an important component of the process. The risk is that losing manufacturing means that it will be almost impossible to keep R&D in the country. We end up seeing governments – at a state and federal level – talking about investing in manufacturing, but failing to produce any clear strategy and directive on how they will do it.”

BARRY THOMAS, MANAGING DIRECTOR OF COOK MEDICAL
Reduce the barriers to Queensland manufacturers accessing global markets

It is critical to the future success of Queensland’s manufacturing sector that small and medium manufacturers are optimally placed to access global markets. As Australia’s domestic consumer market is relatively small, the overwhelming benefits of accessing a larger customer base in the global economy are clear. Despite this, smaller manufacturers are facing unique barriers when seeking out global opportunities. Those challenges can be logistical, such as getting product to market from relative geographical isolation, or can be domestic barriers that impact the overall competitiveness of our local manufacturers in the global marketplace.

Queensland manufacturers told CCIQ five core areas continue to threaten the viability and competitiveness of their operations as compared with overseas manufacturers:

1. The quality of imported products are far lower than Australian made products;
2. Competing against lower wage price economies is making it near impossible to secure a customer base on price alone;
3. Overseas competitors are not subject to the same standards as domestic manufacturers, thus placing Queensland onshore manufacturers at a distinct disadvantage;
4. The lack of integrated infrastructure and planning particularly in regional Queensland; and
5. Obtaining the appropriate support from government trade bodies and associated fees/tariffs related to exporting.

In order for local manufacturers to penetrate and exploit international markets, business calls on government to develop a multi-pronged approach to policy development that is tailored to small business needs. This requires:

1. More modern and efficient infrastructure to improve logistical obstacles in getting product to market;
2. Improved partnerships between Queensland manufacturers and the government’s trade and investment offices;
3. An adjustment of policy settings to ensure business operating costs are globally competitive; and
4. Greater connectivity of smaller manufacturers to the digital economy.

The Federal Government is commended by industry for continuing to implement progressive trade liberalisation policies to make it easier for Queensland and Australian businesses to export to our neighbours. Specifically, the Federal Government has negotiated several free trade agreements with South Korea, Japan, China, India and Indonesia to secure greater bilateral trade relations between our nations.

The effect of bilateral free trade agreements on small business is the elimination of tariffs on key exports, which give Queensland businesses a head start in competitive international markets. Liberalising agreements such as those in operation with China, Japan, and South Korea work to reduce barriers to trade, thereby helping industries access new markets and widen the pool of purchasers of their product.

The persistently volatile Australian dollar has made it difficult for Queensland manufacturers who deal in overseas markets to recover value for goods, or make profits.
Value of Queensland’s exports was $44.6 billion over the year to January 2015.²

Queensland manufacturing contributed $15.9 billion (33.8%) of the total value of Queensland’s international merchandise exports in 2014–15.

The majority of Queensland’s manufacturing exports are food, beverages and tobacco ($5,709.0m) and metal products ($2,516.6m).³

Although Australia has a small domestic marketplace, it is located on the edge of one of the largest markets in the world.

China is currently Australia’s number one export market (with a 31.9% share of total exports) followed by Japan (15.5%), Republic of Korea (6.7%), United States (4.9%) and India (3.6%).

The processed foods and beverages, metal products and machinery and equipment segments accounted for around 90% of the total value of manufacturing international exports in 2014–15.

Policy Solutions

→ Ensure small business is afforded every opportunity to capitalise on the benefits arising from the Japan, China, and South Korea and Australian Free Trade Agreements
→ Craft trade policies and programmes with the view to securing new export market opportunities, addressing domestic constraints, and removing barriers to trade for Queensland manufacturers
→ Deepen international connections by breaking down information asymmetries between the manufacturing industry’s desire to penetrate global markets and the opportunities that exist
→ Support government trade missions to maintain Australia’s reputation as a high quality manufacturer and further promote the capabilities of Queensland’s advanced manufacturers to overseas markets
→ Facilitate greater linkages between Queensland businesses and their overseas partners, and achieve better harmonies between business and government in attracting investment to Queensland

→ Improve connectivity across a broad range of channels including integrated infrastructure planning of ports, roads, and rail, improved communications infrastructure to ensure digital access to market knowledge and streamlining of business practices through digital readiness
→ Achieve greater linkages between business and government when seeking out market opportunities overseas through the implementation of a local and state chamber network to act as the conduit between business and government
→ Better education for small businesses looking to export to reduce the apprehension associated with entering new markets
→ Greater investment in infrastructure, particularly in regional Queensland, to ensure cost-effective product routes to market

5. Export of Queensland goods overseas, January 2015, Queensland Government’s Statistician’s Office.
Maryborough Sugar set up office in 1886 as a juice mill, and entered the raw sugar market as a producer in 1896.

A proud exporter of Queensland sugar to South East Asia, Maryborough Sugar stands as an exemplar Queensland manufacturer conquering off-shore markets with a quality Australian Made product.

A key industry player, Maryborough Sugar harvests cane from approximately 13,500 hectares, and receives sugar cane from over 100 growers across Queensland. The mill typically processes 700,000 to 800,000 tonnes of cane in a crushing season extending from July to November each year. The leading sugar manufacturer produces raw sugar in Maryborough and exports 100 per cent of its product through the bulk sugar terminal at Bundaberg.

Staying ahead of competitors from other nations exporting to South East Asian markets was integral to the company’s survival. Maryborough Sugar has met such challenges with vigour by innovating technical processes of production and specialising in particular farming practices to improve output.

With respect to domestic challenges impacting Maryborough Sugar’s ability to compete overseas, wage costs were cited as a key challenge. For Maryborough Sugar, the comparatively high expense of employment in Australia has meant less staff on the floor of their plant than competitors in other jurisdictions. Although adaptable, businesses such as Maryborough Sugar experience acutely the domestic constraints placed on growth, particularly when competing against producers in other countries with comparatively lower business operating costs.

Our biggest concern is remaining competitive with global players, most significantly, keeping ahead on a cost basis.
Realise key reforms to tax and workplace relations, and deliver affordable energy supply for small business

The competitiveness and sustainability of Queensland’s manufacturing industry is hamstrung by an inefficient and uncompetitive tax system, an inflexible workplace relations framework, prescriptive regulatory compliance requirements, and rising energy costs. In order to create an environment to enable business growth, governments must ensure that policies give manufacturers the best chance to adapt to meet the complex and changing global economic environment. As profitability and international competitiveness remain critical to the survival of the manufacturing sector in Queensland, government must focus on reigning in business operating costs for manufacturers and burdensome regulatory requirements that inhibit growth and investment.

Tax reform

Taxation levels influence how and where a manufacturer chooses to operate and invest their money. Taxation policy settings directly influence the competitiveness of local economies, and determine domestic and foreign investment in the manufacturing sector. Tax is also a direct cost on employers and must be carefully crafted to ensure the employer is not unnecessarily burdened insofar as to act as a disincentive to start, grow, employ or invest in their business.

By creating a low taxation business operating environment with minimal compliance costs, Australia and Queensland will be laying the foundation for increased business investment, which leads to employment and wages growth and ultimately, higher living standards and taxation receipts to Government.

Australia’s tax system faces a number of challenges, including technological change, an ageing population and increased mobility of investment, all of which make the revenue from traditional tax bases more volatile. While the economic environment has changed substantially, Australia’s tax mix has remained fairly unchanged since the 1950’s. The tax system is now considered by Queensland businesses to be outdated and a brake on economic growth.

The priority for Queensland manufacturers is for comprehensive tax reform that considers the taxation system holistically, with a focus on addressing the complexity of the system and reducing the reliance on income taxes in favour of consumption taxes like the Goods and Services Tax (GST), which will enable the removal of inefficient State taxes.

Policy solutions

→ Retain our low tax status compared to OECD nations
→ Improve the overall efficiency and competitiveness of our tax system through competitive federalism, the expansion of a GST, and the abolishment of inefficient state taxes such as payroll tax and stamp duties
→ Extend the instant asset write-off beyond the time limits established in 2014-15 Budget to ensure generous depreciation policies continue to encourage manufacturing businesses to use their increased cash flows on investment in research, development and innovation
→ Lower the corporate tax rate 25% to attract and retain foreign capital
→ Research and development tax incentives should be better targeted to small and medium-sized firms, and greater collaboration between academia and industry must be encouraged to shared R&D outcomes

20,000 JOBS

Payroll tax - 4,000 Queensland jobs are jeopardised and 20,000 Queensland small businesses will directly lose from a failure to lift the Queensland threshold to $1.6 million

$2.5B

The R&D Tax Incentive was worth $2.5 billion when introduced in 2011 and is forecast to reach $3.5 billion in 2017-18 despite recent changes to restrict access to scheme
Regulatory reform

CCIQ concedes some well-targeted regulation is necessary to facilitate a level playing field for businesses; however, the pendulum has swung too far towards a largely unnecessary and highly prescriptive regulatory framework. This is adding a heavy cost burden on manufacturing businesses and is negatively impacting on the competitiveness of the manufacturing sector in Queensland more broadly. Federal, state, and local governments play an important role in reducing the regulatory burden on business. This report advocates for reform to ensure the reduction of burdensome, duplicative, and ineffective regulations and introduce measures that restrict the future growth of regulation across government.

As well as reform to the wider regulatory framework to remove the conditions stifling business growth and employment, there are specific areas of regulation that have a significant impact on manufacturing businesses such as workplace health and safety legislation and variances in local government regulations across multiple jurisdictions.

WHS

Workplace Health and Safety (WHS) legislation is the second major area of regulatory burden for businesses in Queensland with 70 per cent of businesses recently stating that WHS regulation has a high or moderate impact on their business operations. WHS laws are particularly burdensome for businesses operating in the manufacturing sector. The focus of WHS legislation is rightly to reduce the physical risks in what are often high-risk manufacturing processes. However, often times the substance of WHS laws encourages a culture of demonstration of compliance as opposed to focusing on initiatives that actually reduce the incidence of accidents in the workplace. As a direct result, employers in the manufacturing industry have less time to focus on those activities that proactively reduce the incidence of accidents in the workplace.

Local government regulations

Regulation at a local government level is also an inhibitor to business growth in Queensland’s manufacturing sector. A key issue for manufacturing businesses operating across multiple jurisdictions are the inconsistencies in requirements and regulations. Further, the interaction between state and local government planning and development legislation, in addition to environmental and health requirements, is inhibiting decision-making. Planning regulations often sit at odds with State Government strategic planning priorities and the time spent by local governments interpreting and implementing state instruments is acting as a significant delay for businesses in the manufacturing sector.

Regulatory compliance burdens tend to be felt more severely by small businesses, as they often do not have the resources to undertake the breadth of compliance requirements compared to larger enterprises. This is particularly pertinent to manufacturing in Queensland, as 99 per cent of Queensland manufacturers are classified as small or medium businesses.

18TH

Ranking 18 on the OECD’s global competitiveness scale in 2015, Australia fell further in economic performance and government efficiency rankings, raising concerns about our competitiveness as a smart economy.

IN CCIQ’S 2015 RED TAPE SURVEY:

78% of Qld businesses experience a moderate to major impact from complying with government regulation

44% of Qld businesses reported that they spend 6 or more hours p/w complying with government regulatory requirements

57% of Qld businesses indicated that the costs of dealing with red tape had increased

1 IN 4 Qld businesses indicated that red tape had prevented them making changes to grow their business

Policy solutions

Overall, manufacturing businesses support compliance and regulatory frameworks that are flexible to allow businesses to be more responsive to market trends and economic conditions. Regulatory reductions in key compliance areas will stimulate business growth and enhance the international competitiveness of the manufacturing industry.

To reduce the overall compliance burden on businesses, government must:

- Establish high level political leadership and commitment to a state regulatory reform agenda
- Measure the regulatory burden and establish a baseline of existing regulatory requirements
- Impose constraints on regulators through binding targets to reduce the existing stock and restrict the future growth of regulation
- Publicly report regulatory reform measures and progress against the target on a regular and ongoing basis to achieve ministerial and government accountability

WHS

- Reinstate laws that require at least 24 hours’ notice by WHS entry permit holders before they can enter a workplace, reduce the powers of health and safety representatives to direct workers to cease unsafe work and remove the requirement for businesses to provide a list of health and safety representatives to the regulator
- Ensure the adoption of nationally harmonised WHS model laws only occurs if there is not a significant additional compliance burden placed on Queensland manufacturers

Local government regulations

- Reduce confusion for manufacturing businesses operating across multiple local government jurisdictions in Queensland by introducing more streamlined state based law and policy in the area of planning and development, environmental regulation, and health and safety
- Limit the ability of local government to interpret the application of state and federal laws that relate to planning and development, environmental regulation, or health safety by tightening state-based planning instruments to provide greater certainty to businesses. The impacts of delay with respect to this process fall disproportionately on the small business community.
Workplace relations reform

Australia currently has a highly prescriptive workplace relations system that regulates all aspects of the employment relationship and beyond. Not only has this approach undermined the capacity of employers in the manufacturing sector to take on employees, but has created a system which legislates for the worst case scenario in which all employees are victims that require protection, representing a huge detriment and cost to the majority of employers who do the right thing.

Workplace relations are one of the most significant issues facing Queensland businesses as it directly shapes their employment and operational arrangements, and influences their cost bases. The top five workplace relations issues for Queensland businesses as unfair dismissal, complexity of the system, penalty rates, wages, and lack of flexibility.

Manufacturing businesses told CCIQ the Fair Work laws:

- Are highly prescriptive
- Do not take into account the unique circumstances of small business
- Go too far in regulating all aspects of the employment relationship
- Are too complex and lack flexibility

With respect to red tape, manufacturing businesses told CCIQ the Fair Work system:

- Had significantly increased their overall compliance costs
- Impacted on business operating arrangements, eroding business profitability and viability

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Policy solutions

Introduce measures that will enhance the capacity of employers in the manufacturing industry to focus on running their businesses to adapt to the new economy by:

- Reducing red tape and compliance costs: Queensland businesses want a simple, effective, and relevant workplace relations system. Reducing the prescriptive nature of the current legislation to allow for the adoption of best practice methods will go a long way towards alleviating the current compliance costs and enhancing the capacity of employers to run their own business.

- Embracing workplace flexibility: The workplace relations system needs to embrace flexibility as the key factor for delivering mutually beneficial outcomes. We need a workplace relations system that can be tailored to the needs of extremely diverse and dynamic workplaces.

- Deliver the appropriate balance between employers and employees: A system where the rights of employees are balanced against the rights of employers, with adequate protections in place to ensure the sustainability and fairness of the system.

- Deliver productivity improvements: Enhanced wages and conditions need to be offset by delivering equal benefits to employers through higher efficiency or productivity improvements.
Affordable & reliable energy supply

Energy is the most significant input cost for Queensland manufacturing businesses. In a recent CCIQ survey, 65% of businesses cited electricity price rises as a major or critical concern. Manufacturers use a diverse range of energy sources and the ability to secure long-term supply is a key factor in their decision-making on whether to invest in, grow, or close their business operations entirely. Mostly however, the provision of reliable and cost-effective electricity supply is vital to manufacturing businesses in Queensland continuing their operations.

It is the role of the Queensland Government to clarify as part of its energy policy for the state the future of the electricity market and what role the government will play in the future of energy security and affordability. In order to ensure the competitiveness of Queensland manufacturers into the future, the government must address issues relating to improved competition and the delivery of a more efficient electricity market and better outcomes for manufacturing businesses, particularly in rural and regional Queensland.

24%

The manufacturing industry was the largest industrial consumer of energy (24%) in 2013-14

38%

The manufacture of non-ferrous metals accounted for 38% of manufacturing energy use. Other major contributors were petroleum and chemical products (20%), food, beverages, textiles (18%) and other manufacturing products (13%)

The manufacturing industry had the highest industrial expenditure on energy products in Australia in 2013-14

$37B

Manufacturing used $37 billion worth of energy products, or 24% of total domestic energy products

65%

Increasing electricity prices is the most significant business issue with 65 per cent of Queensland businesses surveyed by CCIQ indicating a major or critical concern with the cost of energy

x2 / 54%

Electricity bills have doubled in past seven years, growing by more than 100 per cent between 2007-08 and 2014-15. Network costs account for 54% of electricity bills

57%

Coal makes up 57% of the total generation capacity in Queensland

19%

Retail costs contribute to 19% of electricity bills. Small businesses have indicated that as a result of high electricity prices they are investigating alternative energy options

40%

of small business respondents had experienced decreased/substantially decreased profitability;

Policy solutions

- Introduce greater competition into Queensland’s electricity markets through deregulation
- Investigate fair feed in tariff rates for solar rebates
- Immediately discontinue building unnecessary infrastructure aimed at ‘gold-plating’ network reliability
- Introduce efficiencies by privatising Queensland’s network assets which will have the effect of driving down prices due to competition

CCIQ and Queensland Council of Social Services (QCOSS) are partnering with the State Government to enhance advocacy representation for small business and residential energy customers in Queensland over the next two years. The advocacy services undertaken by CCIQ and QCOSS will be conducted with the purpose of raising the visibility of energy consumer issues, identifying emerging consumer issues to inform policy development, and disseminating relevant energy information and resources to small business and residential consumers across the state. CCIQ and QCOSS will represent the interests of Queensland residential and small business energy customers on emerging energy policy and regulatory issues, facilitating two way information exchanges between government and residential and small business customers.

Source: ABS Energy Account, Australia 2013-14, cat. 4604.0
Aluminium Balustrades (North Coast) (ABnc) is a multi-skilled lean manufacturing company that specialises in the design, manufacture and installation of a wide variety of custom aluminium products to architectural and commercial projects throughout South East Queensland. The business prides itself on being 100 per cent Australian and family owned and operated.

With more than 30 years of experience, ABnc’s success lies in its progressive and innovative approach to manufacturing. In light of a changing manufacturing landscape, ABnc recognised that innovation was critical to remaining internationally competitive, particularly as a regional manufacturer.

For the past five years ABnc has undertaken an extensive overhaul of its business model, focussing on process, efficiency and systems innovation. This included a large investment in competitive systems and staff training to ensure optimal business output.

Next on the agenda is product innovation, which will see the development of new designs and ideas to give ABnc a competitive edge over its international competitors.

ABnc identifies competition with imported product as the manufacturing industry’s greatest challenge moving forward. As a regional manufacturer, the business is unable to compete on such a large global scale on price alone. The solution, according to ABnc, is Industry collaboration, with shared knowledge, experience and innovations allowing Queensland manufacturing as a collective to remain competitive against the industry’s true competitors: overseas manufacturers.

CASE STUDY: ALUMINIUM BALUSTRADIES

Through process innovation we have achieved a new level of efficiency that we didn’t think was possible. Moving forward we are looking at product innovation, however we couldn’t have undertaken this next phase without first making our processes and systems as efficient as possible. Without this innovation we wouldn’t be here today!
Bolstering manufacturing’s image by focussing on Queensland’s successes

Manufacturing in Australia has received significant attention over the past few years, largely attributed to high profile closures and major shifts in government policy that looked to re-orientate industry support. As a direct result, manufacturing as an industry has been the recipient of considerable public discussion and dissection about its future.

The poor perception of Australia and Queensland’s manufacturing industry has presented a series of challenges for industry recovery and strategic policy planning for future growth opportunities. The consequences of this negative public perception include successful manufacturers encountering roadblocks when seeking to attract and retain talent, and potential customers and policymakers continuing to sidestep the potential opportunities offered by advanced manufacturing.

Queensland needs to build a renewed perception of its manufacturing industry, from one of steep declines and a bleak future, to that of a rejuvenated and active industry full of opportunity and promise. To this end, governments are encouraged to work closely alongside industry to re-position the dominant narrative in favour of future growth and opportunity for the industry.

Private Sector and Consumer Support

It is undeniable that Queensland manufacturers face an uphill battle when competing against international manufacturers. Businesses continue to report decreased demand from local consumers who are driven by cost and are switching to overseas suppliers who can provide a similar product at a fraction of the price of what Australian manufacturers can deliver.

With buying behaviour primarily linked to price, local manufacturing businesses have to work exceptionally hard to regain market share by focusing on quality and innovation to counter the price inequality between imported and locally manufactured products. For some manufacturing businesses, expressly marketing products as Australian made assists in shifting purchasers towards their product. For others, Australian locality is a marketable differential in itself. To ensure the future viability of the industry, the public and private sectors must actively participate in the reinvigoration of support for local manufacturing businesses through working together in advocating buy local campaigns.

Procurement

Government can also play a role in supporting locally manufactured products. Small businesses are at an inherent disadvantage when tendering for public contracts or major projects. Overwhelmingly, public sector contracts are awarded to firms that are based outside of Queensland or the region in which the contract is to be executed. The reasons for this are twofold.

First, there is excessive emphasis on government securing the lowest price for a tender, thus sidelinining the overall economic impact of awarding a contract to a local company. Second, the tender process itself is highly onerous and often small businesses do not have the time and resources than larger businesses to effectively compete for local tenders.

Given manufacturing’s impressive contribution to the Queensland economy, CCIQ considers that there is a strong case for identified State Government support for the manufacturing industry with in-line procurement policies that achieve value for money as well as bottom line outcomes.

Currently, scale can present a significant challenge for SMEs when tendering for contracts due to factors including staff capacity, time constraints and the ability of the business to meet all contract requirements.

CCIQ is supportive of creating an environment which facilitates groups of smaller manufacturers working collaboratively to tap into supply chains and overcome some of the barriers presented by a lack of scale. CCIQ strong supports trialling clustering hubs as a way of promoting greater collaboration amongst manufacturing small businesses. If successful, this has the potential to lift local industry capability and foster innovation.
If each employed Queenslander was to spend just an additional $10 per week on Queensland products and services that would amount to an additional $23 million circulating in Queensland’s economy each week or close to $1.2 billion each year.

Increased local spending would provide a significant boost to the Queensland economy and potentially create up to 20,000 jobs.

The Queensland Government spends $16.3 billion per year on goods and services.

Policy solutions

- To drive a necessary perception change of the manufacturing sector, governments at all levels must work alongside industry to:
  - Highlight the achievements of successful advanced manufacturers such as Queensland’s Cook Medical, who have effectively capitalised upon Australia’s global market positioning to realise commercial success
  - Play a leadership role in encouraging debate towards benchmarking the successes of Queensland advanced manufacturing sector against global standards
  - Attract and retain workers to a manufacturing career by interweaving career pathways in advanced manufacturing with education and training targets both nationally and at the state-level
- Work closely with the Queensland State Government and other industry associations to develop industry policy placing the manufacturing industry as a pillar of diversification in Queensland’s economic future
- Advocate and continue to support buy local campaigns to encourage increased support for locally based businesses
- Commit to improving Country of Origin Labelling to improve transparency, increase uptake and create a strong brand image within domestic and international markets to ensure the future viability of the industry
- Government and industry must work together to change the perception of the manufacturing industry in public discourse by participating in the reinvigoration of support for local manufacturing businesses
- A clearer definition and methodology on how value for money will be assessed in the procurement process so industry can become more involved in procurement contracts and embrace innovation as a core business improvement activity
- Better leverage expenditure, introduce smarter sourcing practices, take an innovative one Government approach to purchasing and develop procurement and contract management capability.

The Australian Made Campaign

“Our manufacturers and processors make some of the best products in the world but we have to do a better job of communicating that story to the consumer. There are a number of factors we take into account during the purchase process but one of the most underutilised points of difference would have to be country of origin.

“An Australian-made product implies commitment to quality and safety. Buying Aussie contributes substantially to our economy and provides employment for every generation of worker. As a manufacturer you need to give faces and names to the hundreds of sets of hands that go into making, shipping and supplying the everyday products that consumers take for granted. Tell your story – people want to hear it.”

MICHAEL FRANKLAND, QLD SALES & SERVICE MANAGER
Established in 1920, Mungalli Creek Dairy is one of Queensland’s most celebrated dairy manufacturers, with over 100 years’ business experience. Over the years, Mungalli Creek Dairy has diversified and innovated to respond to external market changes, particularly the deregulation of the dairy industry in 1999, and is solely responsible for supplying local markets with dairy products manufactured using bio-dynamic farming principles.

Mungalli Creek Bio-Dynamic Dairy is a family run business that uses state of the art manufacturing equipment and traditional natural farming methods to bring an award winning range of dairy products to Queensland and Australia.

Mungalli Creek Dairy told CCIQ they were excited about the future of manufacturing in Queensland, particularly the trend towards greater demand for clean and local food sources. At present however, Mungalli believes advances in the industry are threatened by a culture of over-regulation that prevents innovative and/or entrepreneurial responses to problems or challenges that arise in the workplace and in the manufacturing industry more broadly.

Mungalli Creek Dairy believes the best thing people can do to support small businesses is to shop and stock local.

Mungalli Creek Dairy prides itself on being a model for local Far North Queensland businesses through its employment and manufacturing processes and most recently through its innovative business practices.

The biggest challenge for us is making our business work while balancing the high costs of employment, ensuring flexibility and responsiveness while operating within a rigid system, all the while making sure we are fair to both ourselves and our employees.
Build world class infrastructure to increase Queensland’s productivity and competitiveness

If Queensland is going to effectively transition from traditional to advanced manufacturing, businesses must be able to compete on an increasingly global scale and building world-class infrastructure is central to achieving this goal.

There is widespread recognition amongst Queensland manufacturers that the role played by infrastructure in sustaining Queensland’s growth in a 21st century economy is absolutely critical. Infrastructure leads to improved efficiencies for businesses and is a critical factor in raising the levels of competitiveness for the Queensland economy. Queensland cannot afford to stall investment in infrastructure as our global competitors move rapidly towards securing future long-term projects.

In manufacturing sectors that are energy or resource intensive, getting product to market as efficiently and effectively is critical. To achieve this, it is essential that Government places significant attention on ensuring Queensland is well positioned to support future freight needs in order to support Queensland’s manufacturing future. Key constraints on the movement of freight include:

- Limited routes available for heavy vehicles;
- Maximum axle loading and load restrictions in certain areas;
- Lack of separate passenger and freight rail lines in SEQ which results in considerable delays and reduced flexibility during peak period as passenger traffic is given priority; and
- Lack of connectivity between transport modes.

Technology also has a significant role to play in ensuring that manufacturers transition seamlessly from traditional to advanced manufacturing. In order to successfully integrate into low-volume, high complexity, high value manufactured products, Queensland’s manufacturers must be equipped with key enabling technologies such as ICT.

ICT differs from other infrastructure assets in that it supports the generation of knowledge that can be adopted, applied and used for innovation in business and manufacturing processes and in enhancing the functionality of products and services. It involves distributed and delocalised processes both within a factory as well as across firms, from source to firm, and across networked enterprises. Besides improvements to production methods, improved ICT infrastructure will increase firm competencies for:

- Big data;
- Instant problem solutions;
- Quicker customisation of products;
- Speedier product integration into global markets;
- Shorter innovation cycles;
- High level quality control techniques;
- Lower production lead time; and
- Increased organizational transparency, knowledge management and collaborative engineering.
1. Cairns and Far North Queensland
   - Prioritise access to high-speed internet for small businesses

2. Townsville and North Queensland
   - Focus on the continuing maintenance of the Bruce and Hahn Highways
   - Urgently upgrade water storage and sewage infrastructure to deal with population pressures
   - Prioritise access to high-speed internet for small businesses

3. Mackay and Central Coast
   - Progress the Walkerston Bypass and Mackay Ring Road to allow heavy trucks to bypass Mackay city to get from the Port to the highway
   - Prioritise access to high-speed internet for small businesses

4. Wide Bay Burnett
   - Invest in regional flood mitigation infrastructure and strategies especially surrounding Bundaberg
   - Prioritise access to high-speed internet for small businesses

5. Sunshine Coast region
   - Conduct lane-widening along the Bruce Highway and Kawana Way to ease congestion
   - Prioritise access to high-speed internet for small businesses

6. Brisbane
   - Ease traffic congestion in Brisbane City as a matter of priority
   - Accelerate upgrades to the Wynnum Road Corridor to ease congestion
   - Conduct lane-widening and road-sealing along Kingsford Smith Drive
   - Progress upgrades to the Inner City Bypass to increase Brisbane’s capacity

7. Gold Coast
   - Conduct lane-widening along the M1 to address congestion and population growth
   - Assess the merits of extending the light rail south to the Coolangatta Airport
   - Prioritise access to high-speed internet for small businesses

8. Ipswich
   - Upgrade the arterial road from Springfield to Yamanto to alleviate the pressures from rapid population growth
   - Widen the connection to the Ipswich Motorway (both directions) from Augustine Heights to Bellbird Park; and the Rocklea to Darra section to deal with growing peak-hour congestion to and from Ipswich
   - Invest in capacity expanding infrastructure at known trouble spots such as Colleges Crossing and Mt Crosby Road
   - Prioritise access to high-speed internet for small businesses

9. Toowoomba and South West Queensland
   - Progress second Toowoomba Range crossing and associated roads
   - Consider the merits of inland rail to open new markets and business opportunities
   - Prioritise access to high-speed internet for small businesses
**Policy solutions**

- Queensland’s existing infrastructure plan needs to be immediately actioned to provide certainty for business and potential investors.
- Identify options for greater private sector involvement in the development and delivery of critical infrastructure.
- An independent infrastructure body should be established to advise government on infrastructure requirements in the short, medium, and long term and should include representatives from industry.
- Develop an integrated transport plan to address current and future bottlenecks, while prioritising upgrades to freight infrastructure.
- Accelerate the delivery of the National Broadband Network, particularly for rural and regional businesses.
- Ensure communications infrastructure is affordable and upgraded to provide the quality of service and security required by advanced manufacturers.

**SUMMARY**

The future of manufacturing requires the right policy settings that effectively and efficiently promote investment and productivity growth. Innovation, research and development, access to enabling technologies, taxation settings, regulatory and workplace relations reform, as well as infrastructure investment and energy policy all play an important role in creating the right environment for an industry in transition to thrive into the future.

Through our partnership with Cook Medical, CCIQ is taking charge of manufacturing industry policy in Queensland to get better outcomes for the small and medium manufacturing businesses of this proud State.

CCIQ through this report has recommended a number of policy solutions to compel governments at all levels to recognise the importance of harnessing the future of the manufacturing industry.

CCIQ delivers actions through its purposeful and multi-pronged advocacy agenda. For almost 150 years we’ve been the voice for business, with a primary focus on advocacy. Our advocacy team has built an enviable reputation in this regard, and has worked tirelessly to ensure Queensland is the best place to do business.