

QUEENSLAND BEEF PROCESSING STRATEGY

2019-2022



Front cover - image courtesy of JBS

The Department of State Development, Manufacturing, Infrastructure and Planning

Copyright

This publication is protected by the *Copyright Act 1968*.

Licence



This work, except as identified below, is licensed by the Department of State Development, Manufacturing, Infrastructure and Planning under a Creative Commons Attribution-Non-Commercial-No Derivative Works (CC BY-NC-ND) 4.0 Australia licence. To view a copy of this licence, visit: http://creativecommons.org.au/

You are free to copy, communicate and adapt this publication, as long as you attribute it as follows:

© State of Queensland, Department of State Development, Manufacturing, Infrastructure and Planning, August 2019.



The Queensland Government is committed to providing accessible services to Queenslanders of all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on telephone 131 450 and ask them to contact the Queensland Department of State Development, Manufacturing, Infrastructure and Planning on (07) 3452 7100.

Disclaimer

While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Copies of this publication are available on our website at www.dsdmip.qld.gov.au and further copies are available upon request to:

Department of State Development, Manufacturing, Infrastructure and Planning

PO Box 15009, City East, Queensland 4002

Phone: 13QGOV (13 74 68)
Email: info@dsdmip.qld.gov.au
Web: www.dsdmip.qld.gov.au

Foreword

Protecting and growing manufacturing jobs into the future is a priority for the Queensland Government, and supporting growth of the beef processing industry is part of our strategy for a flourishing Queensland manufacturing sector.

Queensland is a significant global beef processor, servicing domestic markets and producing high-quality beef products that are exported to more than 50 countries. In 2017–18, almost 50 per cent of all Australian beef and veal products were processed in Queensland.

With an excellent reputation worldwide for high-quality beef, Queensland has an opportunity to further tailor its meat and meat products to the demands of the growing global middle-class. Developing and producing high-value, export-ready products will increase the value of Queensland's beef processing industry and boost the broader Queensland economy.

More than 10,000 Queenslanders are directly employed in the beef processing industry and the industry value-add is approximately \$1 billion annually, making it one of the state's largest manufacturing sectors. The beef processing industry is a significant regional employer and a major contributor to regional economies.

Despite long-term growth, the beef processing industry faces a range of challenges including extreme climatic conditions and weather events, reduced livestock numbers, high cattle prices, increased global competition and high operating costs.

The north-west Queensland floods in early 2019 caused significant cattle losses, which are likely to lead to tighter cattle supplies for a number of years. This may impact the beef processing industry. A package of measures have been put in place by the Queensland and Australian Governments to specifically assist producers in north-west Queensland with a strong focus on restocking.

Consultation with industry participants has identified that keeping processing costs down is critical for maintaining global competitiveness. The industry has a strong track record of investing in and adopting new technologies to reduce operating costs and open up new market opportunities. The Queensland Government has supported the industry through a range of programs to invest in infrastructure and adopt innovative technologies and practices. The industry is represented on the Ministerial Manufacturing Council and the related Manufacturing Skills Working Group to ensure we hear first-hand from industry about the challenges facing the industry and the opportunities for growth.

The Queensland Government is committed to maintaining a globally competitive beef processing industry in Queensland by working in partnership with industry through this strategy. Growing our beef processing industry will boost the economy, protect and create jobs and support regional communities.

The Queensland Government looks forward to continuing its work to ensure a bright and sustainable future for one of this state's most important industries.



The Honourable Cameron Dick MP

Minister for State Development,

Manufacturing, Infrastructure and Planning

Contents

About the strategy	1
Queensland's beef processing industry	2
Major Queensland certified export beef abattoirs	3
Assisting Queensland operations	5
Priority 1	
Enhancing industry engagement and representation	5
Actions 1—4	6
Case Study Government investment to generate	
regional jobs and growth	7
Priority 2	
Ensuring efficient movement of livestock and freight	
(road and rail)	8
Case Study Upgrading Yeppoon rail line	
to strengthen industry	9
Actions 5—6.	10
Case Study Building our Regions: Cloncurry,	
Emerald and Roma Saleyards	11
Priority 3	
Building and retaining a skilled workforce	12
Case Study Skilling Queenslanders for Work initiative	14
Case Study Developing skilled meat workers	15
Case Study Attracting professionals	16
Actions 7—9	17
Priority 4	
Investing in supply chain and processing efficiency	. 18
Case Study Investing in regional manufacturing	20
Actions 10—12	20
Case Study Increasing sustainability: ecoBiz and Teys Australia	21
Case Study Saving energy: JBS Solar Project	22
Glossary	. 24
Summary of Actions	5-27

About the strategy

The *Queensland Beef Processing Strategy 2019–22* (the strategy) has been developed to support and grow the beef processing industry.

Building on the extensive range of programs that are available to the beef processing industry, the overall objective of the strategy is to place downward pressure on processing costs and ensure the industry can capitalise on emerging product and market opportunities, particularly those from the growing global middle-class.

The strategy is focused on the beef processing industry and does not directly consider issues associated with the production of cattle or the production/processing of other meat types. The benefits of a strong processing industry extend right across the beef cattle supply chain; and other meat processing industries are expected to benefit through this strategy, for example, through broader regulatory reform or the optimisation of supply chains.

The strategy has been prepared in consultation with major beef processors and representative bodies to identify the challenges facing the industry and the opportunities to work in partnership to respond to these challenges. In addition to challenges such as extreme climatic conditions and weather events, exchange rates and cattle prices, the main issues identified by the industry include:

- the high costs of processing relative to global competitors
- the need to improve productivity
- compliance costs
- challenges with recruitment and retention of employees
- the importance of the freight network to industry competitiveness and cost-efficiency.

Engagement with the beef processing industry identified that as a trade-exposed, labour-intensive industry, keeping processing costs down is essential to maintaining global market share. In October 2018, the Australian Meat Processing Corporation (AMPC) released *Analysis of Regulatory and Related Costs in Red Meat Processing*. This report compares costs in the red meat processing industry in Australia with our key international competitors, the United States, Brazil and Argentina. The four major costs for Australian beef processors (from highest to lowest) were livestock, labour, utilities (power and water) and regulation (predominantly by the Australian Government).

Industry also identified the need for the government to formalise engagement with them and advocate on their behalf in relation to regulation and market access. Informed by consultation, the strategy focuses on four priority areas:

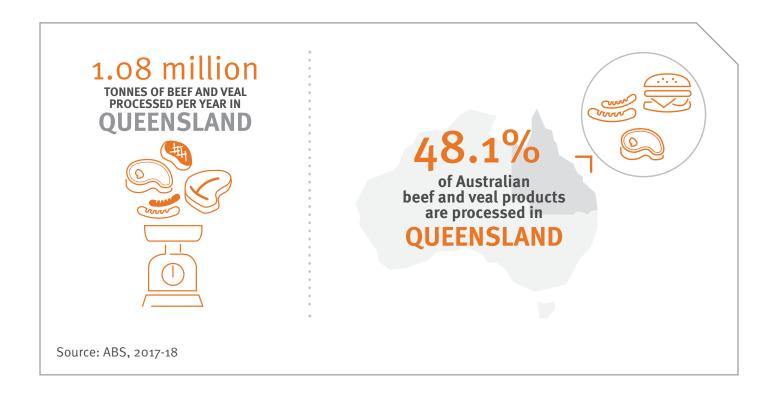
- · enhancing industry engagement and representation
- ensuring efficient movement of livestock and freight (road and rail)
- building and retaining a skilled workforce
- investing in supply chain and processing efficiency.

Queensland's beef processing industry

The beef processing industry makes a significant contribution to Queensland's economy. The industry value-add to the Queensland economy is approximately \$1 billion annually, making it one of the state's largest manufacturing sectors.

A 2018 study on cattle supply and abattoirs commissioned by the Department of Agriculture and Fisheries (DAF)¹ found that the average direct employment in the beef processing industry in Queensland is around 10,000 jobs. Conservative estimates by industry are that there is at least the same number of people again involved in activities supporting the industry, such as road transport, shipping, carton and equipment manufacture, insurance, banking, laboratories and other ancillary industries.

The beef processing industry also underpins the supply chain from Queensland's beef producers to domestic and international markets.



Queensland is the largest beef processing state in Australia. In 2017–2018, 1.08 million tonnes of beef and veal were processed in the state and \$4.92 billion of beef products were exported to destinations including Japan, South Korea, USA, China and Taiwan. Queensland's beef processors' reputation for producing clean, green and safe red meat products is a major factor underpinning its export success.

Queensland's beef processing industry is highly competitive, with major export certified abattoirs operated by companies including JBS, Teys/Cargill, NH Foods, Kilcoy Global Foods, Australian Country Choice, Nolan Meats, Stanbroke and John Dee. There are 15 major certified export beef abattoirs in Queensland, with nearly 70 per cent of slaughter capacity concentrated mainly in South East Queensland (bounded by Gympie to the north, Oakey to the east and Warwick to the south). There are two major export facilities at Rockhampton and operations at Biloela, Mackay and Townsville.

Queensland also has 43 operational regional slaughter houses and killing rooms that service domestic consumers. These smaller operations provide invaluable employment opportunities in regional communities, supply products to local businesses and support local producers. Although the number of operations has reduced over time, overall processing capacity has increased as processors have achieved greater efficiencies.

¹ Department of Agriculture and Fisheries. (2018). Analysis of beef cattle supply and evaluation of commercial viability of locations for processing facilities in Queensland.

Major Queensland certified export beef abattoirs



Major certified export beef abattoirs



Assisting Queensland operations

The Queensland Government has an extensive range of programs available to assist business and industry in Queensland, including beef processors. Building on these programs, the strategy has identified four priority areas and corresponding actions to capitalise on new opportunities, grow the industry and create more manufacturing jobs.



The Queensland Government is committed to effective, ongoing engagement with the beef processing industry to support the industry and advocate on its behalf.

As important contributors to the manufacturing sector, beef processors are represented on the Ministerial Manufacturing Council (MMC), which is chaired by the Minister for State Development, Manufacturing, Infrastructure and Planning. The MMC meets quarterly and is focused on growing and promoting manufacturing capabilities, efficient regulation, skills and expertise, and helping to position the industry for sustainable future growth.

The industry is also represented on the Minister for Agricultural Industry Development and Fisheries' Ministerial Beef Roundtable. This broader forum brings together stakeholders across the beef supply chain to share information on issues impacting the immediate profitability and long-term growth of the beef industry, and to collectively identify options and solutions.

Ongoing engagement and collaboration between industry and government is important to address challenges and capitalise on opportunities. With the support of industry, we propose to formalise engagement on both local/regional issues and strategic issues facing the industry.

The Department of State Development, Manufacturing, Infrastructure and Planning's (DSDMIP) regional officers will engage with processors for detailed discussion of current and emerging issues at a local or regional level. DSDMIP officers will refer issues to and seek the support of key agencies such as the Department of Agriculture and Fisheries (DAF) and Department of Transport and Main Roads (TMR) where relevant issues are raised. It is also proposed that with the support of industry, the Director-General, DSDMIP will chair twice-yearly meetings between industry and senior executives from relevant state government departments, to monitor the outcomes of the strategy and respond to strategic issues such as freight, skills, training and energy.

The Queensland Government actively promotes
Queensland beef to key export markets such as Japan and
South Korea through initiatives including trade missions.
The government will also continue to advocate on behalf
of industry in relation to regulation and market access to
assist Queensland beef processors access emerging global
markets. This will include making representations to the
Australian Government directly or through the Council of
Australian Governments (COAG) on matters that are the
responsibility of the Australian Government.

APPROXIMATELY 80%

OF ALL EXPORTS GO TO THE FIVE LARGEST CUSTOMERS JAPAN, SOUTH KOREA, USA, CHINA and TAIWAN



Source: ABS unpublished trade data and Queensland Treasury, 2017–18

The following industry engagement and representation actions are planned:

Action 1

Engage with beef processors on local and regional concerns to allow for detailed discussion of current and emerging issues facing the industry.

Action 2

Support ongoing engagement by holding twice-yearly meetings between industry and senior executives from relevant portfolio agencies in the Queensland Government to respond to strategic issues and raise the profile of the industry.

Action 3

Make representations to the Australian Government on issues that will assist Queensland beef processors including regulations, Free Trade Agreements and other trade and market access issues.

Action 4

Promote Queensland's high-quality beef to inbound delegations and through trade missions and outbound delegations.

CASE STUDY -

Government investment to generate regional jobs and growth

The Queensland Government's \$175 million Jobs and Regional Growth Fund (JRGF), supports investment that leads to job creation and capital investment for eligible projects in regional Queensland. A total of \$10 million has been allocated to fund a business case and capital works for a Regional Export Distribution Centre Pilot, which may lead to further opportunities for direct air freight of high-value Queensland beef.

Following a competitive selection process, Wagner Group Holdings Pty Ltd from Toowoomba and Air Freight Handling Services Pty Ltd from Cairns have been selected to receive funding for business case development.

The JRGF also supports private sector projects that create employment and economic growth opportunities in regional areas. Assistance through JRGF was recently announced for Mort & Co to deliver a \$36 million expansion of its operations at Grassdale on the Darling Downs. This will increase the annual throughput of its feedlot by an additional 80,000 head of cattle per year and diversify the business through the construction of a world-class fertiliser manufacturing facility. Thirty-four new long-term jobs will be created at Grassdale and about 105 full-time-equivalent (FTE) jobs supported during the 18-month construction period. The expansion has the support of downstream meat processors who have indicated about 115 FTE jobs will be created at regional abattoirs. JRGF is supporting innovative regional projects like this, that will have real impacts on local communities and create new jobs.





An efficient freight network is critical to Queensland's global competitiveness and economic performance. Beef processors rely on a combination of road, rail and port access for the delivery of livestock and goods and the transport of products to domestic and global customers. TMR continues to work with beef processors to improve the efficiency of road freight transport through targeted investment and innovative solutions such as the use of Performance-Based Standards vehicles wherever possible.

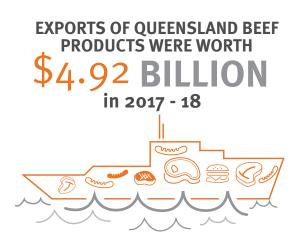
TMR also recognises the importance of facilities for livestock transport services and works with industry representatives such as the Livestock and Rural Transporters Association of Queensland wherever possible, to achieve outcomes. Site-specific initiatives have been undertaken to improve road freight access, such as improved road train access at both the Roma Saleyards and Rockhampton abattoirs over recent years.

As a deliverable through this beef processing strategy, TMR will commence work on Freight for the Meatworks Sector – future directions, to provide the policy direction to support the freight transport needs of the beef processing industry. Treating freight as a system, a multi-modal approach will be taken to set out the future direction of the government for road and rail policy and investment prioritisation.

Through the implementation of Regional Transport Plans and as part of transport project planning and delivery processes, the government will regularly engage with relevant stakeholders, including beef processors, to identify opportunities to improve the efficient movement of livestock and freight. This engagement is expected to

complement existing investment in road infrastructure, with the Queensland Transport and Roads Investment Program detailing around \$23 billion in transport and road projects over the next four years (from 2019/20).

The Queensland Government also provides significant assistance to the livestock industry through the Livestock Transport Services Contract. The contract subsidises cattle train services, which enable the transportation of livestock from regional hubs across the state to processing facilities on Queensland's eastern coast. The contract supports non-commercial livestock services and ensures a minimum standard is offered to the livestock industry. TMR also has a contract with Queensland Rail that funds rail infrastructure maintenance and upgrades. Recent investments in Rockhampton and Oakey exceed \$6 million and will improve supply chain efficiency.



Source: ABS unpublished data and Queensland Treasury, 2017-18



Upgrading Yeppoon rail line to strengthen industry

The Queensland Government has committed \$5 million to upgrade rail infrastructure in Nerimbera. This involves upgrading 1.9 kilometres of track and sleepers, as well as replacing timber bridges and culverts. The upgrade will strengthen Rockhampton's beef industry by increasing opportunities for regional producers to transport livestock by rail. It will also enable producers in north west and central west Queensland to again transport livestock by rail direct to the JBS abattoir. The project is expected to be complete in mid-2019.

CASE STUDY -

The following actions in relation to efficient livestock movement and freight are planned:

Action 5

Commence work on *Freight for the Meatworks Sector – future directions*, to provide the policy direction to support the freight transport needs of the beef processing industry.

Action 6

Engage with the beef processing industry to ensure that opportunities to improve the local and regional road and rail network for the efficient movement of livestock and freight are fully considered in transport infrastructure planning and programming.



CASE STUDY

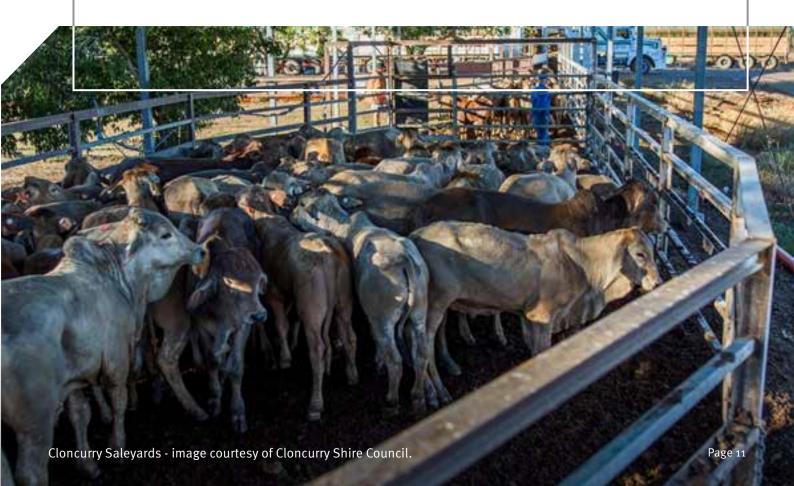
Building our Regions: Cloncurry, Emerald and Roma Saleyards

Through the Building our Regions program, more than \$5.5 million has been allocated to assist with the \$10.6 million upgrades to saleyards and related infrastructure at Cloncurry, Emerald and Roma. These upgrades will benefit local communities and the broader cattle industry.

Cloncurry is the second largest cattle-handling facility in Queensland and sees 325,000 head of cattle pass through the facility each year. The saleyards have been upgraded to ensure it remains operational and viable, and improves workplace health and safety and animal welfare so it continues to support jobs and economic development in the state's north-west. The council-owned saleyards play a critical role in the community through the ripple effect of employment and flow-on benefits. The upgrade will support up to 11 ongoing FTE positions at the facility that operates around-the-clock 360 days a year.

Upgrades at the Roma Saleyards will include a new arena for stud stock selling with state-of-the-art audio-visual facilities making it a standout feature for all stud stock sales and a multi-purpose facility featuring an interpretive centre. The project is expected to be completed in mid-2019.

The upgrade to the Emerald saleyards complex will provide a larger spelling area, double-decker dump ramp, all-weather hay shed, and shade structure.



Priority 3 BUILDING AND RETAINING A SKILLED WORKFORCE

The beef processing industry is one of the largest manufacturing employers in Queensland and is well-placed to deliver job opportunities in processing plus a range of trades, administrative and professional roles.

Industry consultation emphasised that the recruitment and retention of staff was a significant challenge to maintaining a stable and skilled workforce.

Industry advised that skills shortages in regional areas and temporary skills shortages have been met through both working holiday visas (subclass 417 visa) and skilled visas (including the former 457 visa). Abattoir work is not currently on the Australian Government's list of eligible skilled occupations, which industry has stated adds to the challenge of meeting skills needs, particularly in regional areas and may be detrimental to the overall enterprise.

The Queensland Government's statement of objectives for the community, Our Future State: Advancing Queensland Priorities, sets a youth engagement target of 91 per cent of young Queenslanders engaged in education, training or work by 2022. Several companies are working with local schools to promote career opportunities and assist with the transition from school to work.

On 1 August 2018, the Jobs Queensland report Advancing Manufacturing Skills: A Skills, Training and Workforce Development Strategy for the Manufacturing *Industry in Queensland* was publicly released. The government supported the recommendations in the report and established a Manufacturing Skills Working

Group, which will prioritise government initiatives to assist workforce development, business development and training. The beef processing industry is represented on the working group.

The Manufacturing Skills Working Group, together with the Department of Employment, Small Business and Training (DESBT) will work with industry and the Department of Education on strategies that provide pathways to work for the meat processing industry. The Manufacturing and Engineering Gateway to Industry School Program, is a working model that could be investigated.

The industry is continuing the transition to increased integration of mechanisation and automation, and sophisticated processing and packaging, to deliver shelf-ready products and improve safety. This is expected to create new career opportunities and new training and skills requirements including data analytics and food science and technology.

> ESTIMATED AVERAGE DIRECT EMPLOYMENT IN THE BEEF PROCESSING INDUSTRY IN QUEENSLAND EXCEEDS

10,000 JOBS

Source: DAF, 2018

DESBT will continue to work with the National Meat Industry Training Advisory Council Limited on training packages available to the meat processing industry, adapting the packages as the meat processing industry evolves. Industry also identified that professional development and skills pathways for management is important for both career progression from the processing floor and improving business operations. In response to the Queensland Productivity Commission inquiry into manufacturing, the government committed to facilitating access for the manufacturing industry to a consolidated online information resource on management, mentoring and leadership courses². This resource is now in place and the Manufacturing Skills Working Group will provide advice on the effectiveness of this resource in meeting industry needs.

These initiatives will build on the Annual Vocational Education and Training (VET) Investment Plan, which outlines the Queensland Government's investment in a number of VET programs and initiatives that support participation in skills training across a range of industries, including meat processing. The 2018–19 Annual VET Investment Plan is underpinned by a VET investment framework that supports demand-driven funding arrangements across a number of program areas.

Investment under the plan is prioritised to those qualifications that provide a pathway to employment and align to skills in demand, based on advice from industry.

Training priorities, targeted by programs under the VET investment plan, are informed by regular engagement with industry stakeholders and government agencies, undertaken through a variety of formal and informal

arrangements to source advice on workforce skills needs. This advice informs the training priorities targeted by programs under the plan, with subsidised qualifications listed on the government's Priority Skills List and the User Choice Price List.

Importantly, by submitting an industry proposal, industry can at any time seek approval for funding of new qualifications or nationally recognised skill sets, or request a change to the government priority of currently funded training products.

Through the \$9 million Regional Skills Investment Strategy (RSIS), the Queensland Government is further investing in regional skills development and training to match local skills with local jobs. Driven by regional communities and industry, the RSIS provides the opportunity for communities to self-determine their industry focus and collaborate to identify local training solutions.

The RSIS bridges the gap between existing training opportunities available through the VET investment plan and current workforce skills needs in targeted regions throughout Queensland.

RSIS provides the opportunity to tailor training solutions to meet local skills needs, which may include targeted investment in skill sets or other specific training outcomes, revised eligibility arrangements to support local participation, or support for local community or industry projects. Local RSIS partners will identify key industry sectors, with food processing expected to be an identified priority in some regions.

 $^{^2 \} www.business.qld.gov.au/running-business/growing-business/management-leadership-training.$



CASE STUDY

Skilling Queenslanders for Work initiative (SQW)

SQW is a highly successful initiative under the Vocational Education and Training Investment Plan. SQW represents a significant investment of \$420 million over six years to support up to 54,000 Queenslanders into work through a suite of targeted skills and training programs. SQW supports strategies that encourage equitable participation by a broad range of groups that generally face barriers or challenges to their participation in skills development and the labour market.

SQW helps Queenslanders gain the skills, qualifications and experience needed to enter or stay in the workforce. Key to the success of SQW is the strong local employer networks fostered by community-based organisations delivering projects. Local businesses are encouraged to support local projects, identify skills shortages and offer employment opportunities to SQW participants as they will have transferable vocational qualifications and employment skills, recent work experience and self-confidence.

CASE STUDY

Developing skilled meat workers

Australian Meat Processing Career Pathways Tiwawarn Kongsombat, Oakey Beef Exports

The skills necessary to work in the production area of a processing plant are unique to the industry.

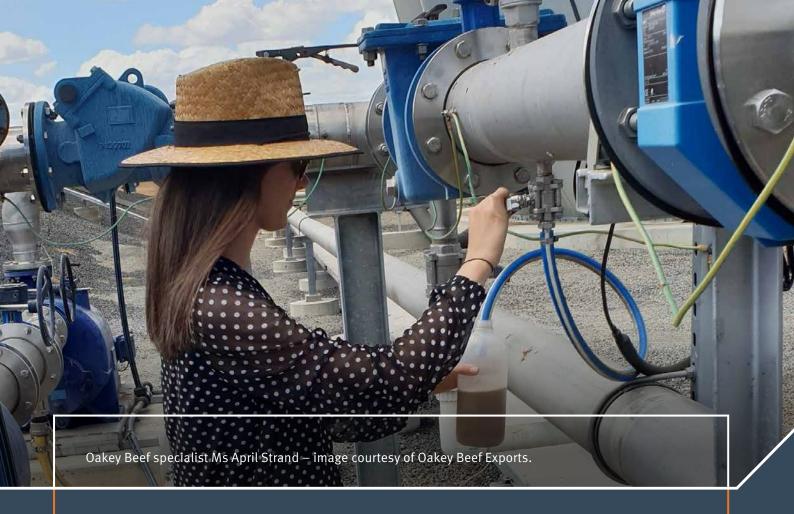
The term 'industrial athletes'* has been used to describe meat workers due to the physically demanding and highly skilled nature of the work. New employees come to the industry without any meat processing skills and experience. Extensive training and development support are required to help new employees develop into highly skilled meat processors.

Tiwawarn Kongsombat started as a labourer at Oakey Beef Exports in June 2009 and then learnt to identify the various meat cuts and packaging codes to pack meat in bags and cartons. By April 2011, Ms Kongsombat was engaged as a packer and quickly moved on to learn knife sharpening, maintenance and the process of slicing meat to produce primal cuts to customer expectations and company standards. In June 2013, Tiwawarn was fully competent and filled a position within the slicing team as a highly skilled and competent slicer.

The development process involved substantial training on the job, learning from more experienced operators, as well as completing a Certificate 3 in Meat Processing, incorporating both classroom training and on the job assessments. Tiwawarn is now a fully trained slicer performing daily at the highest standards in our modern boning room.

*Dr John E Johnson, Addressing workplace ergonomics in the meat processing industry, The National Provisioner, 24 October 2018





Attracting professionals

The meat processing industry needs highly skilled professionals, and developing strong networks within the region is vital in attracting key professionals to the industry.

An important area of the business is environmental management to ensure the industry is setting the global benchmark in environmental performance. Oakey Beef Exports has specialists employed in this department in Dr Aaditi Dang and Ms April Strand.

Prior to commencing work with Oakey Beef Exports in 2018, Dr Dang completed undergraduate and post graduate studies at the University of Southern Queensland including a PhD on brackish water irrigation, giving her invaluable knowledge on effective effluent irrigation.

Ms Strand completed a Bachelor of Science – Biology and Environment and Sustainability at the University of Southern Queensland and a Master of Environmental Science and Management at the University of New England.

Both came to the company through networks without recruitment activity being undertaken by the company. The professional environmental expertise that both Aaditi and April have allows them to make a valuable contribution to the business. It is through the variety and challenges that the work offers, along with career development opportunities within the meat industry, that professionals are retained in the industry.

CASE STUDY -

The following actions have been developed to assist industry with building and maintaining a skilled workforce:

Action 7

Work with the industry on strategies that provide pathways from school to work for the meat processing industry.

Action 8

Work with the National Meat Industry Training Advisory Council Limited on training packages available to the meat processing industry, including adapting the packages as the meat processing industry evolves.

Action 9

Deliver a consolidated online information resource on management, mentoring and leadership courses and monitor the effectiveness of this resource in meeting industry needs via the Manufacturing Skills Working Group.



INVESTING IN SUPPLY CHAIN AND PROCESSING EFFICIENCY

Reflecting the importance of the beef processing industry in Queensland, the state government provides significant financial and non-financial support throughout the supply chain. This includes a substantial investment in transport infrastructure and freight services and a range of industry support programs. The industry also has a demonstrated track record of investing in new technologies to reduce operating costs and access new market opportunities.

Energy is a major production cost for meat processors, powering refrigeration, sanitation and processing equipment. The industry has made substantial investment in on-site and 'behind the meter' solutions to generate energy, including solar rooftop installations and covered anaerobic lagoons for methane gas recovery.

As part of the *Queensland Advanced Manufacturing 10-Year Roadmap and Action Plan*, a commitment was made to work with local manufacturers to help them increase their international productivity and competitiveness and adopt innovative new processes and technologies. A trial project under the roadmap has recently been undertaken to better understand how manufacturing businesses currently consume energy and to improve energy productivity. One of the businesses in the trial was a major beef abattoir. Cost saving opportunities across all manufacturing businesses in the trial were identified both for energy generation and energy management. The results of the trial are currently being evaluated, including the benefits of a broader roll out of the program.

The Queensland renewable energy sites initiative will facilitate the development of large-scale renewable energy projects to deliver low-cost power in Queensland. Major power consumers, like meatworks, are prime candidates for buying electricity from these projects.

A range of other programs are also available that, subject to eligibility, assist with business investment in production efficiency and technology development. These include JRGF, the Resource Recovery Industry Development Program,

ecoBiz, and a range of programs under the Advance Queensland initiative (such as Ignite Ideas, Industry Research Fellowships, and Innovation Partnerships).

These programs are delivering environmental benefits and cost savings for the industry through process improvements. The government has committed \$5.7 million to continue delivering the ecoBiz program to 2022.

Publicly released on 2 April 2019, *Building our Innovation Economy – Advance Queensland Strategy* is the government's blueprint for Queensland's future, to drive jobs and solve some of the state's biggest challenges through innovation. The draft innovation strategy provides an opportunity for the beef processing industry to recommend new approaches to meet the innovation needs of the industry. Following public consultation, the final innovation strategy will be released later in 2019.

Industry engagement through the beef processing strategy will ensure information is provided to beef processors on programs to support the industry with investment in new technology and process improvements. This will also provide industry with an ongoing opportunity to provide direct feedback on the effectiveness of programs designed to respond to innovation opportunities.

Energy Savers Plus Program

Phase 1 of the government's \$2.6 million Energy Savers Plus Program delivered 96 free energy audits including audits for 10 members of the Queensland Country Meat Processors Association.

The audits of meat processing facilities identified 11,229 megawatt hours in annual energy savings or \$477,000 of bill savings for these businesses at the time of the audit.



CASE STUDY

Investing in regional manufacturing

The Queensland Government is investing \$10 million in a manufacturing hub for Rockhampton.

Food product manufacturing makes up 46.8 per cent of manufacturing sector employment in the Rockhampton local government area and 72 per cent of this is attributed to meat processing. Given the importance of these industries, a 'key initial focus area' of the Rockhampton Hub will be food product innovation.

Mr Wasantha Mudannayake, General Manager of Teys Australia, a member of the MMC and a source of local expertise for the hub delivery framework said, 'I am delighted to be part of the hub to raise industry capability and grow local manufacturing businesses'.

The hub will partner with industry to assist local food manufacturers to improve business efficiencies, demonstrate latest state-of-the-art technology and assist with workforce development and training. The hub's services will be available to the broader regions where they are based and outcomes from the hubs are expected to be transferred across the industry.

The following actions are planned to support industry to invest in efficiency and technology opportunities:

Action 10

Ensure beef processors are aware of programs available to support the industry with investment in new technology and process improvements.

Action 11

Monitor the innovation needs of the industry to ensure relevant government programs are available to support business investment in new technology and process improvements.

Action 12

The Rockhampton Manufacturing Hub will partner with beef processors to assist with improving business and processing efficiencies, demonstrate state-of-the-art technology and assist with workforce development and training needs.



Increasing sustainability: ecoBiz and Teys Australia

The Queensland Government's flagship eco-efficiency program, ecoBiz, helps small-to-medium-sized businesses identify and achieve eco-efficiency initiatives that reduce their operating costs through financial savings across energy, water and waste. With support from the Australian Government and the ecoBiz program, Teys Australia has installed new state-of-the-art wastewater treatment systems at its facilities in Beenleigh and Rockhampton.

The advanced wastewater systems, each comprising a covered anaerobic lagoon and a biological nutrient removal system, will collect all liquid waste from the processing plant and then treat the wastewater and capture methane-rich biogas. The biogas will replace natural gas and coal in onsite boilers or generators, resulting in a major reduction in Teys Australia's reliance on fossil fuels and a move towards renewable energy. The higher quality of treated processing waste water will open up the potential for a greater number of reuse opportunities.

This investment by Teys Australia as an ecoBiz partner resulted in it winning both the Business Eco Efficiency Award and the Premier's Sustainability Award at the 2015 ceremony, in recognition of the company's outstanding contribution to promoting and advancing sustainability in Queensland.

CASE STUDY -

CASE STUDY ·

Saving energy: JBS Solar Project

JBS Australia recently installed Australia's largest single rooftop solar installation at its Primo Smallgoods factory at Wacol.

The 3.2 megawatt solar panel system has 9700 panels covering approximately 75 per cent of the roof. The system is forecast to generate 4869 megawatt hour of power in its first year and save 1.2 million tonnes of carbon dioxide over 20 years.

The company uses a large amount of gas and electricity in its operations and the installation of solar panels is a significant investment in energy efficiency to lower Primo's carbon footprint. The solar panel installation is forecast by the company to reduce energy usage by 19 per cent at Primo's Wacol site.

The company worked with CleanPeak Energy and Todae Solar to implement the project over a three-month period. The solar installation is designed to have a lifespan of 25 years.

JBS Australia also has other energy-saving measures at its feedlots and processing facilities including biogas recovery and waste recycling.





Glossary

COAG – Council of Australian Governments

DAF – Department of Agriculture and Fisheries

DES – Department of Environment and Science

DESBT – Department of Employment, Small Business and Training

DITID - Department of Innovation, Tourism Industry Development and the Commonwealth Games

DNRME – Department of Natural Resources, Mines and Energy

DOE – Department of Education

DSDMIP - Department of State Development, Manufacturing, Infrastructure and Planning

FTE - Full-time equivalent

JRGF – Jobs and Regional Growth Fund

MMC – Ministerial Manufacturing Council

RSIS - Regional Skills Investment Strategy

SQW – Skilling Queenslanders for Work

TMR – Department of Transport and Main Roads

VET - Vocational Education and Training



Summary of actions

•	Enhancing industry engagement and representation	LEAD
Action 1	Engage with beef processors on local and regional concerns to allow for detailed discussion of current and emerging issues facing the industry.	DSDMIP
Action 2	Support ongoing engagement by holding twice-yearly meetings between industry and senior executives from relevant portfolio agencies in the Queensland Government to respond to strategic issues and raise the profile of the industry.	DSDMIP
Action 3	Make representations to the Australian Government on issues that will assist Queensland beef processors including regulations, Free Trade Agreements and other trade and market access issues.	TIQ DAF DSDMIP
Action 4	Promote Queensland's high-quality beef to inbound delegations and through trade missions and outbound delegations.	TIQ DAF DSDMIP
•	Ensuring efficient movement of livestock and freight (road and rail)	LEAD
Action 5	Commence work on <i>Freight for the Meatworks Sector – future directions</i> , to provide the policy direction to support the freight transport needs of the beef processing industry.	TMR
Action 6	Engage with the beef processing industry to ensure that opportunities to improve the local and regional road and rail network for the efficient movement of livestock and freight are fully considered in transport infrastructure planning and programming.	TMR

	0 0	
· · · · · · · · · · · · · · · · · · ·	uilding and retaining skilled workforce	LEAD
Action 7	Work with the industry on strategies that provide pathways from school to work for the meat processing industry.	DESBT DOE
Action 8	Work with the National Meat Industry Training Advisory Council Limited on training packages available to the meat processing industry, including adapting the packages as the meat processing industry evolves.	DESBT
Action 9	Deliver a consolidated online information resource on management, mentoring and leadership courses and monitor the effectiveness of this resource in meeting industry needs via the Manufacturing Skills Working Group.	DSDMIP
· · · · · · · · · · · · · · · · · · ·	nvesting in supply chain and rocessing efficiency	LEAD
Action 10	Ensure beef processors are aware of programs to support the industry with investment in new technology and process improvements.	DSDMIP*
Action 11	Monitor the innovation needs of the industry to ensure relevant government programs are available to support business investment in new technology and process improvements.	DSDMIP*

The Rockhampton Manufacturing Hub will partner with beef processors to assist

with improving business and processing efficiencies, demonstrate state-of-the-art technology and assist with workforce development and training needs.

Action 12

DSDMIP

^{*} DSDMIP will provide information, refer relevant programs to industry and provide feedback from industry to relevant lead agencies responsible for program delivery e.g. DITID.



Department of State Development, Manufacturing, Infrastructure and Planning

PO Box 15009, City East, Qld 4002 13 QGOV (13 74 68) info@dsdmip.qld.gov.au

dsdmip.qld.gov.au/beefprocessing











Connect with us @GrowingQld