




AUSTRALIAN MEAT PROCESSOR CORPORATION

Annual report 2017-2018







Our members are significant contributors to the regional and national Australian economy. Our role in its most fundamental sense is to understand the needs of our members to ensure the sustainability of this vital industry.

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Introduction

We are the Australian Meat Processor Corporation (AMPC) – the Research and Development Corporation (RDC) for the Australian red meat processing sector. Our core focus is to know our members and deliver value against their priorities by connecting them to world-class innovation capability.

This year, we cemented our member-centric approach by shifting toward an improved framework for identifying member needs to which resource allocation can be prioritised. We strengthened our collaborative relationships with leading research providers and industry partners, and structured research and development portfolios informed by our members' top priorities around labour, energy, water, waste, and technology. To continue to meet our members' expectations, we have added talent to our team and are spending more time than ever in direct consultation with our membership so that our investment opportunities are of absolute benefit. With an improved framework to help our members meet their challenges with greater effectiveness, closer provider and industry collaboration, and an ambitious new team, AMPC is wholly committed to delivering strategic R&D outcomes for our members, the red meat processing sector and the wider Australian community.

Our purpose

Enable Australia to build the most sustainable red meat industry

Our mission

To lead industry-level strategy, innovation and capability development for our members, stakeholders and communities

Our vision

To become a highly regarded, world-class provider of RD&E playing a vital role in influencing and growing the Australian red meat industry

Our values

- Collaboration
- Innovation
- Creativity
- Challenge the status quo
- Continuous improvement

Our strategy

1. Focuses on member needs
2. Diversifies funding sources
3. Develops collaborative networks and relationships with authoritative resources
4. Strategically invests in research, implementation of R&D and marketing initiatives by harnessing the world's best ideas and skills that deliver industry-wide benefits

AMPC acknowledges the significant contribution of the Commonwealth in remitting levy funds for the advancement of the Australian red meat processing sector through RD&E and marketing activities.

We would also like to thank Robert Radford, Managing Director of AMPC processor member, R. Radford & Son Pty Ltd, for contributing to our *Annual Report 2017-18* front cover image.

Executive summary



Page 10

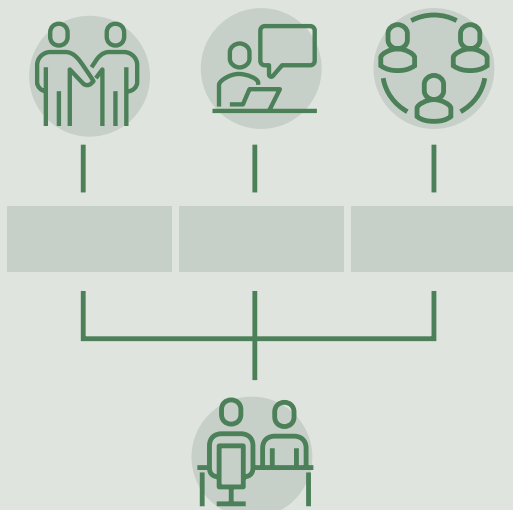
From the CEO

I am pleased to deliver AMPC's *2017-18 Annual Report*, my second as AMPC's CEO. 2017-18 was a year of dramatic change for AMPC and its operating model, as we move steadily toward a more member-centric approach to achieving our mission: to lead industry-level strategy, innovation and capability development for our members, stakeholders and communities.

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About AMPC

The Australian Meat Processor Corporation (AMPC) is the rural research and development corporation (RDC) for the red meat processing industry in Australia. Our mandate is to provide research, development, extension and marketing services that improve the productivity, profitability and sustainability of the industry. Red meat processor levies are strategically invested in programs that deliver a range of benefits for the industry and the broader Australian community.



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AMPC Directors

The directors present their report together with the financial report of the Australian Meat Processor Corporation Ltd (the Company) for the financial year ended 30 June 2018 and auditor's report thereon.

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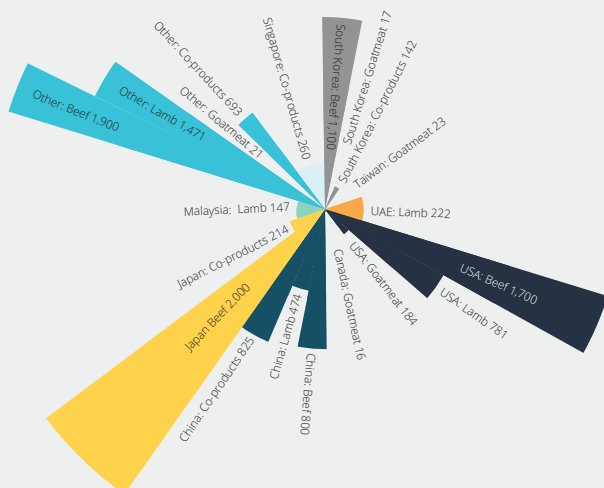
AMPC members

Our members are significant contributors to the regional and national Australian economy. Our role in its most fundamental sense is to understand the needs of our members to ensure the sustainability of this vital industry.



Page 24**Our members' economic contribution**

The red meat processing sector is a significant contributor to the Australian economy, particularly in rural and regional areas. Our purpose is to ensure the long-term sustainability of the industry, for the benefit of all stakeholders.

**Page 30****Aligning to priorities**

While our new approach to relationship management will be the primary driver for identifying member priorities and allocating resources, our programs are also structured to ensure alignment against industry and government priorities.



1. Processing Technologies
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2. Environment & Sustainability
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3. Processing Hygiene, Quality & Meat Science
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4. Capability, Extension & Education
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5. Industry Improvement & Economic Analysis
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6. Joint Program
Page 78

Page 17**Our impact – an evaluation**

This year saw an increase in the AMPC performance evaluation capacity and focus. The AMPC Evaluation Framework is being implemented across the full investment lifecycle.

**Page 82****Financial report**

Red meat processor levies are strategically invested in research, development and extension programs that are aligned to targeted marketing initiatives. These programs deliver outcomes and benefits for the Australian red meat processing industry and the broader Australian community.



From the Chairman



Having been a director of AMPC for a number of years, I decided to accept the chairmanship of the AMPC Board in January 2018 as I believe that there is an important role for AMPC in supporting the improved competitiveness of the Australian Processing Sector.

AMPC is the research and development arm of the Australian Meat Processing Sector, which is a major manufacturing sector employing around 70,000 people across the Country. Many of these processing facilities are in regional and rural towns where they are often the major employer. The importance of the processing sector to these economies and the national economy is often not recognised or acknowledged at a political level by all sides of politics.

A profitable, competitive and sustainable Australian Meat Processing sector requires not just capital investment but a plan and capability in terms of addressing higher costs structures and lower productivity levels compared to major competitors such as the United States and Brazil.

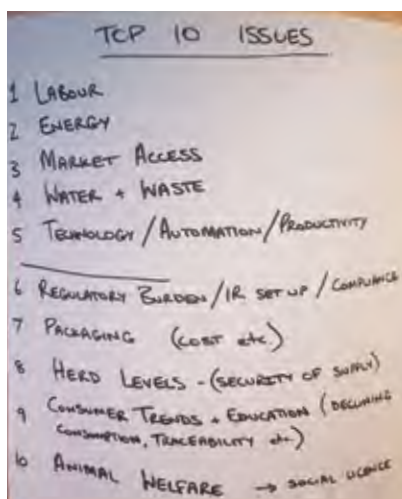
During 2018, the AMPC with the Australian Meat Industry Council (AMIC) and Red Meat Advisory Council (RMAC) commenced working together around developing and implementing with members a structured response to this industry competitiveness challenge, through research, international benchmarking, engagement with the processing sector and government at both state and federal levels leading to informed, practical policy responses. This process, through effective execution by AMPC, AMIC and industry members will in my view deliver benefits for the sector as a whole.

In terms of the opportunities for AMPC, demonstrating value to members through strong engagement, practical research and development outcomes and providing valuable insights to

inform policy continues to be the key focus. I am appreciative of the role played by the new AMPC Board in communicating a clearer strategy and in the role of the CEO and his team in better positioning AMPC to better respond to its member's needs.

To enable effective execution of our strategy, AMPC with AMIC convened a member consultation day in February 2018, where members representing some 85% of Australia's processing capacity were invited to workshop the matters they deemed to be their top priorities for our R&D and marketing efforts.

Through this process participants refined a wide range of ideas into the 'Top 10' priorities, ranked in order as follows:



The AMPC will align its R&D and policy research program with the above industry priorities and issues, which impact on the competitiveness, profitability, sustainability of the sector and underpins the industry's licence to operate.

Board election brings fresh insights

The 2017 Annual General Meeting held in November saw the end of term for all Directors, and subsequently a new board was elected. This resulted in several departures, including that of the previous Chair, Peter Noble, whose 20 years of industry experience and his strategic vision for a sustainable red meat processing sector proved invaluable to the Board, AMPC and its members. I thank Peter for his leadership and for his outstanding contribution over his five terms as a Director.

I would also like to extend my appreciation to past directors Brian James, James Campbell and Catherine Ainsworth who also ended their tenures. They have worked hard to advance the prosperity of Australian red meat processors in their roles at AMPC, particularly Brian who was a Director for eight consecutive terms.

In what is now my seventh term as a director of AMPC and my first as Chair, it is a privilege for me to be able to contribute to ensuring the sustainability of the processing sector that adds so much value to the Australian economy and to the families and communities of the 70,000 people in its employ.

Following these departures, we welcomed Melissa Fletcher to the board and to her role as Deputy Chair. Melissa is an accomplished businesswoman and experienced meat processor of proud indigenous descent and brings a wealth of knowledge and fresh perspective to the Board. We also welcomed Patrick Gleeson and his considerable plant management experience, as well as two new Special Qualifications Directors Bruce Rathie, an experienced investment banking executive and company Director who brings tremendous experience in law and commerce, and Leanne Heywood, who brings strategic marketing, business finance and compliance expertise.

Combining the fresh insights, skills and experience of our new Directors with the extensive knowledge and experience of those that were re-elected, the AMPC Board is well positioned to provide the necessary governance and strategic oversight required to address the key strategic and competitiveness issues faced by the Australian Meat Processing Industry.

It is a great pleasure as Chairman to present AMPC's Annual Report 2017-18.

John K Berry
Chairman

Our Strategy



SHAPE THE FUTURE OF THE INDUSTRY



UNLOCK MARKETS



PROTECT AND PROMOTE THE INDUSTRY



BUILD ENDURING INDUSTRY RELATIONSHIPS



DIVERSIFY FUNDING SOURCES



STRENGTHEN CAPABILITIES TO BECOME A WORLD-CLASS R&D ORGANISATION

From the CEO



I am pleased to deliver AMPC's 2017-18 Annual Report, my second as AMPC's CEO, especially as 2017-18 was a year of dramatic change for AMPC and its operating model. Since I joined we have moved steadily toward a member-centric approach to achieving our mission: to lead industry-level strategy, innovation and capability development for our members, stakeholders and communities. I also bring the desire to bring a more commercially focused outcome from our investments.

To do this we have consulted closely with our industry partners, also to facilitate the processing industry 'one-voice' approach that our members have loudly and clearly called for. If we are to effectively combat the risks to our industry and ensure its sustainability for the future by capitalising on the opportunities ahead, we must work together as an industry, and as a supply chain, and AMPC is proud to be leading by example to do so.

Portfolio shift

This reporting year was the last in which AMPC issued an annual call for proposals, moving instead in early 2018 to allow project proposals to be considered on an ongoing basis.

We are now focusing our Core project portfolio on projects that are fewer in number but greater in impact, and those that are more strategically identified to help our members to meet their industrywide challenges head-on.

We also face ever-rising energy and labour costs and regulation, water and waste treatment issues, and competition from global competitors with a fraction of our operating costs.

This year our industry has faced competition from cheaper proteins both domestically and even from cheaper imported meats.

We have faced increased demand by consumers for provenance, animal welfare and traceability information for our products.

We have faced changing regulatory requirements from our export markets and barriers to trade.

AMPC will continue to direct its investments into our Core, Joint and PIP projects where needed to meet these and any future challenges, and to ensure the productivity and sustainability of our sector, our members and the regional Australian communities they support.

We have tightened our focus on evaluation and outcomes in 2017-18, as part of its new approach, AMPC has re-evaluated its portfolio, choosing to focus on projects with potential to lead to innovation by commercialization and to real results.

Our embedded, member-centric approach

The shift in our approach is to better serve AMPC members by putting their needs directly at the heart of what we do. It's abundantly clear our members wanted us to modernize our approach, so to achieve this we have broadened our industry consultation, and by speaking to more members about what they see as the top issues facing the red meat processing industry in Australia.

We have also been working diligently to assist members to develop and tailor their R&D strategy as to ensure that our investments are in alignment, with the expectations of our members as well as the government's National Science and Research Priorities and the pillars of the Meat Industry Strategic Plan (MISP) 2020.

Industry collaboration

This past year has allowed AMPC to demonstrate its commitment to engage more closely with other industry bodies, working collaboratively with the Australian Meat Industry Council (AMIC), the Red Meat Advisory Council (RMAC) and Meat & Livestock Australia (MLA) to provide a unified approach to our industry's biggest issues.

Nearly 75 per cent of our members' produce is exported, making Australian red meat processors highly exposed to global markets and pricing and currency fluctuations.

We have worked closely with AMIC to overcome non-technical barriers to trade to aid in our access to important markets such as China.

Plus we have enjoyed shared industry presence with AMIC, AUS-MEAT and MINTRAC at events such as LambEx.

Focus on evaluation and outcomes

In 2017-18, as part of its new approach, AMPC has reevaluated its portfolio, choosing to focus on projects with potential to lead to innovation by commercialization and to real results for our levy payers, and ensuring that our investments deliver against the capability and research gaps identified by our members.

We also looked to build on research where more industry sourced data was required in order to support policy change for the benefit of the sector.

As the Research and Development Corporation (RDC) focusing solely on the needs of the Australian red meat processing sector, we have added talent to our team to gather and analyse primary data that is directly relevant to processors. This will enable us to provide more accurate evaluation of our portfolio, and more accurately identify investment opportunities for the direct benefit of our members. By allocating levy funds and government matched funding toward projects that deliver clear return on investment for processors, we are ensuring that we are investing in the best value projects for our membership.

For 2017-18, we conducted evaluations on three projects from the Processing Technologies portfolio, which have yielded a Benefit Cost Ratio (BCR) of 3.62 to 1. Continuous performance evaluation will be a key focus in the 2018-19 financial year in delivering tangible value to members.

Research highlights

This year's Program activities included:

1. Processing Technologies

21 projects active. \$2.6M invested. Five projects completed. Highlight: Primal Cut Recognition Software – the scope of this project was to develop and evaluate sensing hardware and software algorithms capable of rapidly learning and classifying different types of red meat primal cuts.

2. Environment & Sustainability

30 projects active. \$1.8M invested. 13 projects completed. Highlight: Water and wastewater recycling opportunities – the main objective of this project was to progress water recycling and reuse in the red meat industry by providing a selection and assessment tool, incorporating cost benefit analysis (CBA).

3. Hygiene, Quality & Meat Science

24 projects active. \$2.9M invested. 12 projects completed. Highlight: Optimising meat quality through novel processing interventions – this project focused on the development of processing technologies for novel, value-added red meat opportunities.

4. Capability, Extension & Education

51 projects active. \$4.2M invested. 24 projects completed. Highlight: Protecting Australia's Red Meat Processing Industry – this project equips red meat industry workers with the knowledge and skills required in the event of an emergency animal disease (EAD) or an exotic species incursion.

5. Industry Improvement & Economic Analysis

11 projects active. \$1.2M invested. Five projects completed. Highlight: Review of the international competitiveness of Australia's red meat industry – the main objective of this project was to provide in-depth analysis of the market opportunities, policy issues and commercial landscape in six priority export markets.

6. Joint Program

\$3.2M contributed to industry efforts in International Market Access. \$2.4M contributed to Integrity Systems Company's efforts in support of our industry. \$2.2M contributed to industry efforts in Domestic Marketing.

Financial performance

For this financial year, our primary focus was to take a fiscally responsible approach to income and expenditure allocation, including the rebalancing of our R (research) dollar and M (marketing) dollar levy reserve balances. We derived income of \$25m including \$19m of levy income, which

was 100% allocated to M dollars to achieve a responsible M dollar reserves balance. We invested \$23m in R&D and Marketing programs, including our contribution to the operation of AUS-MEAT. Our corporate costs remained under the budget threshold despite the significant energy invested in enhancing our engagement with members and other industry stakeholders. The closing balance of our levy reserves for 2017-18 is \$36m. Excluding retained pre-statutory levy reserves, the closing split between R dollars and M dollars is 70/30, broadly consistent with our benchmark levy income split of 60/40.

Our focus on achieving a fiscally responsible outcome for the 2017-18 financial year provides a strong foundation from which we can execute our 2018-19 activities in line with our 2018-22 strategic plan.

AMPC's strategy into 2018-19 and beyond

AMPC will continue to focus on the needs of our members and the sustainability of our sector in 2018-19. We will strive to deliver results, communicating more clearly and openly with our stakeholders and listening to feedback, transforming as needed to become more ideal to our membership. We will be stringently evaluating our progress and honing in on transformative research to benefit our sector. We will invest strategically to support and develop our industry capability, utilising strong industry partnerships to overcome barriers to market access and trade, and using research to drive innovation and growth within our sector, enabling our members to operate sustainably and meet their commercial objectives.



Peter Rizzo
Chief Executive Officer

Who we are



About AMPC

Our role

The Australian Meat Processor Corporation (AMPC) is the rural research and development corporation (RDC) for the red meat processing industry in Australia. Our mandate is to provide research, development, extension and marketing services that improve the productivity, profitability and sustainability of the industry. Red meat processor levies are strategically invested in programs that deliver a range of benefits for the industry and the broader Australian community.

Our relationship management approach

As the processing industry Research and Development Corporation (RDC) and custodian of processor levy funds, AMPC's stakeholders are numerous and have discrete priorities. We have adopted a key relationship management approach to engaging with our important stakeholders, allowing us to distil and explore those priorities to best design R&D and marketing programs for industry benefit. Whilst our small team has this year maintained a strong focus on delivering 155 projects of which some 60 were completed, so too has much of our collective effort been directed to the development of deep, facilitative relationships with our stakeholders.

Our income sources

To fund our activities, we derive income from the following sources:

- Statutory levies – collected by the government from red meat processors and remitted to us
- Government matching – equal to 50% of R&D spend investment in eligible projects
- Partner contributions – funding from collaborators
- Interest on levy reserves.

Budget allocation process

The 2017-18 financial year saw the final round of our traditional budget cycle, which previously relied on a brief round of member consultation and an annual call for proposals from our research providers. Budgets were previously allocated in a bottom-up approach, based on provider's proposal submissions. Much of the FY18 project portfolio was derived from this process, whereas the 2018-19 financial year budget is based on a strategic resource allocation based wholly on member needs. For more information on the new budget allocation process and the industry consultation that underpins the approach, please refer to the 2018-19 Annual Operating Plan available on our website.

Table: Slaughter Volume vs Levy Income 2017-18

Species	Slaughtered *	Marketing \$	R&D \$	Total Levy \$
Cattle	7,479,200	26,366	13,699,684	13,726,049
Sheep	8,395,800	85	1,239,037	1,239,122
Lamb	23,432,400	234	3,734,862	3,735,095
Goat	1,914,361	19	194,490	194,509
Penalties		6,199	17,646	23,844
Total		32,902	18,885,718	18,918,620

* Source: Australian Bureau of Statistics

Our investment activities

There are three primary activities in which we invest our funds:



Core

Core projects address industry-wide priorities in terms of productivity, profitability, sustainability, integrity and capability. They are supported by a robust industry wide consultation process aimed at identifying and delivering innovative outcomes. Funding comes from processor levies and matched government funding (where applicable).



Plant Initiated Projects (PIPs)

Plant Initiated Projects (PIP) enable processors to identify and undertake RD&E projects that generate whole-of industry benefits by trialling and adopting new technologies at their own processing plants. These efforts are supported by private investment in industry RD&E as well as matching government funds for eligible activities.



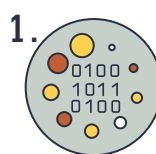
Joint

Joint projects deliver supply chain improvements that support food safety, data integrity, eating quality and increased demand for red meat domestically and internationally. These projects are collaboratively funded by AMPC and Meat & Livestock Australia (MLA), using both processor and producer levies, as well as matching government funds for eligible activities.

Our Programs

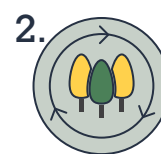
Each of Core, PIP and Joint project is allocated into Program portfolios, as follows.

Our activities under each of these Programs is explored in detail in the 'Delivering Our Programs' section of this report.



Processing Technologies

- 1.1 Productivity and Quality
- 1.2 Sensing and Analysis
- 1.3 Materials Handling
- 1.4 Value Added
- 1.5 Plant Initiated Projects (PIPs)



Environment & Sustainability

- 2.1 Energy Efficiency
- 2.2 Waste Management
- 2.3 Water Conservation
- 2.4 Sustainability
- 2.5 Plant Initiated Projects (PIPs)



Processing Hygiene, Quality & Meat Science

- 3.1 Food Safety
- 3.2 Integrity systems
- 3.3 Meat Science
- 3.4 Transformational Meat Science (TMS)
- 3.5 Plant Initiated Projects (PIPs)



Capability, Extension & Education

- 4.1 Industry capability
- 4.2 Extension Services
- 4.3 Scientific Education
- 4.4 Vocational Training
- 4.5 Plant Initiated Projects (PIPs)



Industry Improvement & Economic Analysis

- 5.1 Industry Improvement
- 5.2 Economic Analysis, Data and Statistics
- 5.3 Industry-wide System Improvements
- 5.4 Strategic Communications
- 5.5 Plant Initiated Projects (PIPs)



Joint Program

- 6.1 Capability Building
- 6.2 Communication
- 6.3 Domestic Market
- 6.4 Integrity Systems
- 6.5 International Market
- 6.6 Objective Measurement
- 6.7 Product & Packaging Innovation
- 6.8 Other Joint Activities

Whole-of-industry consultation

Key stakeholder collaboration

Our primary focus is on communicating with and understanding the needs of our processor members and the broader red meat processing sector.

We also maintain relationships with our research and development providers, including institutions of higher learning, the Australian and state governments, Commonwealth Science and Industrial Research Organisation (CSIRO), industry consultancies, and commercial providers, among others.

We also manage and liaise with our contacts in the key stakeholder group of wider industry including our Peak Industry Council (AMIC), other important RDCs like MLA and other organisations in the red meat industry.

We do this to ensure that our members' levy funds are appropriately and effectively invested to deliver maximum value.



Australian Meat Industry Council (AMIC)

AMPC works closely with the Australian Meat Industry Council (AMIC), the red meat industry Peak Industry Council and advisory body for the red meat processing industry. AMIC also provides a vital role in supporting the domestic smallgoods industry and the domestic meat retail sector.

This close relationship ensures that the needs of processing members of both AMPC and AMIC are clearly understood and considered in RD&E activities. AMPC will continue to support AMIC with empirical research to aid formulation of focused policy and advocacy initiatives for our sector.



Meat & Livestock Australia (MLA)

AMPC is committed to working with its stakeholders to use levy funds as efficiently as possible and to avoid duplication. One component of AMPC's expenditure involves leveraging our financial contributions by co-investment with Meat & Livestock Australia (MLA) in joint activities. This partnership provides services to the industry and the entire supply chain. AMPC also collaborates with other RDCs through Rural R&D for Profit Program submissions and other projects.



Red Meat Advisory Council (RMAC)

AMPC proactively maintains a close and communicative relationship with the Red Meat Advisory Council (RMAC). AMPC also provides contextual R&D, particularly regarding supply chain collaboration, to inform and support RMAC in their management of issues facing the red meat processing sector and in industry representation at ministerial level on whole-of-industry matters such as ACCC inquiries and trade issues.



National Meat Industry Training Advisory Council (MINTRAC)

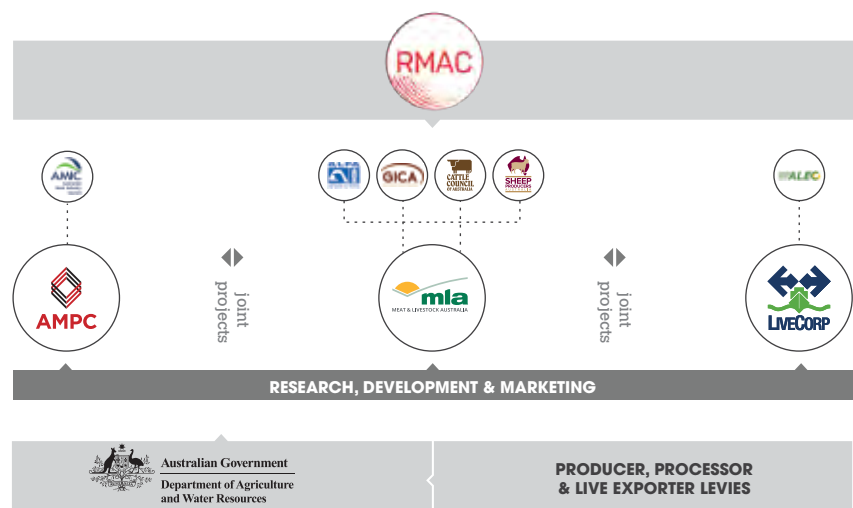
AMPC continues to support and work closely with the Meat Industry Training Advisory Council (MINTRAC) on various activities, including the extension of AMPC project outputs. Extension activities are critical to the effective uptake of RD&E investments in the industry, contributing to AMPC's strong track record of facilitating processor adoption of RD&E and other AMPC-funded outputs.



AUS-MEAT

AMPC proudly supports the work of AUS-MEAT in setting, maintaining and auditing our national red meat accreditation standards. AMPC, along with co-funding body and corporate member, MLA, will continue to collaborate with AUS-MEAT to support the red meat processing sector on critical industry issues, such as the management of red meat trade descriptions for export products, and the management of the Q-fever Register to ensure smooth staff onboarding and the safety of our workforce.

Further information on relationships between AMPC and other organisations can be found at www.ampc.com.au.



Our impact – an evaluation

This year saw an increase in the AMPC performance evaluation capacity and focus.

The AMPC Evaluation Framework is being implemented across the full investment lifecycle:



1.
Prior to
investment



2.
During investment
implementation



3.
After project
completion

As part of the Evaluation Framework, AMPC has conducted the first round of economic evaluations on recently completed projects to support a systematic and objective approach to RD&E decision making.

This enables AMPC to:



1.
Understand the
drivers of
investment success,
and potential
investment impact



2.
Derive lessons
learned to
continuously
improve investment
planning and
delivery



3.
Communicate to
industry members,
broader industry
stakeholders and
research providers the
progress and outcomes
of levy and matched
funding investments

In 2017-18 we
evaluated:

3 projects

from Program 1:
Processing Technologies

worth

\$1.71 million

combined AMPC
investment value

representing

10%

of the value of recently
completed projects

**The analysis
identified a
range of
benefits to
AMPC R&D
across
economic,
environmental
and social
outcomes**

Our impact – an evaluation (continued)

Evaluating project performance

For 2017–18, AMPC focused its evaluations on the Processing Technologies program. To reach a sample of 10% of the value of recently completed projects, three projects were selected for analysis, with a combined AMPC investment value of \$1.71 million (present value in 2017-18 dollar terms).

Independent analysis was undertaken by Michael Clark of AgEconPlus. The analysis identified a range of benefits to AMPC R&D across economic, environmental and social outcomes.

AMPC is delivering a

**positive
impact to
members**

3.62:1

average benefit cost ratio (BCR)

\$3.62

net industry impact for every \$1 invested

Project 1: Miniaturised Snake Robots (2017-1043)

R&D outcomes identified

Economic

- Yield gain – avoided loss from ‘soft-siding’ and bone and meal dust.
- Labour saving – cord removal, splitting and spinal channel cleaning.
- Health and trade benefits – reduced risk of spinal cord contamination.
- Product quality/shelf-life – reduced risk of contamination with bone dust.

Environmental

- Water saving – reduction in intensive washing of the spinal cavity.

Social

- Spill-over benefits in terms of regional community well-being, including regional employment, from increased processor profitability and/or productivity.

Potential flow-on effects

- The technology will be relevant to the processing of other species including sheep, goats, pigs and camels. May need to be re-designed for each species; however, the principles developed as part of this project will be relevant.
- The technology is relevant to all overseas countries which have a modern processing sector and high cost labour. Joint development with the EU and US is likely to speed its uptake in these markets.

Investment performance criteria

1.17

Net Present
Value (\$M)

4.58

Benefit cost
ratio

20.3

Internal rate
of return (%)

Project 2: Improved Bandsaw Operations (2016-1043)

R&D outcomes identified		
Economic <ul style="list-style-type: none"> Cost savings – bandsaw maintenance, energy, labour and processing speed WH&S savings – reduced worker fatigue, increased worker safety Yield gain – increased cutting accuracy, reduced kerf waste Hygiene gain – reduced product handling and less risk of contamination. 		
Environmental <ul style="list-style-type: none"> Energy savings – bandsaws operating efficiently. 		
Social <ul style="list-style-type: none"> Spill-over benefits in terms of regional community well-being, including regional employment, from increased processor profitability and/or productivity. 		
Potential flow-on effects		
<ul style="list-style-type: none"> Preliminary prototype systems have been developed for beef carcass processing; however, they are equally applicable to lamb processing and may find relevance in other industries using bandsaws such as wood and metal fabrication. Sensors and web-connected logging devices adapted for use in this project may also be relevant to the manufacturing sector where there are both manual processes and robotic operations; e.g. manufacture of mining equipment. 		
Investment performance criteria		
0.69	2.58	13.2
Net Present Value (\$M)	Benefit cost ratio	Internal rate of return (%)

Project 3: Container Loading Pilot Installation (2014-1011)

R&D outcomes identified		
Economic <ul style="list-style-type: none"> Labour saving – loading containers, scanning and port marking. WH&S savings – elimination of injuries associated with manual loading. Repack cost savings – elimination of carton damage during a manual load. Traceability – increased customer satisfaction with packed product. Efficiency – faster loading of shipping containers. 		
Environmental <ul style="list-style-type: none"> Waste saving – reduction in damaged cartons requiring disposal/recycling. 		
Social <ul style="list-style-type: none"> Spill-over benefits in terms of regional community well-being, including regional employment, from increased processor profitability and/or productivity. 		
Potential flow-on effects		
<ul style="list-style-type: none"> If automated container loading's potential is realised it could be adopted by other industries that require 'cool chain operation'; e.g. horticultural produce and fresh seafood. If the final technology is as efficient as anticipated, it could displace European style mechanised container loading systems and be applicable to all goods that are boxed and transported in shipping containers. 		
Investment performance criteria		
2.69	3.70	17.4
Net Present Value (\$M)	Benefit cost ratio	Internal rate of return (%)

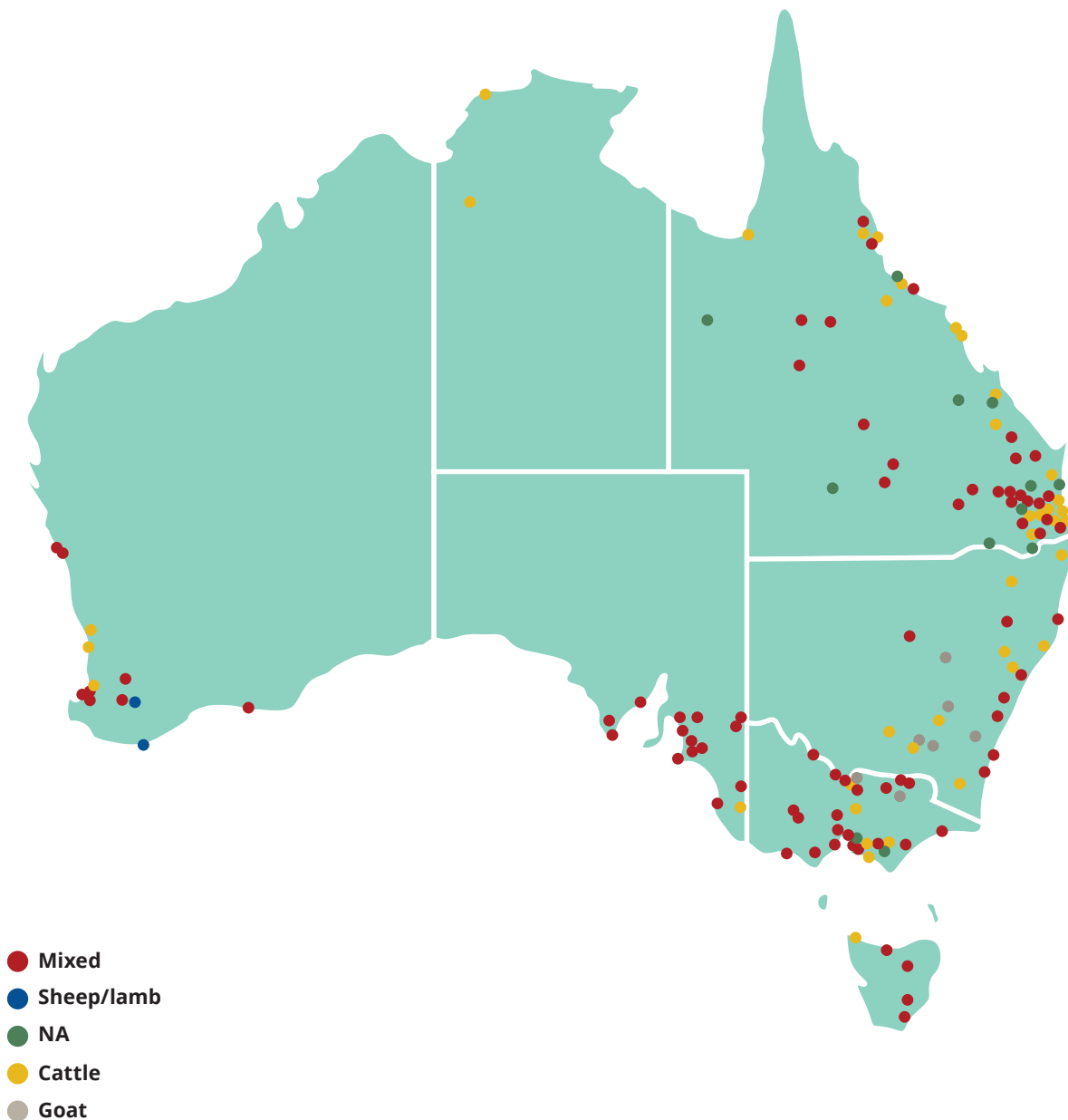
To view the full results, please visit the AMPC website
www.ampc.com.au.

Our members



Our members

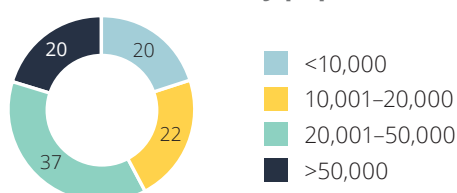
Our members are significant contributors to the regional and national Australian economy. Our role in its most fundamental sense is to understand the needs of our members to ensure the sustainability of this vital industry.



Geographically diverse

AMPC members are spread throughout Australia, particularly in rural and regional areas (map, previous page). AMPC members are primarily located in medium sized rural areas of between 10,000 to 50,000 people (graph 1), where they are typically one of the largest employers.

Member community population (%)

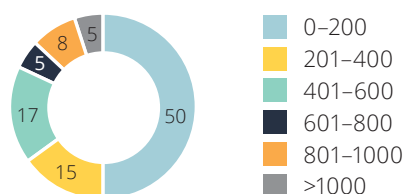


Source: ABS. Stat, AMPC. Measured by local government area (LGA)

Significant employers

While AMPC members range in size from two to 2000 employees, half the AMPC membership have less than 200 workers.

Member employees (%)

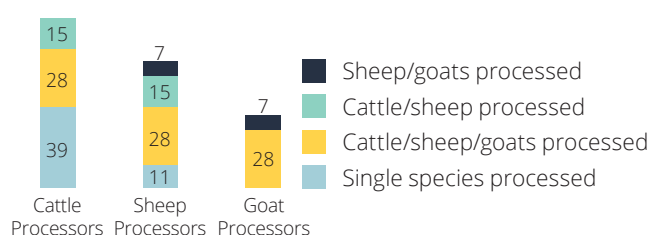


Source: AMPC. Data based on 78 members (53%) for whom data is available, accounting for 92% of total industry employees.

Varied product focus

Across all AMPC members, there are a range of processing sizes and systems. By livestock type, cattle processing is the most common activity, representing 83% of all member establishments (see graph 3).

Members by primary species processed (%)



Source: AMPC. Data based on the 92 members (59%) who provide throughput data.

AMPC members



Operate
130
processing facilities
across Australia (AMPC)



across
102
companies (AMPC)



Process over
80%
of Australia's red meat livestock
(87% cattle, 74% sheep and lambs
and 63% goat) (AMPC, ABS)



Represent more than
90%
of red meat processing
employment (AMPC, MLA)



Providing
100
career path options (AMPC)

Our members' economic contribution

The red meat processing sector is a significant contributor to the Australian economy, particularly in rural and regional areas. Our purpose is to ensure the long term sustainability of the industry, for the benefit of all stakeholders.

Employ

29,800 people

directly (Ernst & Young)

Support

70,000

indirect jobs (Ernst & Young)

Generate

\$17 billion

GVP (Ernst & Young)

Including

\$3.4 billion

direct value add (Ernst & Young)

Support up to

\$17 billion

in flow on value add (AMPC)

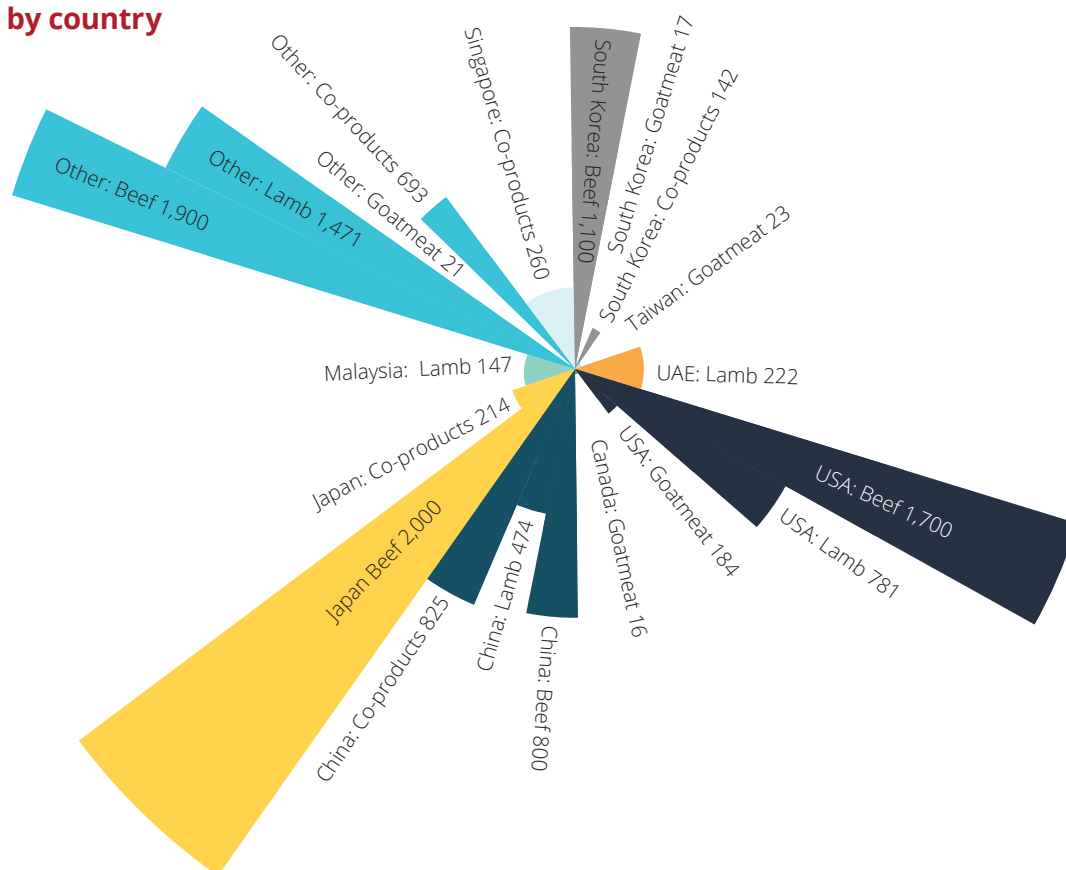
Processing generates significant value up and down the red meat supply chain.

- Australian red meat processing has a gross value of production (GVP) of approximately \$17 billion, the highest in the red meat supply chain, and generates \$3.4 billion in direct value add (Ernst & Young).
- Red meat processing provides direct value add of \$113,000 per employee compared to an average \$93,000 across the rest of the red meat supply chain (Ernst & Young).
- Red meat processing also supports significant value in local and regional communities, and up and down the supply chain, equal to a total value add (direct and indirect) of \$21 billion, or 1.4% of the total national economy (AMPC).

Red meat processing is the largest agricultural exporter.

- Processors export 81% of production, including meat and co-products, which generated \$14 billion in value in 2017, including \$7.5 billion beef, \$3.1 billion lamb & mutton, \$0.3 billion goat meat, and \$2.1 billion co-products (ABARES, Trade Map).
- Australia exports red meat products to 124 countries, with major markets by value shown in table 1 (Trade Map).

Export value by country (\$ million)



Exports to 124 countries, with major markets by value (Global Trade Atlas 2017-18, Comtrade 2017)

Beef & veal (\$ billion)			Lamb & mutton (\$ million)			Goatmeat (\$ million)			Co-products		
Japan	\$2.0 bn	27%	USA	\$781 m	25%	USA	\$184 m	70%	China	\$825 m	39%
USA	\$1.7 bn	22%	China	\$474 m	15%	Taiwan	\$23 m	9%	Singapore	\$260 m	12%
S Korea	\$1.1 bn	15%	UAE	\$222 m	7%	S Korea	\$17 m	6%	Japan	\$214 m	10%
China	\$0.8 bn	11%	Malaysia	\$147 m	5%	Canada	\$16 m	6%	S Korea	\$142 m	7%
Other	\$1.9 bn	25%	Other	\$1,471 m	48%	Other	\$21 m	8%	Other	\$693 m	32%
Total	\$7.5 bn		Total	\$3.0 bn		Total	\$0.3 bn		Total	\$2.1bn	

Source: Trade Map for calendar year 2017.

Red meat exports

81%

of production exported
(including meat and
co-products) (ABS,
Trade Map)

#1

The most valuable
agricultural export
commodity (ABARES)

\$13 billion

in export revenue
generated (Trade Map)

Export to
**124
countries**
(Trade Map)

Our members' social contribution

The continued economic prosperity of our red meat processing sector is closely tied to our social licence to operate. The following case studies demonstrate the positive social impact that red meat processing has for communities around Australia.

Case study:

A Christmas to remember



Red meat processing organisations around Australia have an important role in many communities. They are major employers, offering stable and well-paid work with little seasonal variation. As a result, they have a significant impact on local economies, especially in rural and regional areas. Many of these organisations see their role in the community as going beyond simply providing employment and incomes to locals. For these red meat processors, being an important and influential business in a town or suburb means becoming involved with people beyond the organisation itself who might be struggling. Some support charities through donations; others participate in fundraising events. For others, a more direct method of support works best.

A Queensland red meat processing organisation became aware of the plight of homeless and lonely people in its local community over the Christmas festive season. The organisation had always been aware of its role as a significant provider of employment in the town. It also recognised the flow-on benefits of its employees' spending in the area. But for this organisation, that wasn't

enough. The employees were determined to make a direct difference to people's lives at this special time of year. They took on the challenge of bringing happiness to people for whom Christmas was a struggle.

The management team at the plant decided they would postpone their own celebrations to deliver a giant BBQ Christmas feast for those in need, right in the centre of town. In the days leading up to Christmas, employees worked tirelessly to set up a temporary kitchen in an easily-accessible location, equipped with gas-fired barbecues, rows and rows of tables, and plenty of shaded seating. On Christmas morning, the men and women of the red meat processing organisation – some wearing fake reindeer antlers and Santa hats – cooked up plate after plate of sausages, burgers, steaks, and best Aussie roast beef under the cover of tarps and shade cloths.

For the lonely and the homeless, the meal provided more than food. It was a chance to relax for a while in good company, sharing jokes and conversation.

But that still wasn't enough for the team of red meat processors. As someone pointed out, other people were also giving up their Christmas morning to serve the community – police officers, ambulance staff, and fire fighters. Once again, the red meat processing crew fired up the BBQ and put their culinary skills to good use. Before long, sizzling platters of meat were being collected and distributed to the emergency services workers who had been rostered on that morning.

By now, the morning was nearly over, and the red meat processors started to disassemble their makeshift camp kitchen. That's when they realised just how much leftover food remained. It was all prime produce, safely and properly stored after cooking. They couldn't let it go to waste. Again, a team member came up with a solution: what about the old folks in local retirement homes? Such top quality red meat products would be a real treat for them. Phone calls were exchanged and arrangements made for the remaining food to be delivered to senior citizens in the area. All around town, elderly residents were able to tuck into wonderful roast beef dinners, courtesy of the red meat processing industry.

At the end of the shift, dozens of people had had their Christmas made extra-special by the efforts of workers from the red meat processing industry. Not only did the local plant's management donate a significant amount of produce, employees also gave up a lot of their time and provided all the necessary resources to make this a Christmas to remember for all the right reasons.

Case study: Boys from the bush



Sometimes, an offer of work in the red meat processing industry can mean more than a job – it can be a fresh start in life: the possibility of leaving behind difficult situations and circumstances, and the chance to make the most of new opportunities.

That was certainly the case for the young men involved with the *Boys from the Bush* program. These youths came from remote communities that had limited facilities and few chances for residents to earn a living. Being so far from major centres of population and commerce, the communities offered young people little or no chance of finding work near home.

Program director Milton James was determined to tackle this problem. He had two aims: to help young men in remote communities acquire the life skills and attitudes that would make them more likely to be job-ready when an opportunity arose; and to find suitable jobs for them to move in to. At first, Milton set up a community enterprise venture gathering and processing native plants with medicinal or culinary value for sale to urban retailers. This project introduced the young people to the importance of regular attendance and participation in a job, the significance of teamwork, and the financial rewards of completing a task.

The scheme worked well, but it was only the first step in Milton's plan to break the continuing cycle of unemployment in remote Australia. In order to achieve his ambitious goal, Milton had to find real jobs for his 'graduates'. That's when he realised the red meat processing industry could provide a solution. His previous connections with the industry meant Milton could see the natural synergies between the young men he was working with, and the jobs available in red meat processing. These jobs need people who will attend regularly, bring a good attitude to work, and show real ability while also working safely. Such attributes were among those Milton had helped to develop in the young people he was working with.

After a series of meetings and discussions with general managers from plants around the country, pilot programs were run at two red meat processing organisations – one in a remote location, and one in a metropolitan area. These test runs were very successful, and most participants were extremely pleased with the results. Refinements were made to the original business plan of the project, and the *Boys from the Bush* was ready to be rolled out further. Milton opted to work with a red meat processing organisation in a regional part of Australia for the next step in implementing the program.

Before recruiting any volunteers, Milton spent time talking with families and community leaders about what participation in the scheme would mean for the young men. He explained that the new format of the *Boys from the Bush* meant volunteers would be required to live away from home for at least two years. It was felt this was an important element in helping the young men develop new perspectives, and to break old (and often negative) habits. After extensive discussions, the project was approved by all concerned, and four young men were selected from among the volunteers to begin their new lives, thousands of kilometres from home.

The red meat processing organisation that agreed to act as host played a major role in welcoming the program participants to their new location. Management worked closely with Milton to secure a property in the town where the four youths were able to learn important life skills like budgeting, looking after a home, and eating well. A supervisor was appointed to live with the young men as a 'house father', providing a strong and positive male role model, and guiding them through the first tough weeks away from their families and friends.

The *Boys from the Bush* program is now more than half way through. All four young men have stayed the course, and have become well-liked and well-respected members of the red meat processing organisation's 'family' of employees. They have progressed well in their training, and see their future as remaining within the industry.

The exemplary success of the *Boys from the Bush* program means it's likely even more young men will be able to seek brighter futures with help from the Australian red meat processing industry.

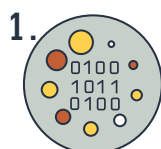


Delivering our programs

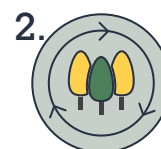


Aligning to priorities

AMPC has a responsibility to consider the needs of many stakeholders. While our new approach to relationship management is the primary driver for identifying member priorities and allocating resources, our programs are also structured to ensure alignment against industry and government priorities.



Processing Technologies



Environment & Sustainability

Meat Industry Strategic Plan 2020		
Consumer and community support		✓
Market growth and diversification		
Supply chain efficiency and integrity	✓	✓
Productivity and profitability	✓	✓
Rural research, development and extension priorities		
Advanced technology	✓	✓
Biosecurity		
Soil, water and managing natural resources		✓
Adoption of R&D	✓	✓
National science and research priorities		
Food	✓	✓
Soil and water		✓
Transport	✓	✓
Cybersecurity		
Energy	✓	✓
Resources	✓	✓
Advanced manufacturing	✓	
Environmental change		✓
Health	✓	
FY19 investment portfolio – by stream		
Levies	\$1,896,689	\$713,614
Matching	\$713,614	\$639,103
Total investment	\$1.43m	\$1.28m



**Processing
Hygiene, Quality
& Meat Science**



**Capability,
Extension &
Education**



**Industry
Improvement &
Economic Analysis**



Joint Program

	✓		✓
✓		✓	✓
✓		✓	✓
		✓	✓
✓		✓	✓
✓		✓	✓
		✓	
✓	✓	✓	
✓	✓	✓	✓
		✓	
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✓		✓	
		✓	
✓		✓	
✓	✓	✓	✓
	✓		
✓	✓	✓	
\$1,727,287	\$2,459,611	\$973,584	\$9,925,388
\$1,162,885	\$1,772,743	\$269,155	\$0
\$2.69m	\$3.55m	\$0.54m	\$9.96m

Processing Technologies



\$2.6m

Total investment

Alignment with government priorities*

Rural research, development and extension priorities:

- ✓ Advanced technology
- ✓ Adoption of RD&E

National science and research priorities:

- ✓ Food
- ✓ Transport
- ✓ Energy
- ✓ Resources
- ✓ Advanced manufacturing
- ✓ Health

* See appendix on page 116 for full details of priorities



\$1.2m

1.1 Productivity and Quality

Objectives: To investigate ways to increase processing efficiency and productivity without compromising on safety.

Outputs: Developing and implementing technologies and solutions that prioritise worker safety, automate manual tasks, increase the use of manual assist technologies, and improve resource efficiency to enhance process value and recovery.

Outcomes: Improved competitiveness in national and international markets, ensuring the long-term sustainability, high quality standards, and growth of an industry constrained by high costs and low margins.

\$0.1m

1.2 Sensing and Analysis

Objectives: To investigate and develop processing technologies capable of dealing with highly variable carcasses in terms of shape, size and composition.

Outputs: Developing and implementing systems that can manage variations to capture the data and images necessary to adjust cutting lines for automation and inform processing decisions according to carcass type, product specification, and customer and marketing requirements.

Outcomes: Development of the processing sector's ability to automatically measure characteristics 'online' and increase overall processing efficiency and productivity.

It is imperative that industry be able to evolve with new technologies in order to remain competitive. The Processing Technologies program provides world-class research and facilitates adoption of these technologies to improve process efficiency, reduce the cost of production, facilitate improved value capture and increase workplace health and safety.



\$0.2m

1.3 Materials Handling

Objectives: To find alternative solutions to reduce labour handling tasks that can risk injury to workers.

Outputs: This stream focuses on developing and implementing cost-effective technologies and solutions to material handling tasks, including the load out of carcasses, picking and packing boned and sliced product (e.g. primals, subprimals and shelf-ready portions) and cartoned meat.

Outcomes: Reduced cost burden to the sector associated with managing increasingly complex material handling tasks and employee injuries.



\$0.02m

1.4 Value Added

Objectives: To explore the potential for innovative concepts, products and technologies to add value within the processing supply chain.

Outputs: It will focus on transforming existing products (e.g. improving the eating characteristics of secondary cuts) and creating new ones (e.g. transforming inedible co-products into raw ingredients for other industries). Projects will deliver cost-effective methods of increasing value in alignment with customer needs.

Outcomes: Facilitation of productivity growth and industry competitiveness of Australian red meat processors.



\$1.2m

1.5 Plant Initiated Projects (PIPs)

AMPC supports members to identify and undertake RD&E projects that benefit the whole sector. AMPC facilitates these projects through the PIP Program. Members can identify site or business level RD&E activities that will improve processing efficiency and technology.

Program 1 Processing technologies

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Automated Beef Ribset Deboning	2016-1011	Exos Limited	16/3/16	15/6/17	Provide opportunities to increase yield and reduce manual labour in beef boning and limit associated injury risks	Manufacturing and trial of a single-side prototype machine to debone the beef ribset, and assessment of labour utilisation and yield outcomes	Currently the operation is performed manually and involves hard work, with associated OH&S risks, variable yield and posing boning room manning issues due to the changing typical workforce. A device that minimises skill and is operable by all boning room personnel at a production rate far above that achieved by current practice will not only provide labour cost saving and decreased OH&S risk, but increased flexibility in boning team assignment and rotation.
Demonstrating and Trialling of an Internet of Things Solution for Real-Time Computation and Delivery of Plant KPIs	2017-1003	Swinburne University of Technology	10/10/16	9/10/17	Develop and demonstrate and Industrial Internet solution for the Australian Red Meat Processing Industry	IOT solution that provides real-time monitoring; cost benefit analysis; pathway to transfer developed solution to IT organization of industry partners	Provide real-time computation and visualization of plant fine-grained KPS's and their use in identifying productivity plant improvements
Prototype development of machine to remove fat from beef striploins leaving a uniform thickness behind – Stage 2	2017-1045	Business and Manufacturing Consultancy UK	1/9/16	1/2/19	To reach a machine design solution as a production prototype and report detailing results and the benefits	First prototype machine design with documented test results; performance evaluation of the first machine; design drawings and cost of first production prototype; report on performance evaluation	Develop a machine that is designed to prove the overall approach to fat trimming; This project is expected to continue the work to implement a full test machine with integrated sensing that would remove fat from beef striploins as a working prototype that can be tested in a plant within Australia.
Automated French Dressing of Lamb Rib Rack: Market Confirmation of the technical and commercial suitability of an "ideal" Automated Machine design followed by its Prototype Design & Build Stages	2017-1052	Applied Robotics International Pty Ltd	1/9/16	1/2/18	Build the prototype, and do testing, evaluation, development and demonstration	Production of a prototype design, performance evaluation and associated costs; gain confidence that the industry really wants an Automated Lamb Rib Racks French Dressing Machine	Advance machine concept that fulfils an industry sector need to a position where it can be adopted by the industry sector without risk
Feasibility Study into a High Volume Cellular Processing Plant	2017-1054	Strategic Engineering Pty Ltd	3/10/16	1/6/17	Determine the feasibility of a high volume cellular processing plant	Develop a concept design of a high volume cellular production system; use robots to perform repetitive tasks	Inclusion of robotic systems in any stage of meat processing allows for increased throughput, efficiency, and reduced errors
Tunnel Boner	2017-1059	Southern Engineering Solutions Ltd (New Zealand)	1/7/16	1/3/18	Develop and manufacture the capability of removing the femur bone from lamb or mutton hind legs while leaving the tibia bone in place	Development and implementation of the tunnel boner machine; machine must meet operation safety requirements; size of machine compact as possible	Increase the rate that this work is currently taking, and remove likelihood of cuts; eliminate Health cost claim lost time by process workers in boning area

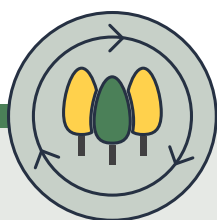
Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
A Boning Line Modular Processing Unit	2017-1069	Applied Robotics International Pty Ltd	17/10/16	30/6/17	Evaluate if the concept of a Modular Processing Unit (MPU), which has had compelling advantages in the manufacturing sectors, can be applied to the abattoir sector to provide specific operational functions at each workstation	Assessment of the MPU concept, to determine whether it can be used in the abattoir sector; analysis of boning line operations to break-down its entire suite of operations into elemental functions	Base data from which creative individuals can produce innovative actual designs for MPUs; Would automate boning line leading to increased efficiency
Feasibility research and evaluation of miniaturised snake robotics for spinal cord removal prior to splitting beef carcasses	2017-1085	Business and Manufacturing Consultancy UK	15/2/17	1/12/17	Specify the technical requirements for a combined cord removal and splitting process by automation	Report on quantification variables; documented and paper evaluated approach to combine cord removal prior to splitting; experimental snake arm tested on sections of beef spine	Automation would increase efficiency and reduce risk of injury
Roadmap Development for a Meat Processing Intelligent Automation Centre	2018-1025	Royal Melbourne Institute of Technology (RMIT)	12/2/18	14/12/18	Establish a research centre for fostering collaborations between the meat industry and academia towards the development and deployment of meat related intelligent Automation Technology.	Review of the current usage of intelligent automation technology; review of the future needs for intelligent automation; industry roadmap for the future utilisation of intelligent automation in the red meat industry.	Establish a research centre for fostering collaborations between meat industry and academia
Applications of Deep Learning for the Red Meat Processing Industry	2018-1041	Greyshed, Inc.	1/11/17	16/7/18	Provide a roadmap for integrating recent machine learning techniques into image and data processing in the red meat industry.	Literature review; case studies of training with sample datasets; roadmap of possible applications of deep learning	Develop and encourage an infrastructure of data storage which would provide researchers with abilities to work with large datasets.
First prototype automation for deboning lamb Shoulder – Stage 2	2018-1045	Business and Manufacturing Consultancy UK	1/12/17	1/2/19	Develop a pilot automation robotic approach for the separation process of the shoulder rib-carcass from the primal piece comprising fixation and handling as well as a robot with minimum sensing to manipulate a compliant cutting tool to achieve cuts shown	Automated deboning system for lamb shoulder; fixation mechanism for easy loading; handling system for transfer; compliant tool for cutting meat along desired cut paths	Implementation of a robotic solution that performs the task as an integrated system, including the handling of the resulting cut meat and rib cage.
Investigation into the suitability of standard meat conveyor belt materials for CO2 pellet cleaning	2018-1052	Cold Logic Pty Ltd	2/1/18	14/5/18	Investigate the effect of repeated cleaning of meat conveyors using CO2 pellets with respect to material properties and fatigue	Comprehensive review of dry ice blasting for cleaning purposes; summary of application benefits; literature review materials; summary report of experimental testing.	Outcomes from this project have the potential to offer alternatives to abattoir owners with regards to cleaning operations and the use of different cleaning chemicals.

Program 1 Processing technologies

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Naked Primal Cut Recognition Vision System Trial in Plant	2018-1048	Strategic Engineering Pty Ltd	1/5/18	1/2/19	Implement the project "Development of Naked Primal Cut Recognition Software" in a meat processing plant for a live trial.	Deliver a robust sending network coupled with advanced software algorithms capable of rapidly identifying a range of pre-packaged red meat primal cuts from a predefined database.	The system would make use of 3D imaging sensors which will capture and process the 3D scene and process the profile of the primal cut in real time, along with a scale for weighing the cut. Information such as primal cut type, dimensions, orientation and mass will be produced by the system in real time.
Scoping processor requirements in beef cutting control, yield data traceability, robotics, automation and structured manual cutting and handling	2018-1112	Business and Manufacturing Consultancy UK	20/3/18	1/9/18	Review current practices and produce a technical requirements document which specifies solutions for acquisition and management of information.	Scoping of Australian processors' requirements for on-line quality and yield measurement including use of predictive solutions from systems; implementation of methodology and process; framework for adoption; final report.	Assist implementation of improvement opportunities as well as technology service providers in the process of supply to enhance processor capability relating to cut quality, yield in high value products, and operational efficiency.
Development of Naked Primal Cut Recognition Software	2017-1064	Strategic Engineering Pty Ltd	3/10/16	15/6/17	Develop and evaluate sensing hardware and software algorithms capable of rapidly learning and classifying different types of primal cuts	Deliver a robust sending network coupled with advanced software algorithms capable of rapidly identifying a range of pre-packaged red meat primal cuts from a predefined database.	Reduce labour costs and allow for real time performance feedback of boning and slicing operations presenting significant economic savings
Integrated Robotic Picking and Packing of Primal Cuts	2017-1065	Strategic Engineering Pty Ltd	3/10/16	15/6/17	Develop a prototype robotic process to pick primal cuts fed from an in-feed conveyor and place them appropriately in cartons	Proposed system developed; analysis of processes conducted within same processing cell; electrical and mechanical interfaces developed	The scope of this project is to design a system capable of picking and packing individual cuts via a 6 axis robot, using an improved vision system developed from the AMPC 2014-1007 project.
Automation of Primal Cut Bagging	2018-1049	Strategic Engineering Pty Ltd	20/6/18	1/4/19	Examine the most effective way of bagging and labelling naked primal cuts.	Develop a proposed system in consultation with processing facilities to ensure the deliverables meet the needs of the processors in the red meat industry. Demonstrate the practicability and viability of autonomous naked primal cut bagging using intelligent technologies.	Strategic Engineering intends to develop an automated system that efficiently packs naked primal cuts into vacuum sealed bags, reducing the labour requirements in the boning room.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
In Plant Trial of Robotic Picking and Packing System	2018-1050	Strategic Engineering Pty Ltd	29/6/18	3/6/19	Install the Robotic Picking and Packing system developed in project 2017-1065 in an actual plant and trial it on real product and in real-time on the production line.	Proposed system will be developed in consultation with one of more processing facilities; standard electrical & mechanical interfaces will be developed; demonstrate the practicability and viability of autonomous picking and packing; marketing of technology	It's envisaged that plants would be able to add modular robotic picking and packing cells one by one as the technology develops and processors become more confident in the technology. Over the next 10 years, plants could foreseeably automate the picking and packing of around 70% of primals using this system, leaving 30% to humans, achieving automation whilst maintaining a degree of flexibility.
Feed study to establish pilot plant boundaries for the implementation of a CO2 capturing facility	2018-1051	Cold Logic Pty Ltd	2/1/18	14/5/18	Identify suitable equipment for the capture, upgrading, and liquefaction of CO2 from either pre- or post- combustion process and remove any large-scale risk when considering implementation of such a system at an existing red meat processing facility.	List of required input and output variables for other users; Report of sizing considerations for other users in the industry; detailing of the boundary conditions pertaining to daily requirements of liquid CO2; report containing outputs of feed study and implications to capital expenditure; separation of scalable expenses.	The direct outcome of this process would be the conclusion and tying together of the previous work and essentially removing any remaining large-scale risk when considering the implementation of such a system at an existing meat processing facility.
Prevention of Contamination of Rendered Meal and Tallow by Foreign Matter	2018-1113	All Energy Pty Ltd	1/3/18	1/11/18	Improve the quality of rendered products by addressing the issue of the presence of foreign matter in raw material.	Education and training program to communicate that foreign material in rendered products is unacceptable; review of mechanical separation, automated detection, and materials of construction options to remove foreign material from rendered products.	Rendering creates co-products used as ingredients in the manufacture of processed foods, stock feed, pet food, and aquaculture feeds. Rendered products are recognized as a valuable sustainable feed stock and adds value to the meat producer.
Value Adding Stage 2	2017-1063	All Energy Pty Ltd	1/9/16	18/1/18	Continue work performed on biomolecules to cover the demand for Australian-derived and manufactured value-added products prior to potential commercial development	Creation of an extensive database of molecules, equipment and process models to ensure that revenue opportunities are defined from the perspective of a domestic meat processing facility	Large and unmet demand for biomolecules derived from Australian bovine tissue; develop an efficient business case review for cost-benefit analysis

Environment & Sustainability



\$1.8m

Total investment

Alignment with government priorities

Rural research, development and extension priorities:

- ✓ Advanced technology
- ✓ Soil, water and managing natural resources
- ✓ Adoption of RD&E

National science and research priorities:

- ✓ Food
- ✓ Soil and water
- ✓ Transport
- ✓ Energy
- ✓ Resources
- ✓ Environmental change

* See appendix on page 116 for full details of priorities

\$0.1m

2.1 Energy Efficiency

Objectives: To investigate ways for the Australian red meat processing sector to utilise energy efficient technologies, reducing their energy usage and minimising their impact on the environment.

Outputs: This stream focuses on developing pioneering concepts, methodologies and products for reducing overall energy consumption within the industry and limiting greenhouse gas emissions. It considers the use of renewable energy sources instead of relying on external energy derived from fossil fuels such as coal, gas, liquefied petroleum gas, oil or diesel.

Outcomes: Reduced energy costs and increased social licence to operate as communities see that the processing sector views corporate social responsibility and stewardship of our natural resources to be a major priority.

\$0.4m

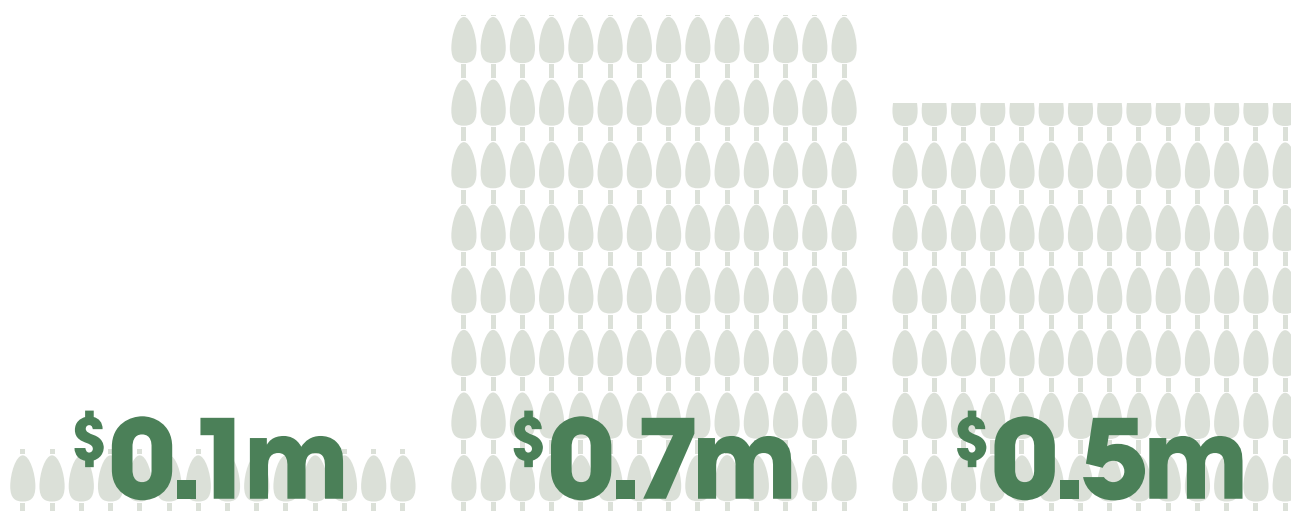
2.2 Waste Management

Objectives: To look at methods by which the processing sector can more efficiently treat and safely remove liquid and solid waste by-products of red meat processing, and to investigate waste management as an additional source of revenue by converting waste into solid and liquid biofuels, nutrients and edible or non-edible products.

Outputs: This stream focuses on developing innovative products and processes to reduce waste and transform traditional waste streams into streams that add value to the industry while reducing the impact on the environment.

Outcomes: Improved overall efficiency of the processing sector due to reduced overhead costs of waste treatment and disposal, along with new revenue streams of recycled or converted waste that can be reused or sold.

Corporate social responsibility is increasingly important to consumers and to the red meat processing sector. The Environment & Sustainability program explores ways to reduce the environmental impact of the industry, maximising efficiencies in energy and water consumption and assisting our members to deliver improved animal welfare outcomes.



2.3 Water Conservation

Objectives: To reduce water consumption, recycle where it is safe to do so, and consider new sources where it is available, while continuing to ensure high levels of food safety and hygiene are maintained.

Outputs: This stream focuses on finding new products and processes to conserve water while delivering the highest food safety standards.

Outcomes: Reduced economic and environmental burden of excessive water usage in the Australian red meat processing sector and increases efficiency through recycling programs.

2.4 Sustainability

Objectives: To investigate ways for the Australian red meat processing industry to negotiate economic, social and environmental challenges while preserving the productivity and sustainability of our sector.

Outputs: This stream focuses on researching new concepts, methodologies and processes that can contribute to the improvement of the industry supply chain sustainability (food safety, integrity systems, animal health and welfare, biosecurity, etc.).

Outcomes: Continued productivity and competitiveness of Australian red meat in the international market without compromising food safety, integrity or quality.

2.5 Plant Initiated Projects (PIPs)

AMPC supports its members in identifying and undertaking RD&E projects that benefit the international competitiveness of the Australian red meat processing industry, e.g. site or business-level RD&E activities and the areas that will enable the sustainable development of the business.

Program 2 Environment & Sustainability

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Investigation into Voltage Optimisation Technology for Abattoirs	2016-1005	Murdoch University	1/11/15	15/3/17	Extend application of research on voltage optimisation	VO guide; development of case studies from literature review and site visits; final report	Increasing/reducing and optimizing voltage levels to a controlled stable level at a facility not only reduces the cost of energy but also enhances equipment performance, prolongs equipment life, reduces maintenance costs and reduces GHG emissions.
Quantifying Energy Savings from In-Line Temperature Boosting of Steriliser Water Ring Mains at Abattoirs	2016-1008	Murdoch University	1/11/15	14/3/17	Investigate and complete a desktop techno-economic analysis on the potential energy savings achievable from integrating point-of-use heating systems into existing hot water ring mains in abattoirs	Fact sheet and techno-economic analysis on the energy and mass flow associated with the ring mains prior to a pilot project to install suitable in-line point-of-use heating systems at representative facilities	The potential energy, water and other potential indirect savings will be calculated. This is intended to provide current practical information about the technical and economic feasibility, the benefits and considerations of this approach for site engineers and managers to consider their implementation at their site.
Investigating steam heat recovery systems (including superheated steam systems for turbine generation) and their applicability to the red meat processing industry	2017-1029	All Energy Pty Ltd	1/9/16	1/6/17	Consider the technical and commercial feasibility of novel steam heat recovery systems to provide a heat supply	Review will determine the most critical elements for economic viability of heat recovery, steam raising and modular power generation systems	AMPC has identified the need to consider the technical and commercial feasibility of novel steam heat recovery systems to provide a heat supply adequate to the requirements of Australian red meat processors (RMPs). Particular interest for investigation is given to superheated steam turbines for generation systems.
Validating baseline data for industry energy efficiency and development of an economic modelling tool to quantify and validate energy consumption	2017-1030	Energetics Pty Ltd	31/8/16	15/6/17	Identify a baseline for energy costs within different areas of meat processing facilities and validate these outcomes	Energy model of red meat processing plant operation; energy model will form basis of economic model; whole of site water modelling	Tight profit margins and rising energy prices create a strong case for energy efficiency in the red meat processing sector. Reducing energy costs through investment in energy efficiency can make a significant difference to the bottom line.
Energy-sufficient meat processing plant	2018-1014	Smart Business Hub Pty Ltd	1/2/18	1/11/18	Demonstrate that meat processing plants can become energy self-sufficient by utilizing reliable renewable energy technologies. It is also about identifying any gaps that require further research.	To ensure knowledge gained through this activity can be easily digested and distributed to AMPC and its members, Smart Business Hub will provide these outputs at the end of a project: written reports and Snapshots, an infographic regarding implementation, an animated explainer video, fact sheets, and a stakeholder presentation.	The project will consider; deployability for varying sizes of processing plants; opportunities to reduce or eliminate energy market exposure; industry sustainability and social licence to operate; options to integrate new technologies and improve industry infrastructure.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Employing Wastewater for Passive Heating and Cooling in Red Meat Processing Facilities	2018-1017	Greysheed, Inc.	30/5/18	14/6/19	Minimize the use of non-renewable energy in meat processing facilities by leveraging passive heating and cooling methods which rely partially upon plant waste systems.	Thermal analysis of heating and cooling loads for typical Australian red meat processing facilities. Prototypes of radiant sky cooling method, as well as cooling system that minimizes electrical refrigeration.	Provide a literature review and heat transfer analysis of heating and cooling requirements typical to Australian red meat processing facilities. In conjunction with these reports, we propose several innovative methods for greatly minimizing the dependency of these heating and cooling requirements on non-renewable energy
Energy, water and waste efficiency for SMEs in Red Meat Processing	2018-1127	Ecoefficiency Group Pty Ltd	16/4/18	21/6/18	The focus is to gain a better understanding of resource use (energy, water, and waste) in small to medium red meat processors and to provide more targeted research and development to improve resource use efficiency.	Baseline report on the characteristics of SMEs and status of energy, water and waste efficiency; Review of existing R&D relevant to small to medium red meat processors; Gap analysis and 1-3 year roadmap document identifying needs	Better understand the needs and wants of SMEs in red meat processing and develop a baseline on the status of energy, water and waste efficiency
Enhanced Energy Recovery in Australian Industry through Anaerobic Co-digestion	2014-1073	University of Queensland (UQ)	1/7/14	31/12/17	Improve energy recovery and reduce the whole-of-life cost of treating solid slaughterhouse wastes using anaerobic co-digestion and leveraging previous research and investment by AMPC and other domestic industries	Detailed report on how anaerobic co-digestion is influenced by the various organic wastes, individually and in combination with each other	The project builds on previous research and investment by AMPC and leverages substantial investment and expertise from other Australian industries. Anaerobic digestion is a mature technology that converts organic wastes into clean energy and digestate with highly plant available nutrients.
Investigation into rapid composting technology for treating abattoir waste	2016-1009	Innovation Development Engineering Administration Services	7/9/15	31/10/16	Evaluate available alternative rapid digestion technologies in regards to waste management that can reduce the costs for the red meat processing industry and generate new revenue opportunities through abatement projects and beneficial use of by-products	Evaluation of the potential applications and markets for by-products; This review will determine the most critical elements for the economic viability of a rapid digestion waste management system and suitability for Australian meat processing facilities.	The intent of the project is to evaluate the technology as a means of reducing costs for the Red Meat Processing Industry and generating of new revenue opportunities through abatement projects and beneficial use of by-products

Program 2 Environment & Sustainability

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Reviewing on-plant waste stream biomass co-digestion options and identifying technologies for optimum mixing, co-digestion and reuse	2017-1031	GHD Pty Ltd	1/9/16	1/6/17	Review different types of anaerobic digestion configurants that are suitable for solid waste digestion	Better understanding of the relevance of anaerobic digestion to red meat processing solid wastes; review of current anaerobic technologies relevant to co-digestion; characterization of red meat processing solid wastes applicable to digestion; final manual	Currently most red meat processing facilities collect and transport solid wastes produced for offsite processing. This is expensive and does not allow the meat processor the opportunity to recover value from the waste. Initially GHD will identify the quantities of solid wastes produced at a reference site and identify suitability for digestion. From review of the literature and experience at full scale, we will identify optimal mixtures of wastes and methods of dosing to maximize gas yields.
Investigation into sensor technologies to manage waste streams and optimise the use of their by-products	2017-1032	Environmental Engineers International Pty Ltd	1/9/16	16/4/18	Identify, using sensor technologies, key parameters for waste stream management and for the optimisation of the treatment process	State-of-the-art review of current waste stream sensor platforms and associated control systems as well as software of different types and costs	This will comprise identification of key parameters for the optimisation of the treatment process operations including biogas generation, energy conservation, techno-economic evaluation of sensor technologies, review of case studies and field validation of a selected sensor system and optimisation of processes at an abattoir.
Crust management for optimal anaerobic digestion performance at meat processing facilities	2017-1033	University of Southern Queensland (USQ)	1/9/16	31/8/17	Determine the range of operational factors which contribute to successful commissioning and continued operation of a CAL by understanding the fate of input effluent	Guidance on water quality parameters and their influence on CALs and develop lab scale techniques to potentially inform biogas yield and CAL performance in regard to crust accumulation at field scale	The fats removed from waste streams also represent a valuable resource in the form of saleable low grade tallow which can offset the costs of plant operation. FOGs and other solids such as paunch material can be problematic in the successful commissioning and running of CAL technology due to the formation of floating crust/scum that form. Indeed, this is believed to be one of the major factors which hinder the successful uptake of CAL technology in the red meat processing industry.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Assessment of Smouldering as an Efficient and Low-Cost Alternative for Management of Agricultural Solid Wastes	2017-1037	University of Queensland (UQ)	3/10/16	1/6/17	Demonstrate proof-of-concept for smouldering in red meat processing applications and develop a R&D pathway to commercial applications	Assessment of smouldering in red meat processing applications compared to other current practices	Australian slaughterhouses have the potential to generate large volumes of solid waste, originating in a number of processing areas with key sources including paunch, manure, screenings (not rendered), DAF sludge, aerobic wastewater sludge, contaminated cardboard and condemned/dead animals. Current disposal methods for paunch and other solid wastes are largely based on composting, land disposal or landfilling, with highly variable costs – and importantly little ability of the processor to control these costs.
Problem to Profit: Developing a sustainable feed base from agricultural wastes using single cell protein	2017-1039	University of Queensland (UQ)	3/10/16	1/6/18	Continue research and development on Purple Phototrophic Bacteria (PPB) in red meat processing applications in order to demonstrate its value proposition for red meat processing wastewater streams	Small-scale proof-of-concept and continuous laboratory-scale operations to support a future R&D strategy for continuous process development	Single Cell Protein (SCP) technologies represent a range of novel process options for treatment of waste streams. These technologies produce edible unicellular microorganisms that can contain more than 60% crude protein with a value that could be 3-5 times higher than the energy mineral/nutrient value of the waste.
Oil and Grease Value Assessment Tool	2018-1023	Johns Environmental Group Pty Ltd	12/2/18	22/6/18	Provide a desktop modelling tool with a simple user interface that calculates the value of recovering oil and grease from wastewater in the form of tallow or forming biogas given site specific information and current market values	Computer model with simple user interface within Microsoft Excel, and a written report summarizing development and use of oil and grease value assessment tool.	A user friendly, Excel based O&G value assessment tool will provide a quantitative measure of tallow recovery versus biogas formation and allow site specific inputs and set current product market value. This tool will enable analysis of current operation options and inform decisions on future treatment upgrades.
Struvite or Traditional Chemical Phosphorus Precipitation – What option rocks?	2018-1026	Johns Environmental Group Pty Ltd	12/2/18	15/6/18	Investigate a number of proprietary full scale struvite precipitation technologies and assess their costs and suitability to the meat industry.	Summary of the major struvite precipitation technologies currently available; understanding the advantages/disadvantages of technologies, cost effectiveness, and a written report summarizing these outcomes.	Struvite precipitation is a wastewater treatment method that removes phosphate and forms a potentially saleable product rather than an expensive waste problem. Considerable laboratory and pilot scale research has proven its effectiveness in meat processing wastewater.

Program 2 Environment & Sustainability

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Management, containment and reuse options for water runoff in red meat processing facilities	2017-1035	Ecoefficiency Group Pty Ltd	1/9/16	1/5/17	Gain an improved understanding of the current management practices and technologies being utilized by abattoirs	Survey of five abattoirs to gather information on management practices and technologies for handling water run-off; literature review of current legislation; survey results; assessment of available technology	Poorly managed runoff can have a significant detrimental environmental impact on surrounding water catchments along with amenity of neighbouring facilities. Techniques for effectively managing run-off include initial site design, operational practices and techniques to effectively minimise, segregate and capture contaminated run-off and lastly, treatment methods and technologies.
Utilization of microalgae to purify waste streams and production of value added products	2017-1038	Murdoch University	17/10/16	2/10/17	Identify different sources of water and effluents from solid waste and wastewater treatment in meat processing facilities and evaluate their potential for utilization in microalgae cultivation process	Literature review on meat processing water and wastewater sources; identification of new water sources; integration of a microalgae cultivation process; development of mathematical model; food safety assessment; estimation of capital investments	The cultivation will be conducive to purifying the waste streams and production of value added products such as biofuel, cattle feed, and high value pigments. The viability of cleaned water recycling for meat processing operations use will be assessed, whilst taking into consideration food safety standards and associative risks. An economic assessment of the proposed system will be conducted based on the mass and energy balances developed in the study.
Investigating water and wastewater reuse and recycling opportunities: identification and segregation of various waste streams	2017-1042	University of Queensland (UQ)	26/9/16	1/6/17	Evaluate specific water treatment options, considering raw water quality and desired end-use application; assess the cost and benefits (energy and water saving) of common abattoir wastewater treatments depending on end-use (river discharge, sewer discharge, irrigation or internal re-use as potable or non-potable water)	Development of a comparison and assessment tool (including cost-benefit analysis model) for wastewater treatment and water recycling options	Enable AMPC and industry members to evaluate specific water treatment options with consideration of raw water quality and desired end use application.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Development of reporting tools for the Australian Livestock Processing Industry Animal Welfare Certification System	2016-1041	Dr L Hewitt	17/8/15	3/10/16	Establish a reporting process to address regulatory requirements and audit duplication in the compliance area of animal welfare and to facilitate government recognition of the Australian Livestock Processing Industry Animal Welfare Certification System (AAWCS)	Delivery of KPIs to be reported to a central agency to demonstrate the industry's compliance with its voluntary and mandatory animal welfare standards	It aims to deliver reporting tools at an establishment and industry level to facilitate government recognition of the Australian Livestock Processing Industry Animal Welfare Certification System (AAWCS).
Toolkit to Guide Livestock Animal Welfare Contingency Planning	2016-1443	Australian Pork Limited	1/8/15	30/6/16	Development of easily accessible and understood guidelines, templates, and support material, to promote and enable individual production animal businesses	Final report including risk assessment templates, communication plan, promotional plan, implementation plan, and monitoring and evaluation plan	From the brief, we understand that the key elements of the project are the development of easily accessible and understood guidelines, templates and support material, to promote and enable individual production animal businesses to identify possible risks, especially in relation to animal welfare, and develop effective operational and contingency plans to reduce, mitigate and address the likelihood of welfare issues occurring on their property
National Livestock Animal Welfare RD&E: Capability and gaps analysis	2016-1444	Australian Pork Limited	1/7/15	28/2/17	Undertake a detailed analysis of current and future Livestock Animal Welfare RD&E capability and infrastructure, identify current and emerging gaps, and develop recommendations and strategies to address these gaps.	Refreshed capability analysis based on the methodology of Kroker and Edge (2009), but with significant enhancements. This includes trends analysis with reference to the past capability and infrastructure audit and the future intentions of major research providers and investors.	Understanding current levels of capability and identifying likely future requirements is critical to guiding the investors and partners in the Animal Welfare RD&E Strategy Committee. Equally, having a plan to address these requirements is fundamental to sustaining the activities and achieving the goals of the Animal Welfare RD&E Strategy.
Quantitative Risk Analysis of the Impact of Climate Variability on the Australian Red Meat Processing Industry	2017-1036	Ernst & Young (EY)	1/9/16	12/6/17	Undertake a quantitative assessment of the risks and opportunities associated with climate variability upon the red meat industry	Assessment of climate variability upon the industry and results of backward scenario analysis looking at the impact of and learning from climate extremes on the meat and livestock industry	The overall sustainability of the supply chain will thereby be gauged, and risk mitigation and adaptation strategies identified. Finally, the project will include the development of an information extension program to communicate the outcomes of the study.

Program 2 Environment & Sustainability

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Review and compare Australian animal welfare systems throughout the supply chain to major trading partners (whole of life animal welfare)	2018-1021	Food and Veterinary Services Pty. Ltd.	1/12/17	15/10/18	Provide a tool for industry and individual processors to defend Australian meat animal welfare practices on a whole of value chain basis.	Develop a comprehensive picture of Australian animal welfare regulation and industry systems presented on a whole of value chain basis.	This comprehensive analysis will allow industry to defend its practices when challenged that systems are inadequate. It can also be used to meet growing consumer expectations that welfare is addressed for the "whole of life".
Predicting and scheduling lamb supply with variable seasonal conditions	2018-1029	Sheep CRC Ltd	20/12/17	1/6/19	Climatic conditions make the forecasting of lamb turnoff dates, and managing production systems challenging. The CRC's predictive sheep management program aims to solve this through an online computer app used to forecast flock information.	Processors and buyers forecasting and scheduling; Lamb producers turn-off prediction and quality assurance; Supply chain processor and producer data sharing; Deliver a number of specialists able to use the modelling and prediction apps with confidence.	The goal is to more accurately schedule lamb and sheep turn off, provide forecast information on carcase characteristics and animal performance and ensure that meat processors and other buyers are able to identify and forward purchase livestock that accurately meet specifications and delivery dates.
Development of "Is it fit to process?" guides for Tier 1 export abattoirs and small to medium enterprises processing for the domestic market	2018-1037	Joan Lloyd Consulting Pty Ltd	1/3/18	1/12/18	Develop short pictorial guides to help underpin decision making about whether an animal is fit to process for small to medium enterprises processing for the domestic market, as well as Tier 1 abattoirs.	Guides for the red meat processing industry; endorsement of the guides by key industry organisations and government; distribution of guides through the MINTRAC networks and related training activities and displays.	The Guides will provide SME enterprises in the red meat processing industry with short pictorial guides to help underpin decision making about whether an animal is fit to process. In addition, the Guides will include the steps to be taken if an Emergency Animal Disease is suspected.
Development of an Industry Animal Welfare Compliance Report and Supporting Media Package	2018-1114	Food and Veterinary Services Pty. Ltd.	16/2/18	26/3/18	Develop an Industry Animal Welfare Compliance Report and supporting media package to allow Industry to promote its credentials and positive standards and practices in Animal Welfare	Compliance report on animal Welfare in the Red Meat Industry; Presentation of Report; Media talking points	Use the considerable media response that will be generated by the Dominion movie when it is released on 28 March 2018 to promote our positive animal welfare performance, on the basis of objective data; "get in front" on anticipated responses from animal rights groups to paint the industry in a negative light
Climate Research Strategy for Primary Industries (CRSPI) 2017-2020	2018-1128	AgriFutures Australia	1/7/17	30/6/20	Strengthen the connection between RD&E investment and industry outcomes through an emphasis on adaptation to a changing climate, emissions intensity, and climate change in business.	Approval of the CRSPI Research Strategy and communication plan; analysis of database of climate research development and extension activities; running of national conference on climate in primary industries; maintenance of a communication portal for climate research and policy.	Strengthen the connection between RD&E investment and industry outcomes through an emphasis on three core areas: (1) adaptation to a changing and variable climate, (2) emissions intensity and markets, and (3) climate change in business and policy.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Executive Support – National Animal Welfare R, D & E Strategy	3000-5088	Australian Pork Limited	1/7/12	30/6/19	Develop arrangements to deliver strong collaboration amongst RD&E provider groups, and effective partnerships between investors and providers	Secretariat support; development and management of meetings; Strategy committee meeting per year; development publications; communication activities; stakeholder engagement	The purpose of the Strategy is to develop national arrangements to deliver strong collaboration amongst existing RD&E provider groups, and effective partnerships between investors and providers.
“National Animal Biosecurity Research, Development & Extension (RD&E) Strategy Implementation Project”	3000-5111	Australian Animal Health Council Limited	1/7/14	30/6/17	Confirm that AHA will provide secretariat and project management services to support implementation of National Animal Biosecurity RD&E strategy	Establish future direction for animal biosecurity effectively and collaboratively to reduce capability gaps	Benefit the livestock industries including red meat industry and supply chain by encouraging greater collaboration and promotion of continuous improvement and investment
Oesophagus (and bung) heat sealing – Medical too conversion (Phase 2)	2017-1051	Scott Automation & Robotics	16/5/17	31/1/18	Advance further previous preliminary work undertaken to utilise medical Ligasure sealing tools to be applied	Report containing the outcomes from trialling the meat processing facility ready sealing device will be submitted; After phase three would be a series of plant initiated projects	When successful the tool will not only eliminate the cost of purchasing plastic seal clips and plugs, it will reduce the negative consequences of plastic in rendering systems and potentially be a tool that is more readily automated in the future compared with the tools used for plastic clip and plug deployment.
Meat Science Towards 2030: An International Forum for the Development of Strategic Objectives	2017-1144	Birkenwood Pty Ltd	15/7/17	30/6/18	This project seeks to assemble an imminent group of Meat Scientists from a number of countries and disciplines to seek a consensus on the key science issues	International forum; AMPC Meat Science Roadmap; meat science strategy for future R&D Investment; Presentation of the AMPC Meat Science roadmap to the Australian industry reference panel; Final Report	The outcomes will include potential strategic approaches to encourage collaborative application of global resources and development of research talent together with an acceleration of knowledge transfer through enhanced industry and research interaction.

Program 2 Environment & Sustainability

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Meeting current and future industry workforce needs	2018-1130	People & Performance International	30/4/18	1/5/19	Working with HR Managers and their teams, and senior management in the industry to address the root causes of labour issues	Site visits conducted to top 20 large processors with individual R&D strategic plans for majority of sites; support to HR managers on HR priorities	Recent consultation with industry in association with development of industry R&D strategic plans has identified 'labour' as one of the top priority issues for the industry. Address the root causes of the 'labour' issues and address entrenched detrimental industry workforce practices to effect cultural change in the industry to a high performance positive culture that embraces innovation and change and enables the attraction, retention, support and development of company workforces that deliver business strategies to meet current and future workforce needs.
Management of The Australian Q Fever Register for 2016-17	2017-1028	AusVet Pty Ltd	1/7/16	30/6/17	Provide operations of the Register for a period of 12 months	Monthly detailed emails regarding Register performance; preparation of register transitioning to a new funding model in 2017-2018	The Australian Q Fever Register forms an important contribution to Q Fever risk management in the workplace, and has provided a continuing service to the red meat processing industry since 2001.
Strengthening industry RD&E outcomes	2018-1103	Broad Aperture Pty Ltd	1/1/18	4/5/18	Form 3-5 year strategy documents for each program area	R&D Strategy Document for incumbent organisations in the Red meat industry for 2018 and the following 3-5 years	This project will form a 3-5 year strategy for Research and Development within each AMPC Program Area. The current program areas include Capability, Education and Extension; Environment and Sustainability; Processing Technologies; Processing Hygiene, Quality and Meat Science; Industry Improvement, and Economic Analysis.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Strengthening engagement with micro, small and medium red meat processors by identifying key priorities for research and development	2018-1111	Broad Aperture Pty Ltd	15/1/18	3/12/18	Reinvigorate relationships between AMPC and small, medium and micro processors through a process of engagement, consultation and collaboration	Plan for 1 on 1 engagement; Data collected on MSME's focus areas; engagement plan including online portal for engagement, tracking progress, MSME feedback; workshops with MSMEs to get data to develop R&D strategic plans; Action plans for FY2018/2019 for MSMEs that link to both strategic plans & project plans; project plans for FY2018/2019 that reflect R&D strategic plans	Seeking to understand the priorities of MSME's will form the basis for a Strategic Roadmap for research and development. Tangible outcomes will be in the form of Action Plans based on the R&D strategic plans, and Project Plans that will hold the detail of how R&D outcomes are developed on a project basis. These project plans will form the framework for continual alignment between industry R&D and strategic imperatives of the Australian red meat industry.
Hyperspectral ZT and Food Safety Determination (Phase 2)	2017-1053	Scott Automation & Robotics	20/1/17	1/7/18	Preliminary findings from phase 1 and demonstrate the system operating in a beef meat processing facility at line, including improving phase 1 algorithms	Utilise the existing Scott HIS camera and algorithm platform; further refine phase 1 algorithms; evaluation of system at a beef site while further refining of the algorithms; produce report	Hyperspectral imaging (HSI) is finding new applications globally in many areas. Scott has recently purchased a wide ranging Hyperspectral camera and is getting great results with preliminary application to detecting faeces and ingesta; This project will take the preliminary findings from Phase 1 and demonstrate the system operating in a beef meat processing facility at line, including improving Phase 1 algorithms.
A Dynamic 3D Model of the Carcass Skeletal Structure – A Feasibility Investigation	2017-1057	Applied Robotics International Pty Ltd	3/10/16	28/6/17	Explore the feasibility to extend the usefulness of the x-ray scanning of a carcass to further downstream carcass break-up operations	Establish that it is feasible to create a 3D Skeletal Model of a carcass; that this 3D model can be made specific to an individual carcass; that the model can be manipulated dynamically in real-time	This capability could be one of the missing technology elements that can be used to make feasible new or nascent downstream automation applications.

Program 2 Environment & Sustainability

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Contemporary chemical lean validation – national standard for measurement	2017-1058	Commonwealth Scientific & Industrial Research Organisation (CSIRO)	1/3/17	1/3/19	Engagement with the meat processing industry to identify currently used methods for CL determination and associated providers	Industry report which summarises current practice in CL determination in the Australian market; formation of industry reference group; assessment of current capability for CL determination in Australia and overseas trading partners	Chemical Lean (CL) determination is prescribed by AUS-MEAT as a mandatory requirement for exporting of any bulk packed meat (beef, sheep and pork) products. AUS-MEAT currently approves ten methods for CL analysis, ranging from classical wet chemical techniques to moisture determination using microwave ovens as well as specific instrumentally based techniques. Presently, no documentation appears to be available on what methods are used by meat processors for CL determination in Australia or its overseas trading partners.
An on-line system to assess beef quality characteristics	2017-1070	Goldfinch Solutions, LLC	1/12/17	15/1/19	Evaluate the TenderSpec™ Beef classification system for objective assessment of ribeye quality traits	Accurate evaluation of carcass quality assessment; documentation of the capability of TenderSpec™ system	An objective evaluation of carcass quality characteristics is needed to deliver high quality products, differentiate Australian beef in the global market, and increase processing efficiency.
RnD4Profit 15-02-014 Enhancing supply chain profitability through reporting and utilisation of peri-mortem information by livestock producers	2017-1099	Australian Pork Limited	28/6/16	30/7/20	Develop and implement standardised national frameworks for reporting of peri-mortem information	Standardised national frameworks and a minimum set of data standards to support consistent reporting of peri-mortem information; governance rules to manage data	The implementation of a multi-species approach will underpin overall surveillance outcomes for market access. Despite individual RDC's identifying the need for such a system and funding activities in this area, a unified system for any species has yet to be developed.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Development and validation of a probe for measuring fat in lamb carcasses	2017-1100	Sheep CRC Ltd	16/12/16	1/5/19	Develop a probe to measure GR at chain speed	Production of a probe followed by a successful validation and then pathway to commercial provision of the probe	In a major study of processor attitudes towards objective measures conducted in 2015 (A.MQA.0015) it became apparent that there was considerable interest in a probe that could be used to measure GR at chain speed.
An on-line system to assess beef quality characteristics – project logistics and sampling	2018-1077	University of New England (UNE)	1/12/17	1/6/18	Evaluate the TenderSpec™ Beef classification system for objective assessment of ribeye quality traits	Accurate evaluation of carcass quality assessment; documentation of the capability of TenderSpec™ system	Successful completion of the work will provide an accurate and objective evaluation of the TenderSpec™ Beef Classification System in predicting the quality traits of Australian beef. It will improve economic opportunities, provide a mechanism to identify high quality

Processing Hygiene, Quality & Meat Science



\$2.9m

Total investment

Alignment with government priorities

Rural research, development and extension priorities:

- ✓ Advanced technology
- ✓ Biosecurity
- ✓ Adoption of RD&E

National science and research priorities:

- ✓ Food
- ✓ Transport
- ✓ Resources
- ✓ Advanced manufacturing
- ✓ Health

* See appendix on page 116 for full details of priorities

\$0.2m

3.1 Food Safety

Objectives: Aims to deliver the appropriate level of protection to the market and ensure that this level of protection is constantly reviewed against regulatory requirements.

Outputs: Identification of tools and meat safety technologies which comply with industry standards for hygiene and food safety risks.

Outcomes: Managed under the Joint Program with MLA, joint food safety initiatives will ensure better value chain integration, improved technical market access and continuous compliance with market and regulatory requirements.

\$1.2m

3.2 Integrity systems

Objectives: To develop and implement systems and technologies that ensure traceability, biosecurity, disease risk mitigation, strong animal health and hygiene, and overall meat quality standards.

Outputs: Development of enhanced animal welfare, carcass grading and cold chain integrity systems based on yield and eating quality.

Outcomes: Accelerated through-chain traceability of animal welfare measures, carcass grading and temperature control systems.

Processing hygiene and product quality are crucial to Australia's reputation for excellence in red meat. The Processing Hygiene, Quality & Meat Science program combines knowledge of meat science and quality in the continuous delivery of high-quality standards and food safety, as a key differentiator of Australian products in a competitive market.



3.3 Meat Science

Objectives: To explore technologies and innovations that measure texture, nutrient bio-availability and colour to improve eating properties.

Outputs: Identification of key attributes and biochemical markers of food quality that are consumer driven through the value chain.

Outcomes: Better market access through innovative response to changing consumer patterns in the creation of products tailored to optimal health and quality.

3.4 Transformational Meat Science (TMS)

Objectives: Investigation of fundamental meat properties such as protein structure at a molecular level and research how advanced technologies can be used to extract desired functionalities.

Outputs: Through industry-wide collaboration, identification of elements and potentially bioactive compounds that can be ethically and sustainably co-produced from meat fractions.

Outcomes: Equipping the next generation of meat scientists with expertise to transform commodity-based operations into high-value, market focused ventures.

3.5 Plant Initiated Projects (PIPs)

AMPC supports its members in identifying and undertaking RD&E projects that benefit the international competitiveness of the Australian red meat processing industry, e.g. site or business-level RD&E activities and areas that will ensure food safety, quality and integrity.

Program 3 Processing Hygiene, Quality & Meat Science

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
A cold plasma wash water technology for meat safety and shelf-life extension	2016 1326	University of New South Wales (UNSW)	15/1/18	1/11/20	To develop and validate a novel non-thermal plasma (NTP) based technology for microbial control of red meat, to be used in carcase wash water	Delivery of: A pre-commercial prototype technology aimed at the red meat sector, a report that documents the key findings, outcomes and conclusions as a result of carrying out the pilot plant trials with plasma-water treated meat.	Chemical free carcase washing, therefore increase in sanitisation of carcase without residues.
Microplasma disinfection of meat	2016 1365	Callaghan Innovation	1/9/16	1/9/17	This project will investigate and develop a new method for neutralising microbial contaminants on meat surfaces. It will do this by the use of electrically-generated plasmas.	Successful implementation will result in know-how related to operating parameters of the plasma generator at small scale, as well as the efficiency of microorganism killing. Some of these results could constitute protectable IP. Knowledge of the operating parameters and the equipment technology will permit estimation of the costs and practicality of scale-up.	Chemical free meat disinfection, therefore increase in sanitisation of carcase without residues.
Laser shock wave processing facility for cryovac meat products	2018 1082	University of New South Wales (UNSW)	1/2/18	1/8/19	To design a build a laser shock wave piece of equipment to study the effects on Bacteria numbers.	Delivery of a chamber that may be able to be commercialised for the use of disinfecting contaminated meat and meat products.	Chemical free meat disinfection, therefore increase in sanitisation of carcase without residues.
Process monitoring for the Australian meat industry - a comparative industry trial	2018 1070	South Australian Research & Development Institute (SARDI)	1/9/17	1/2/19	To develop and test a new version of PHI and to validate the efficacy of the changes with all stakeholders	The development of an enhanced PHI system, ready for a national rollout.	Reduction of PHI parameters required (i.e. reduction of regulatory costs), quicker reporting from DAWR
Microbiological food safety and storage life of Australian red meat	2018 1086	South Australian Research & Development Institute (SARDI)	1/2/18	2/7/18	To develop a monograph that explains development of food safety and hygiene in the Australian Meat Industry	The development of the aforementioned Monograph	Additional work to bolster Australia's reputation as a producer of High quality hygienic product – may assist Market Access
Real-Time Meat Eating Quality Probe: Technology Refinement and Commercialisation	2018 1088	MEQ Probe Pty Ltd	1/8/18	30/8/18	To Refine the MEQ Probe via testing numerous situations, Build the robustness of the MEQ Probe software via calibrations, Refine the total package to meet industry requirements, Refine the Proof-Of-Concept technology to a Commercial Ready solution.	A Commercial Ready meat-eating-quality Probe, a Probe that is scalable to processors chain-speed requirements, and software and statistical model that is ready for validation by AUS Meat and MSA, and any independent testing house	Quick, non destructive method for determination of eating quality

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Automated Visual Inspection & Preparation of Live Animals for Meat Processing	2014 1041	Royal Melbourne Institute of Technology (RMIT)	24/8/16	9/1/18	This project aims to develop technologies for automated detection of animal contamination in lairage and a high throughput cleaning station to prepare animals for slaughter.	Development of a prototype wash station that automatically detects contamination and washes the animal, prior to slaughter.	Greater hygienic input to process, cost reduction in plant.
Identifying Storage Thresholds in Frozen and Chilled Red Meat	2014 1048	Department of Primary Industries (NSW)	8/10/15	20/10/17	This proposed study aims to quantify the effects of freezing following an extensive chill period on meat quality. It also aims to use lipid oxidation to indicate freeze duration and develop quality thresholds. Australia is a net exporter of both frozen and chilled red meat, with stakes in either preservation method constantly shifting.	This proposed study aims to compare these methods in terms of meat integrity and longevity to develop export duration thresholds to deliver best quality products.	Increase in temperature from minus 18 to minus 12 or 15 will save a lot of money to operate freezers and for logistics in export.
Sensing for Offal Grading and Enablement of Automation	2016 1003	AgResearch Limited	1/4/17	31/8/18	To develop a scalable multisensor unit for the detection of pathological issues in offal.	A scalable prototype unit that successfully identifies pathological issues in real time in offal	Decrease in disposition, as Inspector will have augmented decision making assistance.
Pilot study on design of lairage, handling and stunning facilities and the potential impact on animal welfare and meat quality.	2016 1190	University of Melbourne	1/12/15	1/10/18	To identify facility design features that impact on animal handling and pre-slaughter stress in sheep.	This project will deliver an extensive overview of the literature, including published scientific articles as well as research reports held by MLA and AMPC and Trade Journal Reports, on facility design at abattoirs and the potential effect on pre-slaughter stress and meat quality.	Increase in understanding for future design of lairage and handling systems at abattoirs
Intelligent solutions for boxed beef trim export enhancement	2017 1006	Royal Melbourne Institute of Technology (RMIT)	23/12/16	29/6/18	Investigate the extent and causes of the mislabelling problem. Study the issue of market complexity for boxed beef export and identify possible solutions for the mislabelling problem, including simplification and automation of the labelling processes	Identification of the possible solutions for the rectification of the mislabelling problem and pathways for the adoption of AMPC-owned technologies for the full automation of the labelling process, including a feasibility study	Less rejections at customer end of the supply chain

Program 3 Processing Hygiene, Quality & Meat Science

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Can on-site beef dark cutting evaluation (monitoring) be improved and value-added?	2017 1044	Department of Primary Industries (NSW)	30/1/17	31/7/18	To determine DC parameter variation between beef muscles (within-carcass) and formulate a monitoring guide (when and where) to improve evaluation precision, accuracy and whole carcass representation, evaluate the capacity for monitored DC parameters to provide additional information to industry in terms of product shelf-life, spoilage, and purge characteristics.	To deliver a report that details the comparison of beef muscles for within carcass variation of parameters underpinning dark cutting incidence, formulation of a dark cutting guide (when and where) detailing the best monitoring option to improve its precision, accuracy and whole carcass representation, and the evaluation of the potential for monitored dark cutting parameters to provide industry with additional information regarding shelf-life, spoilage, and purge concerns.	Better understanding of dark cutting variation within carcasses
A practical means to accelerate beef ageing and sustain acceptable eating quality and safety: Chilled storage temperature manipulation	2017 1048	Department of Primary Industries (NSW)	16/1/17	3/6/19	To establish temperature-control guidelines for industry to apply when ageing beef and safely achieve improved meat quality within a reduced timeline, use technology (intelligent packaging) to quantify beef ageing period and quality traits in situ (non-destructive and within pack), identify purge loss and other yield parameter associations with ageing period and temperature to provide industry the information to limit waste and increase profits, validate instrumental measures association with consumer perception for eating quality.	To deliver a report that identifies temperature control guidelines, beef aging periods and quality traits.	Potential opportunities for shorter aging times.
Shelf-life extension of fresh meat products using high pressure processing	2017 1056	CSIRO	1/3/17	3/6/19	To define the limits of applied pressure to achieve a fresh meat product with 'acceptable' colour and appearance, without impacting on objective texture and yield, whilst providing extended shelf life due to destruction of spoilage causing microbes.	To provide an accurate cost benefit analysis will facilitate decision making for the meat industry in relation to investment in HPP technology.	Longer shelf life for 'fresh meat'
Non-invasive prediction of flavour, tenderness and juiciness for individual animals at point of slaughter – Stages 1 & 2	2018 1083	AgResearch Limited	23/4/18	1/5/19	Stage 1: Mathematical modelling to identify key factors underlying meat quality attribute pathways. Stage 2: Measurement of muscle-to-meat factors and sensory indicators and physical attributes in at least one muscle.	Advancement in meat measuring models to assist in the improved management of animals for optimal meat quality.	Development of methods for consistent eating quality of meat and meat products.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Development of shockwave technology for tenderisation and decontamination of beef cuts	2018 1085	CSIRO	9/7/18	3/9/21	To Determine shockwave parameters that impact meat tenderness and develop customised treatments for a range of beef cuts	To assess a new processing method for tenderisation and disinfection of beef.	Upgrading of tough meat cuts/muscles to a tenderised product.
Improving beef colour at grading	2013 3005	CSIRO	6/6/14	29/11/17	Understand the role of muscle structure in determining beef meat colour; Develop strategies to manipulate muscle structure to improve muscle colour; Develop scientific expertise and industry capability in beef meat colour; and Incorporate new disciplines into meat quality (Confocal microscopy, mathematics, process engineering) and undertake training of a PhD student.	This project is designed to provide capability to the meat industry through the training of a PhD student in the area of meat colour and also to provide new knowledge in this area. The information obtained from the project will provide the meat industry with evidence as to the effect of rigour on muscle and how this can be manipulated.	Potential to arrest downgrading of carcasses.
Muscle structure and water retention in fresh and cooked meat products	2013 5009	CSIRO	12/5/14	21/11/17	Development of an understanding of the losses in transport and cooking of the different muscles in vacuum packed red meat.	Reduced purge in fresh meat (4-6%, unacceptable in markets) and reduced water loss during transport and cooking (economic loss, loss in juiciness); Improved prediction for assurance of eating quality; and Increase cuts that are tender, juicy and highly acceptable in fresh and food service	Reduction on purge should increase value of primals.
Optimising meat quality and functionality through novel processing interventions	2013 5040	CSIRO	9/8/16	31/8/18	This project focuses on the development of processing technologies for novel, value added red meat opportunities focussing on rapid tenderisation and increasing value of non-primal cuts.	If recommendations of project are implemented by industry: Increased return and value of under-utilised low value cuts; reduced storage time for tenderisation; and new product lines for food service and RTE.	Increasing value of Primals.

Program 3 Processing Hygiene, Quality & Meat Science

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
The effect of processing technologies on microbial populations impacting the shelf life of meat	2013 5041	CSIRO	12/5/14	13/4/18	Develop/adapt metagenomic methods for investigating microbial populations on raw meat, including investigation of RNA as a measure of viability. Develop a model meat system to test the impact of processing technologies on microbial populations and shelf life. Measure the impact of processing technologies on microbial spoilage populations on red meat (using both plating and metagenomics/RNA methodologies). Look at the populations of microorganisms which may be differentially affected by the processing technologies and determine the impact this has on shelf life.	The information obtained from the PhD project will provide the meat industry with evidence as to the effectiveness of processing technologies on meat microbiology.	
Transforming low-value meat cuts and non-meat products into high quality powders	2018 1084	CSIRO	1/5/18	1/5/20	To utilise low value meat cuts and by products into high value shelf stable powders	The development of a new process and prototype for a cost-effective manufacture of meat co-products into high quality powders integrated with 3DP for new product development application (potential new project IP for exploitation)	Upgrading of waste materials to items of high value
Development of novel bioactive peptides from slaughterhouse blood	2018 1087	UNSW	1/5/18	1/6/21	To develop bovine and bovine blood protein-based bioactive peptides with a wide range of applications in pharmaceutical, nutraceutical and functional food products	To produce several outputs that will be of significant value to the Australian red meat industry.	Upgrading of waste materials to items of high value

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Real-time Spectroscopic system for contaminant detection in red meat	2017 1009	Royal Melbourne Institute of Technology (RMIT)	9/12/16	29/3/18	Identify the reference wavelengths for the signature of the bacteria and foreign objects often present in the red meat. Develop methods to identify the presence of foreign objects in the meat. Develop methods to identify the total viable load of the microbial growth in the meat. Identify the suitable spectral range for a low-cost and portable device. Develop low-cost hardware to observe the spectral change due to the microbial growth and foreign objects. Test the system for reliability and real-time performance.	New and improved methods to identify the bacterial load and presence of foreign objects in red meat. Low-cost device to record and analyse the spectral output due to the change in the condition of the meat. Develop two prototypes using the three-dimensional printing and rapid prototyping facility.	Rapid and inexpensive detection of contamination in meat. Increase in early interventions may limit downgrades and rejections.
Noninvasive Measurement of Meat Quality in Live Animals Using Deep Tissue Raman Spectroscopy	2017 1011	Royal Melbourne Institute of Technology (RMIT)	1/2/17	16/12/19	To reduce the level of dark cutting meat in Australia by developing sensor technology that can be used to screen cattle in real-time at the abattoir, either at receipt, or immediately pre-slaughter. This will allow dark cutting susceptible animals to be diverted so they can better recover their levels of glycogen	By detecting and quantitatively determining key biochemical determinants of meat quality within living animals, the project will establish a new ability to quickly and accurately assess the likelihood of dark cutting in each live animal	Potential for decrease of dark cutters (ie less downgrading of carcasses).
Identifying strategies for regulator awareness – Delivery model assessment, development and delivery of training to on-plant regulators on Industry systems and practices (including food safety and meat quality)	2017 1072	Food and Veterinary Services	15/11/16	12/3/18	The objective of this project is to address awareness of the Australian Red Meat Industry's systems and practices: To build regulatory awareness of the Australian Red Meat Industry's practices and systems (including food safety and meat quality) and the commercial environment, and to facilitate regulators to implement policy by making on-plant decisions that are practically viable, not unnecessarily cost-prohibitive and complementary to existing industry and commercial requirements, systems and practices.	A report on the possible delivery models for the training of on-plant regulators, including existing staff and new starters. Training material on the Australian Red Meat Industry's practices and systems (including in the area of food safety and meat quality) and the commercial environment. The delivery of the developed training material. A report on the effectiveness of these industry awareness workshops.	Increase in understanding for in site operators and independent monitors to increase opportunity of more efficiency in plants.

Capability, Extension & Education



\$4.2m

Total investment

Alignment with government priorities

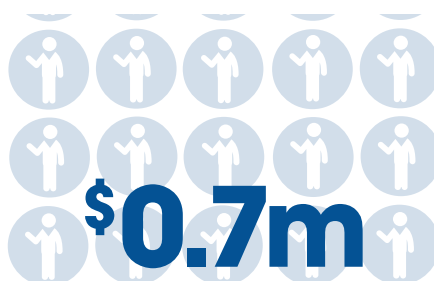
Rural research, development and extension priorities:

- ✓ Adoption of RD&E

National science and research priorities:

- ✓ Food
- ✓ Advanced manufacturing
- ✓ Environmental change
- ✓ Health

* See appendix on page 116 for full details of priorities



\$0.7m

4.1 Industry capability

Objectives: To develop capabilities within the red meat processing sector and among its personnel to ensure long-term sustainability.

Outputs: Identification of the training, education and capability gaps that exist between different sized processors and development of new initiatives to fill those gaps through both face-to-face training and online extension programs.

Outcomes: Increased industry education and capability among small and medium red meat processors.



\$1.3m

4.2 Extension services

Objectives: To ensure that the outcomes of research and development are successfully communicated and disseminated among processors to promote implementation.

Outputs: Provision of support for the extension and adoption of R&D outputs to ensure they deliver value and high return on investment to industry.

Outcomes: Increased member understanding of AMPC R&D outcomes. Increased adoption of successful R&D outcomes into members' processing facilities.

Industry relies on its workforce to continue to build its position on domestic and world markets. In order to achieve this, industry must be able to plan, and meet our current and future workforce needs in a complex and ever-changing environment. The Capability, Extension & Education program helps Australian red meat processors to attract, recruit, support and develop personnel to meet current and future industry needs.



4.3 Scientific education

Objectives: Improving collaboration with the government, Rural Research and Development Corporations (RDCs) and educators can lead to significant results such as innovative development, reducing duplication and improved efficiency.

Outputs: Strengthening of relationships between industry and education providers to jointly conduct scientific research with maximal impact and return on investment to the industry.

Outcomes: Increased employment across all sectors of the industry and ensuring succession planning in critical shortage areas including meat safety, quality assurance and laboratory.

4.4 Vocational training

Objectives: To facilitate ongoing professional development and training for employees in the red meat industry, where it has historically been difficult to attract and retain highly skilled personnel.

Outputs: Attracting, supporting, developing and retaining industry personnel through ongoing professional development to meet current and future industry needs.

Outcomes: Improve the overall skill level of industry personnel via professional development and have strategies in place to retain our skilled workforce.

4.5 Plant Initiated Projects (PIPs)

AMPC supports its members in identifying and undertaking RD&E projects that benefit the competitiveness of the Australian red meat processing industry, e.g. site or business-level RD&E activities and that support training, education and extension of R&D outputs.

Program 4 Capability, Extension & Education

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Leveraging Strategic Energy Products to Enhance Productivity at Red Meat Processing Sites	2017-1015	Energetics Pty Ltd	1/9/16	15/1/18	Focus on the application of existing energy research via education and engagement activities	Provide a framework for assessing and implementing strategic energy projects; engagement through interviews, roadshows	Energetics will provide a framework for assessing and implementing strategic energy projects that optimise the processors' plans for expansion, new products, better waste and water management, as well as technology upgrades.
Meat. Your Future.	2017-1019	Sefton & Associates Pty Ltd	5/9/16	1/6/17	This project outlines a comprehensive strategic communications plan to improve community perceptions of the red meat processing industry as a whole	Detailed action plan setting out strategic and structured approach to improving community perceptions of red meat processing industry; development of campaign elements; stakeholder campaign;	Increased interest in industry; increased labour; improve perceptions on industry
Provisional Business Cases to Determine Appropriate Models for a World Class Red Meat Processing Innovation Centre of Excellence	2017-1023	Freshagenda Pty Ltd	29/8/16	20/3/17	Work from existing feasibility study to determine a business model for a proposed Red Meat Processing Innovation Centre of Excellence in Australia	A business model options paper; financial model; final report; centre communications and action plan	AMPC is evaluating the establishment of a world class Red Meat Processing Innovation Centre of Excellence in Australia. Such a Centre will aid in accelerating incremental innovation whilst at the same time introducing disruptive technologies to ensure Australia remains at the forefront of red meat processing and product development.
Developing a model for meat inspection and quality assurance employment outcomes for University graduates and undergraduates	2017-1024	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/7/16	30/5/18	Develop and trial a model of training whereby undergraduate and graduate University animal science students receive training as meat inspectors and quality assurance officers	Up to ten qualified meat inspectors/ QA officers; model of training for meat inspectors and QA officers that can be adapted by and adopted by other universities	The industry is suffering an ongoing shortage of new recruits who are young, able and qualified meat safety and quality assurance staff. This two-year project seeks to develop and trial a model of training whereby undergraduate and graduate University animal science students receive training as meat inspectors and quality assurance officers either during their undergraduate years or as a post graduate program.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
An Integrated Scholarship Program in Water, Water Re-use and Environment – Year 1	2017-1077	University of Queensland (UQ)	1/2/17	31/1/18	Extend a strong research partnership with UQ and AMPC through development of education and extension partnership in areas of water, water treatment and reuse, and environment	Successful training of students holding various scholarship positions; development of vocational training	Agricultural industries are among the largest land users, water consumers and organic waste producers within Australia. In particular, red meat processing facilities can generate large volumes of wastewater rich in organic contaminants and nutrients. To address these challenges and opportunities, the red meat processing industry is looking to upskill the current workforce and attract new skills through targeted education and professional development programs.
An Integrated Scholarship Program in Water, Water Re-use and Environment – Year 2	2017-1108	University of Queensland (UQ)	1/2/18	31/1/19	Extend a strong research partnership with UQ and AMPC through development of education and extension partnership in areas of water, water treatment and reuse, and environment (yr 2)	Successful training of students holding various scholarship positions; development of vocational training (yr 2)	Demonstrating support for career paths at multiple development/qualification levels will assist in attracting outstanding personnel to the industry.
MINTRAC provision of extension services to red meat processors 2017-2019	2018-1009	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	3/6/19	Provision of funding to Mintrac	Training advice and support to meat processing companies and their RTOs; industry innovations; career services; industry education and training advice; distribution of AMPC training products	Extension services; training; scholarship programs
Development of an engineering maintenance training strategy	2018-1013	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	8/10/18	Provide cross-trade accredited training in area of engineering maintenance	Developing draft qualifications and identifying Units of Competency; developing training implementation strategy; developing trainer and RTO expertise; suitable training and assessment support materials	Following research undertaken by AMPC in 2014-15, a clear need for cross-trade accredited training in the area of engineering maintenance occurred. Subsequent investigation by MINTRAC during the 2015 and 2016 Network meetings confirmed a strong interest in further development of appropriate training.

Program 4 Capability, Extension & Education

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Making the Meat Industry a Safer Place for Workers	2018-1016	Australian Meat Industry Council (AMIC)	22/1/18	20/9/18	Develop an up to date, detailed, and accurate picture of the workers compensation claims in the meat processing industry across Australia	Quantitative and Qualitative data collected and detailed statistical analysis; full report of RMP industry illness and injury performance; 3-5 year strategic plan; development and dissemination of documentation relating to the above	In association with collecting RMP industry workers compensation data, the project aims to engage with RMP industry personnel to identify the WH&S challenges and main issues affecting the meat processing industry and to identify success stories and promote successful implementation of risk reduction strategies as well as the criteria for return to work improvements.
Meat Industry Efficiency and Innovation Capacity Enhancement: Benchmarking Technologies and Systems from Automotive Industry	2017-1001	Royal Melbourne Institute of Technology (RMIT)	1/12/16	15/11/19	Accelerating the adoption of new technologies by benchmarking the competitive and sustainable Automotive manufacturing industry	Guidelines for the red meat industry to identify and adopt the automotive industry's technologies; strategy and pathway to adopt standards and procedures; generate a database of knowledge to compare industries	The research outcomes will generate a database for a rapid knowledge transfer in order to improve red meat industry's innovation capacity on a sustained basis.
Meat Inspection and Quality Assurance Network	2017-1005	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/16	1/6/17	Establish a network of QA Managers as means of distributing new information and providing extension services for AMPC RD&E activities	Fourteen network meetings; agendas and identification of professional development requirements for the network	It is a well-established network that is a highly effective means of distributing new information and providing extension services for AMPC RD&E activities. The network meetings offer forums for the implications of new developments to be explained, explored and discussed.
Facilitation of the QCMPA Network 2016/17	2017-1073	Queensland Country Meat Processors Association (QCMPA)	24/10/16	30/6/17	Facilitation of network meetings aimed at providing information on legislative and regulatory updates, disseminating recently completed R&D outcomes and providing small processors with the opportunity to discuss current industry issues	Development and distribution of training resources; identify new training initiatives; training and education resources; wide range of technical information	QCMPA is active in ensuring that changes to meat processing and retailing legislation, food safety laws and associated regulations do not adversely impact on its members. It achieves this through active interface with Government Departments and Food Safety Regulators.
Meat Industry Training Network 2017-2019	2018-1002	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	14/6/19	Establish a network to provide means of ensuring R&D outcomes are communicated and utilised by industry	Extension activities; training materials; industry products; training system	The Meat Industry Training Networks provide the means of ensuring that R&D outcomes, innovation, new regulatory requirements and industry requirements become embedded into the meat industry training system and are delivered and assessed in a manner which is consistent across the industry.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Meat Inspection and Quality Assurance Network 2017-2019	2018-1003	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	3/6/19	Provide a network for distribution of new information, and providing extension services regarding Meat Inspection and Quality Assurance	Network meetings; extension activities; training; technology transfer; advising on training materials; identification of new and emerging issues	Over a period of twenty years, this network has developed and evolved into a recognised industry forum for the sharing, debate and dissemination of a wide range of issues and information related to meat science, regulation, customer requirements and expectations, and the regulation of the Australian meat processing industry. The QA and regulatory environment is evolving in sophistication and this is placing ever-increasing demands on QA Managers and their staff.
Meat Industry Environment Network 2017-2019	2018-1011	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	20/7/19	Develop a strong communication channel between like-minded individuals who are engaged in researching and developing new concepts, methodologies and understandings to improve the environmental sustainability of the Australian red meat processing industry	Meat Industry environment network which will be an ideal forum for engagement with plant environment personnel; two showcase clips featuring environmental innovations and projects	The network meetings provide a means to share information on the research, development and extension (RD&E) activities relating to AMPC's Environment and Sustainability RD&E Program. It promotes engagement with environment managers from processing establishments and other stakeholders to ensure that all parties are meeting new regulatory requirements and that new information is disseminated.
Meat Processing Engineering Network 2017-2019	2018-1012	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	3/6/19	Provide a means of showcasing initiatives being undertaken by meat processing plants and related industries in the nominated areas of transformational and disruptive technologies, new and modified products and process developments.	Meat Industry Engineering network that will provide products, training, technology transfer; engagement with plant engineering personnel	This network provides extension services for AMPC research and development activities. It gives plant-based engineering personnel, researchers and regulators a very useful forum to explain, explore and discuss new issues and innovations.
Compiling knowledge base for red meat processing knowledge Hub	2018-1044	Freshagenda Pty Ltd	1/11/17	1/8/18	Design and implement an interim red meat processing industry knowledge support hub to make it easier to access research and development findings	Knowledge hub with sophisticated search engine functionality containing research outcomes, extension, insights, expertise resources, and other resources	A knowledge platform that is open to contribution from industry users can provide a tangible way for collaborators to efficiently share knowledge with others, and will underpin the strength of AMPC's open business model.

Program 4 Capability, Extension & Education

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Management of the Australian Q Fever Register 2017-18	2018-1054	AusVet Pty Ltd	1/7/17	2/4/18	Provide a secure repository of records documenting the Q Fever status for individuals as an aid for the meat industry in managing workplace health risks from Q Fever	Monthly reports providing detailed summaries of AQFR performance; final report summarizing 2017-2018FY	The Australian Q Fever Register (AQFR) is the first non-statutory health register to be established in Australia and has been operating without interruption since 2001. It provides a secure repository of records documenting the Q Fever status for individuals as an aid for the meat industry in managing workplace health risks from Q Fever and, in addition, serves as a valuable and unique resource of data for researchers.
Management of the Q Fever Register – Stage 2 (Database/Website Development)	2018-1101	AUS-MEAT Limited	8/1/18	18/5/18	Stage 2 for management of Q Fever register	Development of a new Database, Website, and configuration for the Q Fever Register	The Q Fever Register is an important facility for personnel associated with the Australian Red Meat Processing Industry in that it provides a record of the Q Fever immune status of personnel who register. This information can be accessed to ensure personnel have immunity to Q Fever and can safely access red meat processing sites. The Register also provides a valuable source of data for researchers.
Management of the Q Fever Register – Stage 3 (Hosting, Maintenance and Support) 2017-19	2018-1146	AUS-MEAT Limited	1/4/18	30/6/19	Ongoing management of the Q Fever Register	Maintenance support, service hosting, helpline, support officers	The Q Fever Register is an important facility for personnel associated with the Australian Red Meat Processing Industry in that it provides a record of the Q Fever immune status of personnel who register. This information can be accessed to ensure personnel have immunity to Q Fever and can safely access red meat processing sites. The Register also provides a valuable source of data for researchers.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Management of the Q Fever Register – Stage 3 (Hosting, Maintenance and Support) 2019-20	2018-1147	AUS-MEAT Limited	1/4/18	30/6/20	Ongoing management of the Q Fever Register	Maintenance support, service hosting, helpline, support officers	The Q Fever Register is an important facility for personnel associated with the Australian Red Meat Processing Industry in that it provides a record of the Q Fever immune status of personnel who register. This information can be accessed to ensure personnel have immunity to Q Fever and can safely access red meat processing sites. The Register also provides a valuable source of data for researchers.
Management of the Q Fever Register – Stage 3 (Hosting, Maintenance and Support) 2020-21	2018-1148	AUS-MEAT Limited	1/4/18	30/6/21	Ongoing management of the Q Fever Register	Maintenance support, service hosting, helpline, support officers	The Q Fever Register is an important facility for personnel associated with the Australian Red Meat Processing Industry in that it provides a record of the Q Fever immune status of personnel who register. This information can be accessed to ensure personnel have immunity to Q Fever and can safely access red meat processing sites. The Register also provides a valuable source of data for researchers.
Educational Pathways: Creating a Highly Skilled Meat Industry – Year 1	2016-1027	Royal Melbourne Institute of Technology (RMIT)	1/7/16	2/3/18	Create a holistic educational program to develop people that will have the skills and knowledge to contribute to the meat industry over the coming decades	Criteria for ESP program success, creating research critical mass, delivering research project-specific outputs, ongoing educational opportunities, experienced graduates	The Educational Scholarship Pathways Program: Creating a Highly Skilled Meat Industry (ESP) will create a holistic educational program to develop people that will have the skills and knowledge to contribute to the meat industry over the coming decades.
An Integrated Scholarship Program in Process Engineering – Year 2	2016-1366	Queensland University of Technology (QUT)	1/1/18	31/12/18	Establish a prestigious Integrated Scholarship Scheme that will educate and train the future red meat processing workforce.	Dean's Scholar's Program; Development of Postgraduate Research Projects; student-industry relationship management; Postgraduate Research Scholarships	The scholarship program will be marketed to attract outstanding students to choose process engineering and to expose these students to the opportunities and challenges offered by the red meat processing industry. The integration of scholars at all levels will achieve a critical mass of students and researchers focused on red meat processing at QUT with the variety of experience to provide a team-based approach to teaching and research.

Program 4 Capability, Extension & Education

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Educational Pathways: Creating a Highly Skilled Meat Industry – Year 2	2016-1438	Royal Melbourne Institute of Technology (RMIT)	3/3/18	4/3/19	Create a holistic educational program to develop people that will have the skills and knowledge to contribute to the meat industry over the coming decades (yr2)	Criteria for ESP program success, creating research critical mass, delivering research project-specific outputs, ongoing educational opportunities, experienced graduates (yr2)	The Educational Scholarship Pathways Program: Creating a Highly Skilled Meat Industry (ESP) will create a holistic educational program to develop people that will have the skills and knowledge to contribute to the meat industry over the coming decades.
An Integrated Scholarship Program in Red Meat Safety and Microbiology – Year 2	2017-1092	Curtin University of Technology	1/1/18	3/12/18	Establish, in partnership with AMPC and CSIRO Food and Nutrition, an integrated scholarship scheme in the area of red meat safety and microbiology	Range of scholarships under this program and timelines and mechanisms of their adoption over a 5 year timeframe	Curtin University will establish, in partnership with AMPC and CSIRO Food and Nutrition, an integrated scholarship scheme in the area of red meat safety and microbiology. This area is of considerable importance to the industry from both a regulatory and market access perspective.
Red Meat Processing Upskilling Scholarship Program	2016-1019	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/7/15	30/12/20	This Upskilling Scholarship Program will enable existing meat industry personnel to upgrade their current knowledge and qualifications	Online support network; minimum two recorded study skills webinars per year; case studies from scholarship holders and companies on outcomes from their study to be used as promotion for further scholarships	By supporting the upskilling of existing workers the program will ensure red meat processing companies and the greater industry are addressing the current skills shortages, building plant capacity in a dynamic and changing environment and ensuring succession planning is in place.
Redeveloping the Core Unit CDs into on-line resources for meat processors	2017-1013	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/9/16	20/3/18	Replace the seventeen year old, and very outdated core unit CD's with a series of short, sharp, on-line films which can be used by processing companies and trainers	At least ten short, downloadable films will be developed in up to five different languages, accompanied by quizzes and worksheets	Short, sharp on-line films which can be used by processing companies and trainers alike to support induction, careers promotion, commencement of training, contractor information and refresher training. Film segments will be available in multiple languages, as identified and prioritised by processing companies.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Protecting Australia's Red Meat Processing Industry: Crisis management and development of a proactive approach to potential disease outbreaks and exotic species incursion	2017-1021	Joan Lloyd Consulting Pty Ltd	1/9/16	30/6/17	Provide AMPC with a training package that will equip red meat industry workers with knowledge and skills required in event of an emergency animal disease	Delivery of the training package to Australian red meat processing industry through a regional program of face-to-face engagement	The training package will give meat processing workers the guidance required as to their specific roles and responsibilities in the event of an EAD response (including administrative, veterinary, inspection, support and maintenance staff) and the importance of animal welfare. Links will be provided to contemporary information and images for key emergency animal diseases and to the AMPC disease and contamination library.
Updating extension materials of interest to the red meat processing industry	2017-1027	Ecoefficiency Group Pty Ltd	1/9/16	1/8/17	Review, consolidate, and update the wastewater management and biogas extension material; transfer the static resources to engaging multi-media and digital formats	Manuals, videos, Snapshots, quizzes relating to material	AMPC has invested in the development of an extensive array of extension resources for meat processing wastewater operators. These resources have been developed over time and cover a number of different topics resulting in a somewhat fragmented collection that are in some cases out of date. Furthermore the rise of engaging digital multi-media has made many static, word-based resources at risk of becoming outmoded and obsolete. This project will consolidate that information and update the extension material
Australian Agribusiness Leadership Program	2017-1078	Australian Rural Leadership Foundation Limited	1/12/16	16/12/19	Deliver practical leadership benefits to organisations and individuals within agribusiness sector and enhance opportunity for collective impact and transformation in this sector	At least four industry representatives graduate from the AALP annually; written report or presentation from each of the sponsored industry representatives; Annual summary to all investing partners	The Australian Agribusiness Leadership Program (AALP) will deliver practical leadership benefits to organisations and individuals within the agribusiness sector and enhance the opportunity for collective impact and transformation in this sector. Through investment in four scholarships (annually), the meat processing industry will provide opportunity for its leaders to increase their capability and capacity to lead. Multi-year investment will increase the pool of industry representatives who have the capability to engage in leading the industry into the future.

Program 4 Capability, Extension & Education

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Australian Rural Leadership Program – Course 24 – Grant Melrose	2017-1079	Australian Rural Leadership Foundation Limited	1/4/17	31/1/19	Producing a network of informed capable, and ethical leaders who are able to work collaboratively to advance the interests of their industries	The recipient will ensure that the participants awarded with a scholarship provides to the sponsor mid-course and an end of course negotiated task that details the benefit of the Participant	The Australian Rural Leadership Program is aimed at producing a network of informed, capable, and ethical leaders who are able to work collaboratively to advance the interests of their industries, businesses, communities and rural Australia in general. AMPC annually sponsors one scholar from the red meat processing industry.
Scholarships for Advanced Diploma in Meat Processing	2017-1083	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/9/16	29/12/17	The Advanced Diploma is designed for people who are already employed in the industry and who have the opportunity to draw upon workplace experiences and to carry out assignments and projects in the workplace. The qualification is designed for managers who seek to move into senior positions within their own enterprise.	Awarding up to 12 scholarships to eligible applicants	Increase eligibility to move into senior positions within industry; improved business expertise and experience;
Diploma of Meat Processing Scholarship Program	2018-1007	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	20/12/18	Program which provides essential, relevant and transferable skills for employees undertaking management roles within the meat processing industry.	A target of a 75% completion rate is being set for this project. This means that if all scholarships are taken up, then at least fifteen students will fully complete the program.	Since 2002, the Diploma of Meat Processing has developed as a program which provides essential, relevant and transferable skills for employees undertaking management roles within the meat processing industry.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Ammonia refrigeration training programs 2017-2018	2018-1008	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	1/6/18	This project is for the implementation of two further ammonia refrigeration training programs (Qld and Vic).	Two further training courses; cohort of qualified engine operators against an established national training standard; qualified trainers and RTOs	The development of ammonia refrigeration training programs specifically tailored to the Australian meat industry has been a critical operational and WHS requirement for meat processors. A feasibility study conducted in 2014-2015 identified a critical need for accredited training and a licensing agreement with the USA Refrigeration Engineers and Technicians Association (RETA) to customise and use their materials was signed.
Upgrade of the Meat Inspection exam generator	2018-1010	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	1/6/18	This project is for the conversion and upgrade of the now outdated 2013 CDs of the trainer and student version of the Meat Inspection Exam Generator into a web-based solution.	Web-based resource which includes: student review and practice of exam questions; RTO capability; customized exams; image import; ability to add additional questions	By combining all the resources into a web-based solution, reviewing and updating the content, removing references to Unit codes in favour of a broader subject grouping, and including capacity to import images from the Disease and Contamination Image library, we will be able to create a current resource which has direct alignment to the current AEMIS system and associated qualifications. The new resource will be more easily updated in the future, more accessible to both RTOs and processors, and have broader capability due to its links with the image library.
2018 Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry	2018-1067	Department of Agriculture and Water Resources (DAWR)	1/7/17	6/3/18	The Science Awards programme aims to encourage science, innovation and technology in rural industries and help to advance the careers of young scientists, researchers and innovators through national recognition of their research ideas.	During the course of the winner's research term (usually one year) ABARES will provide the two milestone reports authored by the winner, to the Sponsor.	The Science Awards programme is targeted at innovators, early career researchers, scientists and others to recognise big ideas from young rural innovators that will contribute to the success of Australia's agriculture sector.
Diploma of Meat Processing Scholarship Program FY19	2018-1126	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/5/18	16/12/19	This project is for the awarding of up to 12 scholarships to employees from red meat processing companies over an eighteen-month period.	A target of a 75% completion rate is being set for this project. This means that if all scholarships are taken up, then at least nine students will fully complete the program.	The Diploma of Meat Processing is a program which provides essential, relevant and transferable skills for employees undertaking management roles within the meat processing industry.

Industry Improvement & Economic Analysis



\$1.2m

Total investment

Alignment with government priorities

Rural research, development and extension priorities:

- ✓ Advanced technology
- ✓ Soil, water and managing natural resources
- ✓ Adoption of RD&E

National science and research priorities:

- ✓ Food
- ✓ Soil and water
- ✓ Transport
- ✓ Cybersecurity
- ✓ Energy
- ✓ Advanced manufacturing
- ✓ Health

* See appendix on page 116 for full details of priorities

\$0.2m

5.1 Industry improvement

Objectives: To ensure AMPC provides quality RD&E projects that improve industry's livelihood now and into the future.

Outputs: Analysis and research to improve the overall performance (productivity, profitability and sustainability) of the Australian red meat processing industry against its international competitors.

Outcomes: Australia's red meat processing industry continuing to be a world leader in producing and supplying high quality meat protein.

\$0.02m

5.2 Economic analysis, data and statistics

Objectives: To understand the economic drivers of our industry, our competitors in export and domestic markets, the competitive protein landscape and opportunities and constraints on the industry.

Outputs: Development of economic models for the red meat supply chain in order to better understand supply and demand, and provision of insights and recommendations to industry for supply chain improvements.

Outcomes: The red meat processing sector is better equipped to take advantage of supply chain efficiencies and to maintain supply for a sustainable future.

Economic analysis is essential to making data-driven, evidence-based investment in RD&E that benefits the whole-of-industry. The Industry Improvement & Economic Analysis program uses economic modelling, statistical analysis, benchmarking and networked information flows to study drivers of industry productivity and sustainability and provide insights to inform policy efforts.



5.3 Industry-wide system improvements

Objectives: To identify efficiency and productivity gains and system improvements to the Australian red meat processing industry.

Outputs: Industry-wide improvements to the red meat processing sector with a specific focus on areas where industry reputation is critical to export success and maintaining market share.

Outcomes: The Australian processing sector is supported to maintain its competitiveness and leadership as a world-leading exporter of high quality, sustainable red meat.

\$0

5.4 Strategic communications

Objectives: To guide industry to better appreciate, understand and optimize their approach to presenting their key concerns to the Australian Government, Committees, Rural Develop Corporations and with their peers.

Outputs: Sound industry projects/ reports that provide industry with a strong voice (backed by credible information) to appeal to government policy makers.

Outcomes: AMPC enlightening heads of industry on how to provide 'industry evidence' to best align and leverage government's 'evidence-based policy' principles.



5.5 Plant Initiated Projects (PIPs)

AMPC supports its members in identifying and undertaking RD&E projects that benefit the international competitiveness of the Australian red meat processing industry through improvement and economic analysis.

Program 5 Industry Improvement & Economic Analysis

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Providing feedback to producers – what value for the processor?	2018-1039	National Meat Industry Training Advisory Council Limited (MINTRAC)	1/8/17	3/6/19	This project reviews five existing models of producer feedback and develops case studies, particularly focussing on the returns and benefits to processors of each model. A simplified model for SME processors will be developed and trialled for the collection and analysis of data and provision of feedback to producers. Priority will be given to those areas of feedback most likely to generate a return for processors.	This project will have the following deliverables: * Five Case Studies of existing producer feedback models. * New model tailored for use by SMEs. * Communication Plan for project results. * Extension support to SMEs for a period of 6 months.	Establishing a better model of feedback to benefit the profitability of both SME processors and livestock producers
Review of Australia's Red Meat Industry 'International Competitiveness'	2018-1129	Oxley International Pty. Ltd. T/A ITS Global	16/4/18	18/5/18	Reviews Australia's red meat export industry's global market position in comparison to other protein exporting countries. The Country Snapshots provide a detailed picture of the competitive market for red meat and other proteins in the target markets, allowing AMPC members to target their export strategies.	ITS Global delivered a set of Country Snapshot reports focusing on China, EU, USA, Indonesia, South Korea, Japan that presents key data and analysis of production and consumption of red meat and other protein sources, trade flows, market access, and cultural preferences in each market.	The Country Snapshot reports will provide AMPC with fresh analysis and insights that will help guide market development activities, policy engagement with the federal government and collaboration with other stakeholders in Australia's red meat industry.
Managing Risk across the Red Meat Supply Chain – Stage 1	2018-1142	Jacaranda Commodity Partners	25/6/18	1/10/18	The purpose of this project is to produce a paper that analyses the volatility of financial markets and its impact on the red meat business and explores the importance of risk management and key risks facing the industry.	A comprehensive report coupled with two in-person presentations (one at report's draft stage, and another at conclusion) to AMPC as well as a Project Snapshot that pulls together key points and findings of the research.	By outlining various risk management techniques and best practices across similar industries, this project aims to provide AMPC's members with sound practical information on how to manage a variety of financial market risks, such as foreign exchange, interest rate, credit, liquidity and commodity price risk.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Development of economic model for analysis of regulatory and related costs and duplication in red meat processing	2017-1062	SG Heilbron Pty Ltd	1/9/16	29/6/18	Substantive economic analysis of the costs of audit and certification in Australian red meat processing, and policy analysis to generate options for reducing duplication and improved effectiveness; as well as a cost comparison analysis against the USA, Brazil and Argentina.	<p>Stage 1</p> <ul style="list-style-type: none"> • Situation analysis of the audits and certification requirements in the meat processing industry; • Understand business operational and cost impacts relating to compliance with multiple audits and certification requirements; • Identify potential means to improve the situation through reduced costs and improved effectiveness; • Quantify impact on industry and flow on impacts from potential improvements; and • Report on the findings of the research on multiple audits, and separately on the Scoping Analysis. <p>Stage 2</p> <ul style="list-style-type: none"> • Understand key cost components in red meat processing both in Australia and in key international competitor countries; • Independent compilation of processing costs and analysis thereof to improve the basis for industry policy initiatives aimed at addressing cost competitiveness hurdles; • Construction of a model that will enable potential quantification of the impact on industry and flow on impacts from potential improvements either by industry collectively through AMPC or by individual processors via access to the model; • Report on the findings; and • Provide processors who supply a full data set a confidential report on their facilities costs compared to Australian and international country averages. 	Benchmarking the Australian cost to operate against key international markets helps industry advocates form policy positions based on data.

Program 5 Industry Improvement & Economic Analysis

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Blockchain for the Meat Industry: Where and How?	2018-1047	Griffith University	15/3/18	3/6/19	The aim of this project is to explore the use of blockchain technology for the red meat industry, starting with an investigation of the current supply chain processes and practices within the industry.	This project consists of a mapping exercise of the red meat current supply chains. A clear understanding of physical product, information and finance within these supply chains will provide the opportunity to critically examine them and, subsequently, to streamline operations and eliminate redundancies.	This project will demonstrate opportunities for supply chain improvement through the integration of blockchain technology. It will offer enhanced transparency, accountability, coordination, traceability, and customer confidence with improved customer-oriented decision making for the industry.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Red Meat Industry Funding Program Map & Tool	2018-1134	Food Innovation Partners	29/5/18	13/7/18	This project will undertake desk top research to compile and curate a detailed list of funding programs that are relevant to Australia's red meat industry and can contribute to deliver on the industry's investment strategies.	A compiled and curated data set of Government and industry funding programs relevant to the Australian red meat industry. Development and implementation of cloud-based Funding Program Map and Tool for AMPC members.	Access to a cloud-based tool for AMPC members to readily identify funding support mechanisms. This cloud-based portal can be first-port-of call for information required to assess eligibility and undertake an application process.
Development of alternative packaging method for whole sheep carcase to regain market access in Mexico for flat stacked carcasses	2017-1157	Australian Meat Industry Council (AMIC)	1/3/17	30/8/17	Development and trial of a new packaging method for flat stacking of whole sheep carcasses to regain market access in Mexico and benefit whole carcase export to other international markets.	Development of alternate method of packaging whole carcase as opposed to the current standard of inner poly bag and outer cotton stocking net. Manufacture of new packaging in China. Trial shipment to Mexico via SAMEX.	The trial packaging ultimately failed and was rejected by Mexican authorities.

Joint Program



\$9.9m

Total investment

Alignment with government priorities

Rural Research, Development and Extension Priorities:

- ✓ Advanced technology
- ✓ Biosecurity

National Science and Research Priorities:

- ✓ Food
- ✓ Transport
- ✓ Advanced manufacturing

* See appendix on page 116 for full details of priorities

\$0.1m

6.1 Capability Building

Objective: The capability building program invests in current and emerging industry leaders, innovators and scientists to enhance professional and business skills and build a performance culture.

\$0.1m

6.2 Communication

Objective: The communication program ensures that MLA and AMPC's R&D and Marketing services are known and accessible to levy payers and stakeholders. It also seeks to build confidence in the industry, ensuring the community understands the contribution the industry makes and supports its operation.



\$3.2m

6.5 International Markets

Objective: The international market program seeks to grow demand for Australian red meat by maintaining and improving market access, providing timely insights about global opportunities, and promoting Australia's superior points of difference.



\$0.8m

6.6 Objective Measurement

Objective: The objective measurement program seeks to facilitate development and adoption of objective measurement tools across the value chain.

Maximising market access and effective consumer marketing are key aspects of facilitating the domestic and global competitiveness of the Australian red meat processing sector. The Joint Program works jointly with MLA to increase market access for Australian red meat, and enhances and communicates the value proposition of Australia's red meat to the customer, consumer and community.



6.3 Domestic Market

Objective: The domestic market program seeks to demonstrate the value of red meat to consumers and target barriers limiting red meat consumption: price and health perceptions.



6.4 Integrity Systems

Objective: The integrity systems program seeks to protect Australia's disease-free status and underpin the marketing of Australian product as clean, safe and natural. It also helps Australia capture price premiums from customers and consumers willing to pay more for higher levels of product assurance.



6.7 Product Packaging and Innovation

Objective: The product packaging and innovation program seeks to inform value chains and the wider industry about new products, processes packaging and business models, leading to increased demand and higher value red meat.



6.8 Existing Joint Program Management Team (JPMT) Projects

Objective: This stream represents existing joint projects that are contract managed by AMPC, with joint oversight provided through the Joint Program Management Team (JPMT) framework with Meat and Livestock Australia.

Program 6 Joint Program

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Other Joint Projects							
Export Control Bill Legislation Amendment	2018-1091	Clayton Utz	13/10/17	27/10/17	RDC Co-fund with Australia's red meat industry export facing sectors (with LiveCorp) to articulate a strong legal and practical rationale of its position, by reference to widely accepted and entrenched principles (or examples) of good regulation.	Preparation of an outline of recommended submissions Exposure Draft Export Control Bill 2017.	Give the export facing sectors of the red meat industry appropriate assurances about the nature of future regulatory oversight and certainty about the practical implications of key compliance obligations.
Indonesia and Halal Certification	2017-1105	PT Mitra Asia Lestari	28/11/16	23/11/17	The key objective of the project is to understand the Halal Product Assurance law on trade for Australian red meat and meat products including secondary cuts into Indonesia.	A report outlining Indonesia's Halal Product Assurance law on market access for boxed beef and associated meat products, including offal and demonstrating outcomes to reduce the trade barriers.	Assist in resolving market access barriers with Halal certification service delivery in Indonesia.
National Freight and Supply Chain Strategy	2018-1075	Juturna Infrastructure	1/7/17	18/8/17	RDC Co-fund with MLA to understand core red meat transport networks and their infrastructure needs in macro	Arm RMAC to deliver a submission on behalf of Australia's red meat industry to the National Freight and Supply Chain Strategy	Raise the concept of Australia's red meat sector as for the most part a very large, discrete but identifiable and self-contained networks in need of major transport investment and accompanying regulatory reforms to drive future competitiveness and major productivity gains.

Project title	Code	Provider	Start	Date due	Objective	Outputs	Benefit to industry
Live Trade Issues Paper	2017-1158	SG Heilbron Pty Ltd	8/6/17	10/7/17	To investigate the economic implications of live trade and the negotiation of free trade agreements and its knowledge of livestock being processed offshore and branded 'Australian made'.	The report canvasses the issues and the implications of the live trade for meat processing in Australia and for the broader Australian economy.	The report adds to AMPC's strategy regarding appropriate research for sustainability in the sector
RRD4P round 2 Accelerating precision agriculture to decision agriculture	2017-1097	Cotton Research & Development Corporation (CRDC)	30/6/15	30/6/18	To demonstrate evidence based digital decision making in agriculture using big data.	Create an agricultural digital strategy.	Data integration and information sharing within red meat value chain

Financial Report

For the Year Ended 30 June 2018

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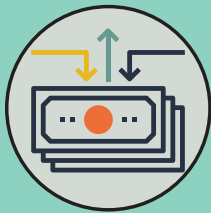
Australian Meat Processor Corporation Ltd

ABN 67 082 373 448

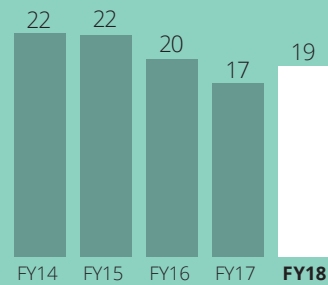


Financial Highlights

Income (\$M)



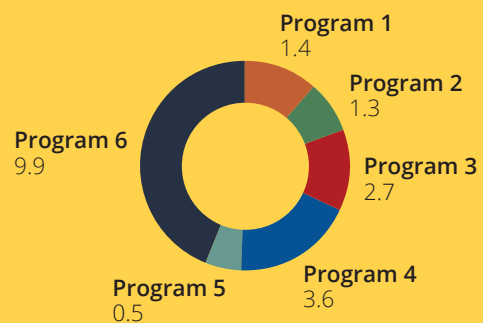
\$25m
Actual income
for FY18



Expenditure (\$M)



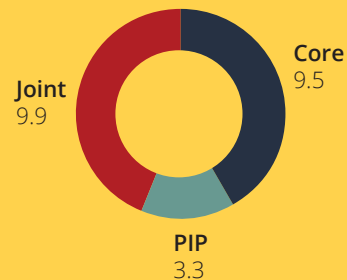
\$23m
Program expenditure
(Inc AUS-MEAT)



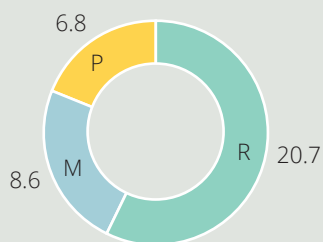
Reserves (\$M)



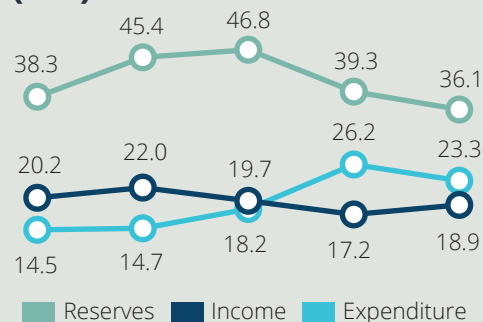
\$36m
Levy reserves



Levy reserves by split (\$M)



Target reserves management (\$M)



FY18 Financials by Category

Actual income and costs for FY18

	RD&E	Marketing	Pre-stat	Total
Income				
Levies	\$32,901	\$18,885,718	\$0	\$18,918,619
Interest	\$584,996	\$243,278	\$190,844	\$1,019,118
Government Matching & Contributions	\$5,045,402	\$0	\$0	\$5,045,402
Total	5,663,299	19,128,996	190,844	24,983,138

	RD&E	Marketing	Pre-stat	Total
Program Expenditure				
Core RD&E				
1. Processing Technologies	\$1,427,228	\$0	\$0	\$1,427,228
2. Environment & Sustainability	\$1,278,206	\$0	\$0	\$1,278,206
3. Processing Hygiene, Quality & Meat Science	\$2,325,770	\$373,918	\$0	\$2,699,688
4. Capability, Extension and Education	\$3,545,485	\$0	\$0	\$3,545,485
5. Industry Improvement & Economic Analysis	\$538,310	\$0	\$0	\$538,310
Total Core	\$9,114,999	\$373,918	\$0	\$9,488,917
6. Joint Program	\$3,600,144	\$6,325,244	\$0	\$9,925,388
Total Joint	\$3,600,144	\$6,325,244	\$0	\$9,925,388
Plant Initiated Projects (PIPs)	\$3,300,476	\$0	\$0	\$3,300,476
AUS-MEAT Contribution	\$0	\$550,000	\$0	\$550,000
Total	\$16,015,619	\$7,249,162	\$0	\$23,264,781

	RD&E	Marketing	Pre-stat	Total
Corporate Costs				
Direct Corporate Costs (Project Support)	\$1,591,806	\$0	\$0	\$1,591,806
Indirect Corporate Costs	\$1,078,113	\$2,262,712	\$0	\$3,340,825
Total	\$2,669,919	\$2,262,712	\$0	\$4,932,631

Net Income	(\$13,022,239)	\$9,617,122	\$190,844	(\$3,214,274)
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Reserves movements for FY18

	RD&E	Marketing	Pre-stat	Total
Opening Reserves as at 30 June 2017	\$33,720,077	(\$1,014,510)	\$6,557,627	\$39,263,194
Budget Net Income FY18	(\$13,022,239)	\$9,617,122	\$190,844	(\$3,214,274)
Closing Reserves as at 30 June 2018	\$20,697,838	\$8,602,612	\$6,748,471	\$36,048,921

Directors report

The directors present their report together with the financial report of the Australian Meat Processor Corporation Ltd (the Company) for the financial year ended 30 June 2018 and auditor's report thereon.

The names of each person who has been a director during the year and to the date of this report are:



John Berry
Chairman

Bachelor of Business Finance and Master of Business Administration (MBA), Graduate and Fellow of the Australian Institute of Company Directors.

John is a Director and Head of Corporate and Regulatory of JBS Australia Pty Limited, Australia's largest meat and food processor and feedlot operator. John has been involved in the Australian meat industry for over 20 years, and has responsibility for industry, government and corporate relations activities within the JBS Australia business.

John was elected to the AMPC Board for a seventh term on 27 November 2017, and as Chairman in January 2018.



Melissa Fletcher
Deputy
Chairman

Melissa Fletcher is the Chief Executive Officer of Fletcher International Exports, one of Australia's largest processors and exporters of lamb and sheep meat products.

As an Australian of proud indigenous descent with over 30 years of industry experience, she represents a new generation of red meat industry leaders and brings a unique and valuable perspective to the AMPC Board.

Melissa was elected to the AMPC Board for her first term on 27 November 2017.



Bruce Rathie
Special
Qualifications
Director

Degrees in law and commerce and Master of Business Administration and is a Fellow of the AICD, the Governance Institute and AIML.

Bruce Rathie is a solicitor and experienced company director who joins the Board with extensive careers in both investment banking and the legal profession.

He currently holds non-executive positions in ASX listed and unlisted companies across a diverse segment of the private sector.

Bruce was elected to the AMPC Board for his first term on 1 January 2018.



Leanne Heywood
Special
Qualifications
Director

Leanne is an experienced non-executive director and committee chair with broad general management experience gained through an international career in the mining, rural, government and not-for-profit sectors.

Her board experience outside the AMPC includes an ASX200 Mining Company with operations in South America, and a Not-for-profit organisation working with aboriginal families.

In a senior executive capacity, she has extensive domestic and international marketing experience with in depth exposure to markets across Asia, South America and Europe. In this capacity she has managed complex and difficult stakeholder relationships including customers, governments, communities and investment partners and developed an advanced ability to facilitate complex cross-cultural negotiations.

Leanne holds a degree in accounting and an MBA and is a graduate of the AICD International Company Directors Course in Shanghai.

Leanne was elected to the AMPC Board for her first term on 1 January 2018.



Gary Hardwick
Processor
Director

Gary Hardwick is the Founder and Executive of Hardwick's Meatworks Pty Ltd located in Kyneton, Victoria. Gary is a qualified Accountant, a Member of the Australian Processors Council (APC) and Director of Australian Meat Industry Superannuation Trust (AMIST). Gary is also a Director of PrimeSafe (VIC).

Gary was elected to the AMPC Board for an eleventh term on 27 November 2017.



Dean Goode
Processor
Director

Master of Business Administration (MBA) from James Cook University, Townsville.

Dean was appointed Chief Executive Officer of Kilcoy Pastoral Company Limited (KPC) on 1 July 2012. He has worked for KPC for over twelve years, including as General Manager of Operations. Dean has extensive experience in the export beef processing industry. In January 2017, he was appointed Group Chief Executive Officer of the rebranded group of companies, Kilcoy Global Foods, with responsibilities in Australia, USA and China.

Dean was elected to the AMPC Board for his second term on 27 November 2017.



Tom Maguire
Processor
Director

Post-graduation in Economics, Industrial Relations and Human Resources Management. Completed Master of Business Administration (MBA) from University of Queensland.

Tom Maguire currently holds the position of General Manager - Corporate Services with Teys Australia Pty Limited. Tom has been involved in the Australian meat industry since 1997 and has held senior positions in the National Meat Association of Australia.

Tom was elected to the AMPC Board for a seventh term on 27 November 2017.



Simon Stahl
Processor
Director

Bachelor of Commerce (Accounting major) from University of Southern Queensland.

Simon Stahl has been working in the red meat industry for over 26 years and currently holds the position of Chief Executive Officer, Northern Co-operative Meat Company Ltd. Simon began his career at KR Darling Downs, Toowoomba, before working with NH Foods Australia Pty Ltd in a variety of roles including Managing Director (TBS Mackay) and Group Innovation Manager.

Simon was elected to the AMPC Board for a fourth term on 27 November 2017.

Directors report (continued)



Pat Gleeson
Processor
Director

Pat Gleeson is a fourth-generation cattle farmer from Crow's Nest, Queensland, who began his working life as an apprentice butcher. Pat Gleeson is now the General Manager of Oakey Beef Exports, Thomas Borthwicks Mackay and a Director in the Nippon Ham Group in Australia.

He has extensive experience and professional training that spans more than three decades in cattle production, beef processing, and management across the supply chain. As an agribusiness specialist - producer and processor, Pat has applied his focus on developing people, company culture and innovation while managing financial results through strategy execution.

Pat is an active member of the industry participating on many boards and advisory panels.

Pat was elected to the AMPC Board for his first term on 27 November 2017.



Peter Rizzo
Chief Executive
Officer

Peter Rizzo BAgSci GAICD is a business builder and a hands on team leader, with a distinguished and multi-dimensional career spanning nearly 30 years in agri-business, international agri-commodities, financial services, and investment banking, working mostly across major trade hubs including Singapore, Hong Kong, Shanghai and Sydney.

Originally from an Angus cattle and Corriedale sheep stud farm in Western Victoria, Peter began his career as a Livestock Agent for Elders pastoral and then as Export Manager for Elders International, which afforded him a deep insights of the pre and post farm gate supply chain.

This experience proved invaluable in his next role as General Manager and then Regional Asian Head of Commodities for D.R. Johnston Group a wholly owned subsidiary of the USA Food giant ConAgra Foods, where he spent a decade trading in agri-commodities in a highly competitive international market place. Several senior executive roles in the agri-commodities and trading sector followed, including for Rizco Pty Ltd, and then made a shift to world renown commodity investment banks of Rand Merchant

Bank and Standard Bank Group. Prior to joining AMPC Peter was with Fortune 500 NASDAQ listed INTL FCStone Inc. where he was first Managing Director of the Australia operations and then regional commercial head Deputy Chief Executive Officer – Asia.

Peter holds a Bachelor of Agricultural Science from La Trobe University and is a Graduate member of the Australian Institute of Company Directors. His family farms cattle and sheep in Victoria and has also been highly active in volunteer work for Balmoral Nippers and the Mosman Junior Rugby Club. Peter assumed the role of Chief Executive Officer of AMPC in February 2017



Hasaka Martin
Company Secretary

Hasaka Martin was appointed as Company Secretary on 16 March 2018. Hasaka is a Chartered Secretary with has over 10 years' experience, he holds a Graduate Diploma in Applied Corporate Governance and is a Fellow of both the Governance Institute of Australia and the Institute of Chartered Secretaries and Administrators.

Directors have been in office since the start of the financial year to the date of this report unless otherwise stated.

Outgoing Directors



Peter Noble Director

Peter Noble is currently the director of Invasive Animals Ltd and Chair of its Governance and Remuneration Committee. He was a board member of the inaugural Principles of Sustainable Insurance, a Finance Initiative of the United Nations Environment Program.

Prior to its sale in 2014, Peter held the position as Chairman of Directors for family company, GM Scott Pty Ltd (GMS), where he had been a director and shareholder since 1988.

Peter holds degrees in Law and Commerce from the University of NSW and has practised law with International law firms in Australia, the United States and Asia. He is also an adjunct Associate Professor in Law and Agriculture at the University of New England.

Peter was appointed to the AMPC Board for a fifth term in December 2015 and completed his term on 27 November 2017.



Catherine Ainsworth Director

Catherine currently sits on the boards of Harness Racing Victoria, Racing Analytical Services and the Australian Horse Industry Council. Catherine has previously sat on the boards of Pulse Breeding Australia, Barley Breeding Australia, University Of Melbourne Faculty Of Veterinary Science and chaired the National Animal Health Laboratory Strategy.

In her executive career, Catherine worked across veterinary pharmaceuticals, agribusiness, and the public sector, including management of the agricultural research portfolio for the Victorian government. Catherine led the development of the Australian Grains Genebank and major agricultural research infrastructure in regional Victoria. Catherine has a Bachelor of Veterinary Science (Honours) from the University of Sydney, a Master of Veterinary Science from the University of Melbourne and an MBA from Melbourne Business School. Catherine is also a graduate of the AICD's Company Director's Course and AICD "Mastering the Boardroom".

Catherine was appointed to the AMPC Board for her first term in December 2015, and was the Chair of the Audit & Risk Committee and the Nomination & Remuneration Committee. Catherine completed her term on 27 November 2017.



James Campbell Director

In August 2015, James was appointed as Chief Executive Officer of Sanger, a Senior Executive role within the Bindaree Beef group. This follows a 15-year professional career spanning Chartered Accounting (KPMG) and Institutional Banking (ANZ) with a consistent specialist focus on agricultural business.

James is a member of the Institute of Chartered Accountants in Australia and holds a double degree in Commerce (Accounting) and Business Administration from the University of Canberra.

James was elected to the AMPC Board for his first term in December 2015 and completed his term on 27 November 2017.



Brian James Director

Brian James is a current Director of and is actively involved in Thomas Foods International (TFI) (formerly T&R Pastoral) which owns and operates fully integrated export processing facilities located at Murray Bridge (SA), Lobethal (SA), Tamworth (NSW) and Wallangarra (QLD). Brian is a Director of AMIC, Chairman of National Export Sheep, Lamb and Goat Council, Deputy Chairman of the APC and is actively involved in various other industry committees.

Brian is a member of the Australian Society of Accountants and is a Certified Practising Accountant (CPA).

Brian was elected to the AMPC Board for an eighth term in December 2015 and completed his term on 27 November 2017.

Directors report (continued)

Principal activities

AMPC is responsible to promote:

- freedom of trade in the interests of the Members;
- marketing and sales of Australian meat on the Australian market and to overseas countries;
- meat processing industry Research and Development;
- improvement of the quality of Australian meat;
- the classification of Australian meat;
- the economic, environmental, health, safety and social wellbeing of the meat processing industry and the wider community;
- the mutual interests of Members by holding conferences, symposiums and seminars for any or all of the Members and presenting the views of the Company on behalf of the Members at any conference, symposium or other forum; and
- the interest of and do all relevant acts and things for the advancement, protection and promotion of the interests of, the Members.

Red meat processor levies are strategically invested in research, development and extension programs that are aligned to targeted marketing initiatives. These programs deliver outcomes and benefits for the Australian red meat processing industry and the broader Australian community.

AMPC's goals are to provide RD&E and Marketing services that:

- improve long-term efficiency and industry competitiveness;
- protect, secure and maintain market access;
- enhance industry sustainability;
- develop capability, translation and extension; and
- increase productivity and value capture.

AMPC manages activities across key programs that include:

Processing Technologies; Environment & Sustainability; Processing Hygiene, Quality & Meat Science; Capability, Extension & Education; Industry Improvement & Economic Analysis; and Joint Activities.

AMPC is committed to working with its stakeholders to achieve an efficient application of levy funds through its RD&E and marketing activities. That impact is enhanced by leveraging AMPC's investment through co-investment and collaboration.

AMPC engages with the Australian Government, its meat processor membership base, Meat & Livestock Australia (MLA) and other bodies in the red meat industry including the Red Meat Advisory Council (RMAC) and the Australian Meat Industry Council (AMIC). These collaborations ensure that processor levy funds are appropriately and effectively invested to deliver maximum benefits.

AMPC will continue to develop strategic partnerships and alliances with other organisations that have complementary

capabilities and service delivery assets. These organisations include the National Meat Industry Training Advisory Council (MINTRAC), Universities, government agencies, Research & Development Corporations (RDCs), research institutes, CSIRO, Co-Operative Research Centres (CRCs) and other industry providers, both in Australia and internationally.

No significant changes in the nature of the Company's activity occurred during the financial year.

Short term and long-term objectives

The objectives for which the Company is established are:

- to promote, protect and further the interests of the Company and its Members in any lawful manner;
- to act as a Meat Processor Body, including by providing services, and procuring and providing leadership in the provision of services, relating to Research, Development and Marketing in the meat processing industry for the benefit of its Members and Meat Processors and the community in general;
- where a Statutory Levy Regime applies, enter into a Funding Agreement or similar arrangement with the Commonwealth of Australia relating to the payment to, and application of Statutory Funds, by the Company;
- where no Statutory Levy Regime applies, or Statutory Levies are set at zero, enter into Contribution Contracts with Members for the payment of Company Contributions;
- to collect payments or Company Contributions from Meat Processors for the purpose of investing in and financing projects, undertakings or enterprises of any kind either severally or jointly with any meat Industry corporation, body or entity; Research and Development corporation, body or entity; marketing corporation, body or entity; or other person, body or entity; in each case in the interests of and for the benefit of Meat Processors and/or the meat processing industry;
- to receive Statutory Funds and apply those Funds in accordance with the Statutory Funding Agreement (SFA), the Red Meat Memorandum of Understanding (MoU) and the Australian Meat and Live-stock Industry Act 1997 (Cth);
- to enter into contracts with, and employ and engage, individuals, organisations, companies, bodies or entities to manage, Research and Development and Marketing projects and/or other projects on behalf of the Members and in the interests of and for the benefit of Meat Processors and/or the meat processing industry;
- to perform such acts and do any other thing deemed necessary or desirable for the preservation, protection and promotion of the rights and interests of the Members as Meat Processors; and
- to carry out any and all such acts and do all such things that may be in the interests of the Members and to carry out any or all such acts and or all such other things that are an incidental or conducive to the attainment of the aforementioned objects.

Incorporation

The Company was incorporated as a national Member funded public company on 22 April 1998 pursuant to reforms announced by the Minister for the Department of Agriculture, Forestry and Fisheries on 18 March 1997.

These reforms required red meat processors and livestock exporters to establish separate self-funded companies to interact with a producer company through willing partnership arrangements.

In 2007 AMPC, through its processor Peak Industry Council, requested the Commonwealth Government to re-introduce a Statutory Levy and that such funds be directed to AMPC to enable it to continue to carry on its normal business activities including its contractual arrangements pursuant to the Memorandum of Understanding referred to below. On 1 September 2007, the Government introduced a Statutory Levy Scheme to collect funds from red meat processors in turn forwarded these funds on to AMPC to manage and fund industry programs.

Memorandum of Understanding

The Company became a party to the Memorandum of Understanding ("MoU") on 27 April 1998 and to subsequent revisions to the original document.

The MoU links the Company with Meat and Livestock Australia Limited (a separate producer corporation) and LiveCorp (a separate livestock exporter's corporation) together with the Commonwealth of Australia, Peak Industry Councils and the Red Meat Advisory Council (RMAC).

The roles and responsibilities of the Company under the MoU are:

- a) to provide management, funding and administrative arrangements for red meat processing industry activities to be undertaken by or through MLA including 'Joint Functions', 'Core Functions' and any unforeseen event which has significant impact upon the industry;
- b) in consultation with the Australian Meat Industry Council (AMIC) to undertake activities and provide services on behalf of the processing sector of the industry, which are not inconsistent with the provisions and principles of the MoU;
- c) where services are provided by or through MLA, to develop jointly with MLA and/or AMIC goals for achieving the vision and strategic imperatives for the industry sector it represents;

d) each year to prepare in consultation with AMIC:

- i. strategic plan including financial projections for the period of 3 years beginning on 1 July in that year for the performance of functions necessary to achieve the objects of the Company and consistent with the Meat Industry Strategic Plan (MISP); and
 - ii. an operating plan including financial projections setting out the activities the Company proposes to undertake in the immediately following financial year consistent with its business plan;
- e) to pursue the achievement of industry goals identified in the MISP in a manner consistent with policies and strategic imperatives developed pursuant to the MoU and to perform its functions and exercise its powers in a manner consistent therewith; and
- f) to negotiate and enter into contracts with MLA, and with both MLA and LiveCorp, under which MLA will perform, or arrange for other persons to perform, Joint Functions and services on behalf of the industry sectors they represent for achieving the goals identified in the MISP.

Wind-up costs

Every member undertakes to contribute to the property of the Company in the event of the Company being wound up while a member, or within 12 months after ceasing to be a Member, for:

- a) the payment of the debts and liabilities of the Company which were contracted by the Company before the Member ceased to be a Member; and
- b) the costs, charges and expenses of winding up, and for the adjustment of the rights of the contributors among themselves,

such amount, as may be required, not exceeding one hundred dollars (\$100).

Operating results

The deficit of the Company amounted to \$3,214,277 (2017: deficit of \$7,521,122).

Directors report (continued)

Meetings of directors

During the financial year, 14 meetings of directors (including committees of directors) were held. Attendances by each director during the year were as follows:

	Directors' Meetings		Nomination & Remuneration Committee		Audit & Risk Committee	
	Number eligible to attend	Number attended	Number eligible to attend	Number attended	Number eligible to attend	Number attended
John Berry	9	9	-	-	-	-
Melissa Fletcher	5	5	-	-	-	-
Bruce Rathie	3	2	1	1	2	2
Leanne Heywood	3	3	1	1	2	2
Gary Hardwick	9	9	-	-	2	2
Dean Goode	9	8	-	-	-	-
Tom Maguire	9	5	-	-	-	-
Pat Gleeson	5	4	-	-	-	-
Simon Stahl	9	5	1	1	-	-
Peter Noble	4	4	-	-	2	2
Catherine Ainsworth	4	4	-	-	2	2
James Campbell	4	2	-	-	2	2
Brian James	4	4	-	-	-	-

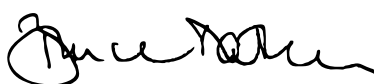
Auditor's independence declaration

The lead auditor's independence declaration in accordance with section 307C of the *Corporations Act 2001*, for the year ended 30 June 2018 has been received and can be found on page 10 of the financial report.

Signed in accordance with a resolution of the Board of Directors:



Director:
John Berry



Director:
Bruce Rathie

Dated 25 September 2018

Corporate Governance Statement

30 June 2018

The Board of AMPC is responsible, with management, for the corporate governance practices of the Company and constantly updates its practices based on both its advice and its own investigations. This statement sets out the main corporate governance practices that were in operation throughout the financial year, except where otherwise indicated.

The Constitution of the Company was approved by the Members of the Company at a General Meeting held on 14th June 2007 with a high level of support. In part, this was to address the proposed implementation of Statutory levies, which commenced on 1 September 2007.

The Board of Directors

The Board carries out its responsibilities according to the following mandate:

- the Members elect the Processor Directors every two years;
- the Special Qualifications Directors are elected by the Processor members of the Board;
- the Chairman and Deputy Chairman are elected by the Board;
- the Directors should possess a broad range of skills, qualifications and experience;
- the Directors are expected to act independently of any associate activities that may cause a conflict;
- the Board should meet on a regular basis; and
- all available information in connection with items to be discussed at a meeting of the Board is provided to each Director prior to that meeting.

As at the date of this Directors' report, the Board consisted of seven Processor Directors and two Special Qualifications Directors. Details of the Directors are set out in the Directors' report.

The primary responsibilities of the Board include:

- the approval of the Annual Operating Plan and the annual financial report;
- the establishment of the long-term goals of the Company and Strategic Plan to achieve those goals;
- the review and adoption of annual budgets for the financial performance of the Company and monitoring the results on a regular basis;
- ensuring that the Company has implemented adequate systems of internal controls together with appropriate monitoring of compliance activities, including compliance with the Company's obligations under the Red Meat Industry Memorandum of Understanding and the Statutory Funding Agreement; and
- reporting to Government and Members.

Independent Professional Advice

With the prior approval of the Chairman, each Director has the right to seek independent legal and other professional advice at the Company's expense concerning any aspect of the Company's operations or undertakings in order to fulfil their duties and responsibilities as Directors.

Audit & Risk Committee

- Bruce Rathie (Chair)
- Gary Hardwick
- Leanne Heywood

The Audit & Risk Committee meets on at least two occasions in the course of each year.

The Audit and Risk Committee oversight responsibilities include:

- the preparation and integrity of AMPC's financial accounts and statements;
- the internal controls, policies and procedures that AMPC uses to identify and manage business risks;
- the qualifications, independence, engagement, fees and performance of AMPC's external auditor;
- the external auditor's annual audit of AMPC's financial statements;
- the resources, performance and scope of AMPC's internal audit function;
- AMPC's compliance with legal and regulatory requirements and compliance policies; and
- reviewing and recommending the annual budget to the Board.

The Audit & Risk Committee invites the Chief Executive Officer and the Finance and Administration Manager and may request the external and internal auditors or the Company's legal representatives to attend meetings for the purpose of considering pertinent matters that may arise.

Corporate Governance Statement (continued)

30 June 2018

Risk Management

The Board is responsible for the Company's system of internal controls. The Board constantly monitors the operational and financial aspects of the Company's activities and, through the Audit & Risk Committee, the Board considers the recommendations and advice of external and internal auditors and other external advisers on the operational and financial risks that arise or may arise.

The Board ensures that recommendations, and any concerns identified by the external and internal auditors and other external advisers are investigated and, where considered necessary, appropriate action is taken.

In addition, the Board investigates ways of enhancing existing risk management strategies, including appropriate segregation of duties, the employment and training of suitably qualified and experienced personnel and in conjunction with the recommendations of the Audit & Risk Committee, the scope and work program of internal auditors.

Nomination & Remuneration Committee

- Leanne Heywood
- Bruce Rathie
- Simon Stahl

A Nomination & Remuneration Committee has been established to assist the Board to:

- develop and implement an independent process to ensure people with the collective expertise required are identified for selection to the Board to facilitate compliance with the new skills-based Board as set out in the Statutory Funding Agreement with the Commonwealth; and
- develop remuneration policies and practices applicable to all Officers on an annual basis to ensure that these policies and practices fairly and responsibly reward individuals.

The Nomination & Remuneration Committee met once in the financial year ending 30 June 2018.

In order to retain and attract executives of sufficient calibre to facilitate the efficient and effective management of the Company's operations, the Board may seek the advice of external advisers in connection with the structure of remuneration packages.

Code of Conduct

As part of the Board's commitment to the highest standard of conduct, the Company has a Code of Conduct to guide executives, management and employees in carrying out their duties and responsibilities. The Code of Conduct includes such matters as:

- integrity of staff and Directors;
- information and operational transparency;
- responsibilities to Members;
- compliance with laws and regulations;
- relations with customers and suppliers;
- ethical responsibilities;
- employment practices; and
- responsibilities to the environment and the community.

All Directors are required to declare any conflict of interest, perceived or otherwise, they may have in matters before the Board, not to vote or participate in the debate on matters in which they have a conflict and, where appropriate, to absent themselves from the meeting during the discussion and vote on that issue.

To the Board of Directors of Australian Meat Processor Corporation Limited

Auditor's Independence Declaration under section 307C of the *Corporations Act 2001*

As lead audit partner for the audit of the financial statements of Australian Meat Processor Corporation Limited for the financial year ended 30 June 2018, I declare that to the best of my knowledge and belief, there have been no contraventions of:

- (a) the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- (b) any applicable code of professional conduct in relation to the audit.

Yours sincerely



Nexia Sydney Partnership



Lester Wills

Partner

Date: 25 September 2018
Sydney

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Statement of Profit or Loss and Other Comprehensive Income

For the Year Ended 30 June 2018

	Note	2018 \$	2017 \$
Revenue	4	24,983,135	24,924,891
Employee benefits expense		(2,833,028)	(2,750,859)
Depreciation and amortisation expense	5	(160,713)	(221,670)
Program expenditure		(24,140,110)	(28,429,471)
Industry support expenditure		(550,000)	(550,000)
Other expenses		(513,565)	(494,013)
Deficit for the year		(3,214,277)	(7,521,122)
Total comprehensive loss for the year		(3,214,277)	(7,521,122)

Statement of Financial Position

As At 30 June 2018

	Note	2018 \$	2017 \$
Assets			
Current assets			
Cash and cash equivalents	8	38,542,593	40,199,661
Trade and other receivables	9	5,031,087	6,088,554
Other assets	10	169,979	124,278
Total current assets		43,743,659	46,412,493
Non-current assets			
Property, plant and equipment	11	43,337	62,145
Intangible assets	12	-	112,122
Total non-current assets		43,337	174,267
Total assets		43,786,996	46,586,760
Liabilities			
Current liabilities			
Trade and other payables	13	7,597,125	7,251,049
Provisions	14	98,374	50,923
Total current liabilities		7,695,499	7,301,972
Non-current liabilities			
Provisions	14	42,576	21,590
Total non-current liabilities		42,576	21,590
Total liabilities		7,738,075	7,323,562
Net assets		36,048,921	39,263,198
Equity			
Pre-statutory accumulated funds	20	6,748,471	6,557,627
Statutory R&D accumulated funds	20	20,697,838	33,720,080
Statutory marketing accumulated fund	20	8,602,612	(1,014,509)
Total equity		36,048,921	39,263,198

Statement of Changes in Equity

For the Year Ended 30 June 2018

2018	Accumulated Funds \$	Total \$
Balance at 1 July 2017	39,263,198	39,263,198
Total comprehensive loss for the year	(3,214,277)	(3,214,277)
Balance at 30 June 2018	36,048,921	36,048,921

2017	Accumulated Funds \$	Total \$
Balance at 1 July 2016	46,784,320	46,784,320
Total comprehensive loss for the year	(7,521,122)	(7,521,122)
Balance at 30 June 2017	39,263,198	39,263,198

Statement of Cash Flows

For the Year Ended 30 June 2018

Cash flows from operating activities:	Note	2018 \$	2017 \$
Receipts from statutory levies		20,466,144	19,035,961
Other receipts and recoveries		12,267,411	15,869,319
Payments to suppliers and employees		(35,652,145)	(43,950,367)
Interest received		1,291,305	1,462,614
Net cash used in operating activities		(1,627,285)	(7,582,473)
Cash flows from investing activities:			
Proceeds on disposal of property, plant and equipment		-	2,203
Payment for property, plant and equipment		(29,783)	(16,144)
Net cash used in investing activities		(29,783)	(13,941)
Cash flows from financing activities:			
Net cash provided by/(used in) financing activities		-	-
Net decrease in cash and cash equivalents held		(1,657,068)	(7,596,414)
Cash and cash equivalents at beginning of year		40,199,661	47,796,075
Cash and cash equivalents at end of financial year	8	38,542,593	40,199,661

Notes to the Financial Statements

For the Year Ended 30 June 2018

The financial report covers Australian Meat Processor Corporation Ltd ("the Company") as an individual entity. Australian Meat Processor Corporation Ltd is a Company limited by guarantee, incorporated and domiciled in Australia.

The financial report was authorised for issue by the Directors on 25 September 2018 2018.

1 Basis of Preparation

The financial statements are general purpose financial statements that have been prepared in accordance with the Australian Accounting Standards - Reduced Disclosure Requirements, Accounting Interpretations and other authoritative pronouncements of the Australian Accounting Standards Board (AASB) and the *Corporations Act 2001*.

The principal accounting policies adopted in the preparation of the financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

The financial report has been prepared under the historical cost convention, as modified by revaluations to fair value for certain classes of assets as described in the accounting policies.

New, revised or amended Accounting Standards and Interpretations adopted

The Company has adopted all of the new, revised or amending Accounting Standards and Interpretations issued by the Australian Accounting Standards Board that are mandatory for the current reporting period.

Any significant impact on the accounting policies of the Company from the adoption of these Accounting Standards and Interpretations are disclosed in the relevant accounting policy.

Any new or amended Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

2 Summary of Significant Accounting Policies

(a) Revenue

Revenue from Statutory Levies are recognised in the period that the Government collected the levy.

Other revenue is recognised when the right to receive the revenue has been established.

All revenue is stated net of the amount of Goods and Services Tax (GST).

(b) Intangible assets

Significant costs associated with software acquired separately are initially recorded at cost and are amortised on a straight-line basis over the period of their expected benefit, being three years.

(c) Plant and equipment

Each class of plant and equipment is carried at cost or fair value less, where applicable, any accumulated depreciation.

Plant and equipment is measured on the cost basis. The carrying amount of plant and equipment is reviewed annually by Directors to ensure it is not in excess of the recoverable amount from those assets. The recoverable amount is assessed on the basis of the expected net cash flows which will be received from the assets employment and subsequent disposal. The expected net cash flows have been discounted to present values in determining recoverable amounts.

Depreciation

The depreciable amount of all fixed assets is depreciated on a straight line basis over their estimated useful lives to the Company commencing from the time the asset is held ready for use.

The depreciation rates used for each class of assets are:

Fixed asset class	Depreciation rate
Furniture, Fixtures and Fittings - straight line	20%
Office Equipment - straight line	20 - 25%
Computer Equipment – straight line	40%

(d) Leases

Leases are classified at their inception as either operating or finance leases based on the economic substance of the agreement so as to reflect the risks and benefits incidental to ownership.

Finance leases

Leases of fixed assets, where substantially all the risks and benefits incidental to the ownership of the asset, but not the legal ownership, are transferred to the Company are classified as finance leases. Finance leases are capitalised by recording an asset and a liability at the lower of the amounts equal to the fair value of the leased property or the present value of the minimum lease payments, including any guaranteed residual values. Lease payments are allocated between the reduction of the lease liability and the lease interest expense for the period.

Operating leases

Lease payments for operating leases, where substantially all of the risks and benefits remain with the lessor, are charged as expenses in the periods in which they are incurred.

Lease incentives under operating leases are recognised as a liability. Lease payments received reduced the liability.

(e) Income Tax

The Company is exempt from income tax under the provisions of Section 50(40) of the *Australian Income Tax Assessment Act 1997*.

(f) Employee benefits

Short-term employee benefits

Liabilities arising in respect of wages and salaries, annual leave, sick leave and any other employee benefits expected to be settled within twelve months of the reporting date are measured at their nominal amounts based on remuneration rates which are expected to be paid when the liability is settled.

Long-term employee benefits

All other employee benefit liabilities are measured at the present value of the estimated future cash outflow to be made in respect of services provided by employees up to the reporting date.

Contributions made by the Company to an employee superannuation fund are recognised in the Statement of Financial Position as a liability, after deducting any contributions already paid and in the Statement of Comprehensive Income as an expense as they become payable. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payment is available.

(g) Impairment of non-financial assets

Non-financial assets with an indefinite useful life are not amortised but are tested annually for impairment in accordance with AASB 136. Assets subject to annual depreciation or amortisation are reviewed for impairment whenever events or circumstances arise that indicate that the carrying amount of the asset may be impaired. An impairment loss is recognised where the carrying amount of the asset exceeds its recoverable amount. The recoverable amount of an asset is defined as the higher of its fair value less costs to sell and value in use.

(h) Comparative Figures

Where required by Accounting Standards comparative figures have been adjusted to conform with changes in presentation for the current financial year.

(i) Financial instruments

Classification

The Company classifies its financial instruments in the following categories: financial assets at fair value through profit and loss, loans and receivables, held-to-maturity investments, and available-for-sale financial assets. The classification depends on the purpose for which the investments were acquired. Management determines the classification of its investments at initial recognition and re-evaluates this designation at each reporting date.

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2018

Held-to-maturity investments

Fixed term investments with an intention to be held to maturity are classified as held-to-maturity investments. They are measured at amortised cost using the effective interest rate method.

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are measured at fair value at inception and subsequently at amortised cost using the effective interest rate method.

Non-interest bearing loans and receivables are designated as receivable 'at call' and are therefore recognised at their face value at inception.

Financial liabilities

Financial liabilities include trade payables, other creditors and loans from third parties, including inter-Company balances and loans from, or other amounts due to, Director-related entities.

Non-derivative financial liabilities are recognised at amortised cost, comprising original debt less principal payments and amortisation.

Non-interest bearing loans and payables are payable on demand and are therefore recognised at their face value at inception.

(j) Investment in AUS-MEAT Limited

AUS-MEAT Limited ('AUS-MEAT') was incorporated on 17 June 1998, and the Company is one of two Members of AUS-MEAT. As AUS-MEAT is a tax-exempt public Company limited by guarantee, it cannot distribute its surpluses to its Members; however, upon the event of the wind up of AUS-MEAT, the entity would be entitled to receive 50% of the net assets of AUS-MEAT. As there is no right by the entity to participate in a share of the ongoing results of AUS-MEAT, the use of equity accounting is not appropriate. Therefore, the equity accounting requirements of AASB 128 have not been applied. Details of the investment in AUS-MEAT are included in Note 19 to the financial statements.

(k) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term and highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash, which are subject to an insignificant risk of change in value.

(l) Trade and other receivables

Trade and other receivables are recorded at amounts due less any allowance for doubtful debts.

(m) Trade and other payables

Trade and other payables are recognised when the entity becomes obliged to make future payments resulting from the purchase of goods and services provided to the Company prior to the end of the financial year and which are unpaid.

(n) Provisions

Provisions are recognised when the Company has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result, and that outflow can be reliably measured.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, the receivable is recognised as an asset if it is probable that recovery will be received, and the amount of the receivable can be measured reliably.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at reporting date, taking into account the risks and uncertainties surrounding the obligation. Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows.

(o) Plant Initiated Projects (PIP) Program

Statutory Levies

Of the total levies received during the financial year, 25 percent is available to support Research & Development programs initiated by Members through the Plant Initiated Projects program.

Liability

The amount recognised as a liability for plant-initiated research & development projects is the amount of the reserved contributions that have been allocated to approved projects. The liability is treated as a payable under trade and other payables in the financial statements.

Plant initiated projects with funding allocations are considered to be active until the Member notifies AMPC of completion or termination, at which point AMPC will derecognise the project liability and write back any remaining funds belonging to the project.

(p) Goods and services tax (GST)

Revenue, expenses and assets are recognised net of the amount of goods and services tax (GST), except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). In these circumstances, the GST is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of GST. The net amount of GST recoverable from, or payable to, the ATO is included as a current asset or liability in the statement of financial position.

Cash flows in the statement of cash flows are included on a gross basis and the GST component of cash flows arising from investing and financing activities which is recoverable from, or payable to, the taxation authority is classified as operating cash flows.

(q) Current and non-current classification

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

3 Critical Accounting Estimates and Judgments

Estimates and judgements are based on past performance and management's expectation for the future.

The Company makes certain estimates and assumptions concerning the future, which, by definition, will seldom represent actual results. No estimates and assumptions could have a material impact on the assets and liabilities in the next financial year, other than those disclosed elsewhere in the financial report.

4 Revenue

	Revenue from operations	
	2018 \$	2017 \$
- statutory levies	18,918,619	17,210,026
- interest received	1,019,118	1,245,731
- reversal of non-aligned provisions	-	289,056
- government matching and other income	5,045,402	6,180,078
Total revenue	24,983,139	24,924,891

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2018

5 Deficit for the Year

Deficit for the year has been determined after:

	2018 \$	2017 \$
Expenses:		
Depreciation of non-current assets:		
- furniture, fixtures and fittings	33,078	33,078
- office equipment	(420)	4,701
- computer equipment	15,933	15,709
Depreciation of plant and equipment	48,591	53,488
Amortisation of intangible assets	112,122	168,182

6 Auditors' Remuneration

- audit and review services	40,000	42,479
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7 Key Management Personnel Compensation

The totals of remuneration paid to the key management personnel of Australian Meat Processor Corporation Ltd during the year are as follows:

Directors		
Short-term benefits (Directors Fees)	303,432	316,332
Post-Directorship benefits (Superannuation)	28,826	31,842
	332,258	348,174
Executives		
Short-term employee benefits (Salary)	330,384	364,319
Post-employment benefits (Superannuation)	19,616	22,771
	350,000	387,090

The names of Directors who have held office during the year (and included as key personnel in addition to the CEO) are:

P G Noble	G F Hardwick	C G Ainsworth	J K Berry
J A Campbell	D Goode	R B James	T J Maguire
S R Stahl	B Rathie	L Heywood	M Fletcher
P Gleeson			

Other Key Management Personnel include:
P Rizzo (CEO)

Total aggregated out of pocket costs including travel and related expenses incurred by Directors during the year was \$33,279.

8 Cash and Cash Equivalents

	2018 \$	2017 \$
Cash at bank	3,542,593	5,035,460
Cash on term deposit	35,000,000	35,164,201
	38,542,593	40,199,661

9 Trade and Other Receivables

Current

Trade receivables	3,865,164	4,994,358
Other receivables	1,165,923	1,094,196
	5,031,087	6,088,554

10 Other Assets

Current

Prepaid expenses	56,423	10,722
Cash on term deposit for bank guarantee*	113,556	113,556
	169,979	124,278

*The \$113,556 term deposit for bank guarantee is not available for use.

11 Plant and Equipment

	2018 \$	2017 \$
Non-current		
Office equipment		
At cost	30,778	26,166
Less accumulated depreciation	(23,867)	(24,287)
	6,911	1,879
Furniture, fixtures and fittings		
At cost	165,389	165,389
Less accumulated depreciation	(154,959)	(121,881)
	10,430	43,508
Computer equipment		
At cost	115,466	90,295
Less accumulated depreciation	(89,470)	(73,537)
	25,996	16,758
Total plant and equipment	43,337	62,145

Movements in carrying amounts of plant and equipment

Movement in the carrying amounts for each class of plant and equipment between the beginning and the end of the current financial year:

	Furniture, Fixtures and Fittings \$	Office Equipment \$	Computer Equipment \$	Total \$
Year ended 30 June 2018				
Balance at the beginning of year	43,508	1,879	16,758	62,145
Additions	-	4,612	25,171	29,783
Depreciation expense	(33,078)	420	(15,933)	(48,591)
Balance at the end of the year	10,430	6,911	25,995	43,337

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2018

12 Intangible Assets

		2018 \$	2017 \$
Non-current			
Software - at cost		420,456	420,456
Less accumulated amortisation		(420,456)	(308,334)
		-	112,122
Movements in carrying amounts of intangible assets			
	Note		
Balance at the beginning of the year		112,122	280,304
Amortisation		(112,122)	(168,182)
Carrying amount at the end of the year		-	112,122

13 Trade and Other Payables

Current

Unsecured liabilities

Trade payables		1,301,668	1,012,784
Plant initiated projects	15	578,814	324,765
Other program payables		5,591,458	5,848,449
Sundry payables and accrued expenses		125,185	65,051
		7,597,125	7,251,049

14 Provisions

Current

Employee benefits		98,374	50,923
Non-current			
Employee benefits		42,576	21,590

15 Plant Initiated Projects liability

Current

Opening balance included in payables		324,765	481,745
Total PIP transactions approved across the whole membership		3,325,700	4,847,634
Reductions arising from payments of approved PIPs		(3,001,426)	(4,715,558)
Reductions resulting from reversal of PIP funding		(70,225)	(289,056)
	13	578,814	324,765

16 Related Party Disclosure

Transactions with related parties

Transactions between related parties are on normal commercial terms and conditions no more favourable than those available to other parties unless otherwise stated.

	2018 \$	2017 \$
Operational and support funding to AUS-MEAT Limited	550,000	550,000
Project funding to AUS-MEAT Limited	223,560	-

Director related Plant Initiated Projects

During the period AMPC has approved PIP's for a number of Director-related entities under the PIP program. Under the Company's Constitution, all transactions with Director related entities are on normal commercial terms and are consistent with those provided to all Members.

The following table provides a breakdown of the movement and final balance of PIPs of Director related parties.

Transaction Value Balance Outstanding

	2018 \$	2017 \$	2018 \$	2017 \$
Plant Initiated Projects	2,539,889	3,694,916	292,286	111,656

17 Members' Guarantee

The Company is incorporated under the Corporations Act 2001 and is a Company limited by guarantee. If the Company is wound up, the constitution states that each member is required to contribute a maximum of \$100 each towards meeting any outstandings and obligations of the Company.

18 Economic Dependence

In its role as the red meat processor research and development body and red meat processor marketing body under the Australian Meat and Live-stock Act 1997, the company is charged with the management and application of levy funds collected from red meat processors by the Commonwealth Government. The expenditure of levies on behalf of industry is conducted in accordance with the Funding Agreement between AMPC and the Department of Agriculture and Water Resources. During the financial year AMPC became party to a new Funding Agreement covering the period 2016 to 2020.

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2018

19 Associated Entities

	Principal activity	Percentage Owned (%)* 2018	Percentage Owned (%)* 2017
AUS-MEAT Limited	Services to the Food Industry	50	50

Summarised financial position of associate:	2018 \$	2017 \$
Current assets		
Cash	1,784,780	1,052,774
Receivables	1,742,073	1,542,152
Other financial assets	6,287,084	6,487,383
Other	932,090	767,780
Non-current assets		
Plant and equipment	3,361,125	3,301,622
Current liabilities		
Accounts payable	(3,524,220)	(3,256,065)
Deferred revenue	(210,000)	(210,000)
Non-current liabilities		
Provisions	191,784	(203,529)
Net assets	10,181,148	9,482,117
Net surplus for the period	699,030	293,833
Other comprehensive income	-	-

20 Accumulated funds

(a) Pre-Statutory funds

The pre-Statutory funds records the Company's retained surpluses prior to the Statutory Funding Agreement which commenced 1 September 2007:

Movements during the financial year:

	2018 \$	2017 \$
Opening balance	6,557,627	6,354,809
Allocation of current year surplus	190,844	202,818
	6,748,471	6,557,627

(b) Statutory Research and Development funds

The Research and Development funds record surpluses contributed by the Research and Development portion of the processor Levy in accordance with the Statutory Funding Agreement 2016-20:

Movements during the financial year:

	2018 \$	2017 \$
Opening balance	33,720,080	43,907,060
Allocation of current year surplus	(13,022,242)	(10,186,980)
	20,697,838	33,720,080

(c) Statutory Marketing funds*

The Marketing funds records surpluses contributed by the Marketing portion of the processor Levy in accordance with the Statutory Funding Agreement 2016-20:

Movements during the financial year:

Opening balance	(1,014,509)	(3,477,549)
Allocation of current year deficit	9,617,121	2,463,040
	8,602,612	(1,014,509)

*The prior year deficit occurred on the basis of the misalignment in the income split and expenditure split between Research and Marketing funding allocations. The split in allocation of funding between Marketing and Research has been modified for an 18-month period beginning on 1 January 2017 where 100% of levies were allocated to Marketing. From 1 July 2018 the split between Marketing and Research will be 40% and 60% respectively.

21 Contingencies

Contingent Liabilities

Australian Meat Processor Corporation Ltd had the following contingent liabilities at the end of the reporting period:

The 25 percent of received levies allocated to the Plant Initiated Projects (PIP) program remains available for three years, after which the commitment lapses. As at 30 June 2018, the total Research and Development funds held in reserve for potential PIPs is \$5.2M (30 June 2017: \$5.14M).

Contingent Assets

There were no contingent assets identified as at 30 June 2018.

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2018

22 Operating leases

	2018 \$	2017 \$
Non-cancellable operating lease rentals are payable as follows:		
- not later than one year	59,352	116,727
- between one year and five years	-	59,352
	59,352	176,079

The company leases the head office under an operating lease. The lease is for a period of five years commencing 1st September 2013 and will cease in October 2018. The Company has recognised a provision of \$40,000 as at 30 June 2018 to restore the premises to the original condition. During the year ended 30 June 2018 an amount of \$142,845 was recognised as an expense in respect of operating leases (2017: \$133,300).

23 Events after the end of the Reporting Period

Subsequent to year end the Company has signed a lease for a new premise commencing in November 2018 for five years. On 24 August 2018 the Company entered into an agreement for the capital fit-out of the new office space. The contract value is \$168,387 which is expected to be fully incurred by 31 October 2018. Other than this, no matters or circumstances have arisen since the end of the financial year which significantly affected or may significantly affect the operations of the Company, the results of those operations or the state of affairs of the Company in future financial years.

24 Statutory Information

The registered office of the Company is:

Australian Meat Processor Corporation Ltd
Suite 1, Level 5
110 Walker Street
North Sydney NSW 2060

Directors' declaration

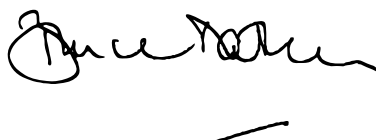
The directors of the Company declare that:

1. The financial statements and notes, as set out on pages 82 to 112, are in accordance with the *Corporations Act 2001* and:
 - a. comply with Australian Accounting Standards Reduced Disclosure Requirements and the *Corporations Regulations 2001*; and
 - b. give a true and fair view of the financial position as at 30 June 2018 and of the performance for the year ended on that date of the Company.
2. In the directors' opinion, there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of the Board of Directors.



Director:
John Berry



Director:
Bruce Rathie

Dated 25 September 2018

Independent Auditor's Report to the Members of Australian Meat Processor Corporation Limited

Report on the Audit of the Financial Report

Opinion

We have audited the financial report of Australian Meat Processor Corporation Limited (the company), which comprises the statement of financial position as at 30 June 2018, the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the company is in accordance with the *Corporations Act 2001*, including:

- i) giving a true and fair view of the company's financial position as at 30 June 2018 and of its financial performance for the year then ended; and
- ii) complying with Australian Accounting Standards - Reduced Disclosure Requirements and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the 'auditor's responsibilities for the audit of the financial report' section of our report. We are independent of the company in accordance with the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We confirm that the independence declaration required by the *Corporations Act 2001*, which has been given to the directors of the company, would be in the same terms if given to the directors as at the time of this auditor's report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information

The directors are responsible for the other information. The other information comprises the information in Australian Meat Processor Corporation Limited's annual report for the year ended 30 June 2018, but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of the other information we are required to report that fact. We have nothing to report in this regard.

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Directors' responsibility for the financial report

The directors of the company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards - Reduced Disclosure Requirements and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibility for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at The Australian Auditing and Assurance Standards Board website at: www.auasb.gov.au/auditors_files/ar4.pdf. This description forms part of our auditor's report.



Nexia Sydney Partnership



Lester Wills
Partner

Dated: 25 September 2018
Sydney

Appendix





Appendix

Priorities from page 30

In addition to our members' priorities, we have other frameworks to guide the selection and delivery of our RD&E portfolio. The Meat Industry Strategic Plan (MISP) provides the overarching strategic priorities of the red meat industry, and the Australian Government has provided both a set of Rural R&D priorities and a set of National Science and Research Priorities.

The Meat Industry Strategic Plan 2020

The Meat Industry Strategic Plan (MISP) is comprised of four pillars: Consumer and Community Support, Market Growth and Diversification, Supply Chain Efficiency and Integrity, and Productivity and Profitability.

These four pillars are reflected in AMPC's Core and Joint projects. These projects seek to cultivate and reinforce community support by demonstrating industry's investment in environmental and corporate responsibility, and our commitment to best practice in animal welfare. They provide data to inform policy efforts to unlock new markets and increase market access in existing ones, promoting the value and quality of Australian red meat.

They facilitate supply chain collaboration, optimising product quality and integrity, and investigate ways that new technologies and productivity measures can increase processing efficiencies, helping to ensure that Australia's red meat processing sector has a strong, sustainable future.

Rural RD&E priorities

The Australian Government has developed a set of rural RD&E priorities focusing on rural investment areas with a high need for funding. These are:

Advanced technology

Enhance innovation of products, processes and practices across the food and fibre supply chains through technologies such as robotics, digitisation, big data, genetics and precision agriculture.

Soil, water and natural resources

Manage soil health, improve water use efficiency and certainty of supply, sustainably develop new production areas and improve resilience to climate events and impacts.

Biosecurity

Improve understanding and evidence of pest and disease pathways to help direct biosecurity resources, minimising biosecurity threats and improving market access for primary producers.

Adoption of RD&E

Focus on flexible delivery of extension services that meet primary producers' needs and recognise the growing role of private service delivery.

National science and research priorities

In May 2015, the Australian Government announced a set of nine science and research priorities designed to increase investments in areas of immediate and critical importance to the nation. The priorities are neither exclusive nor exhaustive. AMPC strives to align its RD&E portfolio with the research priorities by sharing objectives and aiming for corresponding outcomes.

Food

Develop internationally competitive, sustainable, profitable, high-intensity and high-production capacity in new and existing food products and maintain Australia's reputation for clean, safe and quality-controlled food production.

Soil and water

Focus on Australia's critical soil and water assets, build capacity for improved accuracy and precision in predicting change to enable better decision-making.

Transport

Develop low-cost, reliable, resilient and efficient transport systems that respond to Australia's changing urban, regional and remote communities and meet business needs.

Cybersecurity

Position Australia as a leader in cutting-edge cybersecurity research and innovation to safeguard the country's security, enhance resilience and enable economic growth.

Energy

Enable the Australian energy sector to improve efficiency and reduce emissions, integrate diverse energy sources into the electricity grid and, as a result, create jobs, growth and export opportunities.

Resources

Support the exploration of traditional resources, rare earth elements and groundwater, and develop new technologies and knowledge to allow safe, environmentally sensitive and economically viable resource extraction.

Advanced manufacturing

Develop and support existing industries while enabling the development of a new and advanced manufacturing sector.

Environmental change

Build Australia's capacity to respond to environmental change and integrate research outcomes from biological, physical, social and economic systems.

Health

Build healthy and resilient communities throughout Australia by developing treatments, solutions and preventative strategies to improve physical and mental well-being and improve the efficiency and effectiveness of Australia's health care system.



AUSTRALIAN MEAT PROCESSOR CORPORATION (AMPC)

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