AMPC

AUSTRALIAN MEAT PROCESSOR CORPORATION

Delivering sustainable value

Annual Report 2018–2019


TRAMONTINA

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.

Contents

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

Introduction

AMPC delivers value to processors through authentic partnerships with members, providing innovative, sustainable solutions across priorities including: labour, energy, market access, water and waste, animal welfare and advanced technology.

Our people work with the members to conduct research and development (R&D) activities with a view to ensuring the sustainability of Australia's processing industry. Our activities include:

- Investing in a portfolio of R&D on behalf of our members to ensure profitability and sustainability; and extending innovation to members and industry
- Member education, training and information sessions across industry issues and opportunities, including the provision of publications and resources
- Tailored R&D plans for individual member businesses
- Working with the processor peak body, the Australian Meat Industry Council (AMIC) and Government evidencing the value of the processing sector to help inform policy, discussions and direction
- Communicating the value of the meat processing sector to enhance the reputation and understanding of the great work processors do

As the research, development and marketing service provider for Australian processors, AMPC runs programs of activity that are funded by processor levy payers, private contributions and the Australian Government.

We engage leading research organisations and fund joint activities with our value-chain partner Meat & Livestock Australia (MLA) to address the priorities of the processing sector and its stakeholders.

Throughout this document the term R&D is used to include 'extension' and other activities that contribute to the transfer of knowledge and the adoption of new technology and innovation.

Our purpose

Enable Australia to build the most sustainable processing industry

Our vision

To become a highly regarded, world-class provider of R&D playing a vital role in influencing and growing the competitiveness of the Australian processing sector

Our values

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

From the Chairman

As Chairman of the Australian Meat Processor Corporation (AMPC), I am pleased to present the 2018–19 Annual Report. It has been a significant year for the corporation, a year marked by organisational change and ultimately a year that has highlighted why strong and well-focused R&D, innovation and policy formulation, especially around cost and regulation, is so important for the competitiveness of the Australian Meat Processing Sector.

Australian red meat has established an enviable place in the international marketplace, and we are largely export dependent, with approximately 70% of production going offshore. While our product is recognised as premium, safe and of superior eating quality, Australian Meat Processors have a high cost to operate compared to our international competitors.

In 2018–19, the AMPC operations have been aligned to ensure that through its engagement with members our focus is on delivering responses which improve cost to operate and competitiveness either at a member company level or as the Australian Processing Industry as a whole.

Cost to Operate (CTO) report

In 2018, research undertaken by AMPC highlighted the highly competitive nature of meat processing and the animal protein sector across the world. The project compared the regulatory and related costs of the premier beef exporting nations of Brazil, USA and Argentina with Australia and revealed some remarkable cost disparities. The data in the final report highlighted that Australian processors are operating with significant cost disadvantage, particularly with respect to regulated costs.

Of the costs incurred, it is estimated that in Australia more than 54% (excluding livestock purchases) are due to some form of regulation. Across the spectrum of regulatory and certification costs Australia's costs are estimated to be twice that of the United States and Argentina, and more than three times that of Brazil.

The CTO report is an important tool to inform processors and the peak industry body the Australian Meat Industry Council (AMIC), which has worked to bring the opportunities and threats identified in the report to the attention of Federal and State governments. In this climate of strong international competitiveness, it is imperative that we continue to provide balanced and empirical research combined with strong and effective advocacy through AMIC and our membership to address regulatory and cost barriers and improve competitiveness.

“R&D has a proven role in driving long-term productivity, growth and sustainability.

“Supporting a competitive and profitable Australian Meat Processing Sector is the major goal of AMPC.”

Member-focused value

R&D has a proven role in driving long-term productivity, growth and sustainability. AMPC commissions independent evaluations of its research projects to demonstrate the benefits and outcomes that have emerged or are likely to emerge from investments. For 2018–19 this assessment revealed the average cost benefit ratio across the projects examined to be 8:1, or for every dollar invested by levy-payers, a return of $8 benefit to processors, the community and the environment.

In 2019–20, AMPC will continue to develop the range of services it provides and will be in active consultation around specific R&D and innovation programs for each Company member.

Organisational change

Before the end of the 2018–19 financial year, Peter Rizzo, who served as the AMPC CEO for two years, resigned from the business. While his departure was unexpected, the Board had the opportunity to revisit the operational structure of the organisation.

On 1 October 2019, the Board announced Chris Taylor was appointed as Executive General Manager. Mr Taylor had been acting in the role and was the company’s Chief Financial Officer since 2016. I look forward to working with Chris over the year ahead.

Board business

Ensuring the right mix of skills and experience on our Board is important to the effective governance of the company. During 2018–19, the AMPC Board undertook an independent assessment of skills in accordance with our Funding Agreement with the Commonwealth Government. The assessment found that all the skills required under the Funding Agreement and our constitution were demonstrated across the current mix of Processor and Special Qualifications Directors.

Supporting a competitive and profitable Australian Meat Processing Sector is the major goal of AMPC. Changing climatic conditions, fluctuating livestock supply and variable sell markets pose challenges processors cannot control. However, we can control what happens in our individual processing operations. AMPC will continue to work actively with its levy-paying members to ensure value for money and direct benefits from the AMPC programs and resources.

It is important for the processor levy payers to ensure they control and direct R&D and Policy development on behalf of their sector and that this work contributes to an internationally competitive Australian Meat Processing Industry.

As Chairman of AMPC, I look to levy-payer members to actively engage and provide feedback to myself and the AMPC executive on areas where we can improve and develop to create value.

John K Berry
Chairman

Highlights

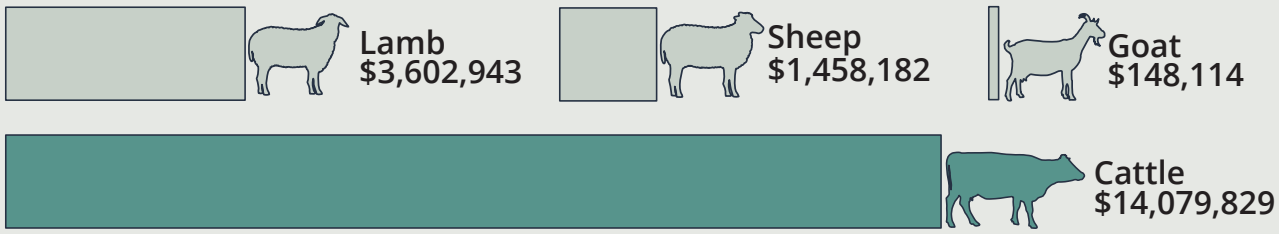
Levy Income

$19m
2018-19

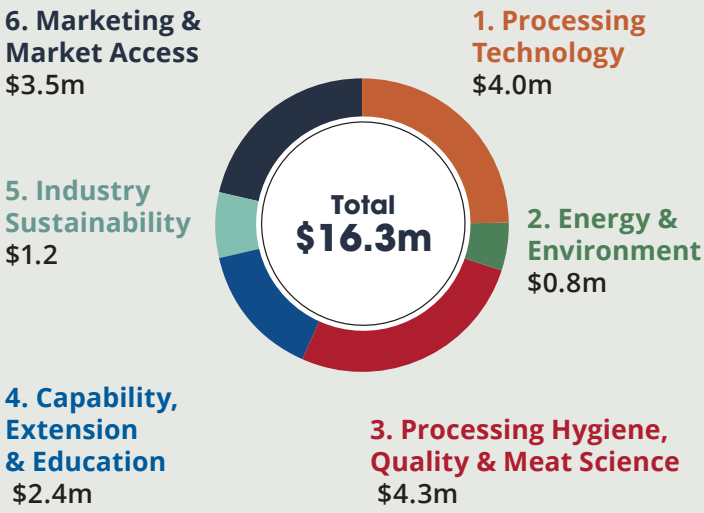
Evaluated project performance

8:1 benefit to cost ratio

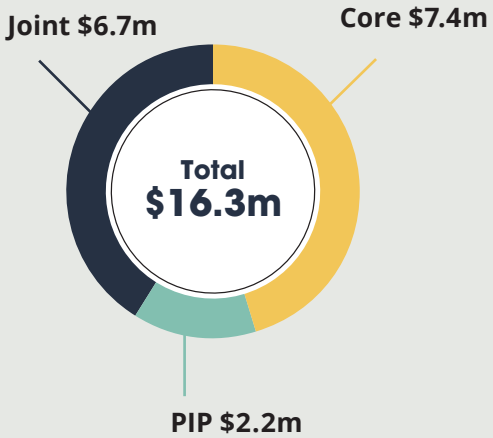
Levy income by species



Expenditure by Program



Expenditure by Type



Reserves

$38m
Levy reserves

MLA Joint programs attracted

35% of levy income

Member engagement

32

member plant visits

21

member PIPs committed

45

Core projects completed worth $9.8m

44

processors participated in R&D

Costs to operate*

Combined cost per head (labour + utilities + certification related costs)

24%
higher than in the United States

Over 2x
the costs of Brazil

75%
higher than in Argentina

54%
of costs are due to regulatory burden

Which is 2x
that of the United States

3x
that of Brazil

2x
that of Argentina

Labour

Labor-related costs comprise over

58%
of total operating costs

* According to the AMPC Cost To Operate (CTO) report.

Our Performance 2018-19

In 2018–19 we evaluated:

3 projects

from the programs:

- 1. Processing Technologies;
- 3. Processing Hygiene, Quality & Meat Science; and
- 5. Industry Improvement & Economic Analysis.

worth

$1.41 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

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 economic evaluations on recently completed projects to support a systematic and objective approach to R&D 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

Evaluating project performance

R&D has a proven role in driving long-term productivity, growth and sustainability. AMPC commissions independent evaluations of its research projects to demonstrate the benefits and outcomes that have emerged or are likely to emerge from investments. For 2018-19 this assessment revealed the average benefit to cost ratio across the projects examined to be 8:1, or for every dollar invested by levy-payers, a return of $8 benefit to processors, the community and the environment.

8:1
average benefit to cost ratio

1 Processing Technologies

Project One

(2018-1112) Scoping processor requirements in beef cutting control, yield data traceability, robotics, automation and structured manual cutting and handling

Investment Performance Criteria

$616k	3.35	64%
Net present value	Benefit cost ratio	Internal rate of return

Project description

The Australian beef industry has specific requirements for planning automation and robotics integrated with traceability of information in the value chain. This project reviewed current practices to evaluate and quantify processor requirements, as automation technology is now reaching maturity for many meat industry applications and there are now commercial and cost-effective solutions available.

Additional unquantified benefits:

- Improved yield, quality and reduced labour costs.
- Potential for improved plant efficiency via reduced energy and resource use.
- Improved worker safety and product hygiene.

3 Processing Hygiene, Quality & Meat Science

Project Two

(2018-1070) Process monitoring for the Australian meat industry – a comparative industry trial

Investment Performance Criteria

$6.3m	7.00	16%
Net present value	Benefit cost ratio	Internal rate of return

Project description

This project tested the utility of the proposed 'traffic light' product hygiene index (PHI) system through a comprehensive industry trial involving 12 establishments from the beef, sheep/lamb and pig sectors. Outcomes for the industry include reduced costs for compliance, microbiological testing and Meat Hygiene Assessment.

Additional unquantified benefits:

- Reduced resources required to conduct carcass microbiological monitoring.
- Potentially improved food safety leading to reduced risk to hygiene.
- Human health.

5 Industry Improvement & Economic Analysis

Project Three

(2018-1039) Providing feedback to producers – what value for the processors

Investment Performance Criteria

$2.9m	31.18	62%
Net present value	Benefit cost ratio	Internal rate of return

Project description

This project reviewed five existing models of producer feedback particularly focusing on the returns and benefits to processors of each model (i.e. improved carcase yield). A simplified model for small and medium-sized processors was developed and trialled for the collection and analysis of data and provision of feedback to producers. Priority was given to those areas of feedback most likely to generate a return for processors.

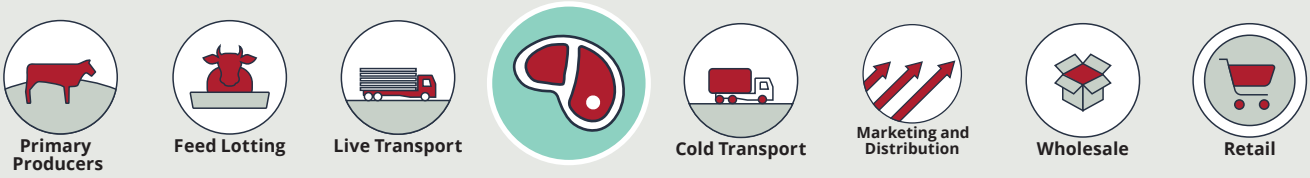
Additional unquantified benefits:

- Improved efficiency of production and reduced waste.
- Improved producer engagement.
- Improved animal welfare outcomes via reduced animal health impacts.

It should be noted that the average benefit to cost ratio calculated across the selected sample can vary significantly year-on-year.

Our members

Our members and industry



Process $11.9 billion
in exports per year

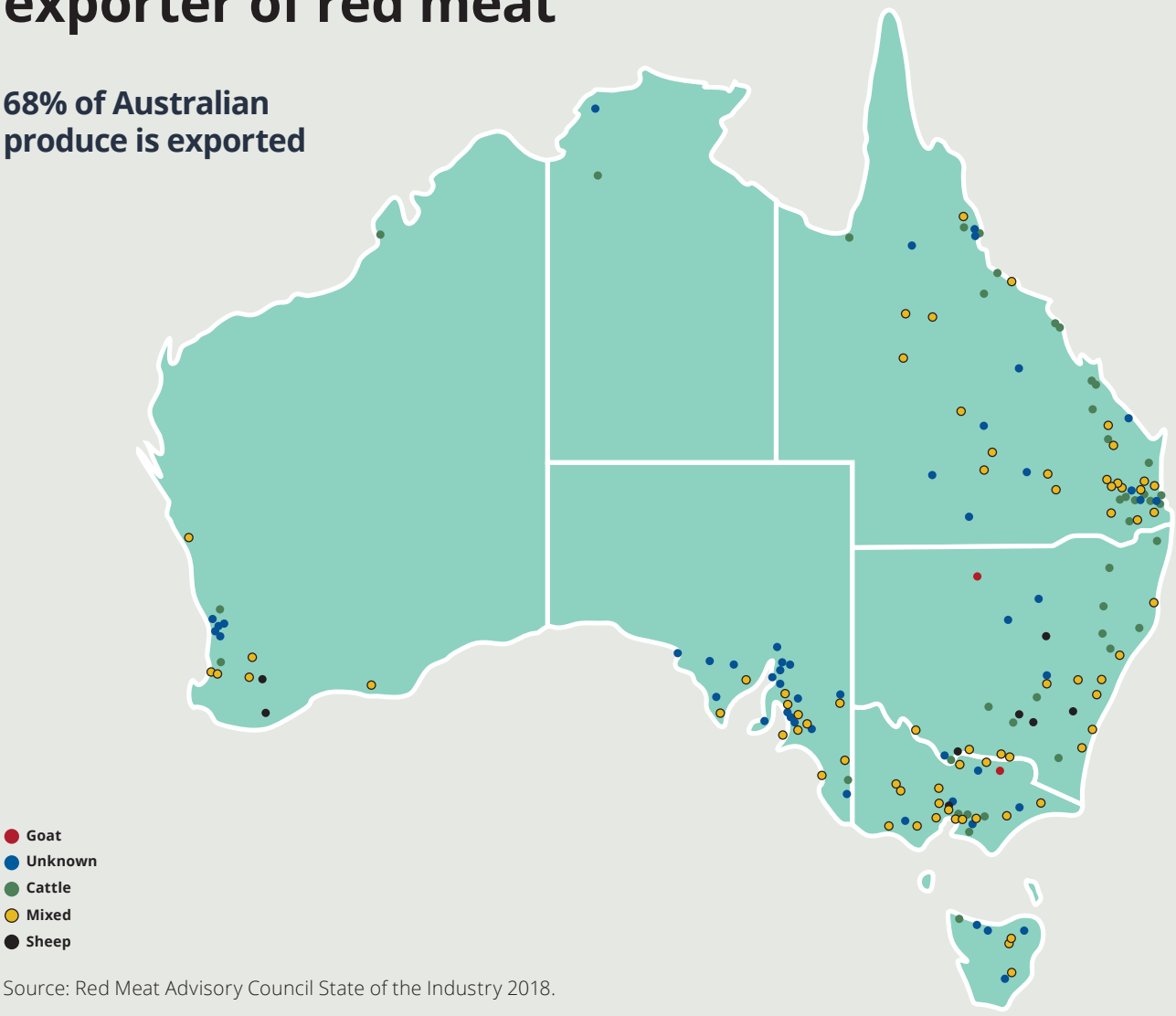
Contribute $18.4 billion
to Australia's GDP per year (including flow-on effects)

Employ 29,800 people
Comprising the second-largest employer in the Australian meat industry by sector

Generate 2.4 additional indirect jobs
for every person employed by processing

The world's second-largest exporter of red meat

68% of Australian produce is exported

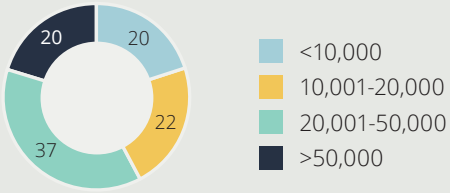


Source: Red Meat Advisory Council State of the Industry 2018.

Geographically diverse

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

Member community population (%)

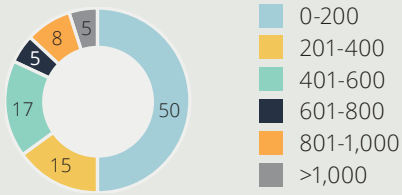


Source: ABS. Stat, AMPC. Measured by local government area (LGA).

Significant employers

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

Member employees (%)

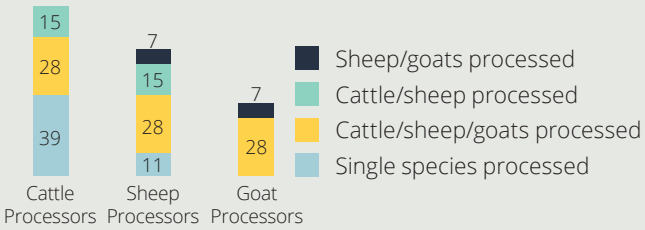


Source: AMPC. Data based on 78 members (53%) for whom data is available, accounting for 92% of total industry employees.

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.

Members by primary species processed (%)



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

AMPC members

Operate

129

processing facilities across Australia (AMPC)

across

101

companies (AMPC)

Process over

80%

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

Represent more than

90%

of red meat processing employment (AMPC, MLA)

Providing

100

career path options (AMPC)

AMPC member issues

These 10 issues identified through member engagement in 2018 provide a framework which informs the process of R&D portfolio development. In 2018-19 AMPC continued to evaluate and discuss the priority of these issues with members so that R&D alignment responds to current and emerging needs of the membership.

01
Labour

Our people are one of the most critical components in meat processing. Training, development, leadership, workforce planning, labour supply variations and health and safety are among many facets critical to building a sustainable industry.

02
Energy

Rising energy costs have a significant impact on the industry. Industry focus remains on the return on investment for energy-efficient options, researching best practice and engaging service providers to assist in transitioning to alternate models.

03
Market access

Broad and efficient access to global markets keeps our industry alive. Our members have called for a united voice through which to lobby government to ease regulatory burden, provide better markets and improve collaborative efforts for sustainable solutions in existing and new markets.

04
Water and waste

The industry is a significant consumer and producer of water, primarily to ensure food safety and hygiene during operations. Drought, price increases and resulting water restrictions have put enormous pressure on processing plants to respond to the challenge and reduce water consumption.

05
Technology, automation and productivity

Complexities around technology, automation and productivity stem from variations to inputs in meat processing. Industry calls for a better understanding of the impacts of technology across the supply chain and models to improve costs and competitiveness.

06
Regulatory burden, industrial relations & compliance

The high cost of regulatory compliance including export certification, hygiene, workplace health and safety, industrial relations, and environmental and building compliance, impact on the competitiveness of the processing industry.

07
Packaging

Certification costs include food safety; labelling requirements; community expectations of environmentally sustainable, biodegradable and recyclable materials; high cost of adhering to the differing requirements of export markets; and lack of understanding of consumer needs and preferences at the processing level.

08
Herd levels

Volatility in Australian cattle herd levels, combined with rising infrastructure, grain and feed supply, pest management, transportation costs, and impact on processing capacity and costs.

09
Consumer trends and education

Increased competition from cheaper alternative proteins and a meat-free agenda, increased consumer expectations of provenance attributes such as traceability, sustainability and animal welfare, and negative messaging regarding detrimental effect of red meat on health.

10
Animal welfare and social licence to operate

Threat to social licence to operate and reputational risk, lack of a clear, industry-wide approach to risk management and better livestock welfare outcomes, and need for community education programs to combat poor perceptions of industry.

How we work

Our R&D portfolio

Delivering a balanced program portfolio requires strong consultation and collaboration with members and industry stakeholders to maximise value returned to levy payers.

Budget allocation

In 2018–19 a high level strategic budget has been allocated guided by our members' Top 10 issues framework, to ensure projects deliver value against their priorities.

Core activities attracted $7.4 million of funding for the year, which includes new and existing commitments. In 2018–19 core activities represented 46% of allocated funding.

In 2018–19 the member-led Plant Initiated Projects attracted $2.2 million of budget contribution to projects targeted towards on-plant adoption of R&D outputs.

Joint activities co-funded and managed by value chain partner MLA attracted $6.7 million, representing 35% of total levy income.

Portfolio development process

Annually, AMPC engages with its members and follows a strategic process to develop its portfolio through:

- In-depth, ongoing consultation with members, research providers and key stakeholders;
- Structured R&D plans to address key priorities;
- Ongoing ideation and commencement of projects throughout the year; and
- Engagement of project champions where appropriate.

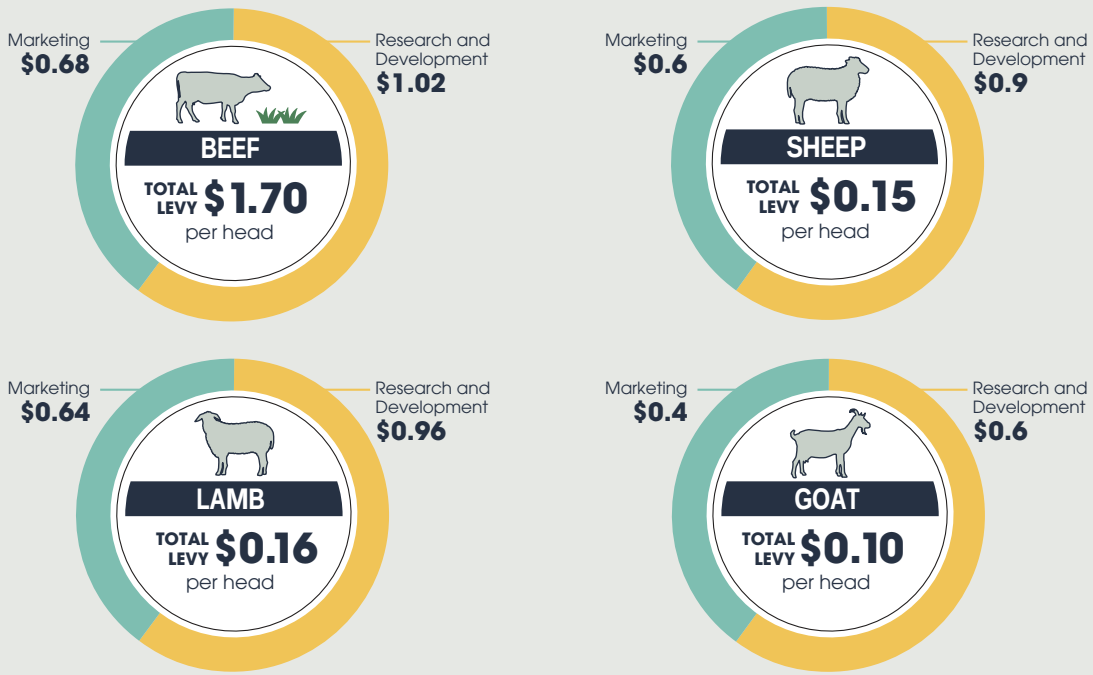
This approach ensures our portfolio is positioned to deliver value for members.

Balanced portfolio

The following factors are considered when building and reviewing our program portfolio:

- **Alignment:** to member, industry and government priorities
- **Participation:** opportunities for industry collaboration and participation in trials/tests
- **Adoption:** opportunities for practical outputs for processors
- **Gaps:** opportunities not yet addressed by the existing research
- **Continuance:** building on previous R&D activities and avoiding duplication

Beef Production and Livestock Slaughter Levies (per head)



- **Duration:** short, medium and longer-term priorities
- **Horizon:** adjacent, incremental and transformational projects
- **Risk:** technical, provider, financial risks and mitigation activities
- **Outcomes:** extent of industry return on AMPC's research investment.

Projects are allocated based on capability, funding capacity, and the extent to which stakeholder returns can be maximised at both industry and individual member levels.

Project types

Core

Core projects, divided into six programs, address key issues facing processors 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 (PIP)

Plant Initiated Projects (PIP) enable processors to identify and undertake R&D projects that generate whole-of-industry benefits by trialling and adopting new technologies at operating plants. These efforts are supported by private investment in industry R&D 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.

Programs

1 Processing Technologies

4 Capability, Extension & Education

2 Environment & Sustainability

5 Industry Improvement & Economic Analysis

3 Processing Hygiene, Quality & Meat Science

6 Marketing & Market Access

Whole-of-industry consultation

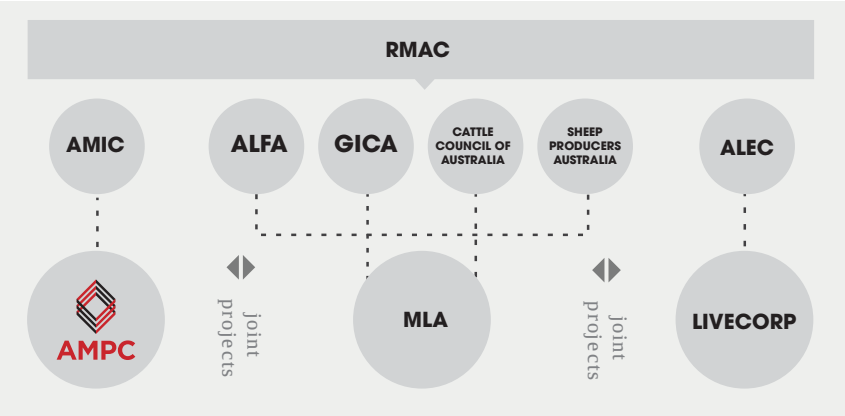
Key stakeholder collaboration

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 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 R&D 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 its 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 R&D investments in the industry, contributing to AMPC's strong track record of facilitating processor adoption of R&D 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.

Industry collaboration

Governments

State, Federal and local governments

How we work with them

Statutory Funding Agreement
Senate estimates/inquiries
Using independent reporting to engage
State sector for international audits (Food Safety)
Cross-sector research initiatives
Food safety regulations

Industry bodies

AMIC, RMAC, CCA, SPA, ALFA

How we work with them

General correspondence
Regular meetings and Statutory Funding Agreement
Cross-sector collaboration for innovation
Provide research for lobbying to government

Producers

Farmers

How we work with them

Training courses
Joint projects
Cross-sector research initiatives

Communities

Places where our members operate

How we work with them

Promotional activities and campaigns
Training and education programs
Scholarships
Economic significance demonstrations

Members

Representatives for over 90% of Australia's red meat processing capacity

How we work with them

Face-to-face site visits
Plant Initiated Projects
Industry steering committees
Member consultation on levy funding investment and portfolio development, plant trials and testing

Research partners

Universities and research institutions

How we work with them

Facilitation of research provider and member interactions
Develop research projects and programs
Day-to-day management of project deliverables
Help extend research through presentations, publishable reports
Publication in research journals
Cross-sector research initiatives

Service providers

Meat & Livestock Australia

How we work with them

Plant Initiated Projects Program (PIP)
Joint programs
Cross-sector collaboration for innovation
Development programs
Collaborative Innovation Strategies Partnership Program (CISP)

Customers

Wholesalers, retailers – major chains and butchers

How we work with them

Packaging
Shelf-life guidelines
Integrity systems and regulations
Assurance programs and certification

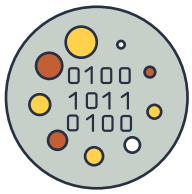
Consumers

Domestic and international

How we work with them

MLA joint program
Marketing

Programs



PROGRAM 1
Processing Technologies

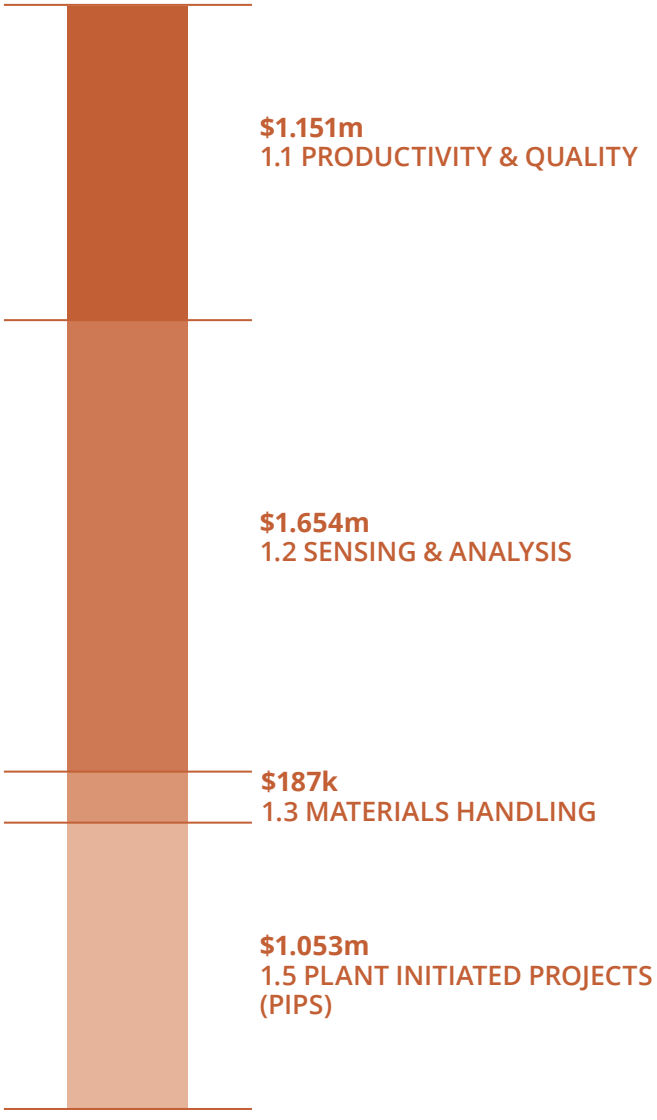
It is imperative that industry be able to evolve with new technologies in order to remain competitive. The Processing Technologies program provides world-class research and facilitates adoption of these technologies to improve process efficiency, reduce the cost of production, facilitate improved value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

Alignment to Key Frameworks

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	**$2,022,303**
Matching	**$2,022,303**

Program investment

Total investment: $4.045m



Red meat processors come in many different sizes; operations vary widely from small owner-run and operated business through to small-medium enterprises and plants which employ thousands of regional workers. No matter the size of the business, improving process efficiency, reducing the cost of production and increasing workplace health and safety outcomes are all positive in delivering value back to the processor. Advances in technology offer real opportunities to value add and offer cost efficiency.

Australia's international competitiveness must be enhanced to maintain or increase market share; currently 68% of red meat processed in Australia is exported. Evolutions in manufacturing, automation and industrial robotics are changing every step in the manufacturing process. Outside of the processing sector, manufacturers are adopting robotics and technologies to collaborate with human engineers and operators, freeing them up for higher-level tasks and thereby increasing overall efficiency. There is significant opportunity for R&D to identify, develop and deploy processing technologies that may be transformational to industry.

Productivity and Quality

Danish pig processors use a piece of manufacturing equipment called a 'bung handler' to reduce faecal contamination. It also saves labour for handling and bagging the bung, and it eliminates the need for plastic bags, strips or the like to close the bung.

The first phase of this project, (2018-1031) 'automatic equipment for handling of the bung in the lamb slaughter process' aimed to identify whether this Danish equipment could be modified for successful use with lamb carcases. The aim of phase two is to manufacture a factory prototype, test it in an Australian plant, and to successfully adapt and document the prototype in an in-line installation.

The evaluations on four different lamb slaughter lines were successful, indicating that the bung handling equipment modified for a lamb slaughter line is highly feasible. Hence, it was decided to move forward with the second phase of the project. The initial payback estimate for a bung handling machine is 6-9 months.

Once the prototype has been successfully tested in phase two, the third phase of the project will be to transfer knowledge of the design and equipment adaptation for optimal lamb bung handler operations to an equipment supplier for commercialisation to the Australian meat industry.

Materials Handling

While there is considerable hype around what an 'internet of things' could do for many industries, identifying where this technology can best be applied is the first step. This project, Demonstrating and Trialling of an Internet of Things Solution for Real-Time Computation and Delivery of Plant KPIs (2017-1003), considered opportunities for introducing Industrial Internet of Things (IIoT) solutions to the Australian red meat processing industry aiming to improve meat processing worker and plant productivity.

Workers in meat processing may be productive depending on such factors as their training, the sharpness of their knives and their skill. Wearable technologies could help identify where workers need more training, are an OHS risk due to fatigue or when knife sharpness is hindering efficiency. Wearables could also be used to guide the hand to minimise trim losses.

Based on the outcomes of an industry consultation, the project developed an IIoT wearable technology system for achieving the following in real-time: (1) identifying workers regardless of location (e.g. at different workstations and/or moving around a plant), (2) recognition of different worker activities (i.e., productive, blade alignment and idle) with correlations to knife sharpness, and (3) pathway to monitor and optimise throughput per worker per hour KPIs.

Processing Technologies (continued)

A trial of the IIoT system was conducted in a meat processing plant and demonstrated its effectiveness in assessing and improving in-plant productivity. This project has now been developed to a pilot stage where it will be used across members of various sizes.

Opportunities for export quality assurance

China is one of Australia's largest export markets for members. The combination of smart glasses and traceability platforms could benefit the transparency of Australian meat processing operations in satisfying compliance concerns of domestic regulatory authorities and China's quarantine regulations.

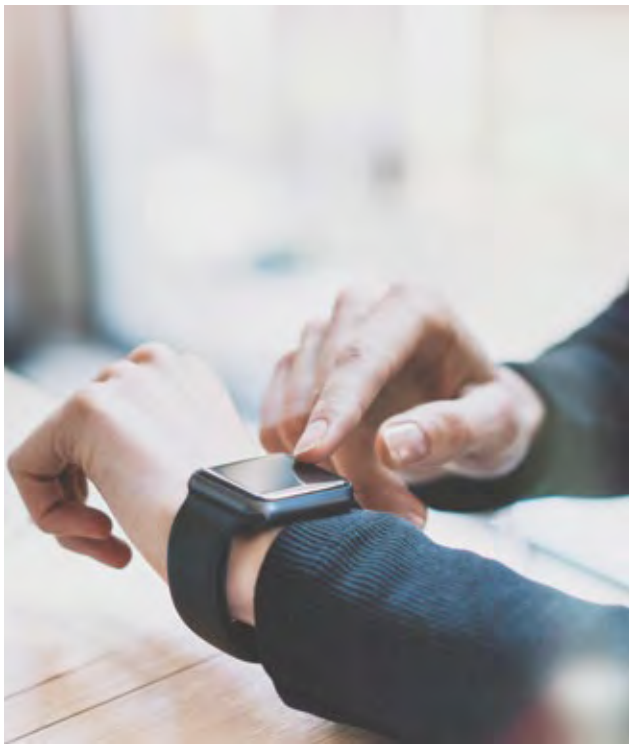
The use of the smart glasses to create visibility ensures processors can demonstrate product value and integrity to anyone at a moment's notice. The use of traceability systems also contributes to this as well as providing timely and precise communication between customers and the supply systems.

The objective of project 2019-1064 Bondi Labs is twofold:

a) Explore the use of existing video communication technology designed to support hands-free remote expert audits on meat processing sites between Australia and China; and

b) Explore the use of a Chinese government agency designed and operated food import traceability data platform for the Australian red meat processing industry, as well as develop a data translation and import methodology to ensure the solution can work for any Australian red meat processing organisation.

This project aims to explore the use of these two technologies to ensure the Australian red meat industry remains technologically competitive and capable of leveraging our premium brand status. It is scheduled to complete in 2019-20.



FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1045	**Prototype development of machine to remove fat from beef striploins leaving a uniform thickness behind – stage 2**	Project Complete	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.
2018-1025	**Roadmap development for a meat processing intelligent automation centre**	Project Complete	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.
2018-1052	**Investigation into the suitability of standard meat conveyor belt materials for CO_2 pellet cleaning**	Project Complete	Investigate the effect of repeated cleaning of meat conveyors using CO_2 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.
2019-1013	**Australian meat processor global technology adoption awareness – plant visits and IFFA 2019 in Europe**	Project Complete			
2018-1112	**Scoping processor requirements in beef cutting control, yield data traceability, robotics, automation and structured manual cutting and handling**	Project Complete	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.
2018-1051	**Feed study to establish pilot plant boundaries for the implementation of a CO_2 capturing facility**	Project Complete	Identify suitable equipment for the capture, upgrading and liquefaction of CO_2 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 CO_2; 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.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1113	**Prevention of contamination of rendered meal and tallow by foreign matter**	Project Complete	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 recognised as a valuable sustainable feed stock and add value to the meat producer.
2017-1069	**A boning line modular processing unit**	Project Terminated			
2019-1038	**eMTC implementation including DAWR requirements**	Project In Progress	Make available a readily acceptable commercially viable eMTC system endorsed by DAWR. Uptake by industry of an eMTC system delivering the reduction in labour and an increase in industry efficiency. Acceptance by export markets of the eMTC system as implemented by Industry and accepted by DAWR.	A Meat Notice for eMTC issued by DAWR. The uptake by export establishments of the eMTC model by use of the Meat Messaging industry portal to lower the operational and compliance costs related to the transfer of export eligible meat. A snapshot defining the industry saving available through the use of the eMTC model. A project report on project outcomes. Training material on the eMTC suitable for inclusion in industry training products.	As defined in previous projects the direct costs of paper MTCs is in the order of $5,000,000 per year to industry. This is a cost that can be total removed by including the eMTC process into normal automated existing export establishments' IT systems instead of the manual preparation and attestation of paper records. This project has a potential whole of industry return for the first year of 50 times the total project cost.
2019-1039	**US Pilot for pallet labels as an alternate system of shipping mark**	Project In Progress	The primary objective of the project is the acceptance by FSIS of the use of SSCC pallet labels as an alternative to applying a shipping mark to each and every carton exported to the US for a limited number of product types. The longer-term objective is to increase the range of product type to the US that FSIS will accept under this new proposed protocol.	Successful outcome of the pilot and acceptance by FSIS of the removal of the shipping marks from carton protocol. The availability of protocol for use by the Australian meat industry. The harmonising of the Meat Messaging processes with NEXDOC processes for issues related to the pilot protocol. Training of the pilot participants. Instructional guides for different sections of the supply chain for utilisation of the pilot protocol.	Many previous industry projects have outlined the cost to the Australian industry of applying shipping marks and the loss associated with the shipping mark errors. Based on 10,000 export consignments per month the damage reduction and the removal of shipping marks have a potential reduction of costs to industry in the order of $200 million annually. There are many hidden and lost opportunity costs associated with the current processes for shipping marks and manual carton handling. The time measured at the US inspection facility for one of the demonstration consignments showed a decrease in unloading and import stamping time from five man hours to less than one man hour.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1029	**Predicting and scheduling lamb supply with variable seasonal conditions**	Project In Progress	Develop and validate a new online computer application for processors and sheep buyers to identify suitable mobs of sheep for forward purchasing. Develop and validate models and apps for lamb producers to use in managing on-farm production and responding to variables. Develop software for processors and producers to share production forecast data (predicted turnoff and carcase characteristics).	Processors and buyers forecasting and scheduling. For processing plants a key deliverable will be information from different regions of the supply 'catchment' for year round supply of lambs. Predictions will be validated for a number of 'what-if' calculators and production options. Lamb producers turn-off prediction and quality assurance. Lamb growth models and sheep wellbeing management alerts will be developed and validated with lamb producers.	Variable climatic conditions make the forecasting of lamb turnoff dates a challenge for every processor and also placing challenges on managing production systems. This project aims to solve this problem by developing aspects of the CRC's predictive sheep management program 'ASKBILL' for lamb processors and lamb producers and develop a new online computer app (FlockSelect) for processors and other buyers to access and use to forecast production information.
2018-1048	**Naked primal cut recognition vision system trial in plant**	Project In Progress	Determine if the Naked Primal Cut Recognition Software as developed and tested in the workshop environment during AMPC Project 2017-1064 can be successfully installed and integrated into a meat processing plant.	The project will deliver a robust sensing network coupled with advanced software algorithms capable of rapidly identifying a range of pre-packaged red meat primal cuts from a predefined database.	The introduction of automated solutions to perform this task will significantly reduce labour required as well as potentially allow for 'real time' performance feedback of boning and slicing operations, presenting significant economic savings.
2018-1049	**Automation of primal cut bagging**	Project In Progress	Determine existing available technologies that might be deployed in automating the task of placing naked primal cuts into vacuum sealed bags.	To demonstrate the practicability and viability of autonomous naked primal cut bagging using intelligent technologies. These technologies will initially be marketed towards medium to large-scale red meat processors.	Reduction in labour costs and OH&S risks associated with the manual bagging of meat cuts after processing.
2018-1050	**In plant trial of robotic picking and packing system**	Project In Progress	Determine if a Robotic Picking and Packing System can successfully share workload with human packers to pack a subset of the primal cuts (say 5% to 20% of products). Trial system in plant and report on its efficacy and suitability to the plant's operations.	To demonstrate the practicability and viability of autonomous picking and packing within the red meat industry using intelligent technologies.	The ability to reduce boning room operating costs whilst improving OH&S practices and maintaining productivity is advantageous to most meat processors. The major impedance to workflow within the boning room is caused by the packing area. In some facilities, primal cuts are packaged at roughly half the rate that they are produced.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1063	**Value adding stage 2**	Project In Progress	An industry working group will review findings to date and select biomolecule(s) derived from bovine tissue and blood for further commercial development leading to increasing the demand for Australian derived and manufactured value added products.	Industry working group with associated documentation of decisions for identifying and confirming molecules of most interest. 'Fixed and firm' budget pricing from manufacturing companies and lab testing companies for molecules of interest to the industry working group. 'Round table' sessions where all stakeholders are brought together to align the various goals of the project for AMPC, meat processors, value adders and the end user. Ranking of biomolecules for further development.	AMPC project 2016-1037 has uncovered a large and unmet demand for biomolecules derived from Australian bovine tissue/blood that are also manufactured in Australia.
2016-1011	**Automated beef ribset deboning**	Project In Progress	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 savings and decreased OH&S risk, but increased flexibility in boning team assignment.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1052	**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 and build stages**	Project In Progress	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.
2017-1059	**Tunnel boner**	Project In Progress	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.
2018-1041	**Applications of deep learning for the red meat processing industry**	Project In Progress	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.
2018-1045	**First prototype automation for deboning lamb shoulder – stage 2**	Project In Progress	Develop a pilot automation robotic approach for the separation process of the shoulder rib-carcase 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.

PROGRAM 2
Environment & Sustainability

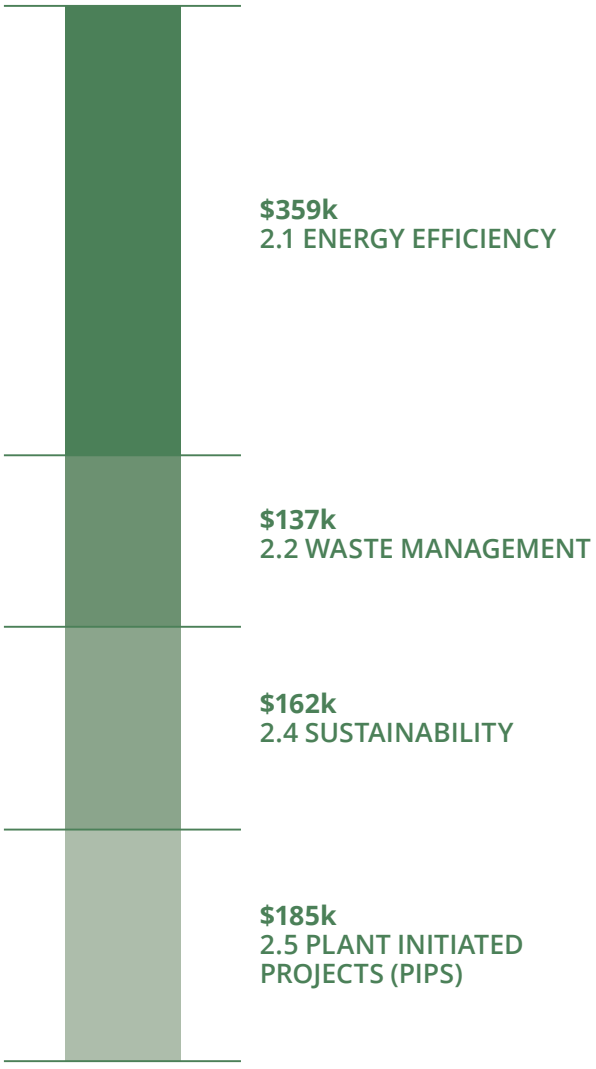
Corporate social responsibility is increasingly important to consumers and to the red meat processing sector. The Environment & Sustainability program explores ways to reduce the environmental impact of the industry, maximising efficiencies in energy and water consumption and assisting our members to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

Alignment to Key Frameworks

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	**$420,857**
Matching	**$420,857**

Program investment

Total investment: $842k



The processing sector recognises that red meat production has environmental impacts and that work needs to continue to address these to safeguard our industry and country for future generations. Good environmental management is a key part of the value proposition of our products and Australia's unique brand in overseas markets.

Many of the projects within the portfolio are iterative, starting as feasibility studies, moving to pilots and then investigating options for industry-wide adoption.

Environmental Management

Meat processing is part of the paddock-to-plate supply chain. Grazing, feed, water, animal health, energy, waste, emissions and transport are part of the footprint of the industry.

Animals which arrive at processing plants have been raised by farmers and/or in feed lots and in most cases have been transported at least five times during their life. For processors, their immediate responsibilities commence on receipt of an animal whose welfare is assessed and either accepted as being fit or rejected and treated or euthanised.

The environmental impact of processing animals is primarily concerned with energy consumed, water used and waste managed. These areas generate significant costs to operate, and as such efficient resource management is a business as well as a sustainability issue.

Water

The Australian meat industry uses large quantities of water to maintain high levels of sanitation, in order to meet food safety requirements. Water is used in washing animals, meat processing, cleaning facilities and treating process wastes.

In the context of a continued drought for Australia the cost of water will only increase. The domestic and international regulatory environment is pushing for more efficient use of potable water and better recycling techniques and the reuse of water resources.

Processors are looking for technologies and methods which will assist them to meet the standards required for domestic and international export trade while mitigating rising costs and protecting their social licence to operate.

Waste

The environmental impact of treating waste streams and emissions is both a sustainability issue and subject to increasing regulation. Processors have multiple waste streams that are valuable because they enable the creation of useful by-products such as tallow, glycerol, biofuels, fertilisers, compost, animal food and pet food.

Our members face a multitude of hurdles around ensuring responsible and sustainable environmental practices while complying with environmental regulations. Environmental policies around water use, water quality, emissions and discharge of waste need to be science-based; and economically, socially and culturally sustainable.

AMPC, through red meat peak bodies Australian Meat Industry Council and the Red Meat Advisory Council, works to communicate R&D outcomes to advocate the support of government in the development of environmental policy that balances these issues to ensure that Australia maintains a strong, global environmental footprint.

Environment & Sustainability (continued)

R&D 2018-19

Energy Efficiency

Energy and utilities account for about 10% of processors' business costs (AMPC CTO report). Processing is energy intensive, and the establishment of baseline numbers through the measurement of members' energy, water and waste emissions is a priority.

In FY18-19, through project 2018-1014, 'Energy-sufficient meat processing plant', a tool was developed to help members understand the actions, costs and benefits arising from multiple water and energy efficiency measures. Processors can input their current energy, water and waste details, together with a required pay-back, and receive tailored recommendations for their operations. The results of the calculations can be used by processors to investigate changing their operations to become more efficient and productive.

Furthermore, this project has been extended during the year with workshops run by research provider Energetics at AMPC's Industry Forum events.

Waste Disposal

For large processors, productive waste management is assisted using technologies that pass feasibility assessments because of a plant's larger scale. Small and medium-sized producers may have more limited options for waste treatment and disposal, or converting waste to energy, but they will still have the same regulatory burdens regarding waste disposal.

The Wastes to Profits program, an R&D co-investment with Meat & Livestock Australia, is being undertaken by research provider The Queensland University of Technology. The objective of the project is to develop technologies and business models for the conversion of wastes from the red meat, dairy, pork and municipal waste industries into valuable products resulting in productivity and profitability improvements for primary producers.

Project 2019-1127 uses a circular economy approach to examine aggregating the wastes of processors, adjacent businesses and their local councils to arrive at a best case feasibility around turning combined wastes into energy. The project's collaborative approach to the assessment of waste types, and potential energy outputs, is designed to ultimately help reduce traditional energy and waste disposal costs.

Co-benefits of this project include improved environmental outcomes, reduction in Scope 1 and Scope 2 Greenhouse Gas emissions and community economic and productivity benefits through collaboration.

Water

Project 2018-1030, 'Technical and economic feasibility of water recycling and energy recovery for red meat processing in abattoirs', is assessing the opportunity for water recycling across a group of participating processors.

Given the increasing scarcity of water in many parts of Australia, this project aims to provide engineering solutions and technical recommendations to reduce water and energy consumption of modern abattoirs by conducting a technical and economic feasibility study to identify technologies capable of water recycling, while simultaneously recovering energy from meat processing waste streams.

The results of this project will identify and prioritise the most effective way to make significant and economically viable water consumption savings that can be implemented by the meat processing industry.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1014	**Energy-sufficient meat processing plant**	Project Complete	The objective of the project was to demonstrate that meat processing plants can become energy self-sufficient by utilising reliable renewable energy technologies. It also sought to identify any gaps that require further research.	The final report included an implementation roadmap infographic, AMPC project snapshot and full business case (including ROI based on the industry partner processing site). In addition, a 3-5-minute explainer video was provided to graphically summarise the report.	The project illustrated deployability for varying sizes of processing plants; the opportunities to reduce or eliminate energy market exposure; the industry sustainability and social licence to operate; options to integrate new technologies; and how to improve industry infrastructure.
2018-1127	**Energy, water and waste efficiency for SMEs in red meat processing**	Project Complete	This project focused on gaining a better understanding of resource use (energy, water and waste) in small to medium red meat processors, and provided more targeted research and development to improve resource use efficiency. The proposed work was an extension to the ENV 2017-1027.	A baseline report on the characteristics of SMEs and status of energy, water and waste efficiency based on four site visits and interviews of staff (including President of QCMPA). A review of existing R&D relevant to small to medium red meat processors, in the form of an Excel spreadsheet with project title, date, authors and classification according to AMPC's six programs and sub-categories, and gap analysis parameters. A gap analysis report of current R&D for SMEs in AMPC's Environment and Sustainability program. A 1-3-year roadmap document that identifies what R&D needs to be conducted to address the issues for SMEs in the areas of energy, water and waste.	A better understanding of the needs and wants of SMEs in red meat processing, and development of a baseline on the status of energy, water and waste efficiency. Identification of what R&D has been undertaken by AMPC and MLA addressing water, energy and waste operational efficiency and best practice, and identification of gaps in applicability and delivery to SMEs. Development of a 1-3-year roadmap that identifies a clear path forward for red meat processing SMEs to engage with AMPC and address opportunities and challenges for sustainable growth.
2017-1032	**Investigation into sensor technologies to manage waste streams and optimise the use of their by-products**	Project Complete	The objective of this project was to perform a state-of-the-art review of current waste stream sensor platforms and associated control systems, as well as software of different types and costs.	A report on the review of existing sensor technologies and their suitability with respect to complexity of waste treatment operations and capital requirement for the meat processing industry. A report on the validation, potential cost benefit and return on investment of employing sensor technology for wastewater treatment process. A handbook/manual of sensor technology for meat processing wastewater treatment applications. A summary document for publication by AMPC on websites and AMPC/ MINTRAC Environmental Managers Workshop as well as for mailing out to AMPC members.	The 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.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1023	**Oil and grease value assessment tool**	Project Complete	Oil and grease (O&G) are valuable commodities and have been traditionally recovered from wastewater by save-alls and dissolved air flotation (DAF) plants, followed by heating to purify them to second-grade tallow. An alternate approach is to entrain the O&G in the wastewater and convert it to energy-rich biogas for use on-site to reduce the site's energy costs and carbon intensity. This maximises return between tallow recovery or biogas formation. This project aims to inform this debate by producing a desktop calculator.	Full report and snapshot plus Excel-based O&G value assessment calculator.	An O&G value assessment tool provides a quantitative measure of tallow recovery versus biogas formation and allows site-specific inputs and sets current product market value. This tool will enable analysis of current operation.
2018-1140	**Evaluation of electrocoagulation as a wastewater treatment technology for meat processors**	Project Complete	The aim of the project was to review the applicability and effectiveness of electrocoagulation for treating wastewater streams from small to medium-sized red meat abattoirs in Australia.	The project included a full report and snapshot for a pilot trial of an electrocoagulation wastewater treatment system provided by the company.	Electrocoagulation (EC) appears to be a promising alternative to chemical coagulation/flocculation. EC has a long history as a wastewater treatment technology in industries including meat processing, dairies, tanneries, textiles and others. While EC is relatively uncommon in the Australian Meat Processing sector, its small footprint, low chemical consumption and ability to meet stringent wastewater treatment discharge standards has renewed interest in the technology. Furthermore, some recent design developments appear to have addressed previous operational issues such as electrode passivation.
2016-1444	**National livestock animal welfare R&D: capability and gaps analysis**	Project Complete	The purpose of this project was to undertake a detailed analysis of current and future livestock animal welfare R&D capability and infrastructure.	A brief progress report for the Steering Committee in October 2016. Presentation of a draft report including recommendations to the National Animal Welfare R&D Strategy Committee in December 2016. A detailed Final Report of the research capability status and needs for the livestock animal welfare industry as specified in the Terms of Reference by February 2017.	Identification of current and emerging gaps, and development of recommendations and strategies to address these gaps.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1036	**Quantitative risk analysis of the impact of climate variability on the Australian red meat processing industry**	Project Complete	This project aimed to undertake a quantitative assessment of the risks and opportunities associated with climate variability upon the Australian red meat processing industry. A backward scenario analysis was undertaken to look at how climate extremes have impacted on the meat and livestock industry. The overall sustainability of the supply chain will thereby be gauged.	High level exposure and resilience map of the meat processing industry and supply chain, along with short-form draft report. Identification of priority, high risk/opportunity areas/supply chain segments for further analysis. Scope, methodology and budget of following phases to be discussed and confirmed with AMPC. A financial understanding of high priority risks based on possible changes to livestock numbers and other interdependent factors. Report and Excel tool (TBC, as determined by the methodology). An understanding of different pathways towards adaptation, including a backward scenario analysis, and the next steps to be taken. An information package for roll-out to industry. Report, snapshots and presentations, and an online portal.	Identification of climate risks and opportunities, placing them in a geographic context and assessing their severity through frequency and intensity analysis. Learnings from these events can inform climate change adaptation and risk mitigation and adaptation strategies can be identified.
2018-1037	**Development of 'Is it fit to process?' guides for Tier 1 export abattoirs and small to medium enterprises processing for the domestic market**	Project Complete	This project will develop 'Is it fit to process?' guides for small to medium enterprises (SME) processing for the domestic market, as well as Tier 1 export abattoirs. 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.	Full report and snapshot plus extension through several Innovation Collective meetings.	The guides 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 include the steps to be taken if an Emergency Animal Disease is suspected.
3000-5111	**National animal biosecurity research, development and extension (R&DE) strategy implementation project**	Project Complete	The purpose of this project is to confirm that Animal Health Australia (AHA) will provide secretariat and project management services to support the implementation of the National Animal Biosecurity R&D Strategy.	Full report and snapshot.	Project support and investigation, analysis, administration, communication and drafting input to implement the strategy.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2016-1008	**Quantifying energy savings from in-line temperature boosting of steriliser water ring mains at abattoirs**	Project in Progress	The project will complete a desktop techno-economic analysis of the point of use water heating systems and their practicality. 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, and the benefits and considerations of this approach for site engineers and managers to consider implementation at their site.	A detailed report on the energy and mass flow associated with the ring mains, the potential inline heating options, the results of the techno-economic analysis and any potential energy or water savings. Additionally, any potential technical, operational or other issues with these systems will be reported. A fact sheet on the energy savings from introducing in-line or on-site hot water boosting systems. A model to evaluate the techno-economic viability of using on-site in-line boosting.	Quantify the potential energy and water savings by using water heaters at the point of use.
2016-1009	**Investigation into rapid composting technology for treating abattoir waste**	Project Terminated			
2014-1073	**Enhanced energy recovery in Australian industry through anaerobic co-digestion**	Project Complete	This project focused on anaerobic co-digestion as a means to improve energy recovery and reduce the whole of life cost of treating solid slaughterhouse wastes such as paunch, manure and DAF sludge.	Detailed final report on anaerobic co-digestion and operational performance. Fact sheets to promote in-vessel anaerobic technology and anaerobic co-digestion. PowerPoint presentation on project outcomes. A co-digestion manual, containing optimised dose strategies and operating guidelines as a decision-making tool for future use by industry.	The project builds on previous research and investment by AMPC and leverages substantial investment and expertise from other Australian industries regarding anaerobic co-digestion opportunities.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1037	**Assessment of smouldering as an efficient and low-cost alternative for management of agricultural solid wastes**	Project Complete	The key purpose of this project was to: • Demonstrate proof-of-concept for smouldering in red meat processing applications • Assess the business case for smouldering technology against current practice and other emerging solutions • Develop an R&D pathway to commercial application of smouldering	Detailed final report containing solid Waste Technology Review (focus on combustion technologies), technical data demonstrating the operating window for energy efficient smouldering combustion, and cost-benefit analysis demonstrating value for industry. Detailed proposal for future R&D: • Likely to include continuous reactor operation and field trials leading to a technology package containing design parameters, operating/control strategies and process performance case studies for industry and commercial technology providers. Updated cost-benefit analysis: • This project will update CBA at the completion of each stage and will provide design parameters and operating conditions for independent CBA of the technology.	The business case for smouldering technology against current practice and other emerging solutions. R&D pathway to commercial application of smouldering needs further development.
2017-1039	**Problem to profit: developing a sustainable feed base from agricultural wastes using single cell protein**	Project Complete	This project expanded the Sustainable Consumption and Production (SCP) program to screen SCP technologies for suitability to meat processing solids wastes, conduct proof-of-concept testing on solids wastes and, subject to the value proposition, develop an R&D strategy for continuous process development.	Detailed final report containing general wastewater technology review for red meat applications, general solid waste technology review for red meat applications, technical data demonstrating basic feasibility of SCP technologies, and cost-benefit analysis demonstrating value for industry. • AMPC snapshots to promote SCP technology in red meat applications • Technical articles suitable for publication	Identification of requirements for an R&D strategy for continuous process development.
2019-1043	**Concentrated solar thermal and geothermal steam and power assessment**	Project in Progress	This project will assess up to five representative meat processing locations to assess their suitability to achieve cost improvements from the use of modular solar thermal and geothermal technology for the production of processing steam and, potentially, energy as a primary renewable energy source, to mitigate or eliminate current energy costs.	Technology modelling – review of solar and geothermal at each representative site. Cost modelling analysis. Potential energy replacement options and cost modelling – power and steam. Mapping of ideal solar and geothermal region/s. Mapping of ideal meat processing facilities. Funding and grant options. Regional relevance. Compatible technology and programs.	In progress.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1027	**Energy and materials recovery from paunch waste using novel hydrothermal and supercritical water gasification processes – phase 1**	Project in Progress	This multiphase project aims to investigate the feasibility of hydrothermal carbonisation and supercritical water gasification processes for processing heavily moisture-laden paunch waste. The objective is to produce char and gas in a conventional pyrolyser or gasifier system, without the removal of water.	Experiments in a laboratory scale reactor. Thermodynamic modelling. Characterisation of the products of hydrothermal carbonisation and supercritical water gasification. Synthesis of functionalised hydro-chars and super-chars. Pot experiments. Process Modelling (detailed mass and energy balance). Preliminary techno-economic assessment and benchmarking.	In progress.
2018-1030	**Technical and economic feasibility of water recycling and energy recovery for red meat processing operations in abattoirs**	Project in Progress	This project will conduct a technical and economic feasibility study to identify technologies capable of water recycling, while simultaneously recovering energy from meat processing waste streams.	A report including the technical feasibility of compliance with the safety constraints of the meat industry and findings of the economic and environmental benefits of implementing reuse technology will be compiled. In addition, for any proposed reuse train showing significant economic and environmental benefit, a proposal will be included for further pilot testing.	In progress.
2018-1128	**Climate research strategy for primary industries (CRSPI) 2017-2020**	Project in Progress	This project will prepare primary industries for adaptation to our changing and variable climate, and mitigation of greenhouse gas emissions from the sector through collaborative investment and coordinated response in primary industries R&D.	Approval of the CRSPI Research Strategy by AgSOC, and a communication plan to support promulgation of the CRSPI Research Strategy. Analysis of the CRSPI database of climate research development and extension activities and of the usefulness of the database. Running of a national conference on climate in primary industries. Maintenance of a communication portal (e.g. website) for climate research and policy in primary industries.	In progress.
2018-1021	**Review and compare Australian animal welfare systems throughout the supply chain to major trading partners (whole of life animal welfare)**	Project in Progress	This project will provide a tool for industry and individual processors to defend Australian meat animal welfare practices on a whole of value chain basis.	A report comparing the whole of life welfare of Australian livestock to that of European and North American animal welfare systems and practices. Presentation of the outcomes of the comparison to interested industry members (including if requested to the AMIC Animal Welfare Committee). Final report on the project.	In progress.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1120	**Monitoring public attitudes to livestock industries and livestock welfare**	Project in Progress	This project builds on a survey that was designed to monitor public attitudes to animal welfare in the Australian livestock industries.	A questionnaire, capable of being used to benchmark and monitor public attitudes (and sources of knowledge) relating to animal welfare in the livestock industries. Industry-specific information on public attitudes to and knowledge of livestock practices and animal welfare issues in the different livestock industries. Final report, targeted industry meetings, targeted industry publications, targeted meetings with industry consultants, extension personnel and public (Government) and private (NGOs and retailers) policy makers and scientific publications.	In progress.
3000-5088	**Executive support – national animal welfare R&D strategy**	Project in Progress	The purpose of the project is to develop national arrangements to deliver strong collaboration amongst existing R&D provider groups, and effective partnerships between investors and providers. The strategy will be implemented by the Animal Welfare R&D Committee, comprising all livestock industry RDCs, major R&D providers and government investors.	Secretariat support, including the preparation of meeting papers, presentations, agendas, minutes, reports and administration associated with meetings. Development and management of meetings, forums and other events. Provision of suitable venues for two Strategy Committee meetings per year and an annual strategy R&D Forum. Strategy development and project management, including the design of surveys, collection and analysis of data, reporting and developing recommendations in accordance with set timelines. Developing publications, including annual or evaluation reports for the strategy, as directed by the Committee. Communication activities, including the drafting and development of media memos, communication memos or other materials as directed by the Committee. Stakeholder engagement, including the members of the Committee, the Forum and all other R&D provider and investor organisations. Reporting to Government, including the Primary Industries Ministerial Council as required. Presentations on R&D priorities, outcomes and other activities as required by the Committee.	In progress.

PROGRAM 3

Processing Hygiene, Quality & Meat Science

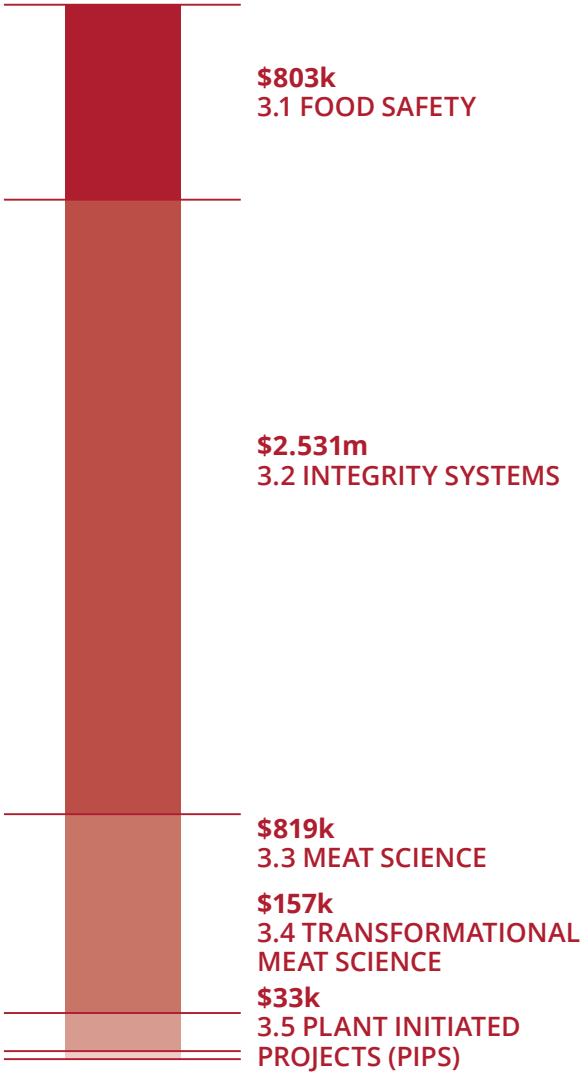
Processing hygiene and product quality are crucial to Australia's reputation for excellence in red meat. The Processing Hygiene, Quality & Meat Science program combines knowledge of meat science and quality in the continuous delivery of high-quality standards and food safety, as a key differentiator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

Alignment to Key Frameworks

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	**$2,858,262**
Matching	**$1,485,185**

Program investment

Total investment: $4.343m



Australia prides itself on the excellence of its food production. Australian consumers expect the best quality red meat, and it goes without saying that we know our food is safe. Consumers internationally trust Australian red meat credentials.

This reputation is well earned, and processors play a unique, unseen role within the paddock-to-plate supply chain, ensuring the exacting standards of Australian red meat. Conducting research is vital in improving understanding of foodborne hazards and maintaining the industry's reputation for safe, healthy products; and ultimately this adds value to red meat sales.

The Processing Hygiene, Quality and Meat Science program communicates the knowledge of red meat food safety risks, and their control, so that industry, regulators and the international marketplace are aware and confident that risks are understood in Australia and are being controlled effectively.

Food Safety and Integrity

Food safety is no accident. The methods, systems and processes used in meat processing plants are subject to strict and increasing regulation. AMPC works jointly with industry partners to identify knowledge gaps in food safety risks along the supply chain.

AMPC invests in the area of processing hygiene, quality and meat science R&D within meat processing and across the value chain, supporting market access for the Australian red meat industry by enhancing product integrity and technical research. Peak industry council AMIC participates on a reference panel to advise on government engagement in issues.

Through a reference panel the Department of Agriculture works collaboratively with AMPC to ensure the delivery of safe and hygienic, quality red meat products to the marketplace.

Meat and Livestock Australia (MLA) together with AMPC delivers a coordinated joint Food Safety program to achieve the overall objective of enhancing product integrity. The program's purpose is to develop a sound scientific basis for food safety management, emphasising microbiological risk management.

R&D 2018-19

One R&D area that has been identified as an opportunity to reclaim value is multi-spectral examination of offal. This project has passed a successful proof-of-concept in the feasibility study during 2018 and is proceeding to a pilot trial in-plant in 2019-20.

Currently offal inspection requires both internal and external manual inspection activities which results in trim losses and decreases carcase yield. This project proposes to use hyperspectral and RGB cameras, x-ray and sensor technology to augment and possibly replace manual internal and external inspection techniques.

The information will be accessible in real time to form a composite image to allow assessment by a human grader or auditor, and/or enable automatic selection, sorting and picking of the offal. Additionally, foreign bodies (metal, gloves etc) would also be detectible for removal.

The sensors and techniques developed in this project would have future applications in carcase grading and identifying regions to be trimmed to remove contamination allowing further value to be extracted from the carcase.

Processing Hygiene, Quality & Meat Science (continued)

Integrity Systems

Maintaining public trust in the food safety of Australian red meat is paramount. R&D programs must continue to identify the best ways of protecting consumers and ensuring we have the technologies that ensure traceability, biosecurity and disease mitigation.

Collaboration and partnerships are essential to successful project outcomes, especially where significant risk must be managed throughout the supply chain. AMPC contributes significant funds to projects which are delivered through key industry partnerships; the Transmissible Spongiform Encephalopathies Freedom Assurance Program (TSEFAP) is one such project.

Bovine spongiform encephalopathy (BSE), also known as mad cow disease, is a disease that was first found in cattle. It's related to a disease in humans called variant Creutzfeldt-Jakob disease (vCJD). Both disorders are universally fatal brain diseases. Eating infected cattle products, including beef, can cause a human to develop mad cow disease.

The Transmissible Spongiform Encephalopathies Freedom Assurance Program (TSEFAP) delivers nationally integrated TSE risk minimisation measures to keep Australian animals and their products free from TSEs, as well as complete enough surveillance to meet international requirements and assure trading partners, markets and consumers that Australian animals and animal products are free of TSEs. This in turn leads to our high level of TSE assurance and ongoing market access.

This project is a continuation of the five-year Freedom Assurance Program, that has been continued once before (2008-2013, 2013-2018). There is no other program designed to provide surveillance and assurance in Australia.

Australia's current TSE free status provides the red meat industry with a significant trade advantage and is important for maintaining access to valuable export markets. This project will deliver economic benefits through a reduced TSE risk achieved by reducing the likelihood of incursion and consequences (extent and duration of lost market access) of TSE.

Focusing on the BSE risk, an economic analysis found that the project would deliver a positive impact for the red meat processing industry, equal to a net present value (NPV) of $16.2 million.

Value-Adding

Offal can add value to a carcase; however, current offal inspection methods used often involve cutting the offal and the value is lost to trim. The standard currently in use has not been reviewed since 2007. Standards should be reviewed periodically to reflect changes in areas such as science and technology, risk profiles, and other reasons. This project seeks to remedy this situation by rewriting the current standard which is more prescriptive and stringent than the science suggests is needed.

Review of the Post-mortem Inspection and Disposition Schedules of the Australian Standard 4696

The outcomes of changes to the standard will result in a higher value product for the processors; for example, incised beef cheeks could potentially contribute $30-85 million in lost opportunity in the current market.

In an industry where margins are extremely tight, and where there is real competitive pressure from emerging economies (Brazil and Argentina) in the cost of operating, these changes to the standard could contribute some advantage to Australian Processors.

The change to the standard will be able to have immediate effect in the domestic abattoirs once issued. From an export perspective, the changes to the standard must be made to provide strength to any applications for changes to Market Access requirements. This project is scheduled to complete in 2019-20.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1070	**Process monitoring for the Australian meat industry – a comparative industry trial**	Project Complete	To develop and test a new version of product hygiene index (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 the Department of Agriculture.
2018-1086	**Microbiological food safety and storage life of Australian red meat**	Project Complete	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.
3000-5105	**TSE freedom assurance program for business plan 2013-18**	Project Complete	To fund the TSE Freedom Assurance Program on AMIC's behalf.	A surveillance system that monitors risk for TSE outbreaks.	TSE freedom is integral to the industry in export markets and domestically.
2016-1003	**Sensing for offal grading and enablement of automation**	Project Complete	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.
2016-1190	**Pilot study on design of lairage, handling and stunning facilities and the potential impact on animal welfare and meat quality**	Project Complete	To identify facility design features that impact on animal handling and preslaughter 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 preslaughter stress and meat quality.	Increase in understanding for future design of lairage and handling systems at abattoirs.
2017-1044	**Can on-site beef dark cutting (DC) evaluation (monitoring) be improved and value-added?**	Project Complete	To determine DC parameter variation between beef muscles (within-carcase) and formulate a monitoring guide (when and where) to improve evaluation precision, accuracy and whole carcase representation, and evaluate the capacity for monitored DC parameters to provide additional information to industry in terms of product shelf-life, spoilage, and purge characteristics.	This project will deliver a report that details the comparison of beef muscles for within-carcase 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 carcase 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 carcases.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1056	**Shelf-life extension of fresh meat products using high pressure processing**	Project Complete	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.	This project has provided an accurate cost benefit analysis, which will facilitate decision making for the meat industry in relation to investment in HPP technology.	Longer shelf life for fresh meat.
2016-1326	**A cold plasma wash water technology for meat safety and shelf-life extension**	Project in Progress	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 precommercial prototype technology aimed at the red meat sector, and 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, resulting in an increase in sanitisation of carcase without residues.
2018-1082	**Laser shock wave processing facility for cryovac meat products**	Project in Progress	To design and build a laser shock wave piece of equipment to study its 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, resulting in an increase in sanitisation of carcase without residues.
2019-1023	**Amendments to AS4696 – post-mortem inspection and disposition**	Project in Progress	To update Schedules 2 and 3 in the AS4696 to reflect changes in post-mortem inspection and disposition.	A new version of the AS4696 as described.	New inspection and disposition procedures that reflect current scientific knowledge around pathological risk.
2017-1048	**A practical means to accelerate beef ageing and sustain acceptable eating quality and safety: chilled storage temperature manipulation**	Project in Progress	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; and validate instruental measures association with consumer perception for eating quality.	To deliver a report that identifies temperature control guidelines, beef ageing periods and quality traits.	Potential opportunities for shorter ageing times.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1083	**Non-invasive prediction of flavour, tenderness and juiciness for individual animals at point of slaughter – stages 1 & 2**	Project in Progress	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.
2018-1085	**Development of shockwave technology for tenderisation and decontamination of beef cuts**	Project in Progress	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.
2018-1087	**Development of novel bioactive peptides from slaughterhouse blood**	Project in Progress	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.
2018-1084	**Transforming low-value meat cuts and non-meat products into high quality powders**	Project Terminated			

PROGRAM 4
Capability, Extension & Education

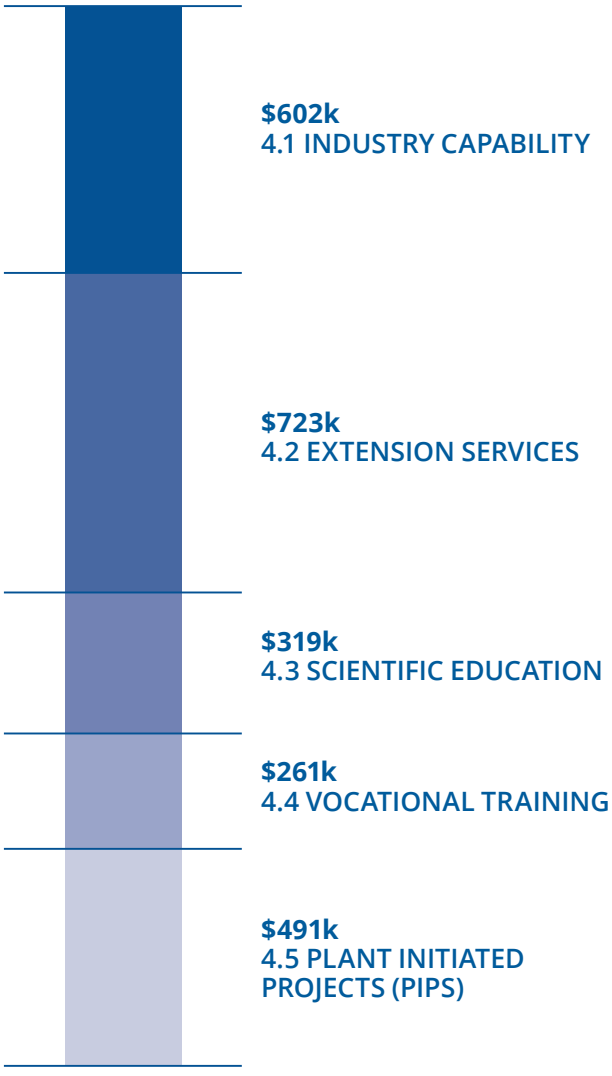
Industry relies on its workforce to continue to build its position on domestic and world markets. In order to achieve this, industry must be able to plan, and meet our current and future workforce needs in a complex and ever-changing environment. The Capability, Extension & Education program helps Australian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

Alignment to Key Frameworks

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	**$1,197,888**
Matching	**$1,197,888**

Program investment

Total investment: $2.396m



The Australian meat processing sector employs around 28,000 people with most of these jobs located in rural and regional areas. According to AMPC members, finding workers, both skilled and unskilled, is a challenge for the industry and impacts their ability to operate at full capacity.

Training, development, leadership, workforce planning, labour supply variations and worker health and safety are all critical aspects to building a sustainable industry.

At a 2018 workshop, AMPC members identified labour as their number one industry issue. Subsequently in an industry survey conducted by the Australian Meat Industry Council (AMIC), the shortage of labour was identified as the second-greatest barrier to red meat processors operating at full capacity – exceeded only by livestock production. On average, respondents surveyed (representing 50% of the industry) identified a labour shortfall of 20%.

Due to stock supply constraints, meat processors experience seasonal fluctuations in plant throughput, which can be a barrier to workers who require full employment as production is not year-round. The seasonality of work is one of the factors which affects the industry's ability to attract and retain staff. According to labour force data, Australian local workers stay an average of less than six months in the job. A high proportion of the workforce is transient; a challenge similarly faced by other regional industries such as horticulture with its need for fruit pickers.

With 68% of Australian red meat exported, the industry's long-term sustainability is dependent on remaining competitive in international markets, and labour plays a critical part in that. As a cost, labour comes in second place, with the per-head cost of animals the greatest input expense.

R&D 2018-19

Capability

Meat processing needs to attract a diverse workforce, particularly a younger generation of workers, as there has been a sharp decline in the number of school leavers being trained in meat processing, smallgoods manufacturing and butchery. This is despite an average youth unemployment rate of 17% in regional areas.

AMPC works with universities and their students directly as research providers, through sponsorship of events such as the intercollegiate meat judging (ICMJ) scholarships programs, and the AMPC-run Industry Forums – connecting processors with the next generation of meat industry workers.

In 2018-19 through AMPC's strong alliance with the National Meat Industry Training Advisory Council (MINTRAC) and our processor members, an urgent need was identified in the area of meat inspection trainers, and Training the Next Generation of Meat Inspection Trainers, (project 2019-1006) was conceived.

At the inception of the project there were only 12 Registered Training Organisations with meat safety qualifications on their scope of registration. Furthermore, MINTRAC estimated that there were approximately 15 trainers across all these organisations, with 12 of the trainers being over 55 years of age.

An R&D project was promptly developed to ensure that the 'next generation' of meat inspection trainers is suitably prepared to provide ongoing, high quality meat inspection training. The project offered a week-long residential program for new meat inspection trainers. It addressed both the future replacement of retiring trainers and ensured there are currently and consistently in-practice new trainers creating a succession plan for the industry's registered trainers.

Capability, Extension & Education (continued)

Education

The attraction and retention of an appropriate, skilled workforce is fundamental to the productivity and resilience of processors. This will require investment in employees through the training of skilled workers. To get a slaughterman or boner to the required skill levels takes a lot of training, and companies need a program where they can invest in a person and realise the long-term benefits.

Current government apprenticeship schemes exclude independent butchers, processors and smallgoods manufacturers in the list of 80,000 apprenticeships that will be funded, and do not cater for traineeships, which is an effective and productive tool for training in the meat industry. AMPC and MINTRAC have sought to address this gap to ensure a steady stream of younger workers are attracted to and upskilled for the opportunities of the sector.

AMPC sponsors a range of different scholarships and grant programs which encourage students to consider the industry. One such initiative is the Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry, which is a competitive, annual grants program to support young people aged between 18 and 35 years.

The 2019 Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry (project 2019-1007) 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.

In 2018-19 AMPC's Award was granted to Dr Kateryna (Katia) Bazaka who is trialling a new way to clean up dirty water from abattoirs while producing value-added products along the way. A plasma scientist at the Queensland University of Technology, she wants to zap the dirty water with plasma to break the waste products down on first to small molecules and then to carbon dioxide, water and other products. Katia has stated that: "By using solar panels to drive this plasma we are hoping to reduce the environmental cost and the economic cost of the setup."

Addressing the Employment Gap

AMPC is considering research to understand whether access to overseas workers with fit-for-purpose visas as part of a total employee mix could support the industry and help direct permanent migration into regional areas.

The primary objective of Working Towards an Ideal Red Meat Industry Visa Program (project 2019-1047) is to present to the red meat industry a visa package that will enable stakeholders to meet the challenges that they have with their workforce.

It is the aim of the project to deliver an 'ideal visa program' for the red meat industry. This proposed visa program can be taken to government to seek support in delivering the program to test and refine the efficacy and benefits.

Issues with the current visa program will be identified and data will be gathered from identified stakeholders to incorporate this with existing data, as well as leveraging experts in the field of immigration/migration and policy design.

Extension

In 2018-19 AMPC undertook to transfer the responsibility for extension of projects from long-term provider MINTRAC and brought extension activities in-house. The Industry Forum program, comprised of two days of meetings, workshops and presentations, brings the latest R&D findings to members and industry.

Innovation Collectives

As a member-owned organisation, AMPC is committed to ensuring that its engagement and activity is responsive to member needs. In 2019, the Innovation Collective calendar has been established in response to feedback from small to medium processors who want more tailored information on AMPC's R&D outcomes and how to practically implement findings in their businesses.

The one-day Innovation Collective meeting is targeted at small and medium processors and is held regionally in all States to align with the footprint of the membership. These workshop style meetings assist in gaining a deeper understanding of how a business may implement new ideas and technologies across sustainability, labour, energy, water and waste, market access, technology, packaging, and animal welfare.

AMPC program managers and research providers present completed AMPC R&D projects or give updates on current projects as relevant. At these events members are encouraged to network with peer businesses and other red meat industry participants.

Network Meetings

The revived Network Meeting is a one-day workshop which takes a global industry focus and replaces the previous network meetings outsourced to MINTRAC, and has streamlined the three-day format into a two-day event.

These forums include presentations from industry bodies and guest speakers, breakout workshops and professional development training on human resources, engineering and environment, quality assurance, and meat inspection.

These new events are designed to facilitate discussion between the red meat sector, research providers, industry bodies and regulators. The opportunity to engage face-to-face also serves to discuss critical issues, collect feedback from our stakeholders and identify new and emerging issues for the red meat industry.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1009	**MINTRAC provision of extension services to red meat processors 2017-2019**	Project Complete	1. Provision of training advice and support to meat processing companies or their RTOs. 2. Identifying or acting upon industry innovations and requirements which require development of applicable training. 3. Provision of careers services to red meat processing. 4. Provision of industry education and training advice to State and Commonwealth government agencies identifying priorities and changes to market access-customer requirements. 5. Distribution and updating of AMPC training products. 6. MINTRAC representation on industry-related Committees, forums and conferences.	Record of training advice provided to meat processing companies or their RTOs. List of training developments/ discussion papers arising from referred AMPC projects. Record of careers inquiries and promotions undertaken on behalf of the industry. Record of responses to government on education and training matters provided on behalf of the industry. Record of products reviewed and updated, as well as new AMPC products promoted to industry. Record of MINTRAC representation of industry-related committees, conferences and forums.	Continuation of industry engagement
2018-1013	**Development of an engineering maintenance training strategy**	Project Complete	Developing draft qualifications and identifying Units of Competency, undertaking consultation with industry and preparing final qualifications for accreditation. Developing a training implementation strategy. Developing trainer and RTO expertise to deliver the qualifications. Developing or customising suitable training and assessment support materials.	The specific outputs of this project are: • Industry-endorsed qualifications for Federal accreditation • A minimum of three RTOs with scope of registration and suitably qualified trainers • A training and assessment strategy which has been agreed by industry • Training and assessment support materials	Mapping of training outcomes for maintenance staff and career path choices.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1016	**Making the meat industry a safer place for workers**	Project Complete	The overarching aims of the project are to: 1. Develop an up-to-date, detailed and accurate picture of the workers compensation claims in the meat processing industry across Australia, by analysing existing State and Territory regulator workers compensation data, relevant workers compensation insurer agents and all meat processor database records for workplace injury claims; and 2. Utilise this information in consultation with industry to develop a 3-5-year R&D strategic plan for work health and safety in the industry and identify a series of recommendations, activities and resources for prevention and intervention strategies to further reduce incidence and severity of injury claims in the meat industry. 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.	Quantitative and qualitative data collected and detailed statistical analysis conducted to provide a detailed picture of illness and injury performance in the Australian RMP industry including factors driving risk and severity relating to injuries within the meat processing sector. The full report of RMP industry illness and injury performance, a brief summary of RMP industry illness and injury performance on a page and a PowerPoint presentation on RMP illness and injury performance. Forums for the Australian meat processing industry conducted to review outcomes of analysis and coordinate industry input and sharing of risk management and loss control strategies for the meat processing industry. 3-5-year strategic R&D plan for WHS in the RMP industry developed in consultation with industry and summarising industry input on the priorities to improve WHS performance in the industry. Development and dissemination of documentation relating to the above across the meat processing industry through strategies such as a webinar on injury/illness data and WHS performance for the Australian meat processing sector.	This project will be further extended from the recommendation of the research into a Stage 2 project.
2019-1006	**Training the next generation of meat inspection trainers**	Project Complete	This project seeks to provide a week-long residential program for 10-15 people who are seeking to become meat inspection trainers. The project seeks to address an urgent need to replace retiring trainers and to ensure there is currency and consistency in practice along new trainers. The program will consist of up to 20 sessions designed to ensure new trainers are fully apprised of current regulations, research, technology and trends in meat inspection.	The primary project deliverable will be a minimum of 10 new trainers ready to commence delivering meat inspection training. A second deliverable will be industry confidence in the quality and knowledge of the new trainers entering the system.	The RMI has a shortage of qualified trainers; this project was aimed to upskill people to ensure we maintain a high level of qualified trainers.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1002	**Meat industry training network 2017-2019**	Project Complete	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.
2018-1003	**Meat inspection and quality assurance network 2017-2019**	Project Complete	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 20 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.
2018-1012	**Meat processing engineering network 2017-2019**	Project Complete	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.
2016-1366	**An integrated scholarship program in process engineering – year 2**	Project Complete	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.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2016-1438	**Educational pathways: creating a highly skilled meat industry – year 2**	Project Complete	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 (Year 2).	Criteria for ESP program success, creating research critical mass, delivering research project-specific outputs, ongoing educational opportunities, experienced graduates (Year 2).	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.
2017-1092	**An integrated scholarship program in red meat safety and microbiology – year 2**	Project Complete	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 five-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.
2017-1079	**Australian rural leadership program – course 24 – Grant Melrose (John Dee Warwick)**	Project Complete	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 provide to the sponsor mid-course and at end of course a negotiated task that details the benefit to 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.
2019-1007	**2019 Science and innovation awards for young people in agriculture, fisheries and forestry**	Project Complete	The ABARES Young People in Agriculture Award is an annual award sponsored by AMPC (Red meat processing category Award). It recognises innovative scientific projects from young rural innovators that will contribute to the ongoing success and sustainability of Australia's red meat industry.	Two milestone reports authored by the winner.	A project on an innovative or emerging scientific issue, including biophysical and social sciences, that will contribute to the ongoing success and sustainability of Australia's agricultural, fisheries and forestry industries.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1015	**Leveraging strategic energy products to enhance productivity at red meat processing sites**	Project In Progress	Processors have reported at training events that they need assistance with understanding the nexus between energy, waste and water to inform their corporate business plans. Energy accounts for 20-30% of the cost of production at red meat processing sites, and addressing this significant cost goes to the heart of business competitiveness. This project focuses on the application of existing energy research via education and engagement activities, leading to the formation of a group of 'implementation ready' small and medium businesses processors. 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. Engagement will be driven through a series of interviews, roadshows, use of feasibility tools, pilots, case studies and targeted training sessions across the AMPC membership.	Phase One Deliverables/Outputs provided by Energetics: • A detailed project plan will be finalised at the initial project planning session. • A list of energy productivity opportunities that are valued by industry. • A 2-page outline for each extension activity (pilots, case studies, roadshows, training events) including topics, intent, deliverables, outcomes, learning outcomes (where applicable), materials, tools, the process to be followed, timing and benefits for participants. • A pack of training materials for roadshows and training events including presentations, checklists and tools and learning activities that reflect the agreed learning outcomes informed by initial industry consultations. • A business case for strategic energy productivity initiatives, that may be used to leverage their business plans, are developed for at least three SME sites (from the pilots). • Provide business cases for three energy productivity (EP) opportunities implemented or being considered by the selected pilot site(s). • Present a report that summarises the outcomes from phase one and facilitates a go/no go decision by AMPC to progress phase two. Phase Two Deliverables/Outputs: • Provide three energy productivity case studies demonstrating how energy projects have supported productivity improvements at pilot sites which will be written up and made available for the AMPC website, roadshows and training events. • Deliver five energy productivity roadshows to present case. examples. • Deliver five feasibility workshops (1-day training sessions) to support the industry to leverage energy productivity. • Provide coaching to progress business cases and business plans. • Present a report that summarises the outcomes from phase two.	Creating an energy benchmarking tool has received a very positive response from those that have attended the workshops.
2019-1022	**Employee retention for the meat industry**	Project In Progress			

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2019-1046	**Understanding an innovation culture and its effect in Australian red meat processing plants: an application of systems leadership – stage 1**	Project In Progress	The culture audit will be implemented in two phases with both quantitative and qualitative components. Participants will be identified from each site at the beginning of the project process to allow for an industry baseline to be developed. A series of semi-structured interviews will be conducted to identify key themes within a qualitative program. The key themes include an understanding of the symbols, systems and behaviours for employees (Macdonald 2016, Hogan 2014). In addition to the qualitative research, a quantitative survey will be conducted with all participants. The survey will be derived from the research conducted by Macdonald (2017) and Hogan (2014) and adapted to the food industry. There is a clear linkage between behaviours, systems and the culture that drives innovation. The second phase of the program will include Managerial Leadership Program (Macdonald & Associates); Systems Design Program (Macdonald & Associates); Innovation Leadership Systems (Agriculture & Response Consulting Aust); and Innovation implementation (Systems Agriculture & Response Consulting Aust). This linkage will be established in the demonstration initiatives that will create an innovation demand from the organisation's senior management team through the managerial leadership program. The system will be developed through the system's design program with an aim to be both productive and authorised. Around 120 projects will be developed through the innovation leadership program that will be completed with Plant Managers and Supervisors. Finally, the projects will be implemented and evaluated through the innovation implementation mentoring program on-site. This project will cover Stage 1 of the intended work.	*Culture Audits* The cultural audit will develop over 120 datasets of drivers for innovation in the meat processing industry including a deep understanding of symbols, systems and behaviours from a systems leadership perspective. The datasets will include both qualitative and quantitative information of the key drivers and a rich picture of what is happening derived from the qualitative information. The data will be layered by plant, business and level of thinking on innovation (Table 1). *Managerial Leadership Program* The managerial leadership program provides a tangible and disciplined set of aligned innovation principles and models for business leaders to be truly effective in the role. These principles provide leaders with management tools to predict behaviour and therefore make informed decisions about how innovation will be socially accepted within the organisation. The program will allow business leaders to take a long-term perspective on innovation management within the business. *Systems Design Program* By optimising innovation with a systems leadership approach the management team will be able to implement an innovation framework to manage the complexity of innovation both at a plant and business level. We will provide a system that assists, that is both authorised and productive, to develop innovation projects. At the end of the process, this will be the group that will evaluate all the projects and how they performed to see if the system needs to be adjusted. *Innovation Leadership Program* The program utilises three leadership skill sets to develop projects as learning outcomes. The team leader, new supervisor and innovation skill sets will develop over 100 projects for the project. These projects will include project context, issues, current state and future state with a focus on the technical, commercial and social project outcomes. These projects will include an evaluation from senior leaders to understand the effect of the projects on the business and the opportunity for projects synergies. *Innovation Implementation* The Innovation Implementation program is a mentoring program to assist project leaders in implementing and evaluating their projects. This will include further work on project design, current state and future state. The implementation and evaluation process will document the entire project process and will include a cost-benefit analysis on the project. This process allows the project team to fully understand the technical, social and commercial benefits to the organisation.	This project will give AMPC and the RMI an understanding of the barriers to innovation adoption and create frameworks to improve adoption of innovation.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1001	**Meat industry efficiency and innovation capacity enhancement: benchmarking technologies and systems from automotive industry**	Project In Progress	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 the red meat industry's innovation capacity on a sustained basis.
2018-1011	**Meat industry environment network 2017-2019**	Project In Progress	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.
2019-1056	**Facilitation of the QCMPA network FY18-FY20**	Project In Progress			
2016-1367	**An integrated scholarship program in process engineering – year 3**	Project In Progress	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.
2016-1439	**Educational pathways: creating a highly skilled meat industry – year 3 & 4**	Project In Progress	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 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.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1093	**An integrated scholarship program in red meat safety and microbiology – year 3**	Project In Progress	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 five-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.
2018-1033	**Charles Sturt University partnership program for red meat capacity development**	Project In Progress	This project will provide for sponsorship of one graduate into a CSU research Masters project that will address the specific needs of regional processors.	New applied research outputs delivering higher quality, productivity or sustainability delivered through one industry-based and led Masters research program.	Over a five-year period, the scheme will place 20 undergraduate CSU students in short-term internships (4-6 weeks) across the regional processing sector, 10 undergraduate CSU students in longer-term industry or international study internships, five University staff members into industry secondments, and four graduates into CSU research Masters projects that will address the specific needs of regional processors. The project will also investigate the opportunity to transition the internships into a formal cadetship scheme and for CSU to provide an advanced educational program to support industry and innovation leadership capacity development.
2016-1019	**Red meat processing upskilling scholarship program**	Project In Progress	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.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1078	**Australian agribusiness leadership program**	Project In Progress	Deliver practical leadership benefits to organisations and individuals within the 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 opportunities 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.
2017-1083	**Scholarships for advanced diploma in meat processing**	Project In Progress	The Advanced Diploma is designed for people who are already employed in the industry and who can draw upon workplace experiences and 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 the industry; improved business expertise and experience.
2018-1007	**Diploma of meat processing scholarship program**	Project In Progress	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 15 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.
2018-1126	**Diploma of meat processing scholarship program FY19**	Project In Progress	This project is for the awarding of up to 12 scholarships to employees from red meat processing companies over an 18-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.
2019-1008	**Australian rural leadership program – course 26 – Graham Lyon (Fletcher International Exports)**	Project In Progress	Producing a network of informed, capable and ethical leaders who can work collaboratively to advance the interests of their industries.	The recipient will ensure that the participants awarded with a scholarship provide to the sponsor mid-course and at end of course a negotiated task that details the benefit to the participant.	The Australian Rural Leadership Program is aimed at producing a network of informed, capable and ethical leaders who can 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.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2019-1026	**Australian rural leadership program – course 26 – Renee Teys (Teys Australia)**	Project In Progress	Producing a network of informed, capable and ethical leaders who can work collaboratively to advance the interests of their industries.	The recipient will ensure that the participants awarded with a scholarship provide to the sponsor mid-course and at end of course a negotiated task that details the benefit to the participant.	The Australian Rural Leadership Program is aimed at producing a network of informed, capable and ethical leaders who can 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.
2018-1103	**Strengthening industry RD&E outcomes**	Project Complete	To form a 3-5-year strategy for Research and Development within each AMPC Program Area.	• R&D Strategy Document for incumbent organisations in the Australian red meat industry for 2018 and the following 3-5 years. • An action plan to deliver tangible R&D outcomes for 2018 with agreed upon and relevant KPIs. • A project outcomes report that analyses the efficacy of the project.	This project supports the core purpose of research and development to ensure projects deliver value to the industry.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2019-1019	**Member centric strategic development**	Project in Progress	1. Member engagement: Ensure large members, medium-size members and smaller members across the country receive the appropriate level of engagement with AMPC, and to ensure the AMPC value proposition is delivered relevantly across these industry groupings. 2. Research providers: Ensure that the providers to the Australian red meat industry are aligned to the needs of the industry and are selected according to a rigorous, relevant and transparent selection panel process. 3. Stakeholders: This involves the key stakeholders in the Australian red meat industry, and developing a strategic approach to the stakeholders which ensures we get their feedback back to the members, and that those key stakeholders are also fully aware of research objectives of the Australian red meat processing industry.	• Report on current state of Member Centric Strategy – End of Month One. • Report on end state Member Centric Strategy – End of Month Two. • Begin Member Centric program execution – During Month Three.	The rationale for this program is to ensure that the member engagement activities, the research providers relationships, and the stakeholder engagement programs are all working together to ensure that member outcomes are maximised.
2018-1146 2018-1147 2018-1148	**Management of the Q Fever Register – stage 3 (hosting, maintenance and support) 2017-19**	Project In Progress	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.

PROGRAM 5
Industry Improvement & Economic Analysis

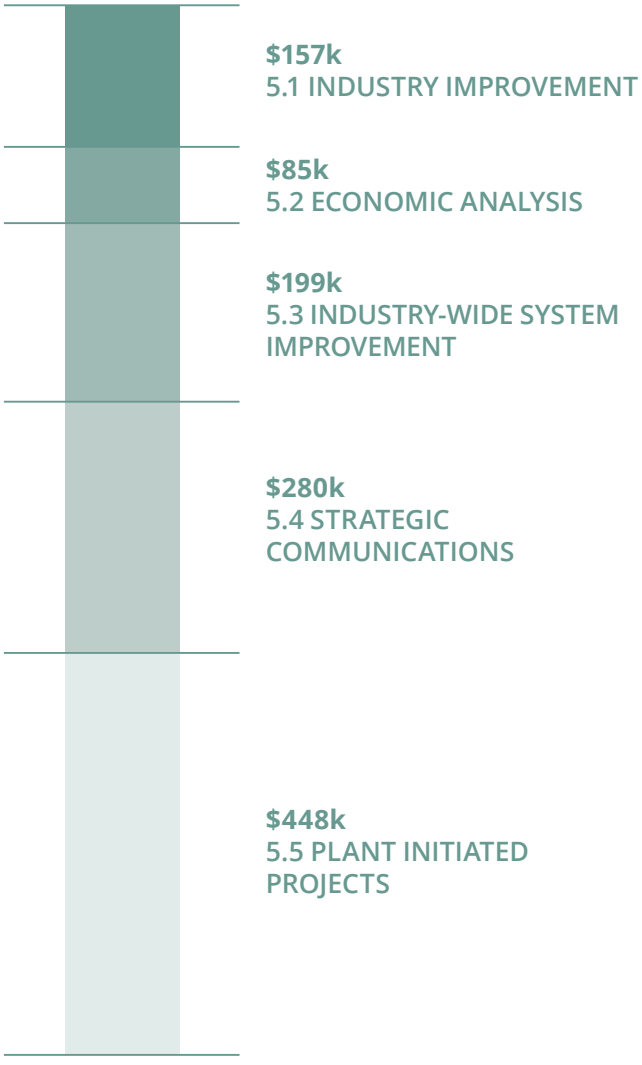
Economic analysis is essential to making data-driven, evidence-based investment in R&D that benefits the whole of industry. The Industry Improvement & Economic Analysis program uses economic modelling, statistical analysis, benchmarking and networked information flows to study drivers of industry productivity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

Alignment to Key Frameworks

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	**$712,029**
Matching	**$457,174**

Program investment

Total investment: $1.169m



AMPC's R&D programs are designed to meet the needs of levy-paying members and to deliver whole-of-industry benefit. Measurement of the outcomes of our portfolio of projects allows for data-driven, evidence-based investment in R&D. This program uses economic modelling, statistical analysis and benchmarking to examine drivers of productivity and sustainability. Ultimately, these insights are used to inform policy efforts.

Furthermore, this program focuses on industry-wide system improvements, especially where industry reputation is critical to maintaining market share.

Cost to Operate

In 2018-19 a comprehensive audit of the elements that contribute to regulatory burden and unnecessary cost was undertaken, which was launched to industry and government as 'The Cost to Operate' (CTO) report. The report gathered several years of data undertaken within different projects (2017-1062) and compared and correlated the Australian context against that of other major red meat processors and exporters internationally, including the United States, Brazil and Argentina.

The project has enabled the red meat processing industry to be better prepared to deal with intensifying international competition by having the information and analysis needed to improve cost and regulatory outcomes for the industry. For instance, the report identified approximately $110 million in export certification charges that could be streamlined to reduce costs.

Peak industry body AMIC has endorsed the report, presented the findings to Government and continues to advocate for removal of red tape to produce better economic outcomes for the those in the red meat supply chain. To augment the findings of the CTO report and to inform policy reform, current project Red Meat Processing Economic Reform (2019-1055) is revisiting and building on this research.

An important part of regulatory reform is ensuring that there is a net societal benefit. Red meat processors are just one part of the community and although any potential reform opportunities may greatly benefit them, this should not happen at the expense of broader society.

An important part of reviewing regulation is identifying the key stakeholders. In this case the red meat processing sector is a critical stakeholder, but so too are other interested groups such as livestock producers, small businesses, red meat consumers, regional communities and the Australian public.

Industry-Wide System Improvements

Animal welfare is not just regulation, it is the right thing to do. All parts of the paddock-to-plate supply chain have been under increasing scrutiny of welfare standards and practices. It is important that processors are aware of their responsibilities and consumer expectations.

The Australian Animal Welfare Certification Standard (AAWCS) is a voluntary code which processors may apply to be assessed for certification. Certified members are audited to ensure their facilities uphold the highest of animal welfare standards.

AMPC believes there are many processors who would be eligible for the certification but have not applied to be certified. There are many factors that may be contributing to the low certification numbers including: time, cost, anxiety about not meeting the standard, and the threat of legal action if a processor is found to be non-compliant or in breach of welfare standards.

AMPC, along with the Australian Meat Industry Council (AMIC), has identified the opportunity for non-AAWCS processing establishments to nominate themselves through AMIC for an industry-funded gap audit against the requirements of the Australian Livestock Processing Industry Animal Welfare Certification System (AAWCS), project 2019-1032.

The purpose of the gap audit is to twofold: firstly, to identify areas of potential non-compliance that should serve as focus point for individual plant management; and secondly, as a precursor to encouraging the adoption of the industry's best animal welfare practices as embodied in the AAWCS.

The final report will be an aggregated and anonymised report and will not identify the specific participants or sites. It will analyse the findings of the gap analyses and include:

- Gaps between participants and the AAWCS
- Trends identified from the gap analyses
- Recommendations for the industry to improve the standard of animal welfare
- Recommendations to increase the number of participants in the AAWCS

It is hoped that the gap audit will lead to more processors becoming AAWCS accredited and will lead to a revision of the current standard to ascertain what needs to be updated to be valuable to industry and build consumer trust in the sector. The project is scheduled to complete within the 2019-20 year.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1039	**Providing feedback to producers – what value for the processor?**	Project Complete	This project seeks to: • Identify those aspects of providing producer feedback which are of value to the processor. • Develop and implement a model of providing producer feedback suitable for small/ medium processors. • Identify areas where future R&D investment is required.	Five case studies of existing producer feedback models. New model tailored for use by small/medium processors. Communication plan for project results. Extension support to small/medium processors for a period of six months.	Increased returns for processors and producers through carcase value improvements.
2019-1004	**Using pallet labels as an alternate system of shipping mark application to loads of beef intended for the US**	Project Complete	Test the acceptance of a pallet label carrying the shipping mark as opposed to the cartons carrying the shipping mark.	Demonstration outcome of the effectiveness of pallet labels as a method of shipping mark.	This will promote logistics efficiencies. The next stage of this project is now being trialled through project 2019-1039
2018-1134	**Red meat industry funding program map and tool**	Project Complete	A tool for red meat industry participants to readily identify funding support mechanisms, a first 'port-of-call' for information required to assess eligibility and undertake an application process to access funding programs for R&D and commercialisation.	This project will deliver a cloud-based Red Meat Industry Funding program map and tool.	To assist red meat industry participants in identifying their eligibility for government grant programs.
2019-1011	**Processing cost competitiveness**	Project Complete	To improve the understanding of red meat industry processing cost economics and means of improving cost economics by the red meat industry of Australia, through the gathering of data on processing costs in New Zealand, and through the sharing of information and collaborative research on cost economics in Australia, Brazil and Argentina, and the United States.	A report outlining the results of the investigations, aggregate data findings where applicable, potential outcomes for Australian red meat processing, and next steps as appropriate.	Improve the economic benefits flowing from meat processing to the red meat industry and broader economy.
2019-1002	**AMPC 2016-18 investment ex-post impact assessment**	Project Complete	To provide an assessment, in line with the CRRDC Impact Assessment Guidelines, of a representative sample of AMPC investments that were completed in the period 1 July 2016 to 30 June 2018.	A final report including but not limited to: Summary of investments, selection, and results by investment theme and key industry issue, with data reported in accordance with the CRRDC Impact Assessment Guidelines.	To identify and provide analysis on key drivers of investment success, including factors not limited to: investment outputs; industry awareness; industry adoption; cost of adoption; adoption benefit; benefit attribution.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2019-1005	**Review of ACCC report on electricity affordability and Australia's competitive advantage**	Project Complete	A review of the ACCC's report on electricity affordability.	A report with recommendations.	The project will have value in the process of research developing detailed policy recommendations for the industry.
2017-1062	**Development of economic model for analysis of regulatory and related costs and duplication in red meat processing**	Project Complete	Understanding the regulatory costs of Australian red meat processors and those of their key international competitors.	A report addressing (but not limited to): • Identification of potential improvements and the economic benefits flowing therefrom. • Recommendations for the next steps to address business and cost impacts. • Identification of a practical development pathway for, and the issues associated with, a process of standards consolidation that will generate cost savings for red meat processors.	Understanding of the key cost components in red meat processing both in Australia and in key international competitor countries; to inform industry policy initiatives aimed at addressing cost competitiveness hurdles.
2019-1020	**Analysis of state-based processing costs**	Project Complete	To identify additional value that could be derived from State-based analysis of processing costs and regulation.	A report	Building on the knowledge of the 'Cost to Operate' report (projects 2017-1062 and 2019-1011) to deliver an understanding of those costs derived from State-based regulation.
2017-1067	**Investigation of options and development of models for industry supply chain information system standards and programs**	Project in Progress	The objective of this project is to address the shortcomings of Australia's fragmented supply chain systems and provide a co-ordinated Australian Red Meat Industry Supply Chain.	A report on the current supply chain. An Australian Red Meat Industry Supply Chain Standard for publishing. A report on viable (cost-beneficial) models for the operation of running industry portals. Workshops on the Australian Red Meat Industry Supply Chain Standards.	This project will create efficiencies for the supply chain by developing a co-ordinated Australian Red Meat Industry Supply Chain Standard and system.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1142	**Managing risk across the red meat supply chain – stage 1**	Project Complete	Understand and communicate the financial risks across the red meat supply chain. Learn how market volatility impacts the profitability and sustainability of the red meat industry. Understand and communicate the importance of risk management. Review traditional risk management solutions (vanilla and structured). Highlight case studies and best practices in risk management across the industry including comparisons to global industry peers. Provide recommendations on how industry participants can effectively mitigate financial market risk.	A comprehensive report coupled with two in-person presentations as well as a project snapshot that pulls together key points and findings of the research.	The purpose of this project is to provide industry insights and educational services into managing financial risks across the Red Meat Sector.
2019-1032	**GAP analysis program for non-certified AAWCS processing establishments**	Project in Progress	1. Provide a benchmark of non-certified processing establishments against the AAWCS Standards. 2. Identify areas of potential improvement within non-certified processing establishments enabling sites to take necessary action to conform with industry standards. 3. Encourage the adoption of the industry's best animal welfare practices as embodied in the AAWCS.	A report analysing the findings of the gap analyses. Recommendations for the industry to improve the standard of animal welfare. Recommendations to increase the number of participants in the AAWCS.	An increased number of processing plants will be accredited by AAWCS leading to improved animal welfare outcomes through practices embodied in the AAWCS.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2018-1047	**Blockchain for the meat industry: where and how?**	Project in Progress	This project aims to explore the use of blockchain technology for the red meat industry. Blockchain technology, which underpins digital currencies (e.g. bitcoin) provides the ability to record sequential events and their timestamps throughout a supply chain. Its availability and maturity present significant opportunities for any supply chain where products need to transact through different parties with different trust levels, and at different times.	A final report answering the questions about the funding structure of the technology deployment, the potential benefits/ profits, and the possible use of the data collected along the supply chains.	It would facilitate the red meat industry in achieving a much more competitive position in global markets. The project will offer enhanced transparency, accountability, coordination, traceability, and customer confidence with improved customer-oriented decision making.
2017-1097	**RRD4P round 2 accelerating precision agriculture to decision agriculture**	Project Complete	The project will design a solution for the use of big data in agriculture.	Recommendations for data communications to improve decision making – or decision agriculture.	To increase the profitability of producers and provide business strategies to realise the economic benefits within Australian farming businesses. The project will increase the adoption of new technologies by farmers and professionals to improve farm profits.

PROGRAM 6
Marketing & Market Access

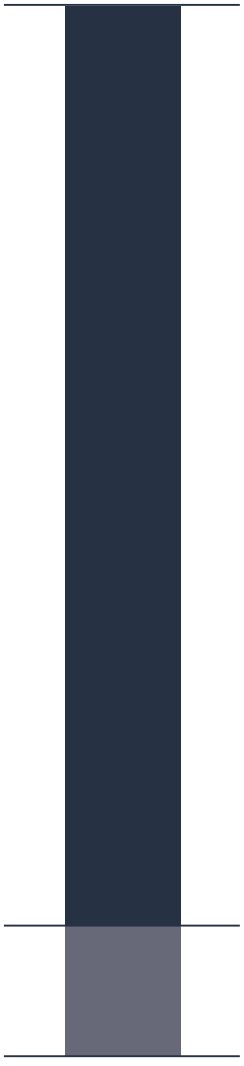
Maximising market access and effective consumer marketing are key aspects of facilitating the domestic and global competitiveness of the Australian red meat processing sector. The Marketing & Market Access program works jointly with MLA to increase market access for Australian red meat, and enhances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

Alignment to Key Frameworks

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	**$3,194,761**
Matching	**$275,522**

Program investment

Total investment: $3.470m



$3.035m
6.1 EXPORT - MARKETING & MARKET ACCESS

$435k
6.2 DOMESTIC - MARKETING & MARKET ACCESS

Joint Programs

The global competitiveness of the Australian meat processing sector is maximised through market access and effective consumer marketing. Australian red meat faces tariffs, quotas and technical barriers to trade across the globe, imposing billions of dollars in additional costs across the value chain. These barriers also prevent or restrict trade which limits the diversity of markets and, consequently, reduces the number of potential customers for Australian red meat.

In response, AMPC collaborates with industry stakeholders including the Australian Government, MLA and peak industry council AMIC to drive growth in exports and deliver greater impact than what could be achieved alone.

Marketing and Market Access

The focus of the Joint Program with MLA is to increase market access for red meat, through collaboration and co-investment in R&D programs and promotional activities which reduce economic and technical barriers to trade in global markets.

With Australian red meat facing increasing competition from other red meat suppliers and protein products in global markets, the industry must continue to promote its exceptional points of difference to global customers and consumers – safety, quality and traceability.

At home, in the domestic market, the focus is to ensure beef and lamb remain popular meal choices by focusing on Australian red meat's value proposition and business development.

AEMIS Review

The Australian Export Meat Inspection Service (AEMIS) Review is a significant project (2018-1131) which is currently underway. The original intention of AEMIS was to reduce inspection costs while ensuring the integrity of Australia's meat exports and enabling market access.

Under AEMIS, meat inspection services were intended to be handed over to processors or, in order to meet importing country requirements, to third party providers, each of which were required to provide qualified inspectors. In the move away from centralised government inspection services to a decentralised semi-private scheme, it was intended that no processing facility would be financially worse off than its peers.

This system also represented a return to full-cost recovery, with an intention to reduce total costs and enable industry to offset costs.

However, with the mixed market requirements (particularly in EU importing countries) industry has been mixed in its adoption of online inspection delivery models. While Australia's reputation and market access have been maintained throughout this period, this mixed model has resulted in a number of implications for the sector:

- producer price pressure, with much of the additional certification and inspection cost passed to producers by means of lower sales prices
- erosion of the Cost Recovery Reserve, resulting in questions about whether Government initiatives to control costs have been sufficient
- cost inequality for smaller processing plants, which do not have economies of scale for inspector recruitment, training and development costs
- inspector shortages, with industry experiencing difficulties recruiting certified and trained meat inspectors

More than six years after its introduction, the review therefore seeks to assess the effectiveness, efficiency and fitness-for-purpose of AEMIS, building on the lessons learned from implementation to ensure it contributes to the global competitiveness of the Australian meat export sector.

The project involves an independent review of the export inspection and certification services. It is tasked to make recommendations to support the intent that AEMIS be cost effective, efficient and fit-for-purpose in protecting and promoting market access for Australian meat and meat products.

The final report is due to be delivered before the end of the 2019 calendar year.

FY19 Active and completed projects: objectives and outcomes

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2017-1053	**Hyperspectral ZT and food safety determination (phase 2)**	Project Complete	To use objective methods in determining Zero Tolerance (ZT) contamination on carcases.	A report detailing the next steps required to enhance the sensitivity of the hyperspectral cameras.	Better accuracy in detection of ZT on carcase and boxed meat, therefore reducing potential for Shiga toxin-producing Escherichia coli. (STEC) contamination.
2017-1058	**Contemporary chemical lean (CL) validation – national standard for measurement**	Project Complete	Validate the performance for methods used for CL determination by Australian domestic and overseas facilities.	A report detailing the accuracy of the available methods for CL determination.	The industry can better choose its internal methodology on the measurement of CL in its trim.
2017-1070	**An on-line system to assess beef quality characteristics ('Tenderspec')**	Project Complete	An objective evaluation of carcase quality characteristics to deliver high quality products, differentiate Australian beef in the global market, and increase processing efficiency.	Report on the Tenderspec potential to accurately predict tenderness of carcases. Videos of the technology operating.	Application of this technology in Australian beef plants has the capacity to benefit producers, the domestic market, and global competitiveness.
2018-1077	**An on-line system to assess beef quality characteristics – project logistics and sampling – phase 2 ('Tenderspec')**	Project Complete	An objective evaluation of carcase quality characteristics to deliver high quality products, differentiate Australian beef in the global market, and increase processing efficiency.	Report on the Tenderspec potential to accurately predict tenderness of carcases. Videos of the technology operating.	Application of this technology in Australian beef plants has the capacity to benefit producers, the domestic market, and global competitiveness.
2017-1100	**Development and validation of a probe for measuring fat in lamb carcases**	Project Terminated			
2018-1131	**Australian export meat inspection service review (AEMIS)**	Project in Progress	Conduct an independent review of the Australian Export Meat Inspection Services to: • determine their current effectiveness, efficiency and fitness for purpose; • make recommendations about the future needs to the Government and Industry around Export Certification Services in the three service areas of: – Certification; – Regulatory compliance verification; and – Ante and Post Mortem inspection.	The Provision of: 1. Consultation Report for AEMIS Steering Committee feedback and final submission to AMPC. 2. Draft Review Report for consultation with the AEMIS Review Steering Group with Final Review Report to be approved by AEMIS Review Steering Group and submitted to AMPC.	The review will make recommendations to improve the effectiveness, efficiency and fitness-for-purpose of the Export Certification Services; building on the lessons learned from implementation to ensure it contributes to the Australian meat export sector remaining as globally competitive as possible, now and into the future.

Code	Project Title	Status	Objective	Outputs	Benefit to industry
2019-1030	**Consultation draft export control rules 2020 – meat and meat products**	Project in Progress	Preparation of an outline of recommended submissions by the Australian Red Meat Industry – through AMIC – on the Draft Rules, guided by Clayton Utz legal analysis.	1. AMIC principles submission regarding the Draft Rules. 2. AMIC technical submission regarding the Draft Rules.	Maximise AMIC's prospect of influencing the proposed regulatory reform and content to help ensure appropriate and proportionate regulatory oversight of Australia's Meat Industry, particularly by reference to clarity, fairness and practical implications. These matters have the potential to avoid significant imposition as well as help ensure efficient and cost-effective regulatory obligations for industry.
2017-1011	**Non-invasive measurement of meat quality in live animals using deep tissue raman spectroscopy**	Project in Progress	Provide a test in live animals that detects the high probability of dark cutting meat prior to slaughter.	Paper and methodology about the testing methods to go into pilot trials.	Detection of dark cutting products prior to slaughter will save the industry on the downgrade of the carcases and reduce inefficiencies in boning rooms due to sorting.
2017-1049	**Lab-on-a-chip system for microbial contamination**	Project in Progress	To find a rapid detection method for microbiological contamination.	This project will prototype a rapid detection method and equipment to go into pilot trials.	Rapid detection of micro contamination of meat and meat products will ensure that real time detection happens; thus reducing hold times of tested samples, and an ability to manage any issues before there are problems.
2017-1040	**Non-invasive prediction of dark cutting**	Project Terminated			

Financial report

Australian Meat Processor Corporation Ltd
ABN 67 082 373 448

Financial Highlights

FY19 Financials by Category

Actual income and costs for FY19

	RD&E	Marketing	Pre-stat	Total
Income				
Levies	$10,537,928	$8,767,304	$0	$19,305,232
Interest	$515,492	$284,551	$178,078	$978,121
Government Matching & Contributions	$4,285,561	$0	$0	$4,285,561
Total	**$15,338,982**	**$9,051,855**	**$178,078**	**$24,568,914**

	RD&E	Marketing	Pre-stat	Total
Program Expenditure				
1. Processing Technologies	$4,044,606	$0	$0	$4,044,606
2. Environment & Sustainability	$841,714	$0	$0	$841,714
3. Processing Hygiene, Quality & Meat Science	$2,970,371	$1,373,077	$0	$4,343,448
4. Capability, Extension and Education	$2,395,777	$0	$0	$2,395,777
5. Industry Improvement & Economic Analysis	$914,349	$254,855	$0	$1,169,203
6. Marketing & Market Access	$551,044	$2,919,239	$0	$3,470,283
Total	**$11,717,860**	**$4,547,171**	**$0**	**$16,265,031**

	RD&E	Marketing	Pre-stat	Total
Corporate Costs				
AUS-MEAT Contribution	$0	$550,000	$0	$550,000
Direct Corporate Costs (Project Support)	$2,034,167	$0	$0	$2,034,167
Indirect Corporate Costs	$2,233,992	$1,489,331	$0	$3,723,324
Total	**$4,268,159**	**$2,039,331**	**$0**	**$6,307,491**

Net Surplus/(Deficit)	**($647,038)**	**$2,465,353**	**$178,078**	**$1,996,392**

Reserves movements for FY19

	RD&E	Marketing	Pre-stat	Total
Opening Reserves as at 30 June 2018	$20,697,838	$8,602,612	$6,748,471	$36,048,920
Net Surplus/(Deficit) FY19	($647,038)	$2,465,353	$178,078	$1,996,392
Closing Reserves as at 30 June 2019	$20,050,800	$11,067,964	$6,926,548	$38,045,313

Directors' Report

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

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 2019 and the auditor's report thereon.

Directors

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 (Government and Law) and Masters 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 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 in December 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 in December 2017.

Bruce Rathie
Special Qualifications Director

Degrees in law and commerce, Masters of Business Administration, and 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 across a diverse segment of private sector companies.

Bruce was elected to the AMPC Board for his first term in December 2017.

Directors' Report (continued)

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

Leanne Heywood
Special Qualifications Director

Leanne is an experienced ASX non-executive director, and Audit and Risk committee and Nomination and Remuneration committee Chair with broad general management experience gained through an international career in the mining, rural, government and not-for-profit sectors. She has strong skills across Marketing, Business Analysis, Contracts, Procurement, Logistics, Accounting and Business Improvement along with an advanced ability to facilitate complex negotiations. She is a Non-Executive Director, Chair of the Audit Committee and member of the Nomination and Remuneration and Related Party committees for Orocobre Ltd, Non-Executive Director and Chair of the Audit Committee for Quickstep Holdings Limited and a Director of Midway Limited. She is a member of the New South Wales Council for Women's Economic Opportunity and was named NSW Business Woman of the Year for 2019.

Leanne was elected to the AMPC Board for her first term in December 2017.

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 was also a Director of PrimeSafe (VIC).

Gary was elected to the AMPC Board for an eleventh term in December 2017.

Dean Goode
Processor Director

Master of Business Administration (MBA) from James Cook University, Townsville. Dean was appointed as Chief Executive Officer of Kilcoy Pastoral Company Limited (KPC) on 1 July 2012. Dean has worked for KPC for 13 years, including as General Manager of Operations. Dean has extensive experience in the export beef processing industry, having previously worked for 20 years with Australian Meat Holdings at both its Dinmore and Townsville facilities in various management roles. In January 2017, Dean 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 in December 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 in December 2017.

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 in December 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 30 years and currently holds the position of Chief Executive Officer, Northern Co-operative Meat Company Ltd (NCMC). Simon began his career at KR Darling Downs, 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 in December 2017.

Hasaka Martin
Company Secretary

Hasaka Martin was appointed as Company Secretary on 16 March 2018. Hasaka is a Chartered Secretary with 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' 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 well-being 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 interests 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 and Sustainability; Processing Hygiene, Quality & Meat Science; Capability, Education and Extension; Industry Improvement & Economic Analysis; and Marketing & Market Access.**

AMPC is committed to working with its stakeholders to achieve an efficient application of levy funds through its RD&E and marketing activities to address industry priorities. 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 and 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 activities 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 things 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 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 and 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 exporters' 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) a strategic plan including financial projections for the period of three years beginning on 1 July in that year for the performance of functions necessary to achieve the objective 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 surplus of the Company amounted to $1,996,392 (2018: deficit of $3,214,277).

Directors' Report (continued)

Meetings of Directors

During the financial year, 15 meetings of Directors (including committees of Directors) were held. Attendances by each Director during the year were as follows:

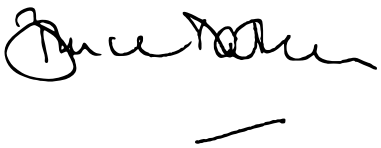
	Directors' Meetings		Nomination and Remuneration Committee		Audit and Risk Committee	
	Number eligible to attend	Number attended	Number eligible to attend	Number attended	Number eligible to attend	Number attended
John Berry	7	6	–	–	–	–
Melissa Fletcher	7	7	–	–	–	–
Bruce Rathie	7	7	3	3	5	5
Leanne Heywood	7	7	3	3	5	5
Gary Hardwick	7	6	–	–	5	4
Dean Goode	7	7	–	–	–	–
Tom Maguire	7	6	–	–	–	–
Pat Gleeson	7	6	–	–	–	–
Simon Stahl	7	6	3	3	–	–

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 2019, has been received and can be found on page 83 of the financial report.

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

Director:
John Berry



Director:
Bruce Rathie

Dated 21 October 2019

Corporate Governance Statement

30 June 2019

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 14 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 the 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 and Risk Committee

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

The Audit and Risk Committee meets on at least four 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 and Risk Committee invites the Chief Executive Officer and the Chief Financial Officer 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 2019

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 and 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 and Risk Committee, the scope and work program of internal auditors.

Nomination and Remuneration Committee

- Leanne Heywood
- Bruce Rathie
- Simon Stahl

A Nomination and 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 and Remuneration Committee met three times in the financial year ending 30 June 2019.

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.

Nexia Australia

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 2019, 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: 21 October 2019
Sydney

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Statement of Profit or Loss and Other Comprehensive Income

For the Year Ended 30 June 2019

	Note	2019 $	2018 $
Revenue	4	**24,568,914**	24,983,139
Employee benefits expense		**(3,653,234)**	(2,833,028)
Depreciation and amortisation expense	5	**(61,875)**	(160,713)
Program expenditure		**(17,965,275)**	(24,140,110)
Industry support expenditure		**(229,900)**	(550,000)
Other expenses		**(662,238)**	(513,565)
Surplus/(deficit) for the year		**1,996,392**	**(3,214,277)**
Total comprehensive income/(loss) for the year		**1,996,392**	**(3,214,277)**

Statement of Financial Position

As at 30 June 2019

	Note	2019 $	2018 $
ASSETS			
Current assets			
Cash and cash equivalents	8	**41,026,282**	38,542,593
Trade and other receivables	9	**3,552,079**	5,031,087
Other assets	10	**12,708**	169,979
Total current assets		**44,591,06**	**43,743,659**
Non-current assets			
Property, plant and equipment	11	**221,823**	43,337
Total non-current assets		**221,823**	**43,337**
Total assets		**44,812,892**	**43,786,996**
LIABILITIES			
Current liabilities			
Trade and other payables	12	**6,623,770**	7,597,125
Provisions	13	**95,731**	98,374
Total current liabilities		**6,719,501**	**7,695,499**
Non-current liabilities			
Provisions	13	**48,078**	42,576
Total non-current liabilities		**48,078**	**42,576**
Total liabilities		**6,767,579**	**7,738,075**
Net assets		**38,045,313**	**36,048,921**
EQUITY			
Pre-statutory accumulated funds	19	**6,926,548**	6,748,471
Statutory R&D accumulated funds	19	**20,050,800**	20,697,838
Statutory marketing accumulated fund	19	**11,067,965**	8,602,612
Total equity		**38,045,313**	**36,048,921**

Statement of Changes in Equity

For the Year Ended 30 June 2019

2019	Accumulated Funds $	Total $
Balance at 1 July 2018	**36,048,921**	**36,048,921**
Total comprehensive loss for the year	**1,996,392**	**1,996,392**
Balance at 30 June 2019	**38,045,313**	**38,045,313**

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

Statement of Cash Flows

For the Year Ended 30 June 2019

Cash flows from operating activities:	Note	2019 $	2018 $
Cash flows from operating activities:			
Receipts from statutory levies		**20,186,412**	20,466,144
Other receipts and recoveries		**10,666,692**	12,267,411
Payments to suppliers and employees		**(29,191,878)**	(35,652,145)
Interest received		**1,064,316**	1,291,305
Net cash provided by/(used in) operating activities		**2,725,542**	(1,627,285)
Cash flows from investing activities:			
Payment for property, plant and equipment		**(241,853)**	(29,783)
Net cash used in investing activities		**(241,853)**	(29,783)
Cash flows from financing activities:			
Net cash provided by/(used in) financing activities		**–**	–
Net increase/(decrease) in cash and cash equivalents held		**2,483,689**	(1,657,068)
Cash and cash equivalents at beginning of year		**38,542,593**	40,199,661
Cash and cash equivalents at end of financial year	8	**41,026,282**	38,542,593

Notes to the Financial Statements

For the Year Ended 30 June 2019

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 24 September 2019.

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.

The preparation of the financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements, are disclosed in Note 2.

New, revised or amended Accounting Standards and Interpretations adopted

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

The following Accounting Standards and Interpretations are most relevant to the Company:

AASB 9 Financial Instruments

The Company has adopted AASB 9 from 1 July 2018. The standard introduced new classification and measurement models for financial assets. A financial asset shall be measured at amortised cost if it is held within a business model whose objective is to hold assets in order to collect contractual cash flows which arise on specified dates and that are solely principal and interest. A debt investment shall be measured at fair value through other comprehensive income if it is held within a business model whose objective is to both hold assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest as well as selling the asset on the basis of its fair value.

All other financial assets are classified and measured at fair value through profit or loss unless the entity makes an irrevocable election on initial recognition to present gains and losses on equity instruments (that are not held-for-trading or contingent consideration recognised in a business combination) in other comprehensive income ('OCI'). Despite these requirements, a financial asset may be irrevocably designated as measured at fair value through profit or loss to the effect of, or eliminate, an accounting mismatch. For financial liabilities designated at fair value through profit or loss, the standard requires the portion of the change in fair value that relates to the entity's own credit risk to be presented in OCI (unless it would create an accounting mismatch).

New simpler hedge accounting requirements are intended to more closely align the accounting treatment with the risk management activities of the entity. New impairment requirements use an 'expected credit loss' ('ECL') model to recognise an allowance. Impairment is measured using a 12-month ECL method unless the credit risk on a financial instrument has increased significantly since initial recognition in which case the lifetime ECL method is adopted. For receivables, a simplified approach to measuring expected credit losses using a lifetime expected loss allowance is available.

Any significant impacts 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

Revenues 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) 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 amounts of all fixed assets are 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%

(c) 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.

(d) Income Tax

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

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2019

(e) 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 12 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.

(f) 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.

(g) Financial instruments

Financial liabilities

Financial liabilities are classified as either financial liabilities 'at fair value through profit or loss' or other financial liabilities depending on the purpose for which the liability was acquired.

Financial liabilities include trade and other payables (including finance lease liabilities), which are measured at amortised cost using the effective interest rate method.

Financial instruments are recognised initially on the date that the Company becomes party to the contractual provisions of the instrument.

On initial recognition, all financial instruments are measured at fair value plus transaction costs (except for instruments measured at fair value through profit or loss where transaction costs are expensed as incurred).

Financial assets

All recognised financial assets are subsequently measured in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

Classification

On initial recognition, the Company classifies its financial assets into the following categories; those measured at:

- amortised cost
- fair value through profit or loss – FVTPL
- fair value through other comprehensive income – equity instrument (FVOCI – equity)
- fair value through other comprehensive income – debt investments (FVOCI – debt)

Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets.

Amortised cost

Assets measured at amortised cost are financial assets where:

- the business model is to hold assets to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Company's financial assets are measured at amortised cost and comprise trade and other receivables and cash and cash equivalents in the statement of financial position.

Subsequent to initial recognition, these assets are carried at amortised cost using the effective interest rate method less provision for impairment.

Interest income, and foreign exchange gains or losses on impairment are recognised in profit or loss. Gain or loss on derecognition is recognised in profit or loss.

Trade receivables

Impairment of trade receivables has been determined using the simplified approach in AASB 9 which uses an estimation of lifetime expected credit losses. The Company has determined the probability of non-payment of the receivable and multiplied this by the amount of the expected loss arising from default.

The amount of the impairment is recorded in a separate allowance account with the loss being recognised in finance expense. Once the receivable is determined to be uncollectable then the gross carrying amount is written off against the associated allowance.

Where the Company renegotiates the terms of the trade receivables due from certain customers, the new expected cash flows are discounted at the original effective interest rate and any resulting difference to the carrying value is recognised in profit or loss.

(h) 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 18 to the financial statements.

(i) Cash and cash equivalents

Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, and 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.

(j) Trade and other receivables

Trade and other receivables are recorded at amounts due less any allowance for expected credit loss in accordance with AASB 9.

(k) 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.

(l) 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.

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2019

(m) Plant Initiated Projects (PIP) program

Statutory Levies

Of the total levies received during the financial year, 25% 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.

(n) 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.

(o) Current and non-current classification

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

An asset is classified as current when it is either expected to be realised or intended to be sold or consumed in the Company's normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is classified as current when it is either expected to be settled in the Company's normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

3 Critical Accounting Estimates and Judgements

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

	2019 $	2018 $
Revenue from operations		
– statutory levies	**19,305,232**	18,918,619
– interest received	**978,121**	1,019,118
– government matching and other income	**4,285,561**	5,045,402
Total revenue	**24,568,914**	**24,983,139**

5 Surplus for the Year

The surplus for the year has been determined after:

	2019 $	2018 $
Expenses:		
Depreciation of non-current assets:		
– furniture, fixtures and fittings	**35,317**	33,078
– office equipment	**3,060**	(420)
– computer equipment	**23,498**	15,933
Depreciation of plant and equipment	**61,875**	48,591
Amortisation of intangible assets	**–**	112,122

6 Auditor's Remuneration

– audit and review services	**40,000**	40,000

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 (Director's Fees)	**362,820**	303,432
Post-Directorship benefits (Superannuation)	**34,468**	28,826
	397,288	332,258
Executives		
Short-term employee benefits (Salary)	**479,035**	330,384
Post-employment benefits (Superannuation)	**20,965**	19,616
Termination benefits	**497,771**	–
	997,771	350,000

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

J K Berry	M Fletcher	B Rathie	L Heywood
G F Hardwick	D Goode	P Gleeson	T J Maguire
S R Stahl			

Other Key Management Personnel include:

P Rizzo (CEO) departed the Company in June 2019.

Total aggregated out-of-pocket costs including travel and related expenses incurred by Directors during the year was $43,812.

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2019

8 Cash and Cash Equivalents

	2019 $	2018 $
Cash at bank	**6,026,282**	3,542,593
Cash on term deposit	**35,000,000**	35,000,000
	41,026,282	38,542,593

9 Trade and Other Receivables

Current		
Trade receivables	**2,855,037**	3,865,164
Other receivables	**697,042**	1,165,923
	3,552,079	5,031,087

10 Other Assets

Current		
Prepaid expenses	**12,708**	56,423
Cash on term deposit for bank guarantee*	**–**	113,556
	12,708	169,979

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

11 Plant and Equipment

Non-current		
Office equipment		
At cost	**9,025**	30,778
Less accumulated depreciation	**(5,540)**	(23,867)
	3,485	6,911
Furniture, fixtures and fittings		
At cost	**210,745**	165,389
Less accumulated depreciation	**(29,130)**	(154,959)
	181,615	10,430
Computer equipment		
At cost	**96,757**	115,466
Less accumulated depreciation	**(60,034)**	(89,470)
	36,723	25,996
Total plant and equipment	**221,823**	43,337

Movements in carrying amounts of plant and equipment

Movements 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 2019				
Balance at the beginning of year	**10,430**	**6,911**	**25,996**	**43,337**
Additions	**207,628**	**–**	**34,225**	**241,853**
Disposals – written down value	**(1,126)**	**(366)**	**–**	**(1,492)**
Depreciation expense	**(35,317)**	**(3,060)**	**(23,498)**	**(61,875)**
Balance at the end of the year	**181,615**	**3,485**	**36,723**	**221,823**

12 Trade and Other Payables

		2019 $	2018 $
Current			
Unsecured liabilities			
Trade payables		**1,296,044**	1,301,668
Plant initiated projects	14	**1,500,150**	578,814
Other program payables		**3,476,702**	5,591,458
Sundry payables and accrued expenses		**350,874**	125,185
		6,623,770	7,597,125

13 Provisions

Current		
Employee benefits	**95,731**	98,374
Non-current		
Employee benefits	**48,078**	42,576

14 Plant Initiated Projects liability

Current		
Opening balance included in payables	**578,814**	324,765
Total PIP transactions approved across the whole membership	**2,368,480**	3,325,700
Reductions arising from payments of approved PIPs	**(1,667,273)**	(3,001,426)
Reductions resulting from reversal of PIP fundings	**220,129**	(70,225)
	1,500,150	5,031,087

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2019

15 Related Party Disclosure

	2019 $	2018 $
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.		
Operational and support funding to AUS-MEAT Limited	**550,000**	**550,000**
Project funding to AUS-MEAT Limited	**203,433**	**223,560**

Director-related Plant Initiated Projects

During the period AMPC has approved PIPs 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 2019 $	Value 2018 $	Balance 2019 $	Outstanding 2018 $
Plant Initiated Projects	**1,835,830**	2,539,889	**1,351,883**	292,286

16 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.

17 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 Livestock 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. During the financial year AMPC became party to a new Funding Agreement covering the period 2016 to 2020.

18 Associated Entities

	Principal activity	Percentage Owned (%)* 2019	Percentage Owned (%)* 2018
AUS-MEAT Limited	Services to the Food Industry	**50**	50

	2019 $	2018 $
Summarised financial position of associate:		
Current assets		
Cash	**1,143,290**	1,784,780
Receivables	**2,605,795**	1,742,073
Other financial assets	**6,486,637**	6,287,084
Other	**789,489**	932,090
Non-current assets		
Plant and equipment	**3,736,486**	3,361,125
Current liabilities		
Trade and other payables	**2,158,859**	1,795,374
Provisions	**1,873,554**	1,938,846
Non-current liabilities		
Provisions	**308,252**	191,784
Net assets	**10,420,932**	10,181,148
Net surplus for the period	**239,785**	699,030
Other comprehensive income	**–**	–

Notes to the Financial Statements (continued)

For the Year Ended 30 June 2019

19 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:

	2019 $	2018 $
Movements during the financial year:		
Opening balance	**6,748,471**	6,557,627
Allocation of current year surplus	**178,078**	190,844
	6,926,549	6,748,471

(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:

Opening balance	**20,697,838**	33,720,080
Allocation of current year surplus	**(647,038)**	(13,022,242)
	20,050,800	20,697,838

(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	**8,602,612**	(1,014,509)
Allocation of current year deficit	**2,465,353**	9,617,121
	11,067,965	8,602,612

* 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 was allocated to Marketing. From 1 July 2018 the split between Marketing and Research will be 40% and 60% respectively.

20 Contingencies

Contingent Liabilities

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

The 25% of received levies allocated to the Plant Initiated Projects (PIP) program remains available for three years, after which the commitment lapses. From 1 July 2019, the PIP balance will accumulate at a rate of 35% and will be available for five years. As a result of this change, the commitment relating to amounts accumulated in the 2016-17 financial year that were due to lapse during 2018-19 have not lapsed. The contingent liability amount is reflective of this change. As at 30 June 2019, the total Research and Development funds held in reserve for potential PIPs is $7.1 million (30 June 2018: $5.2 million).

Contingent Assets

There were no contingent assets identified as at 30 June 2019.

21 Operating leases

	2019 $	2018 $
Non-cancellable operating lease rentals are payable as follows:		
– not later than one year	**208,775**	59,352
– between one year and five years	**749,398**	–
Total revenue	**958,173**	59,352

The Company leases the head office under an operating lease. The lease is for a period of five years commencing 1 November 2018 with no option to renew and excludes the rental incentive of $2,792/month. During the year ended 30 June 2019 an amount of $196,502 was recognised as an expense in respect of operating leases (2018: $142,845).

The Company had recognised a provision of $40,000 as at 30 June 2018 to restore the premises to the original condition. The actual cost of $74,700 was recognised as an expense in 2019. The new lease includes a general obligation to make good the premises when it vacates.

22 Events after the end of the Reporting Period

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.

23 Statutory Information

The registered office of the Company is:

Australian Meat Processor Corporation Ltd
Suite 2, Level 6
99 Walker Street
North Sydney NSW 2060

Directors' Declaration

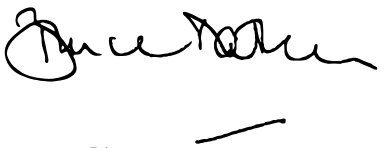
The Directors of the Company declare that:

1. The financial statements and notes, as set out on pages 84 to 99, 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 2019 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 21 October 2019

Nexia Australia

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 2019, 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 2019 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 2019, 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: 21 October 2019
Sydney

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Appendix

Research Priorities

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 wellbeing and improve the efficiency and effectiveness of Australia's healthcare system.

AMPC

AUSTRALIAN MEAT PROCESSOR CORPORATION

AUSTRALIAN MEAT PROCESSOR CORPORATION (AMPC)

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