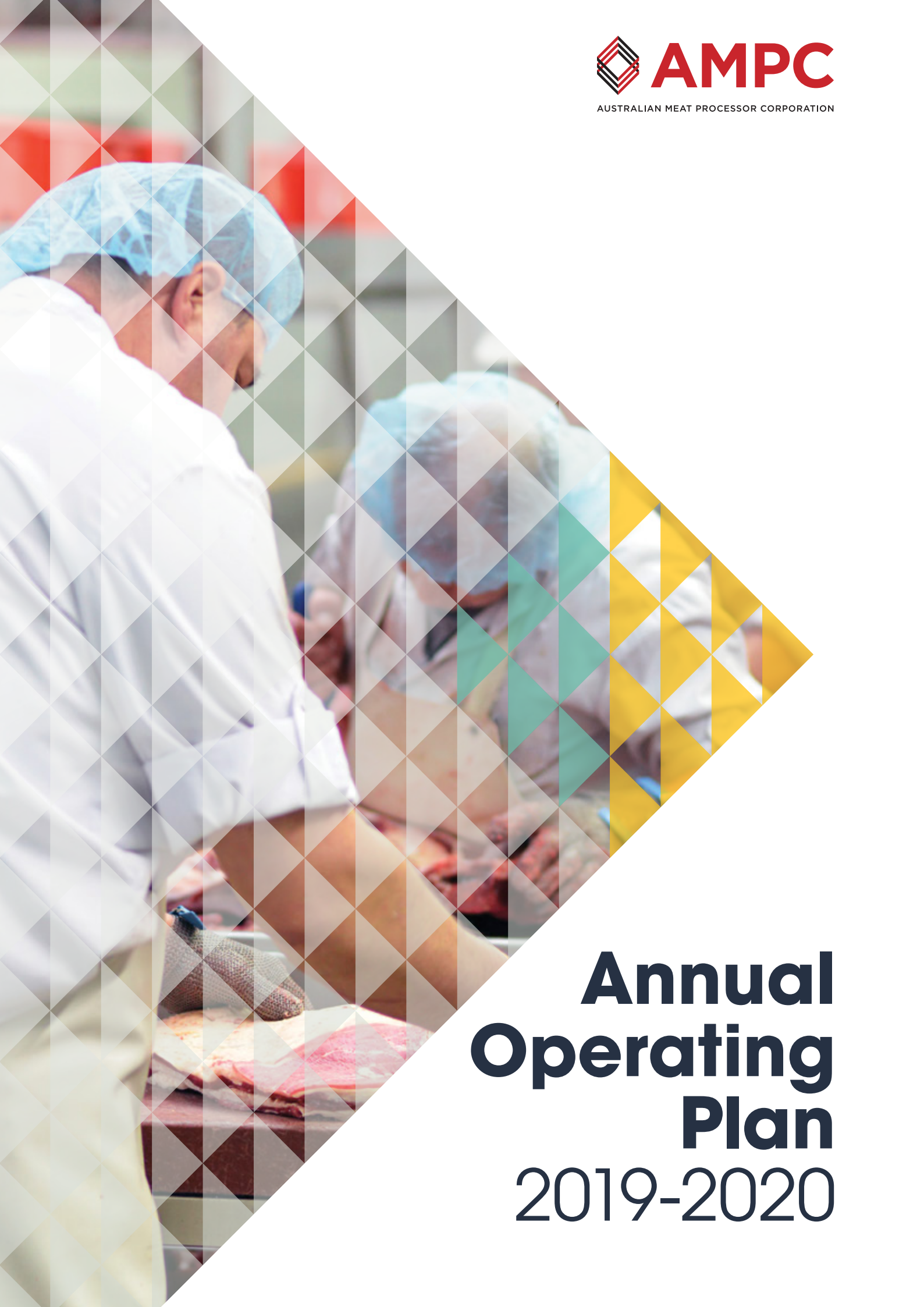




AUSTRALIAN MEAT PROCESSOR CORPORATION



Annual Operating Plan 2019-2020

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

Introduction

AMPC – here for processors

Processors are at the heart of Australia's red meat industry and our rural and regional communities. They are a significant source of employment across the country and are the single largest exporter of Australian food products to the world.

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.

Each financial year an Annual Operating Plan (AOP) is prepared to guide the delivery of AMPC's long-term investment priorities and outcomes. The six programs of our R&D portfolio have been constructed from direct engagement with our members and in partnership with the Australian Meat Industry Council (AMIC) to maximise the value of programs to levy payers.

This AOP outlines our planned activities and investments across the six programs within the 2019-20 R&D portfolio and references a 'top ten' priorities framework formulated by our members to ensure outcomes are aligned to levy-payers' needs and areas impacting on international competitiveness of the Australian processing industry.

These priorities steer the investment decisions for the R&D portfolio and are aligned with industry and government priorities as set out in the *Meat Industry Strategic Plan 2020*, the *Rural Research Development and Extension Priorities*, and the *National Science and Research Priorities*.

A key focus for the 2019-20 financial year will be to ensure that levy payers are made aware of and have the best opportunity to extract benefit from the outputs of our program activities. 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.

R&D and its resulting innovations are critical to ensuring the sustainability of the red meat processing industry into the future, and we look forward to working with levy payers and other stakeholders in pursuing that objective during the year ahead.



Our purpose

Enable Australia to build the most sustainable processing industry



Our vision

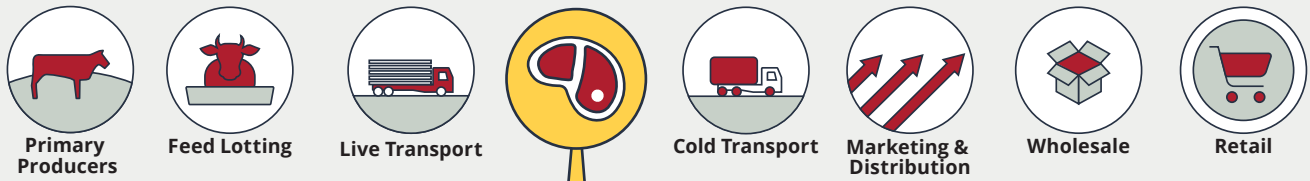
To become a highly regarded, world-class provider of RD&E playing a vital role in influencing and growing the competitiveness of the Australian processing sector



Our values

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

Our members and industry



\$11.9 billion
in exports by meat
processors

**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

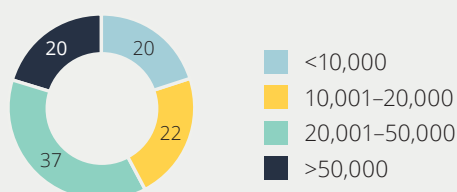
Generate 2.4
additional indirect jobs for
every person employed
by processing

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 (%)

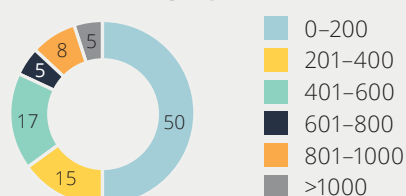


Source: ABS. Stat, AMPC. Measured by local government area (LGA)

Significant employers

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

Member employees (%)

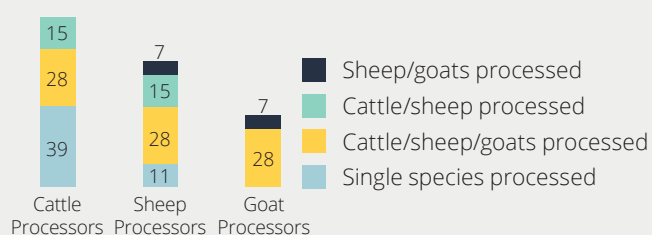


Source: AMPC. Data based on 78 members (53%) for whom data is available, accounting for 92% of total industry employees.

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
130
processing facilities
across Australia (AMPC)



across
102
companies (AMPC)



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



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



Providing
100
career path options (AMPC)

Our operating environment

The Australian meat processing industry is a significant contributor to the Australian economy, employing 29,800 full-time employees and adding over \$18.4 billion to the national GDP.

We continue to enjoy unprecedented biosecurity advantages and an enviable reputation for some of the highest food safety and quality standards in the world.

It is imperative that Australian meat processors continue to innovate, to offset ever-rising operating and regulatory costs. In the international marketplace, our key competitors access labour, energy and government export accreditation and certification at significantly lower cost.

The global trade environment for food – particularly red meat – is subject to unpredictable political and economic influences and in this climate it continues to be a challenge to secure the reliable market access our industry needs.

Australian red meat processors face competition from cheap imported or domestically produced white meat proteins such as chicken and pork, along with imported low-cost red meat.

Industry sustainability

Processors must cater to ever-changing consumer expectations in addition to the traditional drivers of value and quality, and provenance attributes such as animal welfare. Traceability and sustainability are becoming increasingly important influencers relating directly to purchasing decisions. Our industry must continue to meet and exceed these expectations if we wish to maintain and grow our markets.

There is also a trend toward declining per capita consumption and growing vegetarianism, and we must improve communication of our value, if we are to counter the misinformation in the public domain about the nutritional and health value of red meat products.

In addition, the red meat industry is in a herd rebuilding phase, recovering after long-term drought in many key areas of production. Weather events, such as the extensive flooding in Northern Australia in early 2019, have highlighted how susceptible Australia's security of supply of animals is to climate events.

The issues raised by Australian meat processors as their top research priorities are reflected in our operating environment and inform the 2019–20 research portfolio as we strive to meet our members' needs in growing value and creating a sustainable industry.

Cost to operate

During 2018–19, AMPC completed three detailed data benchmarking projects that identify the major cost areas for Australian meat processing at the state and national levels, and compare these to international competitors USA, Brazil, Argentina and New Zealand. This research has highlighted the cost disparity faced by Australian processors, and also provided insights into where RD&E can support cost reductions and thereby improved competitiveness and sustainability.

Internally, AMPC has taken the findings of the above 'cost to operate' data, and incorporated this with other AMPC and wider industry data to develop a representative cattle processor model¹ for AMPC and industry stakeholders to objectively assess the drivers of processor economic performance. The model showed a long-term average margin of \$25 per head of cattle throughput over 11 years from 2008 to 2018, with three distinct periods of positive and negative margins driven particularly by cattle throughput and underlying weather conditions. Of particular concern, 2018 showed a yearly processor margin of -\$14 per head of cattle, despite having an annual throughput equal to the long-term average of 7.8 million head. This was due to the short restocking period after the 2013–15 drought reducing the supply of finished cattle.

Furthermore, the analysis showed that cattle processing plant closures have typically occurred during periods of strongly negative or prolonged negative margins, with broad economic and social implications, particularly for regional communities where the majority of processors are located.

While the representative processor margin has since recovered to average \$20 per head in the first three months of 2019, the severely reduced national cattle herd will likely see an intense or prolonged restocking period when normal weather returns. Based on MLA cattle projections², sustained low slaughter levels may result in negative processor margins until 2021, which will be six consecutive years of negative margins. This analysis highlights the critical importance of RD&E to understand and address the industry's key issues moving forward.

In 2019–20 AMPC will continue to undertake detailed economic analysis of the red meat processing industry that builds on the great work completed in 2018–19. By quantifying and understanding the underlying drivers of the industry and AMPC investments, economic analysis will continue to provide a platform for informed data-driven discussion about the industry's direction and future, and help to identify targeted RD&E to support a sustainable industry future.

1 G Revell, 2019, AMPC representative processor model – recent performance and outlook, report for AMPC

2 MLA, 2019, Trends and analysis – Cattle projections

AMPC member issues

These 10 issues identified through member engagement in 2018 provide a framework which inform the process of R&D portfolio development. In 2019–20 AMPC continues 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.

Top 10 issues

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.



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.



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.



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.



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 to existing and new markets.



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.



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.



09

Consumer trends and education

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



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.



10

Animal welfare and social license 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.



Our stakeholders

Stakeholder communications

The AMPC Communications function supports our stakeholders to inform, engage, discuss and capture feedback on our R&D programs and outcomes.

Strategic communication activities are targeted to the diverse needs of our stakeholder groups. In 2019–20, we will continue to use the following means to communicate with our stakeholders and continue to evaluate their relevance and reach:

- **Personalised, face-to-face communication**
- **Events, workshops, webinars and seminars**
- **Regular email campaigns**, including project completion notifications and letters to members
- **Website enhancements** to streamline information access and support two-way feedback
- **Social media**, including Facebook, Twitter, LinkedIn, YouTube
- **Corporate reporting** that focuses on stakeholder outcomes

Through using this suite of tools, our aim is to increase the satisfaction of our AMPC member group by communicating on our activities, and opening up communication channels to encourage interaction and feedback.

“Our aim is to increase the satisfaction of our processor members groups by communicating on our activities, and opening up communication channels to encourage interaction and feedback – leading to improved costs and competitiveness.”





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 demonstration



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

Initiatives

Plant Initiated Projects

The AMPC Plant Initiated Project (PIP) program allows AMPC members to access part of their statutory levies, accumulated over a five-year period, to carry out R&D initiatives in their own plant. In 2019-20 the PIP process has come in-house to AMPC, delivering a cost reduction in administration for members. Each member plant is individual and has unique R&D opportunities. Conducting practical on-plant R&D with AMPC delivers direct benefit to the individual member and complements our broader R&D

investment portfolio such as: sustainability, meat science, industry capability and market access. Levy funds and member contributions to PIPs are eligible for 50% government matching.

By undertaking R&D activities in a commercial setting, the PIP program aims to foster new ideas, technologies, and innovation within the Australian red meat processing sector.

How to get a PIP project



A 35% proportion of the processor levy is allocated to an AMPC member PIP balance over a five-year accumulation period. Members have five financial years (inclusive) to utilise the funds in the PIP balance. This only applies from the 1 July 2019, and any levies prior are accounted for at 25%.

Any unused balance that falls outside of that applicable five-year period is deemed expired and cannot be accessed for a PIP.



Members of AMPC are required to send a copy of their *Return of Beef Production and Livestock Slaughter form*, submitted to the Department of Agriculture, each month. This is so AMPC can track levies paid and therefore calculate the applicable PIP balance.

How Does a PIP project idea qualify?



1.

Does the project aim to develop or evaluate new or innovative concepts, processes or technologies?



2.

Does the project seek to commercially apply new or recent R&D outcomes into new applications or settings?



3.

Will the project benefit the broader red meat industry and be able to demonstrate that benefit?

How are PIPs funded?

A Plant Initiated Project's funding is provided by:



UP TO

25%

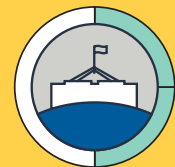
is from AMPC
(via your PIP balance)



A MINIMUM OF

25%

is contributed directly by the member, and / or another funding partner



50%

is provided by the Australian Government, where applicable

How PIP projects happen



1. **Members contact AMPC to discuss their idea** at a high level and their available PIP balance. Depending on the area of research, the member will speak to an AMPC Program Manager who can help to refine the idea and inform them if there's any pre-existing research they should be aware of.



2. **Project scope is developed** and, with AMPC recommendations, a research provider is identified.



3. The completed PIP proposal form is submitted to AMPC.



4. The proposal goes through formal **assessment procedures** to be approved.



5. AMPC **manages the finalisation** of key documentation – Contribution Agreements on the plant's behalf and/or the partner contributor's behalf; and the Research Agreement with the provider.

Innovation Collectives

As a member 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 business 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 the National Meat Industry Training Advisory Council (MINTRAC).

Network Meetings are a critical forum for the extension of our R&D outputs directly to members, and are a unique opportunity for knowledge exchange between participants.

These forums include presentations from industry bodies and guest speakers, breakout workshops and professional development training on human resources, engineering & 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.

“Network Meetings are a critical forum for the extension of our R&D outputs.”



Our activities



“Delivering a balanced
program portfolio requires
strong consultation and
collaboration”

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

For 2019-20, 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 have attracted \$7m of funding for new projects, in addition to \$10.1m allocated to existing commitments.

In 2019-20 the member-led Plant Initiated Projects have attracted \$10m 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 have attracted \$7.8m representing 43% of anticipated levy income.

Portfolio development process

In 2019-20, AMPC will continue to strengthen its engagement with members and follow a strategic process to develop its portfolio:

- 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.

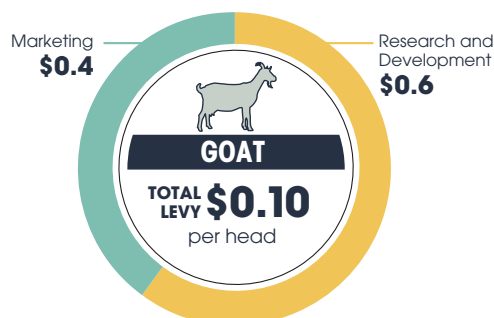
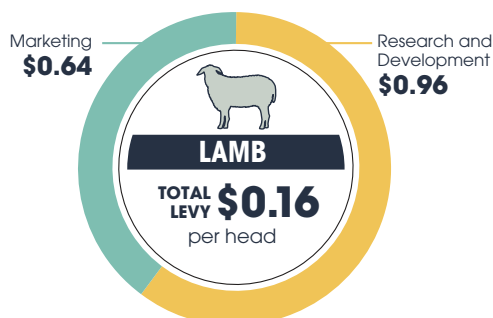
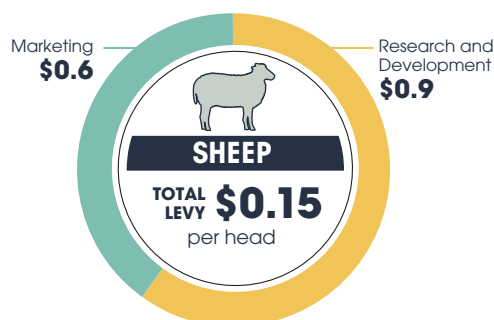
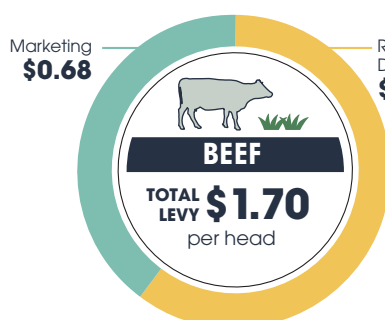
This approach ensures our portfolio is positioned to deliver value for members.

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:** opportunity 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 Project (PIP)

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



Joint

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

Programs



1 Processing Technologies



4 Capability, Extension & Education



2 Energy & Environment



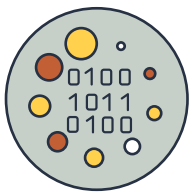
5 Industry sustainability



3 Processing Hygiene, Quality & Meat Science



6 Marketing & Market Access



PROGRAM 1

Processing Technologies

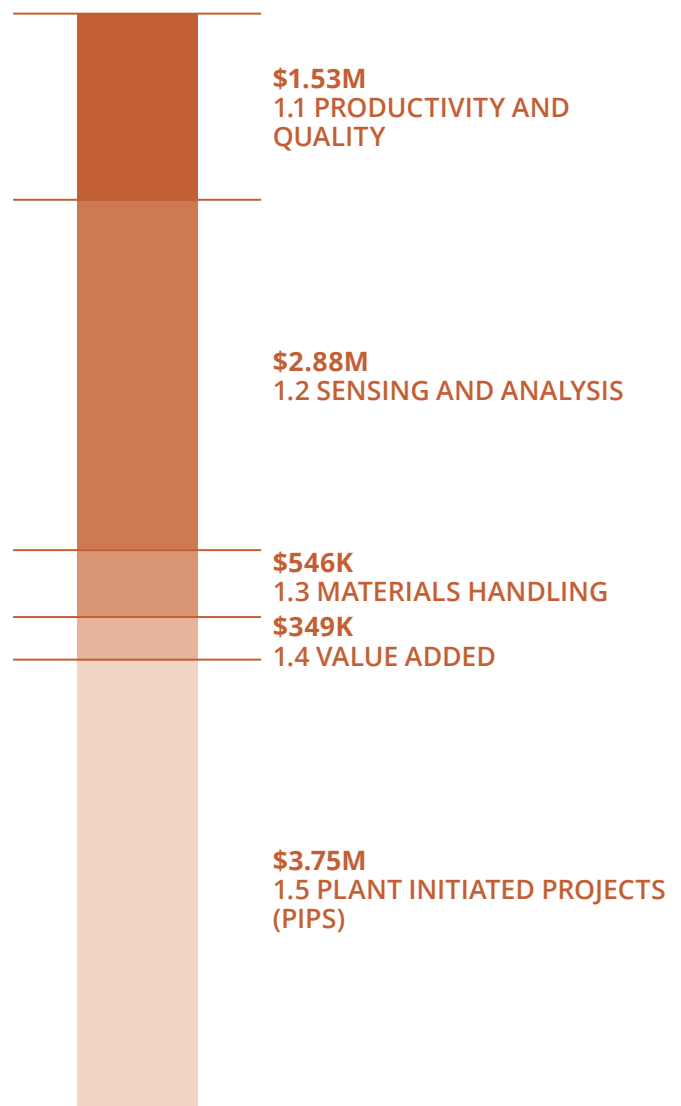
It is imperative that industry be able to evolve with new technologies in order to enhance competitiveness. The processing technologies program provides world-class research and facilitates adoption of these technologies to improve process efficiency, reduce the cost of production, facilitate improved 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	\$7,045,662
Matching	\$2,001,250

Program investment

Total investment: \$9m



\$1.53m

1.1 PRODUCTIVITY AND QUALITY

Total active projects: 8

Objectives

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

Outcomes

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

Focus areas

- Time-in-motion (aligning tasks, process efficiency)
- Primal trimming
- Chilling efficiencies
- Stunning practices (electrical, microwave)

Active projects

- Automated French Dressing of Lamb Rib Rack: Market Confirmation of the Technical and Commercial Suitability of an 'Ideal' Automated Machine Design Followed by its Prototype Design & Build Stages
- Tunnel Boner
- Robotic Beef Splitting CBA & Development
- Automatic Equipment for Handling of the Bung in the Lamb Slaughter Process – Phase 2
- Applications of Deep Learning for the Red Meat Processing Industry
- First Prototype Automation for Deboning Lamb Shoulder – Stage 2
- eMTC Implementation Including DAWR Requirements
- Robotic Removal of Button Bone and Flat Bone After Striploin Chine Bone Removal – Stage 1 Practical Feasibility

\$2.88m

1.2 SENSING AND ANALYSIS

Total active projects: 4

Objectives

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

Outcomes

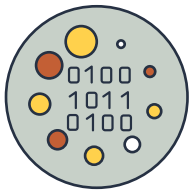
Development of the processing sector's ability to automatically measure characteristics 'online' and increase overall processing efficiency and productivity.

Focus areas

- RGB technologies
- AskBill/MobSelect (sheep & lamb only)
- Ultrasound & X-ray

Active projects

- FRONTMATEC – Automated MSA/ AUS-MEAT Based Grading System
- Predicting and Scheduling Lamb Supply with Variable Seasonal Conditions
- Naked Primal Cut Recognition Vision System Trial in Plant
- US Pilot for Pallet Labels as an Alternate System of Shipping Mark



PROGRAM 1

Processing Technologies (continued)

\$0.55m

1.3 MATERIALS HANDLING

Total active projects: 3

Objectives

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

Outcomes

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

Focus areas

- Internet of Things (IOT) in-plant wearable technologies
- AR, remote expert & audit

Active projects

- Automated Container Load Production System
- Automation of Primal Cut Bagging
- In Plant Trial of Robotic Picking and Packing System

\$0.35m

1.4 VALUE ADDED

Total active projects: 1

Objectives

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

Outcomes

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

Active projects

- Value Adding Stage 2

\$3.75m

1.5 PLANT INITIATED PROJECTS (PIPS)

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

Focus areas

- IOT 'real time' and online validation product integrity

Case study

PROJECT SNAPSHOT

MobSelect: Managing the Impacts of Variable Weather Conditions on the Production and Wellbeing of Prime Lambs.

PROJECT TYPE

CORE



POSSIBLE BENEFIT

A new, online computer application, 'MobSelect' will be developed to allow for processors and other buyers to identify mobs of sheep for forward purchase based on predictions that they will meet a range of criteria by a specified delivery date.

It is anticipated the project will provide accurate predictions of changes in the lamb production environment, provide accurate information for scheduling turnoff and processing for specific mobs of sheep, and provide 'what-if' calculators to respond to altering climatic conditions and changes in pricing grids designed to efficiently meet market requirements. It will also have the potential to underpin quality assurance related to sheep wellbeing.

Protocols and software tools for data sharing between processors and producers will be developed to improve efficiencies and add value to the supply chain.

"MobSelect will allow for the development of a virtual lamb inventory management system for the processor... it is possible to provide a forecast of the kilograms of lamb, the estimate yield and the potential eating quality."

– Dr Alex Ball



PROJECT TIMELINE

10 June 2019–mid 2020

SUMMARY

For producers, buying and selling sheep to alter stocking rates is currently one of the most economical ways to manage feed budgets and variable seasonal conditions.

For processors, forward contracting to buy lambs is one of the most effective ways to manage lamb supply and scheduling.

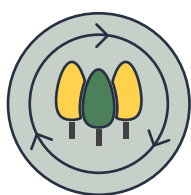
This project will have two components. One part involves designing and building an online computer app (MobSelect) for use by processors and sheep buyers to forward purchase sheep with confidence that the effects of variable seasonal conditions have been adequately accounted for through the predictive analytics of AskBill. The second part involves modification to the AskBill program to allow producers to share relevant information with potential buyers.

AskBill accounts for variables such as joining/lambing times; breed characteristics; selection of genetics within breed; pasture characteristics; and supplementary feeding practices for lamb turnoff and reproductive management of ewes.

This project will develop the predictive analytical capacity and related computer software to enable producers and processors to use these strategies more effectively in managing variable seasonal conditions.

EXTENSION

Capacity building and adoption. The project will deliver several specialists able to use the modelling and prediction apps with confidence and who are able to work within the processor organisation as well as with consultants and lamb producers to implement and extend the utilisation of the new tools across other supply chains.



PROGRAM 2 Energy & Environment

Program 2 has three project streams; Energy, Water and Waste, which are collectively referred to as Energy & Environment. Program integration and the achievement of sustainable outcomes are guided through the application of the following R&D hierarchy:

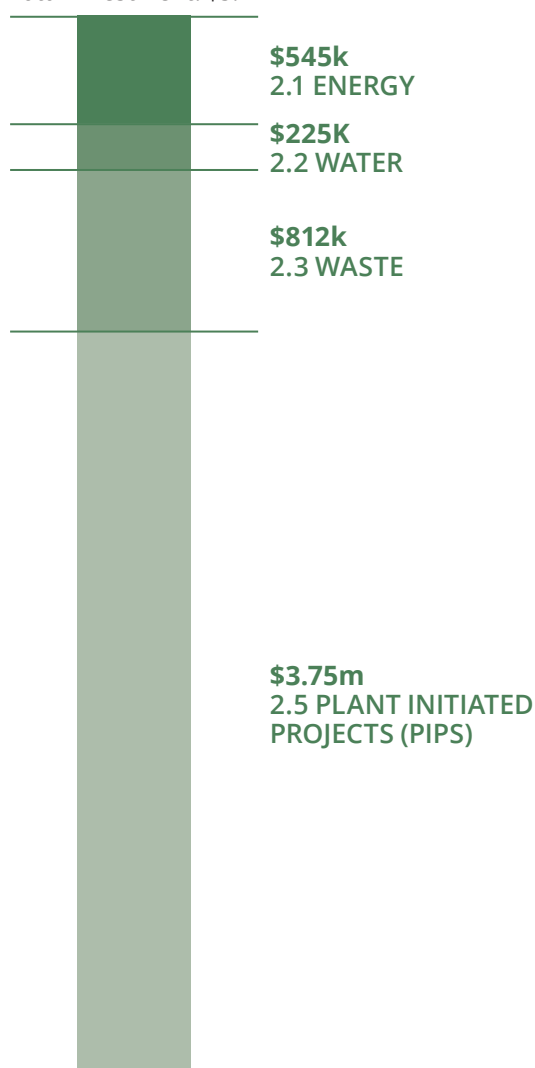
- a) improving plant resource and by-product measurements
- b) utilising process diagnostics to help maximise plant efficiencies; and
- c) adopting technology to further optimise plant and business productivity.

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	\$4,552,588
Matching	\$797,588

Program investment

Total investment: \$5.4m



\$0.54m

2.1 ENERGY

Total active projects: 5

Objectives

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

Outcomes

Reduced energy costs, improved energy productivity and stewardship of our natural resources to be a major priority.

Focus areas

Measurement & management

- Baselines & granular data
- Benchmarking, diagnostics & dashboards
- Buyer groups & business models

Plant efficiencies

- Fuel mix
- Energy recovery
- Energy productivity

Technology adoption

- Asset upgrades
- Fuel switching
- Renewables & storage
- Micro-grids & smart-grids

Active projects

- Enhanced Energy Recovery in Australian Industry through Anaerobic Co-digestion
- Employing Wastewater for Passive Heating and Cooling in Red Meat Processing Facilities
- Energy and Materials Recovery from Paunch Waste Using Novel Hydrothermal and Supercritical Water Gasification Processes – Phase 1
- Concentrated Solar Thermal & Geothermal Steam and Power Assessment
- Emissions pathways – costs, benefits & priorities for red meat processors

\$0.23m

2.2 WATER

Total active projects: 2

Objectives

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

Outcomes

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

Focus areas

Measurement & management

- Baselines & granular data
- Benchmarking, diagnostics & dashboards
- Business models

Plant efficiencies

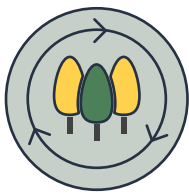
- Water efficiency
- Integrated efficiencies

Technology adoption

- Asset upgrades
- Water treatment

Active projects

- Technical and Economic Feasibility of Water Recycling and Energy Recovery for Meat Processing Operations
- Megasonic Demulsification of Oil and Grease from Meat Processing Wastewater to Water



PROGRAM 2

Energy & Environment (continued)

\$0.81m

2.3 WASTE

Total active projects: 4

Objectives

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

Outcomes

Improved overall efficiency of the processing sector due to reduced overhead costs of waste treatment and disposal, along with new revenue streams of recycled or transformed waste that can be reused, sold or used as a renewable fuel and value add products.

Focus areas

Measurement & management

- Baselines & granular data
- Benchmarking, diagnostics & dashboards
- Business models

Plant efficiencies

- Energy and byproduct recovery
- Bio-gas productivity
- Wastewater treatment efficiencies

Technology adoption

- Asset upgrades
- Value add processes and technologies

Active projects

- Assessment of Smouldering as an Efficient and Low-Cost Alternative for Management of Agricultural Solid Wastes
- Problem to Profit: Developing a Sustainable Feed Base from Agricultural Wastes Using Single Cell Protein
- RnD4Profit Closing the Loop: Black Soldier Fly Technology to Convert Waste to Food and Fertiliser
- Aggregated Waste 2 Energy

\$3.75m

2.5 PLANT INITIATED PROJECTS (PIPS)

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

Focus areas

Energy efficiency

- Utilisation of sophisticated energy monitoring, enabled with dashboard analytics, to guide the optimisation of refrigeration re-heat loads
- Utilisation of solar thermal energy to help reduce refrigeration compressor loads
- Alternative energy storage technology

Water efficiency

- Validation study for water efficiency technology applied to sterilization processes

Water recycling

- Techno-economic feasibility for injection of potable quality recycled water into local supply

Waste

- Assessment of optimal location for secondary wastewater treatment technology through plant-scale mobile application

Case study

PROJECT SNAPSHOT

Technical and Economic Feasibility of Water Recycling and Energy Recovery for Red Meat Processing Operations in Abattoirs.

PROJECT TYPE

CORE



MEMBER

12 plants

PROVIDER

University of New South Wales, UNESCO centre for membrane science and technology.

POSSIBLE BENEFIT

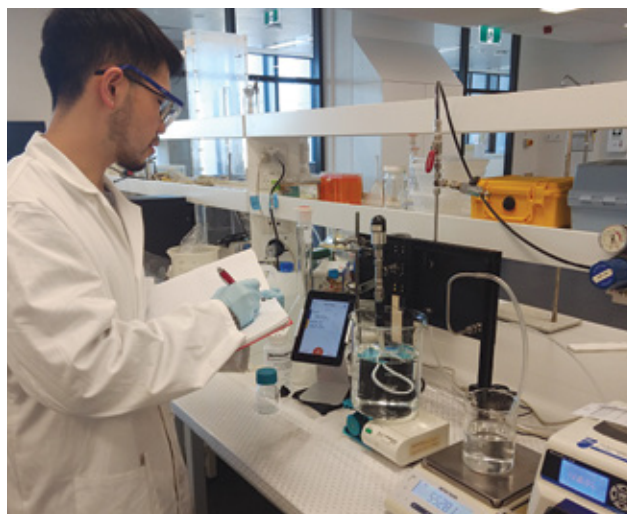
The project will identify potential savings in water and energy use, providing the incentive for increased adoption of water and energy recovery technologies in the red meat processing industry.

PROJECT TIMELINE

10 June 2019–mid 2020

“Water and energy are critical resources that need to be saved and its usage optimised to ensure the sustainability and profitability of the industry. At UNSW we are committed to help the Australian meat processing industry to improve the management of such valuable resources”

– Dr. Francisco Trujillo, UNSW



SUMMARY

Meat processing is both water intensive and energy intensive in order to maintain high levels of sanitation. The project's aim is to conduct a technical and economic feasibility study on proposed water recycling and energy recovering technologies from meat processing wastewater streams.

The project involves survey data collection, process flow mapping, on-site plant visits, sampling and lab studies using membranes for micro filtration.

The findings from this study will identify wastewater streams and prioritise the most effective way to make significant, and economically viable, water and energy efficiency improvements that can be implemented by the meat processing industry.

EXTENSION

The recommendations of the study will prioritise treatment technology options and provide designs and recommendations for future pilot trials based on the most economically (shortest return on investment period) and environmentally successful technology options. The focus will be given to solutions that permit short payoff periods (less than 5 years) given the tight profit margins of meat products.



PROGRAM 3

Processing Hygiene, Quality & Meat Science

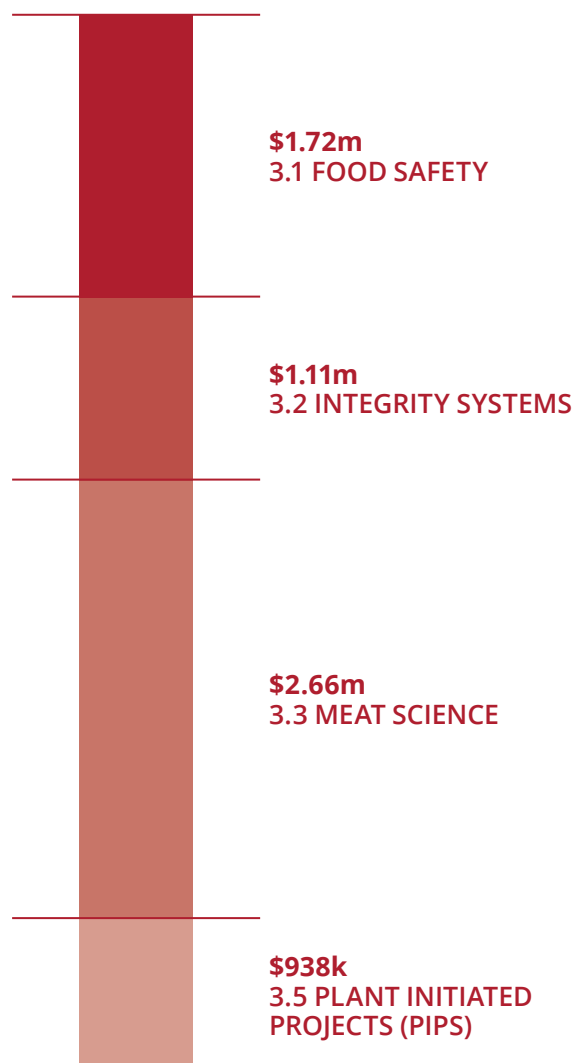
Processing hygiene and product quality are crucial to Australia's international reputation for excellence and quality product in a competitive market. This program aims to support the continuous delivery of high quality standards and food safety.

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	\$4,610,112
Matching	\$1,817,798

Program investment

Total investment: \$6.4m



\$1.72m

3.1 FOOD SAFETY

Total active projects: 6

Objectives

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

Outcomes

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

Focus areas

- Hygiene process review
- Hygiene interventions
- Exotic disease preparedness

Active projects

- A Cold Plasma Wash Water Technology for Meat Safety and Shelf-life Extension
- Laser Shock Wave Processing Facility for Cryovac Meat Products
- Amendments to AS4696 – Post Mortem Inspection and Disposition
- Transmissible Spongiform Encephalopathies Freedom Assurance Program (TSEFAP) FY2018-23
- The Effect of the Final Wash Location on the Microbiological and Visual Condition of Lamb Carcases
- Visual Monitoring of Carcase and Carton Meats – a System for the 21st Century

\$1.11m

3.2 INTEGRITY SYSTEMS

Total active projects: 2

Objectives

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

Outcomes

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

Focus areas

- Transparency and traceability technologies

Active projects

- Sheep CRC Extension FY15 – FY19
- Creating Visibility in the Supply Chain Utilising Intelligent Inspection and Data Technologies



PROGRAM 3

Processing Hygiene, Quality & Meat Science (continued)

\$2.66m

3.3 MEAT SCIENCE

Total active projects: 4

Objectives

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

Outcomes

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

Focus areas

- Objective pathology inspection
- Objective ante-mortem tools to predict dark cutting

Active projects

- A practical Means to Accelerate Beef Ageing and Sustain Acceptable Eating Quality and Safety: Chilled Storage Temperature Manipulation
- Meat Science Towards 2030: An International Forum for the Development of Strategic Objectives
- Non-invasive Prediction of Flavour, Tenderness and Juiciness for Individual Animals at Point of Slaughter – Stages 1 & 2
- Development of Shockwave Technology for Tenderisation and Decontamination of Beef Cuts

3.4 TRANSFORMATIONAL MEAT SCIENCE (TMS)

Objectives

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

Outcomes

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

Focus areas

- Creating value from waste streams

\$0.94m

3.5 Plant Initiated Projects (PIPs)

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

Focus areas

- Traceability processes and technologies

Case study

PROJECT SNAPSHOT

The Effect of the Final Wash Location on the Microbiological and Visual Condition of Lamb Carcasses.

PROJECT TYPE

Core



POSSIBLE BENEFIT

Moving the location of the wash bay during processing is assumed to reduce the surface defect incidence of a lamb carcass by half. If, as a result of the study, washing prior to final trim does not adversely affect the microenvironment on a carcass, there is a potential positive industry impact for the red meat processing industry equal to a net present value (NPV) of \$4.3 million.

PROJECT TIMELINE

10 June 2019–mid 2020

“The opportunity to assess how a change to the location of the final carcass wash, could increase productivity... is also beneficial for the industry’s development in ensuring the highest standard in food hygiene and safety”

– Jessica Jolley, Researcher, University of Adelaide



SUMMARY

This project proposes that locating a carcass wash prior to the final carcass trim would allow the industry to reduce trimming losses without affecting the eligibility of the product.

Current export requirements for sheep meat include the visual assessment of carcasses after the final trim but prior to the final wash. Trimming of small, visual defects located on the carcass surface can result in substantial trimming losses, especially for small stock.

EXTENSION

- The findings will be communicated to the industry and the regulators
- If the findings show there is value in changing the location of the wash bay, the industry will need to put forth a case to the regulators in order to change their processes
- If there is a requirement for export establishments to gain permission from their importing partner countries to approve this process change, market access cases will need to be produced
- Guidelines on the new process will need to be provided to the industry



PROGRAM 4

Capability, Extension & Education

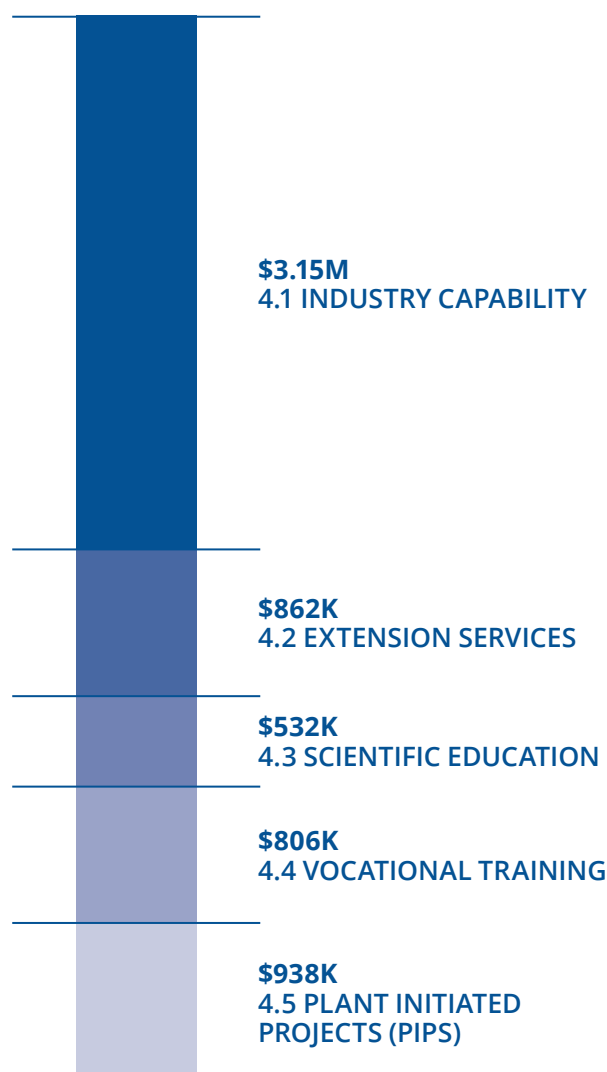
Industry relies on its workforce to continue to build its position in domestic and world markets. In order to achieve this, industry must be able to plan and meet our current and future workforce needs in a complex and ever-changing environment. The Capability, Extension & Education program helps Australian 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	\$3,783,091
Matching	\$2,503,963

Program investment

Total investment: \$6.3m



\$3.15m

4.1 INDUSTRY CAPABILITY

Total active projects: 3

Objectives

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

Outcomes

Increased industry education and capability for processors.

Focus areas

- Baseline data
- System and symbols audit for Innovation
- Creating frameworks for retention
- Industry perceptions
- Time and motion studies
- Safety projects
- Visa programs
- Safety and ergonomics
- Development of a research-based employee retention framework for the meat processing industry

Active projects

- Employee Retention for the Meat Industry
- Understanding an Innovation Culture and its Effect in Australian Red Meat Processing Plants: An Application of Systems Leadership – Stage 1
- Working Towards an Ideal RMI Visa Program

\$0.86m

4.2 EXTENSION SERVICES

Total active projects: 5

Objectives

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

Outcomes

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

Focus areas

- Industry branding
- Increasing awareness in the education space
- Innovation collectives and industry forums

Active Projects

- Meat Industry Efficiency and Innovation Capacity Enhancement: Benchmarking Technologies and Systems from Automotive Industry
- Strengthening Industry RD&E Outcomes
- Strengthening Engagement with Micro, Small and Medium Red Meat Processors by Identifying Key Priorities for Research and Development
- Facilitation of the QCMPA Network FY18-FY20
- AMPC Network Meetings and Innovation Collectives FY19/20



PROGRAM 4

Capability, Extension & Education (continued)

\$0.53m

4.3 SCIENTIFIC EDUCATION

Total active projects: 4

Objectives

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

Outcomes

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

Focus areas

- Internship program

Active projects

- Charles Sturt University Partnership Program for Red Meat Capacity Development
- An integrated Scholarship Program in Process Engineering QUT
- Educational Pathways, Creating a Highly Skilled Meat Industry RMIT
- An Integrated Scholarship Program in Red Meat Safety and Microbiology, Curtin University

\$0.81m

4.4 VOCATIONAL TRAINING

Total active projects: 4

Objectives

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

Outcomes

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

Focus areas

- Professional development
- Leadership training
- Maintenance upskilling

Active projects

- Red Meat Processing Upskilling Scholarship Program
- Australian Agribusiness Leadership Program
- Diploma of Meat Processing (Technical Program)
- Graduate Certificate in Agribusiness

\$0.94m

4.5 PLANT INITIATED PROJECTS (PIPS)

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

Focus areas

- Attraction
- Retention
- Training and education

Case study

PROJECT SNAPSHOT

Understanding an Innovation Culture and its Effect in Australian Red Meat Processing Plants: An Application of Systems Leadership.

PROJECT TYPE

CORE



MEMBER

12 members participating

PROVIDER

Response Consulting

POSSIBLE BENEFIT

The creation of an overarching 'innovation culture' within a meat processing business, which can lead to enhanced productivity and profitability, both now and over a 10-year period.

This project seeks to understand the cultural barriers to innovation within a meat processing business and develop a systematic approach to drive innovation in the businesses while simultaneously working to overcome the existing barriers.



PROJECT TIMELINE

June 2019–Estimated completion February 2020

SUMMARY

This project will undertake an innovation culture audit across a range of meat processing plants in conjunction with several demonstration initiatives.

An initial quantitative and qualitative culture audit will occur for 3 small, 3 medium and 3 large plants. This will allow key stakeholders to gain an overview of business and plant culture across the red meat processing industry.

Demonstration initiatives will then be implemented in one business, including a Managerial Leadership Program, Systems Design, Innovation Leadership and finally Innovation Implementation.



PROGRAM 5 Industry Sustainability

There is great value for the industry in strategically addressing sustainability. This year the Industry Sustainability program will establish a baseline for our members' activities, recognising the good work the industry already does and identifying areas where there are opportunities for the industry to address. The sustainability program will develop a narrative for our membership that is better understood by customers, consumers, investors and other stakeholders.

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	\$1,398,031
Matching	\$773,031

Program investment

Total investment: \$2.2m



\$0.54m

5.1 ECONOMIC RESILIENCE

Objectives

Provide a quantitative platform of the industry's relevance and importance.

Outcomes

The delivery of a triple bottom line assessment of the red meat industry.

Focus areas

- Economic analysis
- Cost reduction
- Profitability

\$0.90m

5.2 PEOPLE & COMMUNITY

Objectives

Create a baseline for industry sustainability.

Outcomes

The provision of a sustainability roadmap for the Red Meat Processing Industry.

Focus areas

- Social impact and contribution
- Resilient red meat communities
- Community trust and perception



PROGRAM 5

Industry Sustainability (continued)

\$0.11m

5.3 ENVIRONMENTAL STEWARDSHIP

Total active projects: 1

Objectives

Champion an initiative that will demonstrate industry accountability and leadership.

Outcomes

Leadership on the issue of sustainable packaging for the red meat processing industry.

Focus areas

- Manage climate risk
- Climate adaptation and transition
- Value chain waste and impact

Active Projects

- Sustainable Packaging in the Red Meat Processing Industry

\$0.63m

5.4 ANIMAL WELFARE

Total active projects: 1

Objectives

Consolidate on the enormous amount of work that is undertaken on animal welfare issues.

Outcomes

Completion of an industry gap analysis on the Australian Animal Welfare Certification System (AAWCS) and sponsoring its revision and update (3rd edition).

Focus areas

- Safe livestock handling
- Maintain healthy livestock
- Humane processing

Active Projects

- GAP Analysis Program for Non-certified Australian Animal Welfare Certification Standard (AAWCS) Processing Establishments

5.5 PLANT INITIATED PROJECTS (PIPS)

AMPC supports its members in identifying and undertaking RD&E projects that benefit industry sustainability.

Case study

PROJECT SNAPSHOT

Sustainable Packaging for the Red Meat Processing Industry.

PROJECT TYPE

CORE



MEMBER

Open to participation from all members.

PROVIDER

Ndevr is the lead provider working with Good Environmental Choice Australia (GECA) and Boxing Clever.

POSSIBLE BENEFIT

This project has the potential to reduce packaging costs, which are almost 9% of business costs (according to the AMPC Cost to Operate report, 2018), as well as address regulatory targets.

By migrating to sustainable packaging methodologies members can save on packaging inputs (costs) and begin a journey to meeting packaging targets and regulations in Australia and key markets. Furthermore, early adoption of sustainable packaging and communication of that action will provide a positive narrative for the industry in meeting community, consumer and customer expectations for packaging, while recognising the important role packaging plays in food safety, food waste, quality and shelf life.

PROJECT TIMELINE

August 2019-2020, expected to wrap up in January 2020



SUMMARY

The use of sustainable packaging in red meat processing will become mandatory for both domestic and international export markets. This project aims to facilitate processors in taking this step and will be instrumental in both education and transitioning members to looming Australian and international packaging regulations and targets.

The project will include engagement with the industry's customers and packaging suppliers as well as recycling, packaging materials experts and, it is hoped local governments and/or council representation.

Ultimately, the project aims to establish waste solutions for members in consultation with key industry stakeholders. Providing a joint supply chain approach to behaviours within the supply chain that contribute to packaging problems, sharing the responsibility for the approach and removing the exclusive responsibility from members.

EXTENSION

- Webinars to increase awareness and education of packaging regulations and targets, and the provision of knowledge regarding market expectations in Australia and key export countries.
- A toolkit and a micro-site for members to use in order to transition to more sustainable packaging options.



PROGRAM 6

Marketing & Market Access

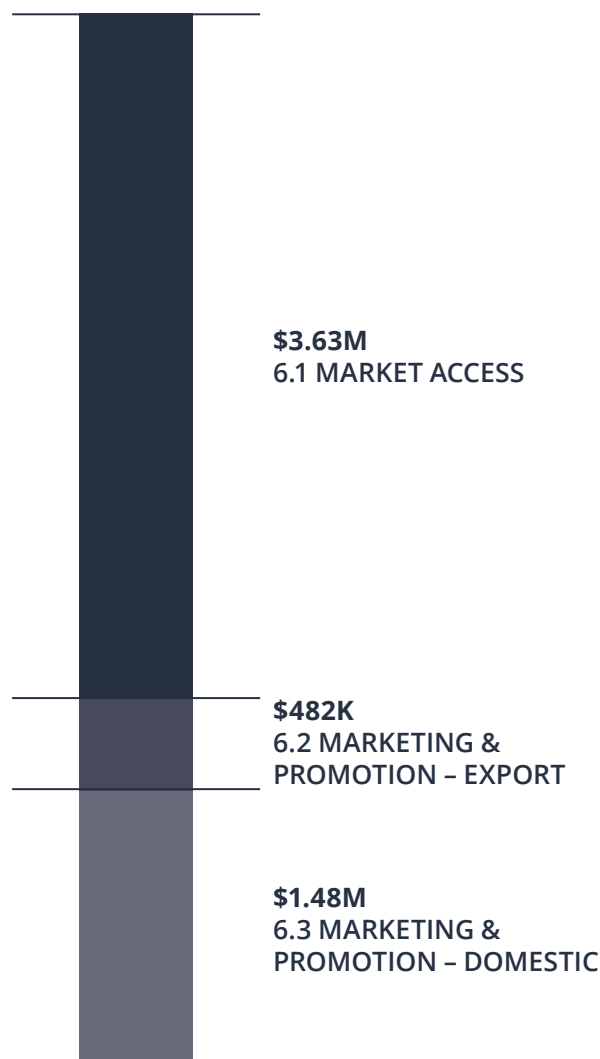
Maximising efficient and effective market access and effective consumer marketing are key aspects of facilitating the domestic and global competitiveness of the Australian red meat processing sector. The marketing & market access program works jointly with MLA to increase market access for the Australian meat processing industry, and enhances and communicates the value proposition of Australia's 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	\$5,091,537
Matching	\$500,000

Program investment

Total investment: \$5.6m



\$3.63m

6.1 MARKET ACCESS

Total active projects: 3

Objectives

To ensure markets remain accessible, efficient and attractive for investment.

Outcomes

A joint program with MLA provides funding for the development of market access capabilities. This includes monitoring trade developments in overseas and domestic markets, undertaking market access research, developing industry-wide positions to support submissions to government and lobbying for market access improvements.

Focus areas

- Australia's continued international red meat competitiveness
- Continue to alleviate and resolve non-tariff measures with key/new trading partners
- Continue to build and strengthen strategic long term relationships with 'in-market' counterpart R&D, academic, scientific and innovative industry bodies

Active projects

- Australian Export Meat Inspection Service Review
- Consultation Draft Export Control Rules 2020 – Meat and Meat Products
- Development and Trial of an IOT Solution for Labelling Consistency and Integrity in Meat Export Supply Chains

\$0.48m

6.2 MARKETING & PROMOTION – EXPORT

Total active projects: 1

Objectives

Maintain and increase the demand for Australia's red meat.

Outcomes

Maintaining Australia's international competitiveness.

Focus areas

- Contribute to Australia's red meat supply chain promotion jointly with MLA's international network
- Promote Australia's red meat product quality, integrity, nutritional value and safety
- Assist with the delivery of 'in-market' developmental workshops to increase awareness and understanding of Australia's red meat attributes

Active projects

- China Market Development 2019 – RD&E



PROGRAM 6

Marketing & Market Access (continued)

\$1.48m

6.3 MARKETING & PROMOTION – DOMESTIC

Objectives

To promote and maintain red meat consumption.

Outcomes

Brand building and business development to defend market position, defend per capita consumption or to increase awareness.

Focus areas

- Contribute to Australia's red meat supply chain promotion jointly with MLA
- Assist with the positive promotion of the nutritional value of locally produced red meat
- Provide scientific/fact based R&D evidence to consumers of the industry's humane treatment of animals processed for human consumption 'paddock to plate'

Active projects

AMPC co-invests in a number of MLA run projects for the benefit of the industry

Case study

PROJECT SNAPSHOT

**Alternate Methods of Stunning
(High Frequency Electric).**

PROJECT TYPE

CORE



MEMBER

Various AMPC members

PROVIDER

CSIRO

POSSIBLE BENEFIT

A new Halal-compliant method of stunning.

Access to Halal export markets: the approximate current value of Australian red meat and offal exported to Halal markets in 2018–2019 was \$1.9 billion in 2018, equal to 14% of total meat and offal export value*; and for beef, the Halal share of export value was 8% in 2018. Halal certification is required for exports to Indonesia, Malaysia, Iran, Iraq, the United Arab Emirates, Jordan, Kuwait, Bahrain, Brunei, Oman, Qatar, Saudi Arabia and Egypt.

PROJECT TIMELINE

Expected start August 2019–August 2020

SUMMARY

There is increasing pressure from Halal authorities to end the practice of head-only stunning in the Australian Meat Industry. Currently there is no other Halal-compliant method of stunning cattle, other than 'percussive' stunning.

This project gathers behavioral, neurophysiological and meat quality data to support regulatory approval in Australia for High Frequency Electrical Stunning (HFE) for Beef Cattle, ensuring that Australia can continue to meet Halal requirements and retain market share.

In order to gain regulatory approval to use HFE in Australian beef processing plants, data on effective induction of insensibility and welfare parameters is required, and the industry needs reassurances that meat quality outcomes will not be compromised.

When trialed as an alternative to percussive stunning, HFE has been associated with a reduced quality of meat and accelerated pH decline, so it is not suitable for processing of high value beef animals.

Encouragingly, reports from New Zealand indicate High Frequency AC (>1000Hz) currents can alleviate the meat quality problems, including being used in long-fed grain finished cattle.

EXTENSION

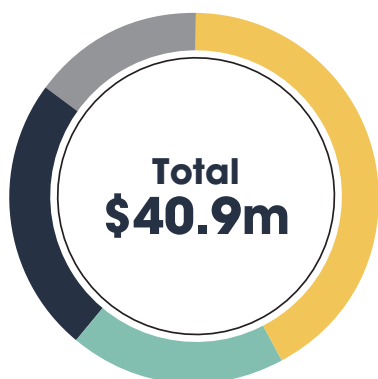
If HFE is found to be a suitable stunning method for beef cattle, data collected will be suitably formatted for submission to the regulatory authority to request regulatory approval.

* Source: TradeMap

Budget

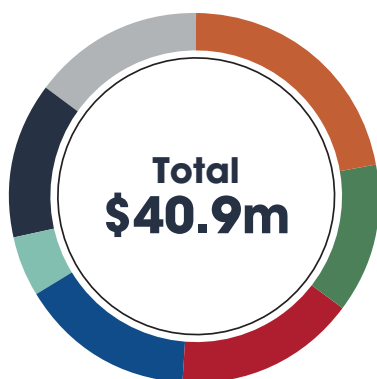
Financial highlights

Expenditure by Type*



Core	42%	\$17,104,197
Joint	19%	\$7,770,451
PIP	24%	\$10,000,000
Corporate	15%	\$6,038,344

Expenditure by Program



1. Processing Technology
\$9,046,912 (22%)

2. Energy & Environment
\$5,350,175 (13%)

3. Processing Hygiene, Quality & Meat Science
\$6,427,910 (16%)

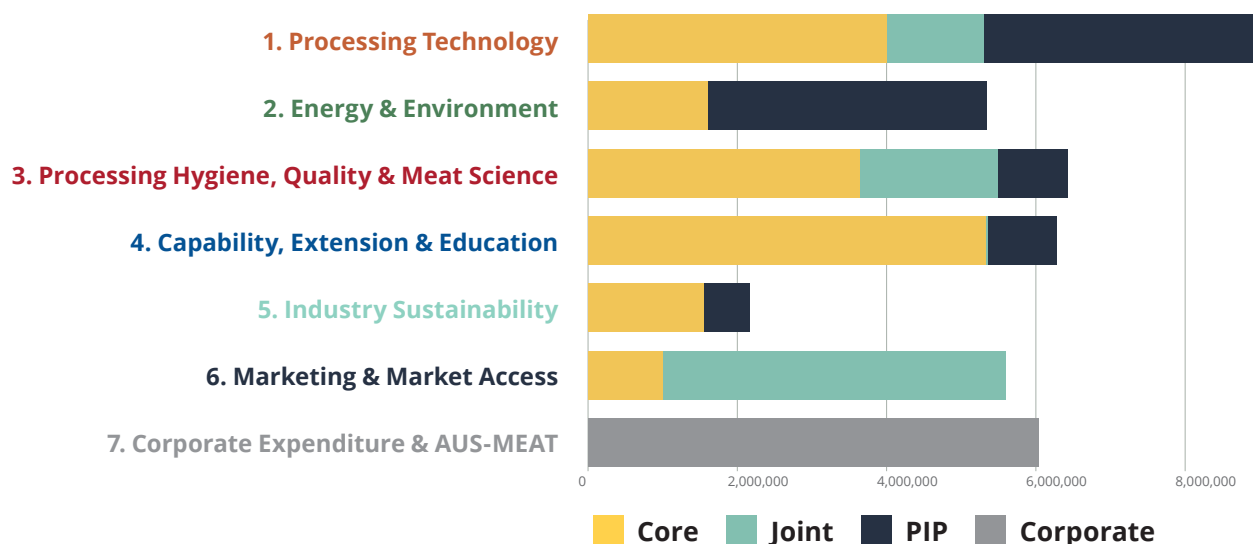
4. Capability, Extension & Education
\$6,287,054 (15%)

5. Industry Sustainability
\$2,171,061 (5%)

6. Marketing & Market Access
\$5,591,537 (14%)

7. Corporate Expenditure & AUS-MEAT
\$6,038,344 (15%)

Expenditure by Program and Type



* Figures expressed as % of total investment

FY2019-20 budget financials

Budgeted income and costs for FY2019-20

	RD&E	Marketing	Pre-stat	Total
Income				
Levies	\$10,859,043	\$7,239,362	-	\$18,098,405
Interest	\$331,209	\$415,371	\$301,419	\$1,048,000
Government Matching	\$13,352,686	-	-	\$13,352,686
Partner Contributions	\$2,000,000	-	-	\$2,000,000
Total	\$ 26,542,938	\$7,654,734	\$301,419	\$34,499,091
	RD&E	Marketing	Pre-stat	Total
Program Expenditure				
1. Processing Technologies	\$9,046,912	-	-	\$9,046,912
2. Energy & Environment	\$5,350,175	-	-	\$5,350,175
3. Processing Hygiene, Quality & Meat Science	\$5,735,854	\$692,056	-	\$6,427,910
4. Capability, Extension & Education	\$6,284,054	-	-	\$6,287,054
5. Industry Sustainability	\$2,171,061	-	-	\$2,171,061
6. Marketing & Market Access	\$278,689	\$5,312,848	-	\$5,591,537
Total	\$28,869,745	\$6,004,904	-	\$34,874,649
	RD&E	Marketing	Pre-stat	Total
Corporate Costs				
AUS-MEAT Contribution	-	\$550,000	-	\$550,000
Direct Corporate Costs (Project Support)	\$2,601,175	\$100,000	-	\$2,701,175
Indirect Corporate Costs	\$1,672,302	\$1,114,868	-	\$2,787,169
Total	\$4,273,476	\$1,764,868	-	\$6,038,344
Net Income	-\$6,600,283	-\$115,038	\$301,419	-\$6,413,901

Reserves movements for FY2019-20

	RD&E	Marketing	Pre-stat	Total
Opening Reserves as at 30 June 2019	\$16,525,671	\$9,504,317	\$6,911,139	\$32,941,126
Budget Net Income FY20	-\$6,600,283	-\$115,038	\$301,419	-\$6,413,901
Closing Reserves as at 30 June 2020	\$9,925,388	\$9,389,279	\$7,212,558	\$26,527,225





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