

## Australian Meat Processor Corporation (AMPC)

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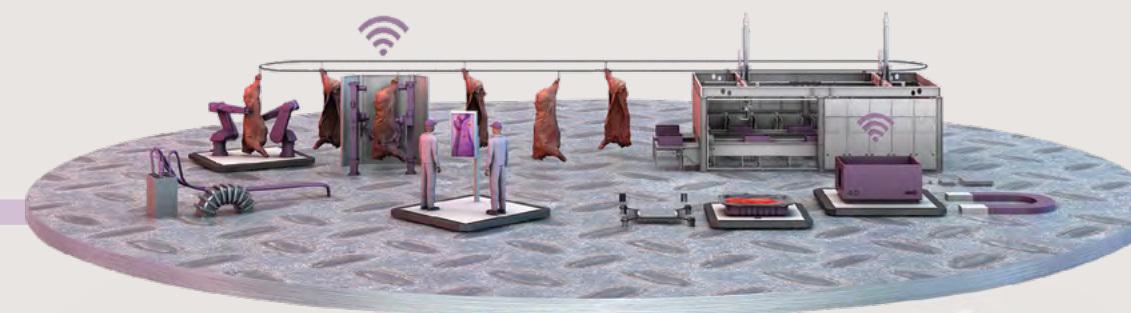
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# Annual Operating Plan 2021–2022

## Transforming the red meat processing sector

### Advanced Manufacturing



### Sustainability



### People & Culture



### Technical Market Access & Markets



### Product & Process Integrity







AMPC is the rural research and development corporation for the red meat processing industry in Australia. 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.

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# Message from AMPC Chair



I am excited to say that members will see more in-plant activity and an increased focus on practical outcomes. We are committed to going beyond an academic exercise and delivering real research that leads to real industry transformation.

The Australian processing sector has much higher operating costs than most of its global competitors, and one per cent of all employees in the country depend on the industry for their livelihood. For processors, innovation is critical. It is key to a more competitive, profitable and sustainable industry and critical to solving the challenges of attracting and maintaining a thriving workforce, improving productivity and ensuring social licence for our products.

There is no silver bullet to the challenges industry faces, including pressure to secure livestock post-drought, global market dynamics as we navigate out of Covid-19, and the need for innovation to underpin the industry's sustainability through uncertain times.

Likewise, there is no simple way to realise all of the incredible opportunity across the whole industry and for our sector specifically.

A broad suite of initiatives, derived from a clear, industry-driven R&D strategy, allows us to be more customer-focused, with a blend of whole-of-industry and bespoke R&D activities. Our strong and growing relationship with the Australian Meat Industry Council will play a key role in achieving positive outcomes.

I'm excited about the work ahead driven by a skilled and highly engaged Board, and delivered by an experienced and motivated team, with the essential support of industry. I look forward to reporting back on what I am sure will be a successful year.

This is going to be a positive year for AMPC and for the processing sector.

John Berry  
AMPC Chair

# Message from AMPC CEO



From the board to our program managers, AMPC is energised and excited to deliver a comprehensive suite of R&D initiatives. Combining efforts across PIP and Core activities, as well as investment in joint activities with MLA, our focus is on executing our strategy, being more hands-on with members, and together accelerating adoption of innovative solutions.

We have developed a balanced program of incremental, adjacent and transformational initiatives that will allow us to deliver immediate and ongoing returns at different levels of risk and reward.

Our approach is based on close working relationships with our members, our levy payers, and so we are always sure to seek balance between species and member segments, too.

With travel back on the agenda, our people are excited to be in-plant, working on bespoke solutions that recognise that every processor is different.


Our Annual Operating Plan offers a sample of the many initiatives we are delivering.

I am proud to be supported in these endeavours by a hardworking and dedicated team and I am delighted by the level of industry support and endorsement our refreshed approach to member engagement has attracted.

The meat processing sector is important, evolving, brimming with opportunity and ever ready to embrace the future.


Chris Taylor  
AMPC CEO

# 2030 Program Aspirations




**Advanced Manufacturing**

Halve human product handling through **technology advancement**, to reduce injury rates, maximise yield and improve processing efficiency.




**Sustainability**

Australian processors recognised as **global leaders in environmental stewardship** and acknowledged as responsible businesses with positive economic and social impacts on their communities.




**People & Culture**

Processing sector seen as a **diverse, safe and attractive** industry of choice for employment.



**Technical Market Access & Markets**

Australia is the **preferred trading partner** for premium red meat products globally, with **unrivalled access** to high value markets.



**Product & Process Integrity**

An enhanced international reputation for **safe, sustainably-sourced, wholesome** red meat products.

# Responding to Unique Needs

## AMPC is for all processors — and every processor is different.



**Significant employers**

Our members have employee numbers ranging from 2 to 2,000, and the breadth of processing systems and approaches is considerable.



**Varied product focus**

Cattle processing is the most common activity, representing 83% of all member establishments, but we also have members in smallstock, and across all our members, plant throughput varies greatly.



**Geographically diverse**

Our membership is also geographically diverse. AMPC members are based throughout Australia, particularly in rural and regional areas, and largely in medium-sized rural areas of between 10,000 to 50,000 people, where they are typically one of the largest employers.

### Members of all sizes

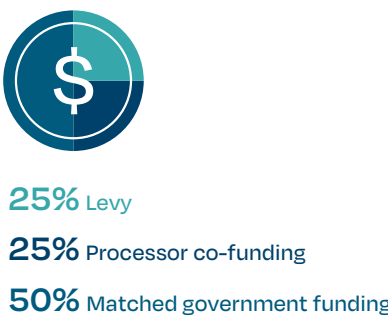
In 2020 we consulted extensively with industry and the Australian Meat Industry Council (AMIC) to determine the best way to ensure valuable, relevant research opportunities are available to members large and small, whether they are highly experienced in R&D or new to it. As a result, our refreshed Plant Initiated Projects program was launched.



**106**  
members operating  
**136**  
processing facilities  
across Australia

### Plant Initiated Projects

PIPs allow members to carry out research and development in their own plant, to find solutions that meet their unique needs. These collaborative initiatives are jointly funded through levy funds, member contributions and government matched funding. AMPC is proud of this program, which enables a wider range of processors to participate in research and which fosters new ideas, technologies, and innovation within the Australian red meat processing sector. Importantly, PIPs are an excellent mechanism for uptake of R&D outcomes which will ultimately drive the sector forward.







# Advanced Manufacturing

The red meat processing sector is ripe with opportunity — but to realise its potential, the industry needs to continue to work on maximising safety in operations and find ways to enhance productivity, increase yield, and identify new approaches to support the workforce.

Advanced Manufacturing is a key pillar of AMPC's refreshed five-year strategy, aimed at finding new ways to address these challenges and realise the opportunities.

## Focus Area

-  Hands-Off Processing
-  Carcase Primal Profitability Optimisation
-  Adoption
-  Digitisation

## A sample of AMPC's initiatives

### Carcase scribing and robotic deboning



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CORE PIP

#### 2021–2022 Aspiration

Commencement and development of small footprint bovine scribing, ovine carcass cutting and carcass marking.

Australian processing is among the most expensive in the world, so there is a pressing need to reduce processing costs and increase boning room yield efficiency. Automating the boning process would reduce per head operating costs for the benefit of the entire Australian industry. It's a topic that has been on the agenda for the industry for many years, over which period new technology has continued to emerge.

AMPC will focus in the 2021–2022 year on understanding if bovine and ovine forequarters and hindquarters can be robotically deboned to acceptable yield and throughput expectations.

At the same time, we will work to further development of small footprint bovine scribing, ovine carcass cutting and carcass marking.

### Remote operation processing technology



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CORE

#### 2021–2022 Aspiration

In-plant evaluation of early working prototypes of Gamification and shadow robotic platforms.

'Gamification' is a term that is gaining traction in a lot of industries and it's something you'll probably be hearing more about across the processing sector. In essence, gamification is about bringing elements of game-playing, like point scoring, competition or rules of play, into a non-game environment.

AMPC is testing whether gamification could help processors upskill staff from hands-on operators to console operators, to increase efficiency and productivity, enhance safety and open up roles to a wider field of candidates.

This initiative is about semi-automated/remote solutions, and beef scribing has been selected as the starting point. The aspiration is that at the conclusion of all development stages, Australian beef processing facilities will have operational staff undertaking scribing activities without holding onto the scribe cutting saw. Ideally operators would be based in a control room. This initiative will also help support the development of an online training tool for operational staff.

This is a five-stage initiative, beginning with concept development then moving onto evaluation by real operators and a range of assessments in the processing setting. The final stage would be industry adoption. AMPC is currently focused on Stage 1.





### Meat processing magnetic conveying system

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**2021–2022 Aspiration**

**Evaluation of existing technologies for adoption with a view to at least one prototype implemented.**

Could the kind of technology used in Japan's famous bullet trains help drive efficiency and profitability in the meat processing sector? AMPC is trying to find out.

Magnetic conveying systems have been in use for years on transport systems but over the past decade they've also started appearing in manufacturing as an alternative to conveyors.

AMPC will undertake studies to determine if this could be a viable way to convey primals, carcasses, and retail-ready portions, prior to final packing. Benefits may include reduced maintenance, ease of changing material flow within boning rooms, reduced cleaning time, individual part traceability, and probably many more.

Throughout this year we will review proposals from technology providers with a view to then working with a processor to implement a production prototype.

### Manual handling

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**2021–2022 Aspiration**

**Container loading, palletising and depalletising and carton storage and retrieval systems conceptually designed and priced for three processing throughput capacities.**

Loading and unloading containers is challenging. The products are heavy, easily damaged, and require robust systems around traceability and labelling. Container loading, palletising and depalletising are some of the most physically difficult tasks in a plant, relying on a limited labour pool of candidates with the requisite strength for the role. The injury rate in this part of the process is high.

AMPC will look within and outside the agriculture industry for new ways to reduce manual handling, to reduce injuries, reduce product damage, increase plant efficiency, and enable better traceability and proof of load systems.

A number of concepts will be reviewed and those with most potential will be further developed. It is anticipated a range of technologies from robotics to sensing tech and new conveyor systems may be used.

### Boning room traceability

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**2021–2022 Aspiration**

**In-plant evaluation of individual full carcase and primal cut traceability solutions.**

Although Australian processors typically use a batch processing methodology, carcase-to-primal tracking is a particularly complex challenge.

AMPC is investigating alternative approaches to tracking the major primals of beef and sheep back to their source carcase. There is at least one solution which has been demonstrated to be technically effective in an Australian beef boning room but there are virtually no existing solutions for lamb boning rooms.

We will conduct in-plant evaluations of individual full carcase and primal cut traceability solutions, suitable for domestic and international supply chains. Across the year we will continue to engage with solution providers and plants which have expressed interest in the initiative.

### Industry 4.0 — the Internet of Things

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**2021–2022 Aspiration**

**Develop an Industry 4.0 roadmap and support at least one in-plant implementation plan to adopt industry 4.0 technologies.**

What really is IoT, and how can it make a difference in meat processing facilities? This space is rapidly evolving, and AMPC recognises the importance of being at the forefront as ideas develop. AMPC is seeking global thought leaders to help develop an Industry 4.0/ Manufacturing 4.0 roadmap for the industry in Australia. This will help identify any additional innovation support required by AMPC to enable Australian processors to evaluate potential developments. We will work with a processors to adopt Industry 4.0 strategies and implementation plans for their business.





# Sustainability

Expectations around sustainable operation of processing facilities continue to rise, driven by an engaged consumer base which in turn fuels market demand at every point along the supply chain. Additionally, of course, sustainable practice is simply good business sense. The processing sector is committed to the red meat industry target of CN30. The first step in achieving this will be enhancing data collection and reporting to help benchmark and manage continuous improvement in water, waste and energy use across the sector.

Focus Area

Communities

Energy

Water

Waste

Packaging

## A sample of AMPC's initiatives

### Refrigeration energy efficiency optimisation



CORE

PIP

#### 2021–2022 Aspiration

**Adoption of refrigeration and other thermal energy efficiency optimisation opportunities.**

Refrigeration costs represent a major proportion of a processor's expenses, so finding better, more efficient ways to manage refrigeration needs in-plant is good for business and environmental sustainability. This year AMPC will complete workshops at sites across all types and sizes, to measure and assess refrigeration efficiency and identify ideas for improved efficiency that could be implemented at the local site and in other plants.

This initiative will analyse the results of the workshops to come up with final designs and pathways to implementation. A wide range of potential opportunities will be explored, including new 'refrigeration as a service' models.

We're also working to assist industry in evaluating thermal energy storage solutions to reduce refrigeration running costs. This is part of RACE for 2030 CRC, B4 — Load Flexing of Refrigeration Plants at Abattoirs. Our initiative is to have five processor thermal energy storage solutions designed within this year, with implementation of one if financially viable.

### Low-cost solar PV



CORE

PIP

#### 2021–2022 Aspiration

**Initial assessment, design and pre-feasibility for 60% of industry throughput, providing transparency and confidence around adoption of solar photovoltaics.**

The meat processing sector recognises the importance of renewable energy but making the right choices around systems and suppliers, and really understanding what a renewable option can deliver, can be difficult. AMPC is supporting members to work out what they need and where and how to get it.

This is a service that will help members answer questions such as: *Do I have a good solar PV opportunity? What is preventing me from using Solar PV? Can buying groups or reverse auctions help me access more affordable solar? What are my funding options?*

Ultimately, this work will contribute to helping industry meet targets on renewables as well as helping processors make the right choices around solar systems.



Multi-fuel biomass boiler pilot



CORE

2021–2022 Aspiration

Develop and launch a pilot program for the evaluation of multi-fuel biomass boilers in different regions.

Combustion of fossil fuel for process steam is the largest contributor to red meat processing Scope 1 (greenhouse gas) emissions.

In fact, boiler fuel can be one of the largest single operating costs for red meat processing plants, so the incentive to move to renewables, and quickly, is strong.

But the replacement of fossil fuel use with renewables to create thermal energy has flatlined in the red meat processing sector since 2015, for a variety of reasons.

AMPC is looking at ways to help create new momentum through a comprehensive pilot program that will enable confidence and capacity building, deliver certainty, and lead to more significant adoption of renewable solid fuels.

We plan to run a pilot trial across multiple sites in various regions for a multi-fuel biomass boiler with several renewable solid fuel blends that are feasible for adoption.

Low-cost class A recycled water



CORE

PIP

2021–2022 Aspiration

Preliminary design, feasibility and business case for the best full-scale opportunity discovered during the pilot.

Reducing water intensity is one of the key challenges facing the red meat industry, and recycling water will be a key part of the solution. This initiative will demonstrate and create momentum towards the adoption of advanced water recycling.

Two containerised portable MF-UF/RO water recycling pilots will be trialled across four plants. By trialling the systems at different sites we can assess how the technology performs using variable treatment options, under different circumstances for different water qualities.

The initiative will produce Class A water, utilising suitable sub-process water streams (eg slaughter and viscera table), with multiple filtration options for re-use in non-food production areas like heating and cooling.

This initiative is an exciting stepping stone towards direct planned potable water recycling.

National Packaging Targets



CORE

2021–2022 Aspiration

Review National Packaging Target implications for the processing sector, and evaluate at least two new approaches to reduce or eliminate plastic packaging in the supply chain.

Rigorous packaging standards are essential in assuring food safety, shelf life and market access, but there is increasing demand to reduce or eliminate plastic packaging. The challenge is intensified somewhat by changing consumer habits, including a tendency towards smaller, more frequent purchases and increased snacking — both trends which increase the packaging to product ratio. At the same time, consumers and other stakeholders are demanding less packaging and packaging with a smaller environmental footprint, and national packaging targets are setting ambitious initiatives.

AMPC's initiative seeks to illustrate the National Packaging Targets for red meat processors, describe any compliance risks and impacts that will affect plants, and identify the commercial opportunities that will enable a feasible shift to sustainable packaging used inside red meat processor plants.

Waterless sterilisation



CORE

2021–2022 Aspiration

Three installed plant prototypes.

Water is a critical input in meat processing, which relies on large volumes of water in its operations, often in rural and regional communities where the resource is under great stress.

In recent times, some regional centres have approached or even reached 'day zero' where they run out of water, and yet these communities rely on processors as a critical element of their local economies. The processing sector is strongly committed to continuing efficiencies around water usage.

Sixty per cent of Australian processors who responded to the AMPC advanced manufacturing innovation survey identified waterless sterilisation in their top 20 of 100 innovation areas recommended by AMPC.

If waterless sterilisation is to be achieved, a pathway with staged development needs to be established. This initiative is designed as an important first step towards enabling waterless sterilisation by finding less water intense approaches to removing solids prior to sterilisation.









# People & Culture

Technology, including automation, is changing the face of the meat processing sector, but at the end of the day, processing will always rely on people for its success. The red meat processing sector contributes about 100,000 direct and indirect jobs in Australia, mostly located in regional areas. Many abattoirs are the largest employer in their town or region. Labour attraction and retention is critical to the sector’s success, and this will only become more important as the types of role available become more sophisticated.

## Focus Area

-  Attraction
-  Retention
-  Development
-  Safety & Wellbeing

## A sample of AMPC’s initiatives

### Attracting employees to the industry



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CORE

#### 2021–2022 Aspiration

**Develop and execute a roadmap for attracting candidates to the processing industry through novel approaches.**

In order to attract and retain the right labour, the industry needs a clear understanding of what brings people into the red meat industry and what resources may be required to help identify and promote the sector’s appeal.

This initiative will start with a comprehensive research program, including stakeholder interviews and quantitative surveys with both current and potential employees of the industry. The initiative will involve groups including school leavers, tertiary students and other potential candidate pools.

The insights uncovered in the research phase will inform the development of a clear, compelling proposition and set of messages for key audiences including school leavers and technical graduates. From this, AMPC will develop and implement a roadmap for attracting candidates.

### Data collection



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CORE

PIP

#### 2021–2022 Aspiration

**Support at least five in-plant evaluations of business intelligence tools.**

You can’t change what you can’t measure — and you can’t benchmark what you can’t compare. As the processing sector becomes more advanced and systems become more complex, there is an increasing volume of data available for analysis. The challenge is not one of finding things to measure, but of choosing what and how to measure and then what to do with the information to transform it from data to insights.

AMPC is working to develop a standardised approach to key processing business metrics to enable us to collect and collate common data from all sites (confidentially) and provide insights into future R&D programs. This critical data will help shape all five of AMPC’s Core R&D program areas — Advanced Manufacturing, Sustainability, People & Culture, Technical Markets Access & Markets, and Product & Process Integrity. This kind of work may provide a critical foundation for everything we do.







## Task ergonomics



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### 2021–2022 Aspiration

**Deliver data-driven assessment of key processing tasks and evaluate at least five improvement opportunities.**

Reducing injury in the processing plant is an important goal for processors, and understanding the way workers complete tasks is central to that aim.

AMPC will undertake a detailed analysis of a number of processing tasks in ovine and bovine production environments, to gain insights into the ergonomic parameters of those tasks.

IoT technology will be employed to collect data around a range of measures at each work station, including the types of movements people make, how much time they spend on various aspects and how they are positioned. Using this data, we will work with processors to evaluate alternative approaches to improve ergonomics and reduce injury rates.

## Knife sharpness



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PIP

### 2021–2022 Aspiration

**Develop a range of solutions to ensure knives are as sharp as possible, via sharpening solutions, on-board/on-operator sharpness sensors and new materials for manufacture.**

A sharp knife enables skilled teams to approach their required cutting lines with precision and requires less effort to use.

Skilled staff take years to master sharpening various styles of knives utilised within the industry. Entry level staff, or those who are unable to master this very specialised skill set, face higher WHS risks and are also less able to achieve premium productivity levels.

AMPC is completing a comprehensive study into the factors around knife sharpening and what improvements can be made to improve outcomes for businesses and employees using advanced technologies. Although there are a lot of existing solutions and approaches, this area of processing is so important to both businesses and staff that AMPC wants to encourage new and existing providers to keep driving innovation, including emerging technology like immersive reality and automated systems.

## Mixed reality training delivery



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CORE

PIP

### 2021–2022 Aspiration

**Research and develop appropriate mixed reality methodologies for the processing sector and undertake in-plant evaluations.**

Could a pair of VR goggles be the most important piece of equipment for a new recruit to learn about the processing sector?

Training is important but not always accessible, especially in regional and remote locations. Plus, traditional training programs can be expensive, time consuming and may not always be highly engaging. AMPC is exploring new ways to deliver training into plants using a mix of technologies. Already there are some high-tech solutions in the industry, from augmented and virtual reality in maintenance to wearable tech improving communications and data collections across plants.

This initiative will review the range of technologies already in use in the processing sector and in other sectors and industries, and assess their applicability to plant staff training. The initiative will also assess the results of mixed and alternative reality plus traditional face-to-face training to determine where best to focus development.

## Physical and mental wellbeing



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CORE

### 2021–2022 Aspiration

**Review practices inside and outside of the processing industry and develop a fit-for-purpose model for wellbeing across the processing industry.**

Everyone talks about wellbeing, but what do they really mean? AMPC is planning a large-scale initiative to find out what wellbeing looks like at different plants, in different roles and in different circumstances.

In the first phase of this two-part initiative, we will gather data to find out what industry seeks and how it views its wellbeing obligations. This is a gumboots-to-C-suite initiative that will initially be focused on making sure the right data is collected in order to understand and deliver on wellbeing needs. It is envisaged that as part of this program of works a number of individual PIPs may be developed specifically for individual plants' needs.

In the second phase, AMPC will introduce a wellbeing assessment and measurement tool for use across the industry.



# Technical Market Access & Markets

There is increasing competition in the sector, not only from other regions but from other products, including different protein sources. The Australian sector must continue to promote its exceptional points of difference to global customers and consumers, and ensure beef and lamb remain popular meal choices. AMPC collaborates with industry stakeholders including the Australian Government, MLA and peak industry council AMIC to drive growth in exports and deliver a greater impact for domestic demand.

## Focus Area

-  Marketing & Promotion
-  Market Access
-  Products
-  International Competitiveness

## A sample of AMPC's initiatives

Comparison on inputs vs outputs

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CORE

**2021–2022 Aspiration**

**Determine input and output ‘per-mass’ measures pertaining to ovine and bovine supply chains.**

The red meat market continues to come under competitive pressure from manufactured/plant-based meat alternatives. Much of the argument in favour of manufactured plant-based products has been built around claims of environmental superiority. This is usually presented on a kilo-vs-kilo basis. However, the information in the public domain does not provide a fair comparison.

This initiative will balance all of the inputs and outputs associated with the production of a kilogram of beef or sheep/lamb protein (including hides, offal, bones, etc) and provide standardised comparative measures as well as providing benchmarking data from a nutritional perspective. AMPC will work with a researcher to create the right framework for the program and to deliver the comparative measures.

New Product Development (NPD) Academy

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CORE PIP

**2021–2022 Aspiration**

**Establish the NPD Academy and engage at least 10 people from industry to participate.**

The New Product Development Academy is one of AMPC's most exciting initiatives, which will help processors create new revenue and market opportunities by turning their value-add and product ideas into realities. From ready-made meals to dry curing of products and weight enhancement of products, the NPD Academy is ready to support processors' 'aha' moments.

The academy seeks to improve capability in new product development through structured training and development. It will enable access to new overseas technology before it gets to Australia, launch conversations about new ideas, and encourage thinking outside the square.

AMPC expects site and product specific NPD opportunities will arise, increasing value extracted from each carcase.



## Smart verification



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### 2021–2022 Aspiration

#### Development of continuous objective verification technology with at least three units demonstrated in plants.

Food safety management is a ticket-to-play topic for the processing sector, while issues with labelling cost the industry millions of dollars in rejected product.

Technology could help address both challenges, leading to increased efficiency, reliability and profitability in the processing sector.

AMPC intends to develop objective compliance data gathering mini projects, utilising machine learning to drive efficiencies in the delivery of compliance services for both industry and government.

For example, this might mean using cameras to detect e. coli, with machine learning algorithms ‘teaching’ the system the best place to look for e. coli markers and how to assess risk level. Or it might be a label reading algorithm that can double check that the label on the box matches the product inside and that the destination-country language on the label says what it is supposed to.

## C. bovis pathway to equivalence



CORE

### 2021–2022 Aspiration

#### Development of a C. bovis risk assessment in order to provide a pathway to equivalence.

Checking for c. bovis remains incredibly important for processors and their customers, but new approaches in Australia are making the task much simpler and much less expensive. If the same approach could be adopted for international markets, it could have an impact of around \$30 million for the sector’s bottom line.

Australian standards are being updated to recognise some key points, including the relevance of grazing location to the risk of c. bovis, and the feasibility of using a heart cut instead of a cheek cut to check when necessary. What that means is that closer assessment is only completed where the risk level is higher, and that the assessment process has a lower impact on the final product value. The implications for plant costs are significant.

An initiative to develop the roadmap toward the full risk assessment of properties in Australia must be developed and agreed to by all jurisdictions and DAWE to ensure that exporters can adopt the new approach to risk-based inspection for C. bovis.

## Tumour identification



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### 2021–2022 Aspiration

#### Development of at least one new method of tumour identification and assessment.

A carcase incorrectly condemned is profit lost. As access to experienced veterinary support and advice becomes harder to access, processors need to find other ways to ensure they can correctly identify when a carcase is or is not fit for processing.

AMPC plans to work with processors to develop and evaluate a practical methodology for tumour identification through a series of in-plant trials.

The aspiration is to help plants determine what is and is not a tumour, what it means and what action needs to be taken. Ultimately the intent is to develop a tool to help with the identification and decision-making process.

## TeleVet antemortem assessment



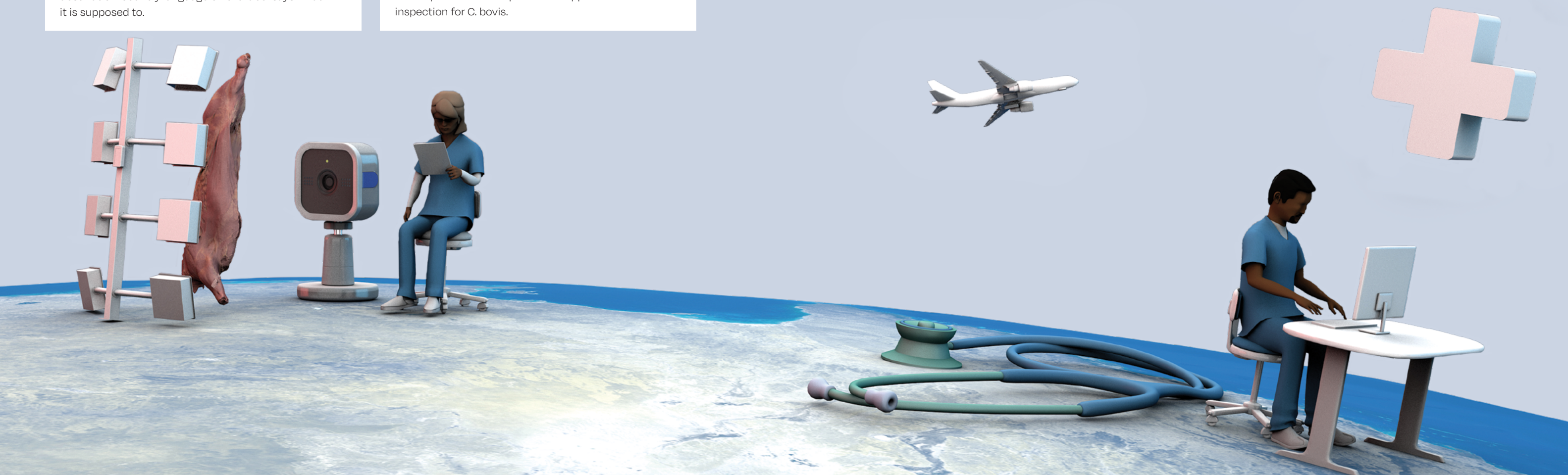
CORE

### 2021–2022 Aspiration

#### Pilot program established.

As the Meat Modernisation process continues, and vet services shift from government to 3rd party providers, access to on-site vets looks set to become more challenging. Plants can’t afford to put operations on hold for hours waiting for a vet to come in. A tele-health approach might provide the solution.

AMPC’s provider will work with processors to develop a methodology and conduct a pilot trial for remote veterinary assessments. This might involve using a live video feed to enable a vet review and may even make use of wearable technology like glasses. AMPC expects that this initiative will not only help address vet access issues in processing plants but may apply all the way back to the farm.





# Product & Process Integrity

One of the greatest assets held by the Australian red meat industry is trust. Australian red meat is recognised as the safest and best quality product on the market. The incredible level of trust afforded the sector is underpinned by systems and processes which are in place across the industry, including in the processing sector, which plays a central role in helping the wider industry to meet the exacting standards expected from Australian red meat. We invest in research and development which enables members to uphold the industry’s reputation for safe, healthy products — and that contributes to processor profitability.

## Focus Area

-  Traceability & Integrity Systems
-  Animal Welfare
-  Food Safety

## A sample of AMPC’s initiatives

Truck-driving impacts on animal welfare



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2021–2022 Aspiration

Provide research-based insights into the effects of truck driving forces on animal welfare outcomes.

It is widely accepted that transportation is a source of stress for livestock, and stock stress is often raised in discussions about animal welfare and wellbeing.

AMPC seeks to quantify the impact with a baseline study on the forces involved in the transport of livestock to processing establishments, and the effects of the forces on livestock welfare.

Decontamination, disinfection and sanitisation



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2021–2022 Aspiration

Development and evaluation of at least three slaughter floor and/or boning room product contamination detection units.

AMPC will undertake a number of initiatives aimed at assessing new approaches to food safety. These include examination of US tech using ozone as a decontaminant; and microwave radiation as a method of deactivation of microbes, with potential application in disinfection of trim products. Another initiative will investigate camera and light frequency technology to identify zero tolerance contaminants on carcasses.







## AAWCS extension and support



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CORE

### 2021–2022 Aspiration

**Ensure the awareness and understanding of revised AAWCS in all accredited processing plants.**

AMPC is always looking for opportunities for cross-industry collaboration and supporting industry in its efforts to direct its own future. The industry-owned animal welfare standard has undergone a detailed review and is now ready to be shared, endorsed and adopted. AMPC will support publishing and extension activities, as well as providing assistance for the training of auditors on the changes to the standard.

## Near-field communications for traceability



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### 2021–2022 Aspiration

**Proof of concept for traceability utilising the modification of an existing technology used in traceability and fraud detection in the wine industry.**

Improved traceability serves a number of important purposes, from supporting processes around food safety to enabling consumer access to information around wellbeing and sustainability. Traceability is also critical in preventing fraud, an increasing issue in a global market where quality products with an impeccable pedigree can command a premium price. The wine industry has been heavily targeted by fraudsters, and has responded with a number of technological solutions.

AMPC will assess the feasibility of modifying new field communications, already in use in the wine industry, for use in traceability and fraud detection in the meat sector.

## Primal to steak tracing



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### 2021–2022 Aspiration

**Proof of concept for ledger-based and combined ledger and parent/child labelling methodologies.**

Traceability matters, but it's a difficult proposition to leverage traceability for processors, who are operating in an environment where they are removed from the brand holder.

AMPC is running two initiatives to assess ways that brands might leverage attributes of their supply chain with consumers, via the tracking of traceability from primal to steak. One initiative will look at utilisation of a ledger-based approach while the other will look at a combination approach using both ledger and parent/child labelling. Both will consider hardware and software solutions. In both cases, AMPC is seeking proof of concept.

## Smallstock EID scanning



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CORE

### 2021–2022 Aspiration






**Determine if the traceability outcomes for Victorian establishments can be replicated in other states.**

Smallstock electronic tags have been in use in Victoria for some considerable time. AMPC will trial scanning technology for processing establishments outside of Victoria to determine if the traceability outcomes for Victorian establishments can be replicated in other states.



# Balanced Portfolio

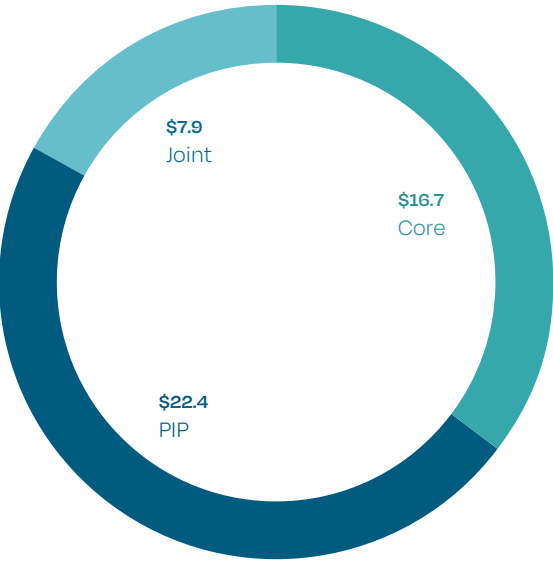
AMPC seeks to invest in a broad range of initiatives that is driven by the needs of the industry and reflects the diversity of the processing sector. Our investments are strategically allocated across our five programs and shared among core and PIP initiatives.

Program Expenditure by Type (\$m)		Core	PIP	Joint	Total
	Advanced Manufacturing	\$4.9	\$4.6	\$0.5	\$10.0
	Sustainability	\$2.6	\$4.0	—	\$6.7
	People & Culture	\$4.7	\$8.1	\$0.1	\$13.0
	Technical Market Access & Markets	\$2.3	\$3.0	\$4.7	\$10.1
	Product & Process Integrity	\$2.2	\$2.6	\$2.5	\$7.3
Total		\$16.7	\$22.4	\$7.9	\$47.0

Expenditure by Program (\$m)



Expenditure by Type (\$m)



# Budget

## Income & Expenditure

Income	RD&E	Marketing	Pre-stat	Total
Levies	\$10,492,704	\$6,995,136	—	\$17,487,840
Interest	—	\$174,460	\$93,224	\$267,685
Government Matching	\$21,402,966	—	—	\$21,402,966
Partner Contributions	\$5,599,331	—	—	\$5,599,331
Total	\$37,495,001	\$7,169,597	\$93,224	\$44,757,822

Program Expenditure	RD&E	Marketing	Pre-stat	Total
Advanced Manufacturing	\$9,954,589	—	—	\$9,954,589
Sustainability	\$6,682,849	—	—	\$6,682,849
People & Culture	\$11,853,290	\$1,114,929	—	\$12,968,219
Technical Access & Markets	\$6,631,502	\$3,449,944	—	\$10,081,446
Product & Process Integrity	\$5,900,649	\$1,435,128	—	\$7,335,777
Total Programs	\$41,022,879	\$6,000,000	—	\$47,022,879
Corporate Member Fees	—	\$615,584	—	\$615,584
Direct Corporate Costs	\$2,800,281	—	—	\$2,800,281
Total Program Direct Costs	\$2,800,281	\$615,584	—	\$3,415,865
Total	\$43,823,160	\$6,615,584	—	\$50,438,744

Corporate Costs	RD&E	Marketing	Pre-stat	Total
Indirect Corporate Costs	\$1,892,772	\$1,261,848	—	\$3,154,620
Total	\$1,892,772	\$1,261,848	—	\$3,154,620

## Reserve Movements

	RD&E	Marketing	Pre-stat	Total
Opening Reserves	\$11,025,929	\$12,783,747	\$6,688,584	\$30,498,260
Budget Net Income	-\$8,220,931	-\$707,835	\$93,224	-\$8,835,542
Total	\$2,804,998	\$12,075,911	\$6,781,809	\$21,662,718



Our Mission

To drive world-class innovation, adoption and strategic policy development through genuine partnerships built on trust.

Our Vision

The red meat processing industry's trusted partner in innovation.

Our Purpose

To enable Australia to build the most competitive, profitable and sustainable red meat processing industry.

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