Advanced manufacturing

The focus for the advanced manufacturing program over the year was on progressing foundational developments in carcase cutting, objective measurement, digitisation, and materials handling solutions. These developments embraced advancement in new technologies including artificial intelligence (AI), sensing, and robotics.

31
Active

28
Completed

59
Advanced manufacturing projects

Excludes MLA managed projects

The program has seen significant progress in automated, semi-automated and remote-operated developments including beef scribing, ovine IMF measurement, primal packing, and shadow robotics with multiple systems progressing beyond proof-of-concept phase to on-plant trials and full production implementation.

AMPC has continued to engage a global provider network of research providers including universities, research, and commercial organisations working to achieve overall strategies ensuring the latest technology is accessed and applied.

In the past year AMPC has progressed its R&D journey to develop and commercialise new fit-for-purpose processing technologies of the future, working together with research partners and industry, to plan, develop, test, and prove in production.

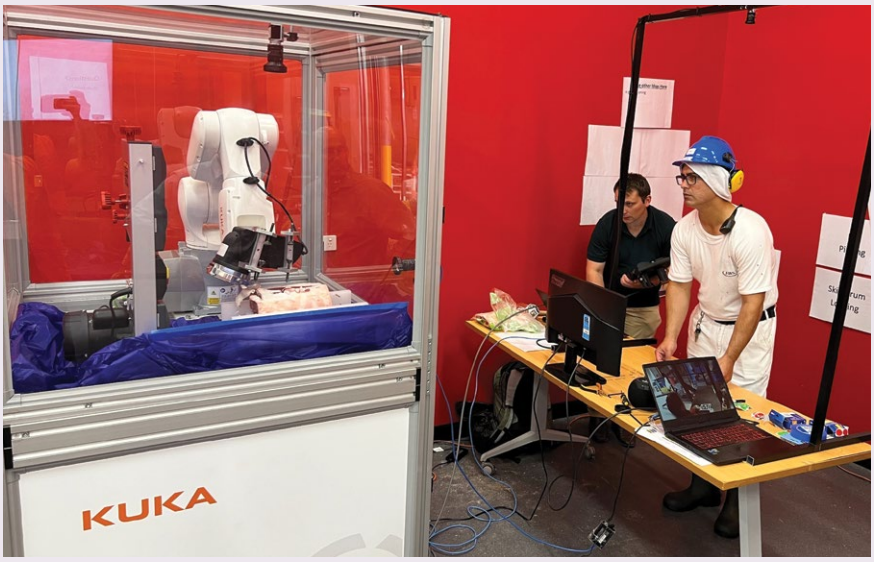
AMPC partners with industry to establish first red meat processing innovation culture centre

AMPC partnered with JBS Australia to establish the JBS Innovation Culture Centre, the first of its kind for the Australian red meat processing industry.

The innovation culture centre officially opened in February 2023 and has been used to host several AMPC immersive reality headsets, a shadow robotic station, and demonstrate exoskeleton solutions for staff to trial.

In the centre AMPC can gather feedback on its technology solutions directly from industry.

Industry can interact with AMPC's innovation and better understand how research and development solutions can be used in different areas of the processing plant.



JBS and AMPC will continue to evaluate technologies such as 3D printing, and conduct R&D workshops in the facility.

Read more in News and Events on the AMPC website >

New easi-load tru-dock container handling system

AMPC worked with V&V Walsh to trial a container handling system to increase efficiency by eliminating the need for products to be transported daily to cold storage facilities and to reduce storage costs.

The Easi-Load TRU-DOCK system creates a seal around the container that allows it to remain cold. Carcases can then be moved into the container under active refrigeration in comparison to the previous process where carcases are moved through a non-refrigerated area to get into the container.

If a processor uses offsite freezing there can be considerable resources involved in transporting product offsite and constraints in production levels and timeframes for containers to be full enough to ship.

This trial focused on delivering a system that would transfer smallstock carcases directly into active freezer container storage, ready for loadout and export. In the previous process, product was handled several times, which increases the risk of compromising product quality and interrupting cold chain integrity and efficiency. This container loading solution reduced handling by up to 200 per cent.

The new system helped the processing plant to expand export capability with a 150 per cent increase of refrigerated containers delivered directly to port over 12 months.

Read more in News and Events on the AMPC website >

Active projects

New sensor tool helps to measure eating quality in sheep meat

This research is looking at a non-invasive, automated sensor tool to accurately measure intramuscular fat (IMF) in lamb carcasses.

The new sensor tool can determine the IMF percentage, a key trait of the Meat Standards Australian eating quality grading system for lamb.

Developed by inMR Measure, the Marbl™ technology tool uses a single-sided nuclear magnetic resonance sensor alongside the longissimus muscle to capture IMF measurements. The sensor tool can be installed into existing carcase handling equipment to measure hot carcases.

Before AMPC and industry investment into measurement technologies and tools, there was a lack of some information when trading information across the livestock value chain.

It also limited processors' ability to realise significant productivity and profitability improvements.

Working with the Australian red meat industry and research partners, AMPC prioritised the development of new technologies capable of accurately measuring eating quality traits that can be deployed pre and post chillers and capable of operating at production speeds.

Automating and accurately measuring IMF on hot carcases can help processors respond to market demands and improve production efficiencies.

Measuring hot lamb carcases, at the end of the harvest floor will provide processors the opportunity to sort carcases into chillers followed by batch manufacture of similarly graded product using IMF percentage measurements.

Read more in News and Events on the AMPC website >

New trial explores bone belt monitoring to improve profitability

AMPC is managing research into red meat bone belt monitoring to help increase profitability.

The research is looking at advanced vision technology that uses AI to monitor the product stream of a bone belt and developing a monitoring tool to understand how much meat is discharged along the bone belt.

The bone belt in a red meat processing facility is where the bones removed from the carcase are placed to be transported for further processing or rendering.

As part of this project, AMPC worked with the Danish Meat Research Institute (DMRI) to trial a vision platform that uses a multispectral camera and AI machine learning to analyse image data and continuously measure bones along the bone belt of red meat processing plants.

Currently the red meat processing industry does not have an efficient solution to quantify the amount of meat that is discharged along the bone belt. This tool will help to understand how much meat is being left on the bone and estimate the potential loss of red meat sales because of these bones being discharged.

The bone belt monitoring tool being trialled can be used to identify areas of improvement including training needs and adjustments required for machinery.

Read more in News and Events on the AMPC website >

World first AI-driven automated beef scribing system

AMPC's investment in advanced manufacturing has resulted in an AI-driven automated beef scribing system being installed at Kilcoy Pastoral Company's processing plant in Kilcoy, Queensland.

The system has a small footprint, operates on artificial intelligence, and was installed in March 2023. The system works by first stabilising the carcase. An artificial intelligence system then analyses an image of the carcase and instructs a robotic cutting saw on where to make the appropriate cuts.

It's the first AI-driven automated beef scribing systems in Australia, and AMPC understands it could be a world first. The benefits include improving yields, greater consistency in scribing operations and most importantly assisting worker safety.

It will be trialled over a 12-month period to determine whether the technology can achieve the necessary performance benchmarks. We are upbeat about this investment which could deliver significant returns to the processing industry and look forward to seeing the results.

The investment involves the design and manufacture of the system which can perform the four scribing cuts required for their operations. As of June 2023, installation was near complete with production ramp and operator training underway.

The system is heavily focused on the principles of artificial intelligence. This technology relies on building data to improve the accuracy and efficiency of the operation of the equipment. Accurate scribing cuts are extremely important due to the high value primals located within the rib structure.

Read more in News and Events on the AMPC website >

Sustainability

The focus for the sustainability program over the year was around the transition to clean energy in two areas. The first being the further development of confidence and capability around bioenergy adoption through the multi-fuel biomass boiler trials. The second being increased adoption of energy efficiency through sharing resources around RaaS (Refrigeration as a Service). Increasing renewable electricity adoption through providing assessment for solar PV was also a focus.

46
Active

14
Completed

60
Sustainability projects

Excludes MLA managed projects

For the first time, bioenergy has overtaken on-site coal use as the industry's third largest source of energy.

Refrigeration energy efficiency resources were published to a dedicated LinkedIn page with now more than 400 followers. Phase 2 of this project is being planned.

Fifty solar PV assessments were completed and the industry's solar PV adoption pipeline has increased by 150% compared to the 2021 baseline.

New host sites trialled the multi-fuel biomass boiler and developed and tested an industry first HACCP process for Class-A water recycling. They also tested waterless spray and ultraviolet (UV) sterilizers.

The program also reviewed the national packaging targets and associated co-regulatory framework, together with implications for the processing industry. It is currently assessing new scenarios to divert facility level plastic from landfill.

Solar PV adoption for red meat processors increases by 150 per cent

AMPC offered a free service that helped processors with the initial assessment and design of new solar PV systems, or to check the performance of their existing systems. The service was proven to be successful with the national processor solar PV pipeline for adoption increasing by 150 per cent (from the 2021 baseline).

When this project started in July 2021 there was 9.8 MW of solar installed at AMPC levy payer processor sites throughout Australia. Since then, the project provider, Beam Solar, has assisted red meat processors to install, contract, or approve a further 14.9 MW of solar PV. This represents a 152 per cent increase in the red meat processor solar PV pipeline for adoption, in just 18 months.

Read more in News and Events on the AMPC website >

Integrated wastewater treatment and resource recovery — digital tool

AMPC engaged water management provider Tessele Consultants to develop an online tool to help processors with the design of integrated wastewater treatment and bio-resource recovery.

The integrated design will assist processors by supporting increased environmental compliance, smaller carbon footprints, treated water recycling, diversion of wastes from landfill, and recovery of nutrients, bioenergy, and fertiliser by-products.

The 3D illustrated software model helps assess, design, and estimate the cost and transition towards modularised wastewater treatment while realising the benefits of a smaller footprint, zero waste and optimised bio-resource recovery.

This project has already received significant attention outside of the red meat processing industry, having been selected for a full presentation at Australia's premier water conference, Oz Water in May 2022.

Read more in News and Events on the AMPC website >

AMPC energy and environment grants helpline

AMPC's energy and environment grants helpline has proven successful with 76 processors registering to use the service since July 2021.

Results included:

- $1.3 million in approved external grants
- Advice for members ranging from Emission Reduction Fund eligibility and registration to individual state and federal grant applications
- Complimentary advice given across energy monitoring, efficiency, and emissions reduction strategies

Read more in News and Events on the AMPC website >

Case study

An Emissions Reduction Fund project is supporting a red meat processor in Queensland to transition to clean energy. They are installing one of the red meat processing industry's largest ever dual-fuel biomass boiler.

A biomass boiler generates heat from biomass such as woodchip or sawdust with significantly less effect on the environment than fossil fuels.

AMPC's Energy and Environment Grants Helpline supported the processor to participate in the Australian Government Emissions Reduction Fund process and earn carbon credits.

2022 Environmental Performance Review results

AMPC runs the Environmental Performance Review for the red meat processing industry every two years.

The 2022 results of the review for the red meat processor sector demonstrated the industry's increasing level of engagement with sustainability.

The most significant result is that since the 2020 review, bioenergy has overtaken on-site coal use as the industry's third largest source of energy, and the industry's solar PV adoption pipeline has increased by 150%.

31 processing plants of different sizes took part in the 2022 review, representing 60 per cent of total Australian red meat processor throughput.

2022 review had the largest ever participation rate since these reviews commenced in 1998.

The review helps processors build trust with their communities and stakeholders through transparency concerning the environment. It also allows processors to compare themselves against industry environmental performance.

The review tracks the industry's environmental performance across key environmental indicators such as water, wastewater, energy, greenhouse gas emissions, and solid waste to landfill.

Read more in News and Events on the AMPC website >

Multi-fuel biomass boiler trials across Australia — sustainable fuel options

AMPC's investment into sustainable fuel options has seen a multi-fuel biomass boiler delivered to several red meat processing sites for trials.

The trials have been helping processors to reduce emissions by demonstrating multi-fuel biomass alternatives to the use of fossil fuel boilers.

The trials have seen new processes around emissions reduction at participating red meat processing facilities by sourcing and developing multi-fuel biomass alternatives in different regions.

The trials have been testing biomass combinations in a portable multi-fuel biomass boiler. The objective is to build confidence and capability when members consider renewable solid fuels for thermal energy and help processors to make more informed decisions around the costs and benefits of adopting biomass boilers.

One of the opportunities for processors will be to consider the sustainable disposal of paunch, as well as the more economic use of adjacent agricultural wastes for use as a renewable fuel.

Each plant will conduct investigations in their own plant around sustainable sources of renewable fuel. Currently biomass boilers use standard woodchip as a fuel source.

The participating plants will be trialling other renewable solid fuels and fuel combinations to test their suitability. They might start with woodchip and then mix paunch with the woodchip. They might try construction waste or dry plant materials with woodchip next and so on.

The biomass boiler has spent time at a processing plant in New South Wales and South Australia.

Read more in News and Events on the AMPC website >

Advanced water recycling trials continue

AMPC's trials into advanced water recycling continue this year.

Three water recycling containers are currently being shared among several different processing plants.

Over the past 12 months the containers were progressively built and sent to five processing plants in QLD, NSW, WA and Victoria.

There are different results coming in from different plants who have trialled the unit. Different sources of water have been used, and also different applications of the recycled water.

One processing plant said the trials have been testing a treatment train on wastewater from a plant biological nutrient removal system. The intention is to achieve a suitable Class A treated water for use in boiler make-up, cooling towers and other potential areas once an ideal treatment train is verified through a HACCP process. This will help them further reduce potable water use on-plant.

Another processing plant said the initial trial has provided results indicating that the quality of water produced by the MMF/UF treatment train option was well under the limits prescribed for stock drinking water.

As a result of the AMPC trials, they will further investigate the potential for using a similar water recycling unit at their facility to recycle water that could be used for cattle drinking water. This initiative could also help offset their use of potable water on-site at up to 150kL per day on large processing days.

The trials involve the operation and testing of a containerized water recycling unit with micro and ultrafiltration, and reverse osmosis wastewater recycling options.

The project is about building confidence and capability on being more efficient with the recycling of different wastewater streams for use in various on-plant processing tasks. AMPC is conducting these trials to help processors investigate the most suitable options for their plant.

Sourcing, treating and testing multiple in-plant water streams with varying filtration combinations will ensure a thorough comparison of efficacy and cost. Results will guide various applications for use of Class A recycled water.

The trials will establish and help progress a sustainable pathway to advanced water recycling in the meat processing industry. The results of the pilot study will include preliminary design, feasibility and business cases that outline suitable uses for such recycled water within processing plants".

The red meat processing industry will be provided with a Class A water recycling handbook that will include tools such as a decision-making matrix to help operators determine when and where to use recycled water within their plants, including how much energy and water savings are likely to be provided.

Read more in News and Events on the AMPC website >

AMPC investment in digital technologies helping to reduce heavy vehicle transport emissions

AMPC is investing in research with Swinburne University of Technology and iMOVE Australia to assess options in the transition to cleaner fuels, and more efficient processes, for heavy transport vehicles used in the red meat processing industry.

To achieve carbon neutrality by 2030, the emissions associated with supply chain logistics need to be monitored, managed and reduced. The first step in this process is to determine a baseline environmental footprint for red meat industry heavy vehicle transport tasks.

This project is a first for the red meat processing industry and will help track emissions for heavy vehicles outside the processing facility. It will use artificial intelligence (AI) and Internet of Things technologies to obtain and analyse data.

Using this data, options for more efficient and low emissions methods of transport, driving and route characteristics, vehicle modifications, alternative fuels, and new technologies will be determined.

Currently, the assumptions used for fuel efficiency, transport emissions, and clean-tech investment in heavy trucks, are largely unverified in Australia. Limited domestic studies have captured and analysed real-world data.

We have partnered with Swinburne University of Technology, who work with iMOVE Australia Cooperative Research Centre, to develop and trial a Data-integrated Visualization and Analytics (DiVA) platform that will work alongside an onboard diagnosis system. It will also integrate with a separately installed real-time exhaust emissions monitoring device.

Read more in News and Events on the AMPC website >

People and culture

The focus for the people and culture program over the year was on delivering projects related to workforce, development, safety and wellbeing.

82
People and culture projects

60
Active

22
Completed

Excludes MLA managed projects

The draft voluntary code of conduct for migrant workers was completed with collaboration from industry. This is a first for the red meat processing industry and it is at the forefront of having a certified and auditable set of guidelines which will help industry exhibit consistent best practice management systems.

AMPC continued to support safety education across red meat processing and conducted three state-based workshops throughout the year to help processors to better understand and manage worker's compensation, worker safety, and navigate employment law. A forklift safety webinar and other induction resources were also created.

Over the year, AMPC conducted its first wellbeing research project and it identified three wellbeing recommendations: reduce smoking rates; improve healthy eating and drinking; and to enhance and protect mental wellbeing.

Virtual reality (VR) resources continue to be developed including a virtual reality tour of a beef and sheep processing plant designed for veterinarian students. Other VR resources created include five maintenance modules, washroom training, resources on beef and sheep cut and offal identification, and an equipment maintenance wizard trimmer training module.

AMPC supported a project to review co-biotic and exo-skeleton devices to understand how they may be integrated into the red meat processing industry. This research has resulted in a practical guide to help members evaluate the use of these devices in their businesses.

AMPC supported a machine learning project with the objectives to understand:

— if machine learning can help in predicting the likelihood of an employee leaving (which means the tool can be used to reduce turnover)

— if it can identify vulnerable employees before they leave an organisations

Outcomes showed that the machine learning model could be used as a tool for reducing turnover in red meat processing plants and is viable and transferable, with minor adjustments for best-fit across businesses.

AMPC supported the updating of the meat processing training package for Halal resources for RTOs. The project aimed to protect and maintain halal meat export market access and ensured a high and consistent standard of national training delivery by RTOs.

Completed projects

Australian Rural Leadership Program

AMPC supports the **Australian Rural Leadership Program** each year by sponsoring red meat processing participants to complete the course.

The ARLP course is an in-depth, cross-sectoral, national leadership program for rural, regional, and remote Australians. It produces leaders who can influence, advocate and lead in authentic and ethical ways.

Over 15 months, 30-35 leaders from diverse backgrounds, industries and communities embark on a unique learning experience involving multiple sessions across the country and internationally.

By investing in our valued members, AMPC is building a cohort of leaders who act beyond themselves, work effectively with others, facilitate change and drive innovation in our industry and local communities.

Read more in News and Events on the AMPC website >

Virtual reality training for red meat processing — from research and development to commercial adoption

Virtual reality training is being commercialised for red meat processors.

AMPC's strategic investment into virtual reality training for red meat processors has resulted in it being made commercially available. Virtual reality training provider, Virtually There, has sold its first modules to Task Labour for their use in training employees to work in red meat processing plants in Australia.

The training works by putting on a headset which gives you the real-life view of a carcase or packing line. If using the scribing module you then take a virtual saw in your hand and you cut what you see. The immersive simulations integrate highly realistic environments with sound and real-life objects to create relevant experiential learning experiences.

Read more in News and Events on the AMPC website >

First for the red meat industry — voluntary code of conduct for the employment of migrant workers

AMPC worked with industry on the development of a voluntary code of conduct for the employment of migrant workers to support processors by underpinning its zero-tolerance view on the exploitation of workers, particularly migrants.

This is the first time the red meat processing industry has developed something like this, and it has come about because of a desire from processors to introduce consistent best practice management standards across all workplaces.

The code has been developed to support the red meat processing industry through a certified and auditable set of guidelines which will help them in the management, recruitment and employment of migrants which is complex for employers to navigate on their own. The guidelines will provide consistent best practice for the onboarding of migrants across all processing plants and ensure migrants have a positive experience in our workplace.

AMPC developed the code through an industry working group consisting of about 20 processors from across Australia. The working group also included the Australian Meat Industry Council (AMIC), AUSMEAT and the Grocery Council of Australia.

The code was developed in consultation with the working group. The working group validated the draft code and its compliance guide prior to it being trialled at five pilot sites.

The code will also be instrumental in helping companies bringing in foreign employees. It will provide them with a checklist of things they need to consider.

The next steps are for industry to adopt the voluntary code and AMPC is in the process of determining a code administrator to help industry do this.

Read more in News and Events on the AMPC website >

Active projects

Iron hand leads the way in exoskeletal trials for the red meat processing industry

AMPC is investing in a project exploring uses of cobotic and exoskeletal devices. The research is looking at various technologies available to support Australian red meat processor workers complete manual tasks and determining their suitability for the industry.

So far, the project has focused on trialling 20 active (requires a power supply) and passive (use own body weight, springs or simple levers) devices in different working environments, using a range of motions. These devices include the PAXEO Back, BionicBack, Evo Vest, Leg X, PAXEO Thumb, and Bioservo Iron Hand.

AMPC has a strategic objective of improving safety for red meat processing workers. Manual handling related injuries are one of the biggest safety concerns for the red meat processing industry.

AMPC is working with industry to determine which manual jobs will benefit from cobotic and exoskeletal devices and trailing these devices in-plant.

These technologies are showing promising signs. The Bioservo Iron Hand which assists with grip, is supporting workers to use 15 to 18 per cent less force when performing tasks that require high grip including consistent knife use for skinning, trimming, and vertical and table boning.

Read more in News and Events on the AMPC website >

AMPC wins grant to support women in maintenance trade roles

AMPC won an NSW Department of Education grant to encourage women in trade roles. The application outlined the development of a program that encourages women to trade roles in the red meat processing industry in rural NSW.

The program is being developed by AMPC and involves an immersive experience and the development of an interactive attraction tool to encourage women to consider trades in the meat processing industry.

The program will run across three different regional areas of NSW.

AMPC will run three programs over the next 14 months that will allow women to learn about and experience maintenance trade roles in red meat processing. Roles such as fitter and turners, electricians and plumbers.

Each program will run for three-days and participants will get their hands on the tools whilst learning about the trades. They will be given the support to develop human skills and use positive psychology principles to support a thriving career.

The immersive experience will involve a day at a meat processing plant in NSW together with a day at TAFE to experience the education side to undertaking a trade. This will give participants a full 360-degree profile of an apprenticeship, experience what it could look like and get hands on in the practical and training elements of the role to be able to make an informed career choice.

The third day of the program will be an employer engagement event which will support stronger networks between red meat processing industry employers, education providers and program participants.

Separate to the three-day program, AMPC will develop an interactive tool to promote the career options for women to work in trade-related disciplines in the red meat processing industry.

This tool will be able to be used by career advisors and red meat processors at career days, field days and other industry events.

Read more in News and Events on the AMPC website >

Technical market access and markets

The focus for the technical market access and markets program for the year has been on enhancing the international competitiveness of our meat exports by reducing regulatory burden on processors and improving market access conditions.

14
Active

8
Completed

22
Technical market access and markets projects

Excludes MLA managed projects

AMPC is undertaking research to assess and review regulatory costs associated with export market access. This work continues previous research on non-tariff measures and barriers to trade. The research is estimating the cost of certain common regulatory activities implemented by importing countries, across four key trading partners for Australian exports of beef and sheepmeat. Data is being gathered from a sample of key exporters. The potential cost reductions generated by the identification of alternative regulatory practices that achieve the outcomes sought by trading partners will be included in the project.

Work is also being progressed by AMPC to assess whether the Raman probe can be calibrated to determine the presence of cadmium residues in beef livers. Current requirements for detecting the presence of cadmium in cattle and sheep from high-risk areas are through a random laboratory testing program, which may be associated with a level of risk for some processors. If it can be calibrated to detect cadmium residues, the Raman probe will provide a safe, non-invasive method of testing that can be used quickly and effectively on plant. Processors will be able to confidently provide offal for sale from animals determined not to have cadmium residues. The estimated savings in offal for human consumption are estimated at around $1.2 million annually for larger processors.

AMPC has undertaken several projects to reduce regulatory burden. Projects to demonstrate the effectiveness of remote audits and inspection are becoming important as regulators throughout the world begin to embrace the benefits of this technology.

AMPC has also supported proposed changes to meat inspection requirements, that will reduce the regulatory burden on the processing sector.

A project was completed to develop a risk management framework to support changes for Cysticercus bovis (*C. bovis*) inspection. The changes to inspection for *C. bovis* are expected to result in returns of around $30 million for processors through the sale of beef cheeks.

Over the past 12 months, AMPC continued to work with processors to identify and deliver projects that are likely to produce real benefits in improving market access. Providing scientific evidence to support the government's technical market access negotiations will continue to be important for this program.

Completed projects

New *C. bovis* framework supports an increase in red meat profits by $30m per year

A risk management framework was developed to support the risk-based inspection requirements for Cysticercus bovis in the revised Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption (AS 4696: 2023).

C. bovis causes small cysts in the muscles and offal of cattle. The presence of cysts can lead to all, or part of the carcase being condemned. Cattle get *C. bovis* from ingesting crops and water contaminated by human wastewater that has not been effectively treated.

Current standards for *C. bovis* inspection require all cattle to be checked for cysts in the heart, diaphragm, and cheek even if there is a low risk of the animal being exposed to untreated human wastewater. Once beef cheeks are incised, they are not suitable for sale for human consumption.

The new risk management framework will allow red meat processors to identify low-risk animals and avoid cutting cheek muscle, while still addressing *C. bovis* risks to human health.

By identifying low-risk animals processors will be able to sell and export this product to international markets.

The revised standard includes updates for some meat inspection requirements, based on current science, and continues to ensure that the meat we produce is wholesome and fit to eat, while providing benefits for red meat processors.

The move to a risk-management approach to inspection for 'beef measles *(Cysticercus bovis)*' is the main change in the standards.

The framework was developed as part of AMPC's strategy of addressing opportunities for regulatory efficiency and providing cost savings to red meat processors.

The changes could potentially lead to increased earnings of up to $30 million for Aussie red meat processors through additional sales of beef cheek.

A risk management framework was required to support the move to the risk-based inspection for *C. bovis*. While the science was there to support the move, operational arrangements to identify and manage the risk, and to provide details of how the system would work, were needed for stakeholders.

The framework provides the detail required by regulators, processors, producers and other stakeholders along the supply chain about the actions and requirements to ensure the *C. bovis* risk associated with cattle exposed to recycled human sewage water is identified and managed appropriately.

The Department of Agriculture, Fisheries and Forestry are working on rolling out the changes to export processing plants.

AMPC worked together with government, industry, and technical experts on leading a steering group to develop the risk management framework.

Read more in News and Events on the AMPC website >

Active projects

Red meat industry first — sensor technology to determine cadmium contamination in beef livers

AMPC is investing in research looking at sensor technology that validates the Raman probe to screen beef livers for contamination with cadmium.

Cadmium is present in the environment in many parts of Australia, and its presence in carcases and offal represents a potential market access risk. Current testing consists of a random laboratory testing program of carcases and can be slow and expensive.

Cadmium residues accumulate in offal and, rather than take the risk that offal from high-risk animals only may exceed acceptable limits, many processors remove the offal from the human food supply chain altogether. This represents a lost opportunity to processors — estimated at around $1.2 million every year for larger processors.

Given its chemical fingerprint and sensitivity, Raman spectroscopy is being assessed for its suitability to rapidly screen beef livers for the presence or absence of cadmium residues. The successful calibration of the probe is expected to enable processors to safeguard their market interests with robust and widespread assessment for cadmium contamination in offal.

Raman spectroscopy is a non-destructive rapid spectroscopic technique which uses the interaction between light and the chemical bonds of matter, to provide information on the structure, composition, and molecular interactions of matter, effectively providing a chemical fingerprint.

Livers from cattle sourced from high-risk and low-risk areas for cadmium are being targeted to measure sufficient numbers of livers with heavy metals present.

MLA Joint Investment

Marketing and market access

AMPC provides funding to MLA as part of joint industry investment program to fund important industry and product marketing, promotion, and market access activities.

In 2022-23, $4.2 million was invested with MLA for marketing activities that encompass domestic and international market research and promotion, technical market access matters and business development activities both domestically and abroad.

Product and process integrity

The product and process integrity program's focus for the year has been on projects aimed at improving the traceability of meat products and providing scientific support for better options to demonstrate product integrity.

38
Product and process integrity projects

23
Active

15
Completed

Excludes MLA managed projects

AMPC is working with processors to assess the effectiveness of various radio frequency identification device (RFID) readers for small stock. This work is important following the recent agreement of Australian agriculture ministers to mandate electronic identification devices for small stock by 1 January 2025. Information sessions were hosted and a factsheet has been developed.

The offal sensing project, which has been underway for some time, concluded at the end of June 2023. The technology has been demonstrated to effectively detect surface and internal defects and diseases in offal. The use of this technology is expected to complement the work of offal inspectors. It reduces the human handling required and therefore the potential for contamination. It may also reduce the need for incising offal and increase the amount of offal that can be provided for human consumption. The next step for this technology is to move towards commercialisation and adoption. Regulatory support is critical to maximise the benefits that may be achieved.

Over the past year, this program has focussed on projects that use technology and science to improve traceability and process integrity. Selecting projects that are likely to be of interest for commercialisations will be a focus for the future.

Completed projects

Remote auditing using smart glasses

AMPC is managing research into remote auditing. Remote auditing allows for various audits to occur remotely through the use of smart glasses technology that can live stream to an auditor or a vet located elsewhere.

It builds on previous research on smart verification technologies that resulted in a 'smart glasses' software application. This research is supporting more red meat processors to adopt remote auditing technology through trials and developing additional remote auditing smart glasses product features.

The Codex Committee on Food Import and Export Certification and Inspection Systems agreed to a guidance document for remote auditing that has gone to the Codex Alimentarius Commission for adoption. This guidance document was developed by Australia and the Department of Agriculture, Forestry and Fisheries has been discussing the use of remote audits to complement or replace on-site audits with trading partners.

AMPC's research is looking into advantages and challenges with this technology and how challenges may be overcome. In areas that have low connectivity, the technology can store video footage and it can be downloaded when connectivity is restored.

There is potential for smart glasses technology to have further applications across red meat processing and already they are being used for maintenance tasks. If a machine requires maintenance, the smart glasses can be worn and live streamed to a specialist who helps to fix the problem.

Another AMPC project looked at smart glasses technology for vet inspections at red meat processing plants. Animal health and welfare assessments, which are conducted by on-site vets, can now be done remotely.

Read more in News and Events on the AMPC website >

Tech trial inspects offal

An investment into offal sensing technology has the potential to improve food safety outcomes and increase returns for meat processors.

The trial, which AMPC ran over the past few years, involved developing a multi-sensory inspection tunnel that uses x-ray for internal offal inspection and an RGB camera (that uses white and UV light) for surface inspection of offal.

The inspection of offal is required as part of Australian food safety standards.

Currently, offal inspection is carried out by a person who performs the required checks by looking outside of the offal, and if required, cutting the offal to look inside.

This technology works alongside human offal inspectors. Images from the x-ray and camera are immediately available on the processing plant's intranet site so the inspector can review.

It potentially reduces the time taken to inspect offal and reduces the need for human handling therefore minimising the potential for cross-contamination.

The other benefit is being able to see inside the offal without having to cut it, which may result in more offal for sale and greater returns for red meat processors.

The trial was conducted at a meat processing plant in Christchurch, New Zealand. Covid restrictions at the time meant that the equipment couldn't be trialled in Australia.

The project finished and the final research report provides recommendations for commercialisation of the technology.

If the technology was to be adopted, it would require regulatory approval.

Read more in News and Events on the AMPC website >

Active projects

Stunning box trial begins

AMPC is funding a study on the improvements in animal welfare outcomes associated with the implementation of advanced stunning box units following a preliminary trial at a New South Wales processing plant.

Developed by Jarvis Products Corporation in conjunction with fabricators MPF Engineering, the new dual-purpose stunning box units were built following the preliminary trial of the box that explored speed, durability, and electrical and pneumatic capability in line with animal welfare and safety requirements.

AMPC is now working with CSIRO to validate the animal welfare and meat quality benefits of using the new stunning box units, looking at animal behaviour, vocalisation, and meat quality measures.

The program is funding the installation of 10 boxes in processing plants across Australia that process different breeds, ages, weights and sex of cattle. As of June 2023, eight boxes have been installed and are in operation. Whilst the boxes can do percussive and electrical stunning, most plants are also trialling electrical stunning.

AMPC conducts regular meetings with the 10 processors, CSIRO and Jarvis to discuss progress, concerns and results so far. Testing will continue.

So far results have shown positive outcomes using electrical stunning. Red meat processors who have previously not trialled electrical stunning may now explore this option to access global markets.

Read more in News and Events on the AMPC website >

MLA Joint Investment

Integrity systems

AMPC provides funding to MLA as part of joint industry investment program to fund important industry integrity functions that include product assurance and traceability systems.

In 2022-23, $2.7 million was provided towards integrity functions including MLA's wholly-owned subsidiary Integrity Systems Company, and SAFEMEAT. SAFEMEAT is dedicated to promoting Australia's best practice management systems that ensure when customers purchase red meat or livestock from Australia, they can be confident in the quality and safety of their choice.

R&D agreements 2022–2023

Investments paid to providers in 2022-23 financial year. These include all new contracts signed in the 2022-23 financial year only.

Project code	Project title	Research organisation	Cost paid $
Advanced manufacturing			
Hands-off processing			
2023-1030	Waterless lamb frenching concept trials — Curious Creations	Curious Creations LTD	17,645.41
2023-1039	Remote Operations — Mimeo Shadow Robots (Stage 3+)	Mimeo Industry Ltd	250,279.78
2023-1056	IP Protection Support — Mimeo Industrial & inMR Measure (Filing)	Mimeo Industry Ltd	27,500.00
Technology adoption			
2022-1052	Brownfield Co-product recovery and overall efficiency gain to meet output capacities. (Stage1)	Wodonga Rendering Pty Ltd	60,000.00
2023-1035	Early adoption and beef supply chain integration of hot carcase marble measurement	JBS Australia Pty Limited	181,250.00
Carcase optimisation			
2023-1038	Beef striploin fat removal — Stage 2B: Controlled variable thickness robotic fat trimming	Business and Manufacturing Consultancy UK	189,500.00
2023-1045	Automated Robotic AI Chilled 3-cut Beef Scribing System — Pre-Engineering	Australian Meat Group Pty Ltd	210,600.00
2023-1050	Ovine Carcass Inspection/Contamination Management — On-site Validation & Process Integration	Veritide Limited	22,800.00
2023-1051	Bovine Carcass Inspection/Contamination Management — On-site Validation & Process Integration	Veritide Limited	22,800.00
Sustainability			
Communities			
2022-1211	Red Meat Processing National Campaign	CT Group	2,823,498.03
2023-1017	Carbon Neutral Certification — Climate Active demonstration	Ndevr Environmental Pty Ltd	31,985.00
2023-1037	International Carbon Management Project	Thomas Foods International Pty Limited	265,125.00
2023-1040	Know and show (K&S) your carbon footprint — discovery phase	Agricultural Innovation Australia	50,000.00
2023-1049	ERF Registration, Development, creation of Carbon Credits, and Management — demonstration	Ndevr Environmental Pty Ltd	26,862.00
Energy			
2023-1033	How to establish an ISO 50001 ready program for a medium red meat processing plant	Wodonga Rendering Pty Ltd	75,300.00
Water			
2023-1028	Front End Engineering (FEED) — Integrated Bio-resource recovery facility stage 1	Bindaree Beef	179,000.00

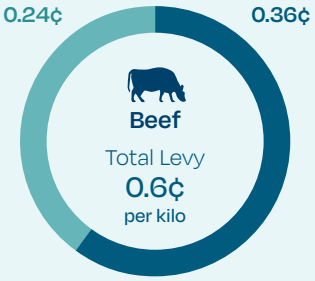
Project code	Project title	Research organisation	Cost paid $
Sustainability (continued)			
Waste			
2023-1042	Commission and validate a novel wastewater treatment plant at a red meat protein recovery facility	L. & G. Meats Pty. Ltd. T/A Westside Meats Pty. Ltd	284,700.00
2023-1060	Ceramic Membrane Technology to remove persistent solids from wastewater	Dardanup Butchering Company	770,974.00
People & culture			
Attraction			
2023-1018	Voluntary Code of Conduct Migrant Worker Management (Stage 2)	KPMG Australia	249,854.00
2023-1029	Red meat processing workforce strategy	Deloitte Touche Tohmatsu	136,500.00
2023-1064	Meat Processing Industry Immersive Careers Experience Tool (Stage 1 and 2)	Think Digital Studios Pty Ltd	67,480.00
Retention			
2023-1046	Decision Intelligence using data to drive business decisions and R&D	Tasmanian Quality Meats Pty Ltd	95,161.00
Development			
2023-1059	Red Meat Industry Knowledge Hub — Sub Project A Optivly Stage 1	Optivly	150,000.00
2023-1061	Empowering Women in Maintenance Trades (EWIT)	Empowered Women In Trades	46,240.00
Safety & wellbeing			
2023-1020	Management of the Q Fever Register — Stage 3 (Hosting, Maintenance and Support) 2022-23	AUS-MEAT Limited	190,837.08
2023-1034	Development of a Rise and Fall Platform Recirculating Harness Attachment	H W Greenham & Sons Pty Ltd	46,497.38
Markets & market access			
Market access			
2023-1052	Integrated Goat Polisher to Skin-on goat slaughter line	Western Meat Exporters Pty Ltd	104,267.20
Global competitiveness			
2023-1047	Beyond Border Analysis of Regulatory and Related Costs	SG Heilbron Pty Ltd	118,053.48
General			
Corporate Costs			
2022-1204	Implementing Governance Best Practice for AMPC Investments	ACIL Allen Consulting Pty Ltd	60,000.00
2023-1027	Review of AMPC levy-funded R&D investments: Alignment with strategy and future opportunities	The Growth Drivers	121,980.00
2023-1031	Strategy Coaching Program	The Growth Drivers	40,975.00

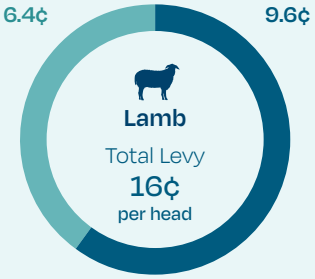
The list only includes new agreements entered into. If a project was originally entered into in a previous financial year and a variation was signed in FY22, it will not appear on the list since it was originally executed in another year. If the project was originally executed in FY22 and subsequently varied it will appear on the list.

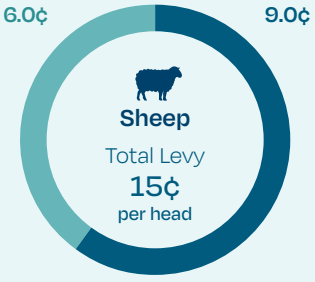
Beef production and livestock slaughter levies

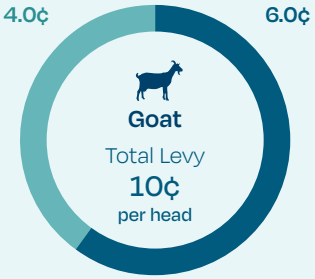
Marketing

Research & development









Funding sources and approach to RD&A

During the year we made changes to future-proof our R&D funding model following an independent review commissioned by the board. The new model increases the transparency of our funding decisions. We replaced the outdated Plant Initiated Projects funding model with a more flexible, transparent approach to funding that delivers better industry-wide outcomes, and it officially began on 1 July 2023.

Funding sources up until 30 June 2023	Funding sources as of 1 July 2023
Core projects Core projects provide benefit to the meat processing industry. They address industry-wide issues covering productivity, profitability, sustainability, integrity, and capability. Core projects go through a robust industry-wide consultation process. Funding comes from processor levies and matched government funding (where applicable). 50% levy 50% matched government funding	**Open funding model** AMPC works collaboratively with our levy payers and research partners through trusted partnerships. Levy payers and research partners co-fund investments in many cases, delivering increased value for the industry. The new model focuses on strategically relevant investments and is supported by a robust program governance framework endorsed by the board. Maximising processor participation in investments remains a critical element of our approach, and provides an opportunity for broader collaboration and a community of practice.
Plant Initiated Projects (PIP) PIP projects enable meat processing plants to identify and undertake R&D projects in their plant that generate whole-of-industry benefits. This is by trialling and adopting new technologies at their plant. They are funded by the plant, levies, and matched government funding. 25% levy 25% processor co-funding 50% matched government funding	
Joint projects Joint projects deliver supply chain improvements. Projects are completed in the areas of food safety, data integrity, eating quality, and support increased demand for red meat domestically and internationally. These projects are funded by AMPC and Meat and Livestock Australia, using both processor and producer levies, as well as matching government funds for eligible activities.	**Joint projects** Joint projects deliver supply chain improvements. Projects are completed in the areas of food safety, data integrity, eating quality, and support increased demand for red meat domestically and internationally. These projects are funded by AMPC and Meat and Livestock Australia, using both processor and producer levies, as well as matching government funds for eligible activities.

Cap — government matched funding

The matched funding mentioned above is provided by the government to research and development corporations each year and is capped based on total industry turnover. For red meat industry participants, the 2022–2023 matched funding cap was $27.4m (total available between AMPC, MLA and Livecorp).

Eligible R&D initiatives attracted matched funding equal to 50% of project expenditure.

The processing sector accesses matched funding through our supply chain innovation partner, Meat and Livestock Australia.

AMPC invested $16.1 million of cap in 2022-23.

Our organisation

Who we are

Our board As of 30 June 2023

John Berry
Chairman

John K Berry is the Head of Corporate and Regulatory at JBS Australia Pty Limited and also a Director of JBS Australia.

JBS is the largest meat, protein and food processing company in Australia and New Zealand.

John has over 20 years of senior management experience in the Australian Meat and Food Processing Industry.

John has lead responsibility for corporate and government relations, industrial relations, sustainability and environmental within the JBS Australia business.

He also has extensive operational and business strategy experience including merger and acquisitions and business integration.

John possesses an MBA from the University of Queensland, business management degree from the Queensland Institute of Technology and is also a Graduate and Fellow of the Australian Institute of Company Directors.

John was elected to the AMPC Board for an eighth term in November 2020.

Melissa Fletcher
Deputy Chairman

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

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

Melissa was elected to the AMPC Board for her second term in November 2020.

Saranne Cooke
Independent Director

Saranne is Deputy Chancellor of Charles Sturt University, Chair of the Australasian College of Sport and Exercise Physicians, Deputy Chair of Racing NSW, Chair of the Royal Flying Doctor Service (South Eastern), a director of Fisheries Research and Development Corporation (RDC), HESTA Superannuation and Aged and Community Care Providers Association.

Dr Cooke Chairs the Fisheries RDC Finance, Audit and Risk Committee and is the Independent Chair of the Sugar Research Australia Director Selection Committee (for 2022 and 2023).

Dr Cooke previously held a number of executive roles within the energy, financial, education and manufacturing sectors. Dr Cooke completed her doctorate by researching board governance across the ASX 200 companies. Dr Cooke also holds a Bachelor of Commerce, Master of Business (Marketing), and a Master of Commercial Law. Dr Cooke is a Fellow of the Australian Institute of Company Directors, a Fellow Certified Practising Accountant, a Fellow of the Australian Marketing Institute, and a Certified Practising Marketer.

Dr Cook was elected to the AMPC Board in September 2022.

Allira Hudson–Gofers
Independent Director

Allira Hudson-Gofers is a non-executive director and chair with board experience across sport, innovation, legal services, and not-for-profit sectors.

In her executive role, Allira is a registered Trans Tasman Patent Attorney and Managing Partner — Australia, of a patent attorney practice.

She holds a Bachelor of Mechatronics Engineering, a Master of Biomedical Engineering, a Master of Intellectual Property, an MBA, and a Master of Legal Business. She is currently completing a Graduate Diploma of Applied Corporate Governance and Risk Management.

Allira was elected to the AMPC board in April 2022.

Dean Goode
Processor Director

Dean was appointed Chief Executive Officer of Kilcoy Pastoral Company Limited (KPC) on 1 July 2012. He has worked for KPC for over 15 years, including as General Manager of Operations.

He has extensive experience in the export beef processing industry, having previously worked for over 20 years with AMH at both their Dinmore and Townsville facilities in various management roles.

In January 2017, he was appointed Group Chief Executive Officer of the rebranded group of companies, Kilcoy Global Foods, with responsibilities in Australia, USA and China.

Dean holds a Master of Business Administration (MBA) from James Cook University.

Dean was elected to the AMPC Board for his third term in November 2020.

Noel Kelson
Processor Director

Noel Kelson has been involved within the Australian meat processing sector since 1971 working in government inspection and compliance. During this period, he had participated within the significant changes executed by the Victorian meat industry including the transition from direct regulatory control to a quality assured outcome.

In 1995 Noel left the government service to become the quality assurance manager for the Warrnambool based Midfield Meat International Pty Ltd, a position held for 23 years.

Noel has maintained a strong interest in industry matters and in 2015 became a serving Board member of the Australian Meat Industry Council and in 2017 a Trustee Director of the Australian Meat Industry Superannuation Trust. In 2017 Noel was appointed to the Board of the Victorian meat authority, PrimeSafe, and in April of 2020 filled a vacancy upon the AMPC Board.

Noel was elected to the AMPC Board in November 2020.

Tom Maguire
Processor Director

Tom has a postgraduate in Economics, Industrial Relations and Human Resources Management and completed a Master of Business Administration (MBA) from University of Queensland.

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

Tom was elected to the AMPC Board for an eighth term in November 2020.

Brad Teys
Processor Director

Brad Teys has worked in the beef processing industry for 42 years, working throughout the business in various areas including livestock procurement, plant operations and sales. Brad has been CEO of Teys since 2002 and has been Chairman and CEO since 2019.

Teys Australia is the second largest beef processing company in Australia with six processing sites, three feedlots and value added and wholesaling businesses throughout the Country's eastern seaboard. Teys Australia employees 4700 people across three states.

Brad has a Dip. Meat Tech. with Distinction from Massey University, New Zealand and an MBA with Distinction from Bond.

Brad was elected to the AMPC Board in November 2020.

Mark Langan
Company Secretary

Mark Langan was appointed as Company Secretary on 28 February 2022. Mark has over three decades' accounting and company secretarial experience in various listed and private companies as well as in private practice. He joined Company Matters in 2014. Previously, Mark served as Chief Financial Officer of Clarius Group Limited for over a decade and before that was company secretary of ASX listed Dapoli Corporation Limited. Mark is a member of the Institute of Chartered Accountants in Australia.

Our leadership team As of 30 June 2023

Chris Taylor
Chief Executive Officer

As CEO of AMPC since 2019, Chris Taylor has led the industry-owned research and development corporation through a strategic and operational reset in the face of significant threats and opportunities to the red meat processing sector.

Chris has led the development of a customer-focused strategy, built a fit-for-purpose team and grown the business from a $20m to $40m annual investment.

Chris has a finance and corporate services background in agrifood and natural resources sectors and was AMPC's chief financial officer from 2016 to 2019.

Chris is a graduate of the Australian Industry of Company Directors (AICD) course, and holds a Bachelor of Business (Management), a Bachelor of Commerce (Accounting, Finance), and is a qualified chartered accountant.

Edwina Toohey
Research, Development and Adoption

Edwina has more than 20 years' experience in research, development and adoption in the agriculture and meat processing sector. She has authored over 55 scientific papers/ reports relating to cattle, sheep and goat meat science and technology research. Edwina has managed diverse teams to deliver excellence through the value chain. Edwina is an Australian Intercollegiate Meat Judging alumni and holds a Bachelor of Applied Science (Agriculture)(Hons) at Charles Sturt University and Master Rural Sci Degree at University of New England.

Edwina began working for AMPC in June 2023 and leads the Research Development and Adoption team.

Veneta Chapple
Industry and Government Relations

Veneta Chapple was appointed to Director of Government and Industry Affairs in July 2019. She manages AMPC's stakeholder relations, government affairs, and strategic policy research and development. Veneta joined AMPC in December 2018 as Senior Manager — Key Stakeholder Engagement after spending nearly 3 years with Inghams Ltd as Head of Corporate Communication.

Veneta began her career as a finance journalist in Australia and the UK before moving into consulting in communications and corporate affairs.

Maria Stathis
Communications and Media

Maria is a highly experienced communications professional with 24 years' experience in Australia and the UK. Her experience includes working in the telecommunications, finance and agricultural industries.

Maria is a highly capable leader having managed a wide variety of teams and her strengths include external communications, internal communications, media management, communication strategy, digital communications, issues management, event management, and social media.

Maria holds a Bachelor of Communication.

Maria began working for AMPC in June 2021 and leads the communications and media function.

Mabel Liang
Corporate Services

Mabel has more than 20 years' experience working in executive roles in multinational, listed, and private companies working on leading international operations, start-ups, joint ventures and business restructures.

She has advanced financial management capabilities in planning, analysis, budgeting, forecasting, cash flow and working capital maximisation with an in-depth knowledge of financial compliance and governance.

She joined AMPC in October 2021.

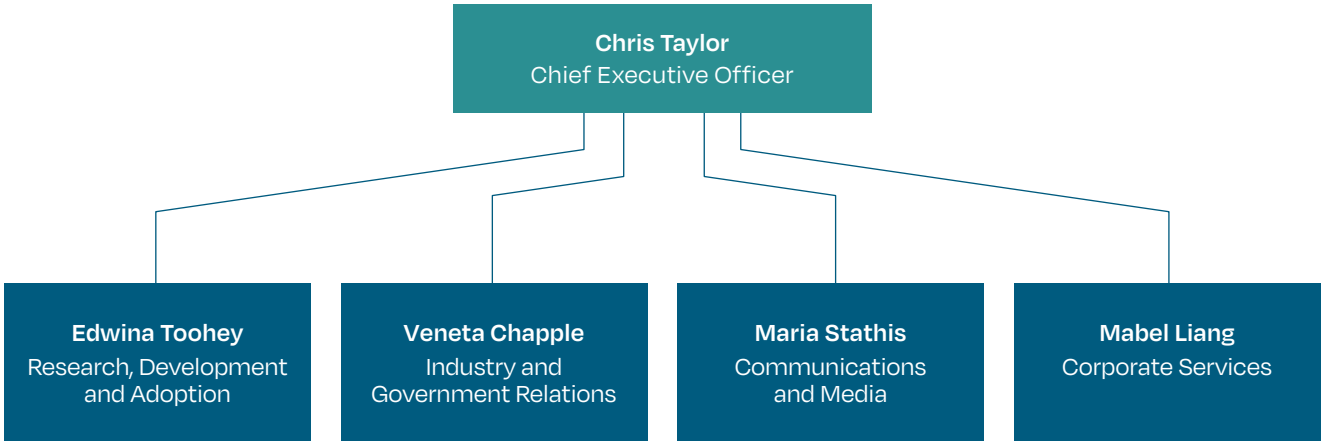
Our people

As of 30 June 2023 AMPC had 17 employees comprising of 14 females and 3 males.

We have a hybrid model with employees doing a mix of working from home and office.

The head office is in North Sydney with six employees working remotely permanently to better service our levy payers.

AMPC organisational chart



Corporate governance statement

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

Corporate Governance Policy

The Board of AMPC has maintained a Corporate Governance Policy during the year ended 30 June 2023.

The Corporate Governance Policy states that the Board of AMPC is committed to ensuring effective corporate governance in accordance with government expectations and drawing on the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*.

In accordance with the Corporate Governance Policy, the Board of AMPC maintains a framework of good corporate governance. The framework comprises of the Corporate Governance Policy and other documents, including:

- Board Charter
- Audit & Risk Committee Charter
- Nomination & Remuneration Committee Charter
- Delegation of Authority
- Diversity Policy
- Code of Conduct
- Privacy Policy
- Whistle-blower Policy
- Conflicts of Interest and Chinese Walls Policy
- Risk Management Plan
- Any other policies deemed appropriate in pursuit of this Corporate Governance Policy

The Board of Directors

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

- the members elect the processor directors every three years
- the independent directors are elected by the processor members of the board
- the chairman and deputy chairman are elected by the board
- the directors should possess a broad range of skills, qualifications and experience
- the directors are expected to act independently of any associate activities that may cause a conflict
- the board should meet on a regular basis
- all available information in connection with items to be discussed at a meeting of the board is provided to each director prior to that meeting

As at the date of this directors' report, the board consisted of six processor directors and two independent directors. Details of the directors are set out in the directors' report.

The primary responsibilities of the board include:

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

The board assesses its performance as a whole relative to its objectives, including the performance of individual directors, at least every two years.

The board acknowledges the need to balance continuity and expertise among directors, with independence and renewal as part of annual board performance assessment and evaluation.

The board recognises that gender targets are an essential part of managing and improving business performance, similar to financial and operational targets. This principle is enshrined in the requirements of the Diversity Policy.

Independent professional advice

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

Audit and Risk Committee

- Saranne Cooke (Chair)
- Allira Hudson-Gofers
- Noel Kelson

The Audit & Risk Committee met four times in the financial year ended 30 June 2023.

The Audit and Risk Committee oversight responsibilities include:

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

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

Risk management

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

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

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

Nomination and Remuneration Committee

- Allira Hudson-Gofers (Chair)
- Saranne Cooke
- Tom Maguire

A Nomination and Remuneration Committee has been established to assist the board to:

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

The Nomination and Remuneration Committee met three times in the financial year ending 30 June 2023.

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

Code of conduct

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

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

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