


Annual Report
2020–21



Redefining
resilience

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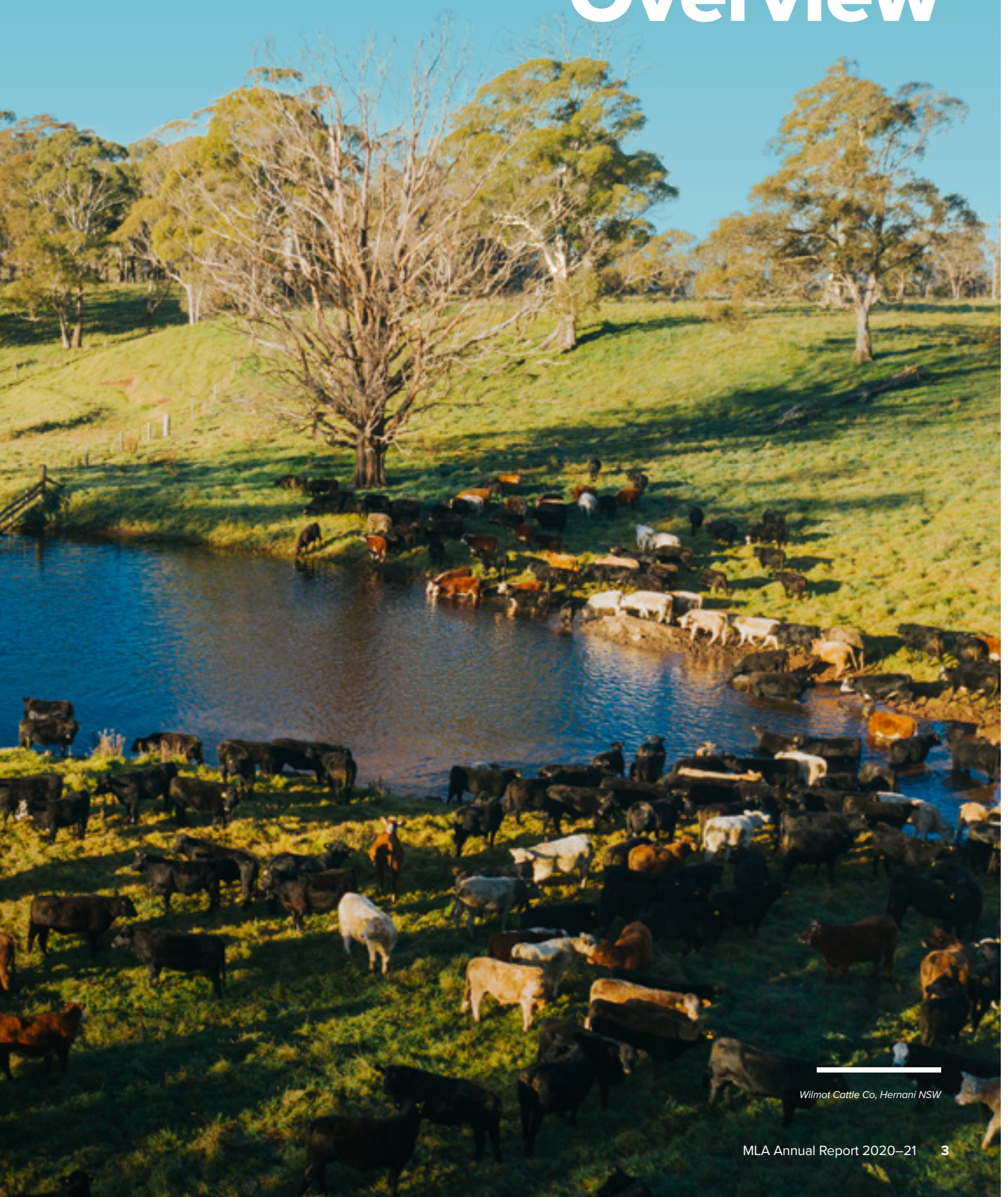
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Overview



Wilmot Cattle Co, Hernani NSW

MLA at a glance



Our purpose

To foster the long-term prosperity of the Australian red meat and livestock industry.



Our vision

To be the recognised leader in delivering world-class research, development and marketing outcomes that benefit the Australian red meat and livestock industry.



Our mission

To collaborate with stakeholders to invest in research, development and marketing initiatives that contribute to producer profitability, sustainability and global competitiveness.



Our values

- customer centricity
- accountability through transparency
- outcomes that make a difference.



Our history

MLA was established in 1998 as a public company limited by guarantee, following the merging of two industry statutory organisations – the Australian Meat & Livestock Corporation and the Meat Research Corporation. MLA is the declared industry marketing body and the industry research body under sections 60(1) and 60(2) of the *Australian Meat and Live-stock Industry Act 1997*.



Our funding

MLA is primarily funded by transaction levies paid on livestock sales by red meat producers. The Australian Government also contributes a dollar for each levy dollar MLA invests in research and development. Other funding streams come from specific unmatched grants from the Australian Government and cooperative funding contributions from other research and development corporations, individual processors, wholesalers, foodservice operators and retailers.

Processors and livestock exporters also co-invest levies into MLA programs through their service companies: Australian Meat Processor Corporation and Australian Livestock Export Corporation (LiveCorp). Individual exporters and importers can also co-invest with MLA on marketing activities.

MLA generates additional income via eligible commercial funding contributions that are matched by the Australian Government. This funding is invested in research and development partnerships that benefit the Australian red meat industry through MLA Donor Company. Integrity Systems Company also receives additional income via the sale of national vendor declaration books and the Livestock Production Assurance program accreditation fee.

See page 57 for further detail of our funding agreements.



Our members

Membership of MLA is voluntary and free to all levy-paying grassfed cattle, grainfed cattle, sheep, lamb and goat producers. MLA had 49,302 members at 30 June 2021 (page 50).



Our stakeholders

MLA works in partnership with industry and government to deliver products and services to the cattle, sheep and goat industries, and other entities along the supply chain.

Through the science and research priorities and the rural research, development and extension priorities, the Australian Government sets high-level priority research and development objectives covering community, industry and environmental concerns.

Peak industry councils provide policy direction on behalf of the red meat and livestock industry. These are the Australian Lot Feeders' Association, Cattle Council of Australia, Goat Industry Council of Australia and Sheep Producers Australia.

MLA also works closely with the Australian Meat Processor Corporation, Australian Meat Industry Council, LiveCorp and Australian Livestock Exporters' Council to develop programs that address key industry issues and opportunities through the supply chain, manage projects and communicate outcomes. See pages 48–50 for more on how MLA engages with its stakeholders and collaborators.



Our subsidiary companies

MLA owns two operating subsidiary companies.

MLA Donor Company (MDC) works in partnership with investors in areas that bring value to the red meat supply chain through innovation and new technologies (page 68).

Integrity Systems Company (ISC) administers the National Livestock Identification System database which records livestock movements. It is also responsible for the Livestock Production Assurance program and National Vendor Declarations and Livestock Data Link (page 68).



Our decision making processes

MLA doesn't make investment decisions in isolation. Decisions are carried out in collaboration with producers, the government, peak industry councils and other industry organisations (see 'Stakeholders' and pages 48–50 for other consultation mechanisms). The regional consultation framework, which commenced in the second half of 2015, enables producers to have direct input into MLA's research and development priorities.



Our locations

MLA employees are based strategically to leverage the best possible access to all stakeholders and to drive demand for red meat in our key markets.

 Sydney, Brisbane, Armidale, Perth	 Ho Chi Minh*
 Tokyo	 Jakarta
 Seoul	 Manila*
 Beijing, Shanghai	 Dubai
Taipei	 Brussels
 Singapore	 London
 Kuala Lumpur*	 Washington D.C.

*MLA has a presence through local agents in these locations but does not have registered offices.

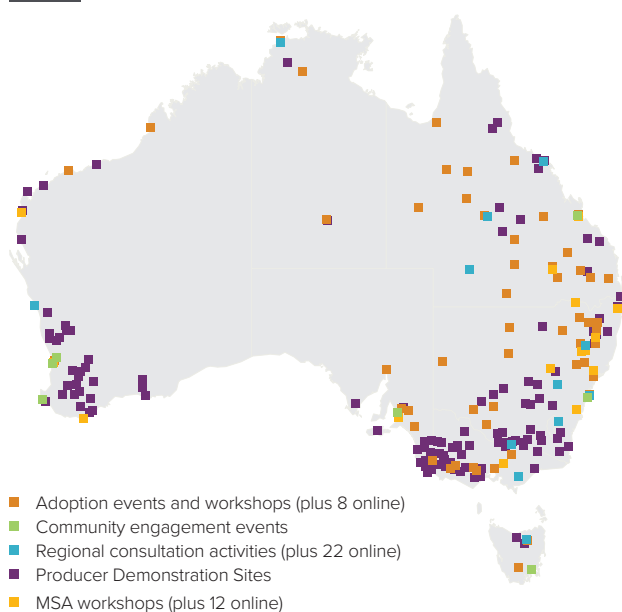


Our employees

At 30 June 2021 MLA had 279 employees both domestically and internationally. MLA's workforce profile reflects a balanced gender profile and age distribution across the organisation (page 69). More than 50% of employees are from a rural background.



Our engagement in 2020–21



These locations and figures are in addition to 49 online and in-person events sponsored by MLA.

Our strategic focus areas

Decisions informed through data and insights



Targeted investment to address the industry's big, complex challenges



Enabling new sources of revenue



Developing new, high value products that allow us to maximise the whole carcass



Beyond today's farm gate



Strengthening our core



2020–21 highlights

Highlights from major projects MLA has led, managed or contributed to include:

Australian Lamb's annual summer campaign showed the country uniting over lamb – and laughs.

The campaign led to

retail sales of lamb increasing

16.8%

(the campaign target was 5%)



MLA was a principal partner of Beef Australia 2021. More than

2,500 people attended MLA activities –

visitor feedback was overwhelmingly positive, with an average rating of 4.5 out of 5 in quality and relevance of content.



Use of the electronic National Vendor Declaration



(eNVD) increased in 2020–21, with

236,000 consignments



made via eNVDs and

68,000 unique users

to the system.

Rare Medium Academy launched to help the foodservice industry with COVID-19 recovery.

More than

4,250

foodservice professionals

tuned in to view the videos and masterclasses.



MLA fast tracked the delivery of lean beef yield data generated from more than

33 million carcass records

to MSA processors and made inroads towards the commercialisation of technologies to objectively measure carcass quality traits. The availability of such data can equip supply chains to potentially capture increased carcass value.



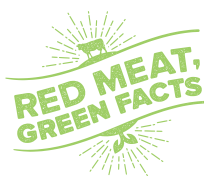
MLA entered into several strategic partnerships to boost the productivity and profitability of Australia's red meat industry, including **Northern Breeding Business (NB2)**, **The Sheep Reproduction Strategic Partnership (SRSP)**, the **Carbon Storage Partnership (CSP)** and the **Emissions Avoidance Partnership (EAP)**.



MLA launched two major publications.

Red Meat, Green Facts

brought together clear, evidence-based messages and information to empower Australia's red meat producers and advocates.



Sustainability update

captured in one place the significant level of MLA's investments in sustainability across the red meat supply chain.

50,000

copies of each publication have been distributed to date.



MLA launched a new online healthy soils hub in April 2021. More than

10,470 people have visited the **healthy soils hub**

727 soil resources

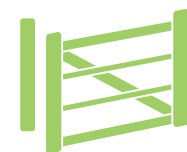
were downloaded on the hub by 30 June 2021.



The MSA beef program delivered an estimated

\$157 million

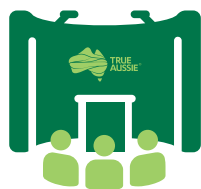
in additional farm gate returns over the past financial year.



The program has returned

\$1.46 billion

to the farm gate since 2011–12.



In late 2020, MLA ran a first-of-a-kind series of international virtual trade seminars.

There were more than

16,000 registrations

for the six seminars across North America, the Middle East and North Africa (MENA), South-East Asia, Japan, Korea and China.

Chair's report

Operating environment, market information and Board business

I'm pleased to present MLA's *Annual Report 2020–21*.

Operating environment

Over the past year there has been a much-needed improvement in seasonal conditions for many of eastern Australia's key agricultural regions. Good rainfall also arrived in the west this past autumn, providing a boost to those production systems.

Livestock numbers are recovering after widespread destocking throughout the drought, with the national flock and herd entering a rebuild phase over the past year. By the end of 2021, year-on-year the flock is predicted to have increased by 6.3% to 68.1 million head and the herd by 5% to 25.9 million head.

While the rebuild is positive, the trade-off has been reduced slaughter. However, some of this has been offset by heavier carcase weights due to the good season.

For both cattle and sheep, many of MLA's livestock price indicators have hit or neared historic marks, due to the turnaround in seasonal conditions and reduced supply.

Globally, beef and lamb supplies are also limited, leading to increased demand for Australian red meat. This has also supported increased competition in Australia, with restockers, processors and exporters all competing for a reduced supply pool, underpinning high prices.

In Asia, African Swine Fever is still creating protein shortages, with Australia benefitting from increased demand to fill this gap.

The high Australian dollar has also put pressure on exporter and importer margins, creating additional challenges when coupled with high beef and sheep prices. However, both domestic and international demand remains robust.

COVID-19

The COVID-19 pandemic has continued to dominate headlines. At the time of printing, the situation in Australia continued to worsen, with a number of states impacted by lockdowns and restrictions. Overseas, there are also spontaneous outbreaks in some of our key markets.

Despite this, our industry has remained substantially more protected than others from the virus fallout. This is thanks to the recognition by the government of the industry being an essential service and by our traceability systems and reputation as a safe, trusted source of high quality protein.

Retail sales have benefitted from COVID-19 as consumers continue to spend more time at home, and although foodservice sales were disrupted, especially in some key overseas markets, they are returning to normal levels.

MLA will continue watching the situation closely, and where appropriate, proactively respond to support the Australian red meat supply chain.

Markets

Cattle and beef

Key trends

- National herd enters a rebuilding phase
- Cattle prices reach record levels due to improved seasonal conditions and strong restocker demand
- International demand for Australian beef remains robust despite high prices

In 2021, Australian cattle prices reached new records for all categories due to improved seasonal conditions that fuelled strong competition between restockers, feedlots and processors. This included a record for the benchmark indicator for young cattle prices, the Eastern Young Cattle Indicator, which climbed above 1,000¢ for the first time in history.

Many producers are seeking to take advantage of the current abundance of feed and are retaining female cattle, hoping to rebuild their herds.

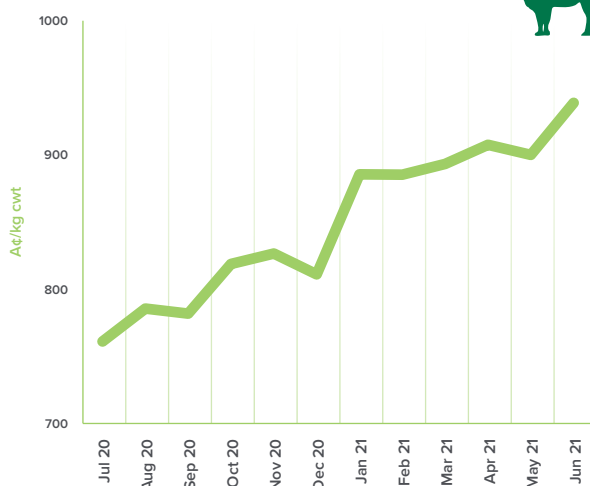
This retention is expected to cause national slaughter to fall to its lowest level in 35 years in 2021. This drop in slaughter will speed up the pace of the herd rebuild, after the herd level hit its lowest point in 25 years in 2020.

For producers, the high cattle prices and improved seasonal conditions have translated into higher farm profits following years of drought.

In export markets, vaccination rollouts, stimulus packages and a return to more normal foodservice behaviour in key beef markets have lifted international demand, an encouraging sign for Australian exports. However, high Australian cattle prices and a relatively high Australian dollar remain challenges for processors and export customers.

African Swine Fever remains a major influence on global protein trade. The Chinese pig population is yet to recover, continuing to pose an opportunity for beef to help fill the gap.

Eastern Young Cattle Indicator



Sheepmeat

Key trends

- The national flock is recovering
- Lamb and mutton prices remained historically high
- Strong export results in key markets

The national sheep flock is entering a rebuild phase, following it falling to its lowest level on record in 2020. The second year of improved seasonal conditions in a row is fuelling this momentum and driving numbers back up at a quicker pace than the herd rebuild.

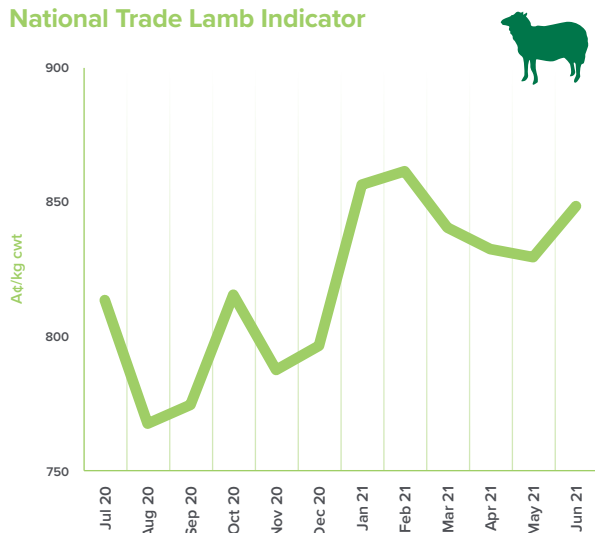
In 2020–21, millions of sheep were transported from WA to the eastern states to meet continued restocker demand, as WA continued to face drier conditions. However, the season in WA has improved since autumn and looks favourable for the remainder of 2021.

The improved seasonal conditions have resulted in a large lamb cohort that has allowed producers to both retain more stock for breeding and sell more. It has also helped keep lamb slaughter and production stable – even as the flock rebuilds.

In 2021 to June, chilled lamb exports to the US and mutton exports to China were higher than 2020 levels. This demonstrates that despite the impact of COVID-19, demand for Australian sheepmeat remains strong.

Encouraging market access progress was also made in 2020–21, with the UK FTA being agreed in-principle and Australia regaining access to the Saudi Arabian live export market.

National Trade Lamb Indicator



Goatmeat

Key trends

- Goat slaughter and production down as the herd rebuilds
- Goat carcase weights reached record levels due to improved seasonal conditions
- The US remains the key export market for Australian goatmeat

Production and slaughter of Australian goats retracted in the past 12 months as producers allowed the goat population to

rebuild following years of drought. The number of nannies and kids being slaughtered is small, reinforcing the rebuild. Many producers are also mustering rangeland goats less often, contributing to this retraction.

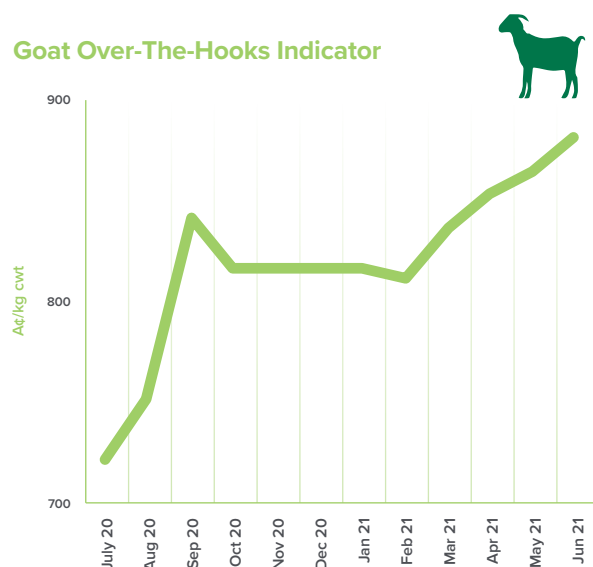
On the flip side, goat carcase weights are increasing on the back of improved seasonal conditions, slightly offsetting the fall in slaughter.

In 2020–21 the goat herd matured, with many producers moving from opportune rangeland harvesting enterprises to managed breeding farms.

On the price front, over-the-hooks offerings for goats continued to hold premiums to those paid for sheep and lambs.

Australia remains the largest exporter of goatmeat despite it being a niche part of many consumers' diets, with demand mostly driven by key ethnic segments. The US is our largest market, taking 60% of exports in 2020.

Goat Over-The-Hooks Indicator



Board business

At MLA's first ever virtual AGM in 2020, three returning Directors, being myself, Russell Lethbridge and Andrew Michael, were re-elected to the MLA Board from a pool of 98 applicants.

Although COVID-19 has restricted the Board's ability to conduct face-to-face meetings, we did still hold three in-person meetings in 2021. The highlight of these was a Board meeting at Beef Australia, which was a unique opportunity to engage directly with levy payers.

In closing, I would like to thank the MLA Board and the entire MLA team for their continued commitment to the company and the industry over the past year. It has been a year like none other.

Alan Beckett
Chair

Managing Director's report

MLA's focus and outlook

The journey to now

It is my pleasure to present *Annual Report 2020–21*.

We are at a significant inflection point in our industry's journey.

Herd and flock rebuilding, globally strong demand and a shortage of protein due to African Swine Fever are all contributing to record prices. We are now in some of the most prosperous times we have ever seen.

Underpinning this success is a strong foundation built on what's important to the consumer – world-class traceability, food safety, biosecurity and eating quality systems. MLA, on behalf of the industry, has been investing in research and marketing over the past two decades to set the industry up with this firm foundation for future success, and it is no mistake that we are taking advantage of it.

When MLA was first set up 22 years ago, Australia had one free trade agreement with New Zealand. We now have 16 FTAs that cover most of the Asian Pacific region – notably: the 10 Association of South-east Asian Nations (ASEAN) member countries, Korea, Japan and China. By comparison, the US has just two comprehensive FTAs with countries in that region. In June 2021, after almost 12 months of negotiations, Australia and the United Kingdom reached an in-principle agreement on the Australia-United Kingdom Free Trade Agreement (see page 18).

Twenty years ago, the Australian red meat and livestock industry did not have a traceability system, but we now have world-leading, individual livestock traceability for cattle (see page 26–27).

We did not have a way of measuring eating quality and grading carcasses based on that measurement – we now have Meat Standards Australia – a system developed with consumers at the heart of it that's now the envy of many of our competitors because it enables Australia to produce red meat with a consistently high eating quality while also enabling producers to capture price premiums (see page 20–21).

Success is no surprise

As an industry we are well positioned to take advantage of the current environment. We need to stop being surprised by our success.

We are in an incredible period of time where we have an opportunity to invest in and take advantage of that position. For MLA, this means focusing on fewer, bigger and bolder investments that will help the industry take full advantage of the opportunities presented from these conditions we have never seen before.

Strategic initiatives

MLA has a big role to play in helping the industry double the value of red meat sales by 2030 – the ambitious goal in the red meat industry's strategic plan, *Red Meat 2030*.

We're focusing on how the supply chain can create and capture more value out of the carcass – whether this is developing new high-value products, identifying ways of objectively measuring traits important to consumers, or becoming more efficient and reducing cost of production. We're working to set the industry up for success in the lead-up to 2030.

Three of these fewer, bigger, bolder areas of work are:

Objective measurement

For more than 20 years, the red meat industry, including MLA, has been investing in objective measurement. This last year, it was time to run to ground some of the promising technologies which measure eating quality traits, with the view to fast-track commercialisation and adoption (see page 28–29). Towards the end of the financial year the team focused on testing a number of cameras and probes to fast-track the collection of data against MSA baselines in readiness for industry standards and language reviews and approvals.

The availability of such data can equip supply chains to potentially capture increased carcass value. Data collection on 2,000 carcasses was accelerated during a 10-week period to confirm accuracy and repeatability of the technologies, providing necessary documentation ahead of AUS-MEAT accreditation in the second half of 2021.

The team created a data analytics toolbox and has initially released it to MSA processors and brand owners, giving them access to lean meat yield data generated from more than 33 million MSA carcass records since 2010, representing 37% of Australian cattle slaughter (see page 28).



MLA has a big role to play in helping the industry double the value of red meat sales by 2030 – the ambitious goal in the red meat industry's strategic plan, *Red Meat 2030*.

We have gone to extraordinary lengths over the past several years since the regional consultation system has been set up to have an extensive and easily accessible consultation process for all producers.

Northern Australia

Another major area of focus for MLA has been exploring opportunities to ramp up productivity and profitability in northern Australia. Roughly half of the national herd graze in the north, and northern producers face unique issues relating to the extensive nature of the production system, distance from markets, supplementary feed, animal health, transport and labour resources that impact productivity.

Furthermore, there are low levels of adoption of proven management practices and technology among many of these producers. Northern Australia is an area that represents substantial investment and opportunity for creating long-term benefits for our industry (see page 38).

Northern Breeding Business (NB2) is an initiative developed by MLA to address:

- calf loss in northern breeding herds
- low profitability of many northern beef enterprises
- low adoption of proven management practices and technology.

MLA's NB2 project has set the ambitious target to deliver an estimated \$20 million/year in net benefits by 2027 to 250 northern beef enterprises.

Promoting and defending the industry

We are also working on developing and executing a whole-of-business approach to promote and defend the positive attributes of red meat. We launched *Red Meat, Green Facts* at Beef Australia 2021 and we have more work in this domain in the pipeline (see page 42–43). As an organisation and as promoters of Australian red meat, we can get on the front foot with what our industry and product offers the community. Nothing can compete with a large group of committed people if we are all proactive and positive about what our industry and our products have to offer.

The importance of collaboration

We have gone to extraordinary lengths over the past several years since the regional consultation system has been set up to have an extensive and easily accessible consultation process for all producers. Any producer who has an interest in engaging with MLA has a pathway to do that.

The aim of the system is to have a transparent, representative and cost-effective framework that underpins effective and relevant R&D investment. The process was established to ensure national and regionally relevant research, development and adoption priorities are identified to deliver optimum value back to grassfed beef and sheepmeat businesses and the red meat industry.

Today the process empowers grassfed beef and sheepmeat producers to directly influence the on-farm research, development and adoption activities their levies are invested in. We also have a full suite of options for any producer to engage with us through the formal structure of the peak industry councils, regional committees, or events such as BeefUp and MeatUp forums. We have gone to great lengths to be as accessible as possible.

Extensive consultation lies at the heart of identifying priority areas of research, development and adoption and then selecting relevant projects for funding. The process starts with grassroots producers, and I strongly encourage them to communicate with one of the 18 regional committees throughout Australia.

New one-stop shop for MLA products and services

On 1 July 2021, we launched a new online catalogue of products and services that red meat producers and stakeholders can access from within the myMLA online platform (see page 21). It groups MLA's products and services in user-friendly bundles to enable stakeholders to have quick and easy access to what is relevant to them. It also showcases promotions that MLA is offering, including discounts on several regionally relevant events for MLA members.

It provides important access for the red meat industry to crucial products and services that enhance producer adoption and build industry prosperity. If we are to remain world leaders and set ourselves up for the future, we must continue to focus on our adoption efforts, including through the use of available services and tools. It is practical, easy to use and will help producers to get on with what they do best – producing some of the finest red meat in the world.

We have now completed year one of our *Strategic Plan 2025*, and MLA will continue to build on the successes of the past 12 months into the future, and further strengthen the resilience and sustainability of the red meat and livestock industry.



Jason Strong
Managing Director

2020–21 summary statistics

Revenue



▼ 3.6% to \$260 million

Expenditure



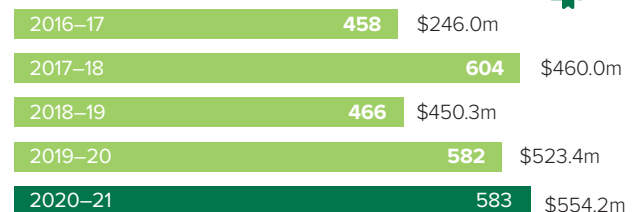
▲ 3.2% to \$282.5 million

Retained earnings



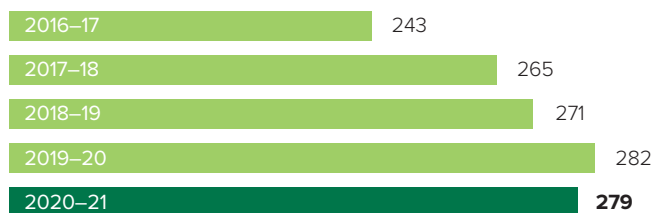
▼ 20.5% to \$87.5 million

Research contracts



▲ 0.2% to 583 contracts

MLA employees



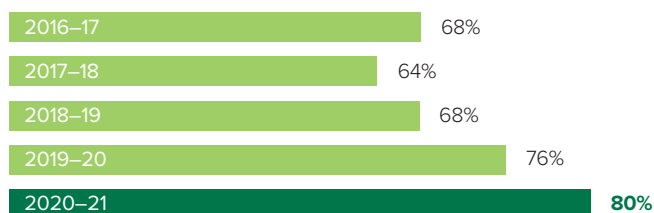
▼ 1.1% to 279 employees

MLA members



▼ 0.6% to 49,302 members

Key performance indicators



▲ 4% to 80% achieved



Report to stakeholders

The report to stakeholders reports against the 16 programs as set out in the *Annual Investment Plan 2020–21*, and provides transparency around MLA's actual activities and outcomes.

MLA objectives and planned activities in 2020–21 were directed by its *Annual Investment Plan 2020–21*. MLA regards the *Annual Investment Plan 2020–21* as the starting point under its *Strategic Plan 2025*, which was under development during the planning of the *Annual Investment Plan 2020–21*.

MLA's *Strategic Plan 2025* is aligned to the Australian red meat industry's 10-year strategic plan, *Red Meat 2030*, and the Australian Government's science and research priorities and its rural research, development and extension priorities. MLA's *Strategic Plan 2025* was launched in June 2020.

Animal health and welfare

MLA's investment in animal wellbeing research, development, extension and adoption (RDEA) aims to safeguard Australia's livestock biosecurity and to ensure proper care of our livestock. Consideration of health and welfare are inextricably linked in defining livestock wellbeing.

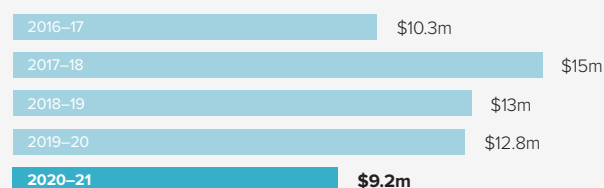
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Ticking off parasite treatment

MLA supported the development of best practice information to reduce the effects of infection from the internal cattle parasite, *Theileria orientalis*.

T. orientalis has spread rapidly across south-eastern Australia since 2006. It costs beef producers an estimated \$67/head from lost live weight and mortalities.

An MLA project, which was completed in January 2021, aimed to confirm the capability and transmission of *T. orientalis* ikeda (ikeda is a strain of *T. orientalis*) by the tick *Haemaphysalis longicornis* (bush tick).

The project responded to industry's need for measures to reduce the impact of the initial infection either by means to control the vector (ticks) or the early stages of the infection. The project included trials of two interventions to reduce infection in cattle.

This study confirmed for the first time that the carrier state persisting in cattle that have recovered from the initial parasitosis from *T. orientalis* establishes some type of resistance. This resistance is referred to as *premunition* to subsequent seasonal tick challenges.

The research clarified:

- how capable the tick *H. longicornis* is of transmitting *T. orientalis* ikeda
- that chemotherapy would remove the infection and reduce chances of relapse and transmission to ticks
- artificial infection with piroplasms could protect against sporozoite challenge
- immunisation (either via natural routes or artificially) could protect against sporozoite challenge with homologous or heterologous genotypes.

Results from this project confirm *H. longicornis* as a vector for *T. orientalis* ikeda.

A new cattle tick vaccine on the horizon

Another MLA project relating to parasites targeted a new vaccine for cattle ticks.

Cattle ticks cost Australia's beef industry approximately \$161 million a year through decreased production, hide damage, tick fever transmission and the cost of chemical treatments.

Currently, the main approach for managing ticks is the regular application of chemicals (acaricides), however ticks evolve quickly and are developing resistance.

Benefits for the industry from a new vaccine would include reduced costs, increased productivity, improved animal welfare and increased market access. Decreasing reliance on chemicals also supports sustainable beef production.

An MLA project tested two different vaccines which demonstrated good efficacy of a dual vaccine using two proteins and a single vaccine with one protein, following two artificial tick challenges over eight months with two initial vaccine boosts (one month apart).

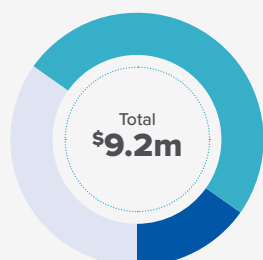
A limitation to the progression to a commercial vaccine is the need for multiple dosing. MLA will continue to pursue a single dose, long-acting vaccine option that builds on these interesting findings.

Benefits for the industry from a new vaccine would include reduced costs, increased productivity, improved animal welfare and increased market access.





2020–21 investment by funding source



■ Producer levies **\$1.4m**
■ Government funding **\$4.6m**
■ Other sources **\$3.2m**

Key performance indicators



■ 4 achieved
■ 3 not achieved

See Appendix A for a full list of KPIs.

New flystrike control options

New opportunities for long-term flystrike control have been identified in an extensive research review by MLA.

Proposed intervention strategies were examined and recommendations for future research include:

- insecticide resistance management
- novel chemical and biological control agents
- novel delivery methods for therapeutics
- improved breeding indices for flystrike-related traits
- prevention of gastrointestinal nematode-induced scouring.

Areas where advances can be made in flystrike control through the greater adoption of well-recognised existing management approaches were identified and included:

- optimal insecticide-use patterns
- increased use of flystrike-related ASBVs
- management practices to prevent scouring.



Get rid of parasites like a boss

Cattle producers dealing with parasites in their livestock can now access everything they need to know at paraboss.com.au.

Department of Agriculture and Fisheries scientist Jess Morgan said with parasites costing the cattle industry more than \$350 million every year, ParaBoss was an invaluable resource.

"ParaBoss is a one-stop shop with the latest information on how to best manage ticks, buffalo flies, lice and worms," she said.



Department of Agriculture and Fisheries scientist Jess Morgan at ParaBoss launch, Beef 21.

"For some time now, sheep and goat producers have had access to this information using ParaBoss, and it's now been updated to include parasites of cattle.

"There is content relating to a range of cattle production systems with information on the biology, treatment and management of parasites as well as the latest advice on preventing the build-up of chemical resistance.

Practical information and management strategies

"This new resource provides annual treatment programs broken down by region and incorporates feedback from producers to ensure it meets their needs and includes a Products Search tool for producers to identify treatment products to suit their situation."

MLA's General Manager, Research, Development and Adoption, Michael Crowley, said ParaBoss for cattle followed the successful model constructed by the sheep industry to develop a go-to website for parasite management in Australia.

"ParaBoss aligns parasite management resources for beef producers into an existing successful framework used by sheep meat producers," Michael said.

"While still offering regionalised integrated pest management strategies, ParaBoss for cattle parasites has consolidated Australia's best practice cattle parasite management resources into one centralised national database.

"ParaBoss for cattle provides practical information and management strategies that can ultimately save producers time, money, and deliver improved animal welfare and productivity outcomes."

Co-funded by MLA, ParaBoss for cattle is a collaboration between the Queensland Department of Agriculture and Fisheries, University of New England, and the University of Queensland. It has been prepared and endorsed by technical experts.

Domestic market

MLA's domestic market program assists MLA to foster the prosperity of the Australian red meat and livestock industry by demonstrating the value of red meat to consumers and customers.

This is achieved by generating insights into the drivers of preference and choice amongst both consumers and customers, and then leveraging these insights to promote the relevant benefits of red meat and addressing the barriers that limit consumption, such as value for money (relative to other proteins), cooking confidence, and health perceptions.

By addressing these opportunities and barriers, MLA seeks to maintain and enhance the value of domestic red meat sales and slow the historic long-term decline in consumption.

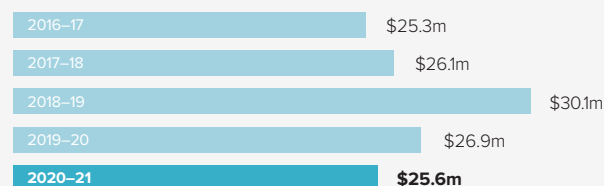
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Rare Medium Academy launch

MLA launched the Rare Medium Academy to ensure Australian red meat remained a prominent menu fixture and to help the foodservice sector recover from the COVID-19 pandemic.

MLA's foodservice trade team, in consultation with the foodservice industry, developed the Rare Medium Academy to educate and inspire foodservice chefs to use Australian red meat in commercial kitchens through:

- new product development
- cooking techniques
- exploring the best cut for cook method.

MLA created a library of 30 videos streamed via YouTube, featuring tips, tricks and hacks to mentor foodservice professionals to escalate their menus while maintaining costs and achieving a balanced meal for their patrons.

More than 4,250 foodservice professionals have tuned in to the Rare Medium Academy's YouTube channel since the launch.

MasterChef serves up success for Australian Beef

Australian Beef sponsored Channel 10's cooking show MasterChef in response to declining traffic to foodservice outlets and the rise of home cooking due to COVID-19.

The focus of the campaign was on how premium cuts of Australian beef (which had declining sales as foodservice demand declined) could deliver restaurant-quality meals at home if prepared correctly.



Each component of the campaign – including promotions leading up to the episode, social channels and television advertising – was strategically placed to complement in-show moments and strengthen viewer recall of key brand messages.

The MasterChef series reached 12.4 million viewers and traffic to the Australian Beef website almost doubled. Australian Beef's sponsorship was very effective at driving a positive perception with 64% of viewers feeling more favourable about Australian beef as a direct result of the sponsorship with MasterChef.

Uniting over lamb

Australian Lamb's annual summer campaign showed the country uniting over lamb – and laughs – after a year that left Aussies more divided than ever.

Building on the 'Share the Lamb' brand platform, the campaign reflected upon 2020 as a pivotal time in history, when Australians were physically distanced due to the pandemic.

The campaign positioned lamb as the meat of choice to unite us, instilling a sense of Aussie pride while tapping into cultural themes and topical issues in a humorous and tongue-in-cheek way.

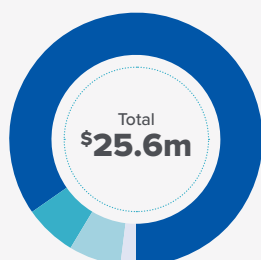
Campaign highlights included:

- retail sales of lamb were up 16.8% (the campaign target was 5%)
- the number of households buying lamb grew by 3.7%
- Aussies bought more lamb more often – the volume purchased for each occasion increased by 5.6% and the frequency of purchases increased by 2.6%
- the campaign ad became Australia's number one trending YouTube video, viewed more than 10 million times.



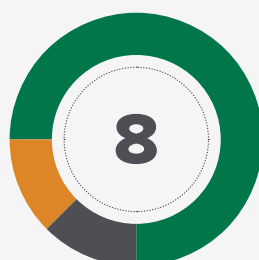


2020–21 investment by funding source



■ Producer levies **\$21.6m**
 ■ Government funding **\$1.7m**
 ■ Processor contributions **\$1.7m**
 ■ Other sources **\$0.5m**

Key performance indicators



■ 7 achieved
 ■ 1 partially achieved

See Appendix A for a full list of KPIs.

New market reports

MLA is transitioning from PDF market reports to dynamic reports that offer greater insight into the market and allow users to view all saleyards from the one location.

These reports can now be used to interpret market dynamics and gain deeper insights to enhance business decision-making, through features such as week-on-week changes, full breakdown of saleyard data with dynamic selection and the ability to drill deeper into categories within the report. Data can be viewed by phone, tablet or PC to improve accessibility.

The greatest meals on earth

The winter 2020 beef campaign continued to build on the 'Australian Beef. The Greatest' brand platform, which launched in 2017.

This campaign, which ran from mid-April to August 2020, reinforced and demonstrated beef's versatility and ease, positioning beef recipes as a solution for quick and easy mid-week meals and raising consumer awareness around the quality and provenance of Australian Beef.

The integrated campaign appeared across outdoor, social, digital, TV, and point of sale.

Campaign highlights:

- the campaign reached 1.2 million people on social media
- consumers' willingness to pay more for beef increased by 2%
- during a 12-week period, the volume of beef eye fillet purchased increased by 30% compared with the same period the previous year.



MLA collaborates with eco-brand to reach consumers



Wide Open Agriculture's Supply and Logistics Manager Warren Pensini and his wife Lori produce beef for the Dirty Clean Food brand. Image: Wide Open Agriculture

The food industry can be a crowded space, so WA-based Wide Open Agriculture partnered with MLA's Collaborative Marketing (CoMarketing) Program to help differentiate its Dirty Clean Food brand across retail, online and foodservice markets.

MLA's CoMarketing Program helps brand owners develop effective marketing campaigns for red meat and supports a range of business development and brand marketing activities. The CoMarketing Program also offers additional support for certified carbon neutral brand producers as an added incentive to help move the industry towards being carbon neutral by 2030 (CN30).

Wide Open Agriculture partners with WA producers to bring them along on the journey of producing beef and lamb, which takes into account social and environmental impacts.

Their approach is built on three goals:

- build soil carbon to tap into multiple environmental and economic benefits
- enhance biodiversity
- improve mineral and water cycles.

Connecting consumers was vital to their message. Wide Open Agriculture used MLA's CoMarketing Program funding to provide opportunities for consumers to taste their products.

"We used the CoMarketing Program to hold tastings in-store to demonstrate our products," Wide Open Agriculture Marketing Manager Marilyn Elson said.

"We believe our product tastes really good. It's good for the planet and it's good for the consumer."

She said the funding was also used to produce point-of-sale signage – although it was limited to avoid creating unnecessary waste, which reflected the company's commitment to being an eco-brand along their whole supply chain.

The company also used CoMarketing funding to help improve its search engine optimisation for online sales, as well as create engaging content.

International markets

MLA's international markets program fosters prosperity for the Australian red meat and livestock industry by measurably improving economic and technical market access and helping make Australia the preferred choice of customers and consumers globally.

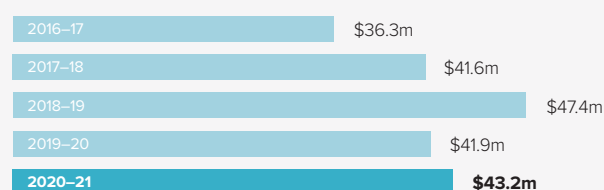
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



COVID-19 in international markets

MLA's international markets team undertook a number of actions in 2020–21 to ensure stakeholders and industry were informed and equipped to support Australian red meat sales globally throughout the COVID-19 pandemic.

The initial priority for MLA was to ensure strong communication lines with exporters, brand owners and key stakeholders, to collect and disseminate market information.

MLA also evaluated the pandemic's impact on planned global market activities, such as trade shows and business development activities, with many of these being deferred to 2021–22.

MLA also developed a global response strategy to support brand owners and customers. The strategy included five focus areas, which were:

- food hacks providing tips for consumers to learn more about cooking with red meat
- developing trust and integrity in Australian red meat for international consumers
- digital development for new online opportunities for events, including virtual trade seminars
- tactical support, including short-term financial support via the CoMarketing program to assist brand owners with promotion
- clear communication of the evolving situation, including new channels like the COVID-19 insights hub.

MLA's quick response helped promote demand in the critical stages of the pandemic, softening some of its worst impacts.

Virtual trade seminar series

In the absence of traditional conferences, in late 2020 MLA ran a first-of-a-kind series of virtual trade seminars to provide a wide range of insights to global customers on Australian beef and lamb.

The seminars were run for six key markets – North America, the Middle East and North Africa (MENA), South-East Asia, Japan, Korea and China.

At each seminar, exporters had the opportunity to position their brand and develop new business opportunities that attendees could engage with.

Highlights of the seminars included:

- more than 1,600 registrations for the six seminars
- 1,525 'chat' conversations and more than 400 business leads generated
- 17 export companies hosted branded booths.

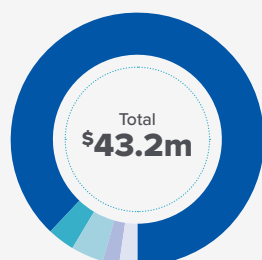
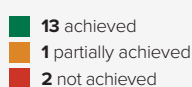
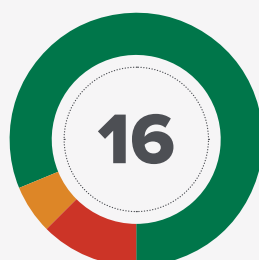
Australia-UK Free Trade Agreement

In June 2021, after almost 12 months of negotiations, Australia and the United Kingdom reached an in-principle agreement of the parameters of the Australia-United Kingdom Free Trade Agreement (A-UK FTA).

Under the agreement, Australian beef and sheepmeat access to the UK will be liberalised over 10 years. During this transition period, Australian beef and sheepmeat will enter the UK under a tariff rate quota regime, with tonnages increasing over 10 years, with the existing above-quota tariff being retained.

After 10 years, a volume safeguard provision will apply until the end of year 15, beyond which time no safeguards will apply.

While industry's Australia-UK Red Meat Market Access Taskforce led positioning and engagement in the A-UK FTA negotiations, MLA played a significant role in securing the agreement, supporting taskforce advocacy throughout negotiations.

**2020–21 investment by funding source****Key performance indicators**

See Appendix A for a full list of KPIs.

MLA also directly engaged with the Department of Foreign Affairs and Trade and provided an interface with the Australian High Commission in London.

The A-UK FTA supports both MLA's commitment to *Red Meat 2030* and to MLA's *Strategic Plan 2025* through improving economic resilience by increasing access to, and the performance of, existing and new markets.

Progress on non-tariff trade barriers

Non-tariff barriers are trade costs and frictions, other than tariffs, that Australian red meat and livestock exports face when accessing global markets. While tariffs have gradually reduced over the last three decades, non-tariff barriers make it increasingly challenging and costly to do business.

COVID-19 compounded some existing barriers – for instance, overseas officials could not audit and approve Australian export establishments. However, COVID-19 also provided a nudge for some markets to remove import barriers to bolster food security.

For instance, MLA, in collaboration with the Australian Meat Industry Council (AMIC) and the Department of Agriculture, Water and the Environment (DAWE), has been investing in shelf life trials and advocating in-market for countries in the Middle East to extend the shelf life on imported red meat.

This work is now paying off, with Australia's largest red meat markets in the Middle East now permitting a shelf life of 90 days on chilled vacuum-packed sheepmeat and permitting (or considering) 120 days on chilled vacuum-packed beef.

These shelf life extensions will open new freight routes and marketing channels for Australian red meat into the region and changes to date are estimated to have a trade value impact of \$120 million a year.

Short term, these benefits have been mitigated by mass disruption to global shipping but, long term, they will enable Australia to leverage its competitive advantage in world-leading shelf life performance.

Healthy Beef, healthy returns

Indonesian company PT Pramana Austindo Mahardkia (PAM) was formed in 2019 with a vision to play the beef game differently through a vertically integrated feedlot-to-consumer supply chain that capitalised on modern retail channels.

The vision aligned with the MLA/LiveCorp Livestock Export Program's (LEP) key focus areas of:

- using evidence-based research to support business decisions
- conducting market research to identify drivers in purchasing fresh beef
- supporting projects aimed at increasing market share of locally processed Australian beef by exploring new retail opportunities.

Partnering with PAM, the LEP contracted a Business Development Manager to oversee and deliver PAM's business development and growth strategy.

'Healthy Beef' brand

PAM's Healthy Beef brand was born out of a series of insights and LEP market research:

- consumer demand for a high quality Australian fresh beef branded product that returned a greater profit margin than traditional wet market retail channels
- Indonesian consumers want convenience, high quality and certainty when they purchase fresh beef, and are also price sensitive.

These insights, coupled with Australian beef's reputation in Indonesia as a quality, lean product, led to the development of the new brand.

Healthy Beef was launched in September 2019, using a multi-channel sales approach and branding developed through LEP market research to target middle and upper-class consumers.

Healthy Beef generated demand for a high quality Australian fresh beef branded product and the profit margin was substantially higher compared with expected returns from traditional wet market retail sales.

A consolidated supply chain was identified as integral to decreasing fragmentation and maintaining control over the end product, including consistent production levels, yield and quality. A feedlot and modern abattoir in Bogor were purchased, and operational changes were implemented to improve production systems at both facilities.

Once the product had been tried, research showed that most consumers were willing to convert to chilled product and further spread the word about the quality of different cuts and the Healthy Beef product.



Eating quality

MLA's eating quality program, Meat Standards Australia (MSA), is integral to the red meat industry's 2030 goal of doubling the value of Australian red meat sales and ensuring continued trust in Australian red meat. The program also plays an important role in transitioning the red meat industry to value-based marketing.

The MSA program delivers significant benefits and value across the whole red meat supply chain through greater farm gate returns, maximising the value extracted from the carcase, and providing consistency and confidence in brands to ensure eating quality for consumers. This builds consumer trust and increases demand for Australian red meat.

Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



- 53% of MSA processors and brand owners are using the Eating Quality-graded cipher as part of their business to pack beef based on eating quality outcomes.
- Robust integrity systems and processes to ensure consumer expectations are met, including new processes to carry out activities remotely.

MSA Index results

In 2020-21, the national average MSA Index was 57.62. The average MSA index for non-grainfed cattle was 58.69 (+0.04), while for grainfed cattle it was 56.93 (-0.75).

The MSA Index is a single number between 30-80 that is the standard national measure of the predicted eating quality of all of the cuts in the carcase.

The national figure was down on year-ago levels by 0.46 points, which was driven by a lower index and greater proportion of grainfed cattle. This lower grainfed index was predominantly driven by higher ossification scores and hump heights due to growing to heavier carcase weights and nutritional impacts following the drought, as well as an increase of 8% in hormonal growth promotants usage.

The MSA Index figures are still historically high, up 0.94 points on 10 years ago, demonstrating continued improvement in the eating quality of Australian beef for the consumer.



Highlights

MSA program continues to deliver price premiums and high farm gate returns

Meat Standards Australia (MSA) has continued its success as a world-leading eating quality grading program in 2020-21 and has delivered an estimated \$157 million in additional farm gate returns over the past financial year, below the 2019-20 total of \$172 million. This means the program has returned \$1.46 billion to the farm gate since 2011-12.

In 2020-21, there were over 3.3 million cattle MSA graded, representing 53% of cattle slaughter in Australia, a seven-percentage point increase on 2019-20. The number of sheep that followed a pathway that optimised eating quality totalled 3.4 million, or 56% of national slaughter. National beef compliance was the highest on record, with 95.5% of carcasses meeting MSA minimum requirements.

The number of sheep that followed MSA pathways totalled 3.4 million or 14.25% of national slaughter. While total slaughter numbers were lower, the proportion of sheepmeat following eating quality pathways was the same as 2019-20 (56%). Of these lambs, 59% are going into MSA trademarked lambs.

The growth in the MSA program can be attributed to a number of key activities, including:

- Business development activities with processors and brand owners to maximise value from the MSA carcasses they are harvesting and ensuring eating quality consistency in over 200 beef and sheepmeat brands.
- Providing carcase feedback, reporting and tools through the enhanced myMSA portal, enabling better decision making to drive on-farm productivity and profitability.

In 2020-21, there were over 3.3 million cattle MSA graded, representing 53% of cattle slaughter in Australia, a seven-percentage point increase on 2019-20.

**2020–21 investment by funding source**

■ Producer levies **\$3.9m**
 ■ Government funding **\$2.1m**
 ■ Other sources **\$0.5m**

Key performance indicators

■ **3** achieved
 See Appendix A for a full list of KPIs.

Enhanced myMSA platform now live

In 2020–21, the MSA team supported producers to learn the recently updated myMSA platform, which has access to new features to assist with improving MSA compliance and eating quality performance.

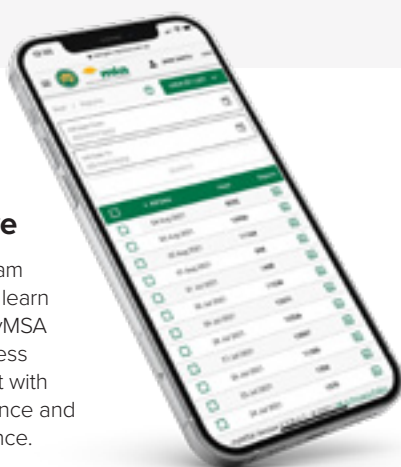
The platform provides MSA feedback through improved reporting and analysis. Additionally, producers have the ability to benchmark their cattle against other MSA-graded cattle for compliance and eating quality on a national, state or regional basis. Carcase filters can also be applied, including the use of hormonal growth promotants, feed type, sex and carcase traits such as ossification.

To support the new platform and increase the amount of information producers receive on MSA carcase feedback, a new Opportunity Index has also been added.

The Opportunity Index allows producers to see what the MSA Index for non-compliant carcasses would have been if they met minimum MSA specifications.

These new features are designed for ease-of-use and to support decision making on-farm. More than 3,440 producers have used the enhanced platform 22,407 times, a significant 38% increase on the 2019–20 usage figures.

The enhancements made to myMSA as well as the support to producers to access and analyse carcase feedback underpins MLA's objective to double the value of Australian red meat sales and maintain Australian red meat as the trusted source of the highest quality protein.

**Control the key to MSA compliance and consistency**

Full traceability of their herd's breeding and nutritional background has been fundamental to the success of the Johnstone family's Central Queensland beef enterprise.

Running a herd of 1,200 Droughtmaster, Black Angus and Santa Gertrudis-cross cattle across their 3,000ha property 'Can-Berra', near Banana, the Johnstones have a track record of excellent MSA performance, thanks to a focus on both genetic traits and animal nutrition.

"To maintain both eating quality and climatic adaptability up here, we run two main cow mobs, with Droughtmaster or Santa Gertrudis bulls going over Angus-cross females, and Angus bulls going over the Droughtmaster or Santa females.

"Our bulls play an important role in providing a good end product, and our broad breeding objectives of fertility, growth and market suitability to align with MSA objectives."

"We've found that exposing weaners to a formulated ration of silage and hay during the two-week weaning window sets them up well to go into our backgrounding system comprising leucaena, buffel and green panic grass," Rob Johnstone said.

"If the season cuts out, we also have the ability to supplement cattle with urea, ammonium sulphate and trace minerals, dispensed using water medicators.

"Making sure our young stock never want for anything during the backgrounding phase helps ensure the quality of the end product, and by running them in one contemporary mob we can easily analyse MSA feedback against their history on-farm, which helps identify issues and eliminate any variables."

The Johnstones placed 55th in the 2019 MSA Excellence in Eating Quality Top 100 for Queensland.

The awards assessed MSA compliance and Index results from the 2017–19 financial years, during which time the Johnstones achieved an average MSA Index of 58.23, almost two Index points higher than the Queensland average of 56.26.

They also achieved an average compliance rate of 98.5%, more than five percent points higher than Queensland's average MSA compliance rate of 93.3% for the same time period.



Rob and Joe Johnstone, Banana QLD

Environmental sustainability

Through the environmental sustainability program, MLA places investments in innovations with economic value propositions for stewardship of environmental resources. This priority reflects the desire for MLA to invest in research, development and adoption activities demonstrating leadership in the management of land, water, waste, energy, biodiversity, climate variability and biosecurity.

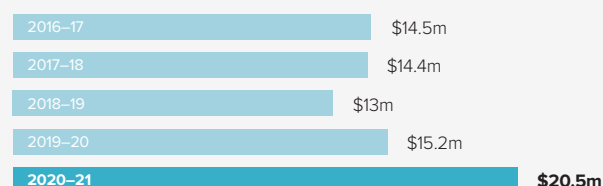
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Getting to the carbon bottom line

MLA delivered a series of pilot carbon accounting workshops with 135 producers throughout the second half of 2020 to improve tools and resources for farm-level carbon accounting, and decision making around productivity-enabled emissions reductions.

The workshops guided producers through determining their net greenhouse gas (GHG) position, taking into account emissions of:

- methane (CH₄)
- nitrous oxide (N₂O)
- carbon dioxide (CO₂)
- stable, long-term storage of carbon (C) on-farm.

Carbon accounting is fundamental in identifying how to achieve a carbon neutral livestock enterprise. It can be used to benchmark and identify activities which can contribute to:

- reduced GHG emissions
- improved carbon storage
- increased livestock and land productivity and profitability.

Emissions intensity allows producers to compare the performance of their farm to other farms regardless of the size of the operation. It also allows producers to measure their performance over time as their operation expands.

Insights from the workshop enabled the generation of version two of the carbon accounting tool found at mla.com.au/carbon-account.

Roadmap to CN30

The Australian red meat and livestock industry released its *Carbon Neutral by 2030 (CN30) Roadmap* in November 2020, reinforcing its commitment to the CN30 initiative and furthering its reputation as a global leader in sustainable food production.

CN30 is an aspirational target of the Australian red meat and livestock industry to achieve net zero greenhouse gas emissions by 2030.

Research undertaken by a consortium of organisations led by CSIRO has shown it's possible for the Australian red meat and livestock industry to achieve CN30 while maintaining long-term average livestock numbers, through continued efforts to avoid greenhouse gas emissions and store carbon in vegetation above and within soils.

The *CN30 Roadmap* outlines:

- what carbon neutrality means for the Australian red meat industry
- why industry has set the target
- the work areas industry will focus on between now and 2030
- how the industry can execute those work areas.

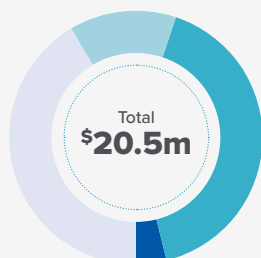
MLA will continue to work with stakeholders to search for opportunities for the industry to transition to a carbon neutral future.

Emissions avoidance and carbon storage are the critical components of achieving carbon neutrality. Another major step for the team has been the launch of the two key investments (each consisting of multiple projects) which will be delivered in partnership with research institutions and commercial entities.

1. **The Emissions Avoidance Partnership (EAP)** aims for 10% improvement in livestock productivity and 50% reduction in enteric methane emissions in 5% of the herd and flock by 2025. The aim is to achieve this through research and adoption of feed additives/supplements, additive delivery mechanisms, forages, genetics and supporting tools.
2. **The Carbon Storage Partnership (CSP)** aims for 10% improvement in livestock productivity in 5% of the herd and flock, and the equivalent of 15 million tonnes of CO₂ stored within 10 million hectares of Australian grazing land by 2025. The aim is to achieve this through research and adoption of products and practices resulting in increased carbon storage in production lands.

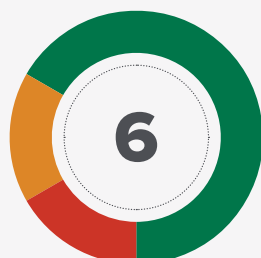


2020–21 investment by funding source



Producer levies	\$0.8m
Government funding	\$8.4m
Processor contributions	\$2.8m
Other sources	\$8.5m

Key performance indicators



Achieved	4
Partially achieved	1
Not achieved	1

See Appendix A for a full list of KPIs.

Forewarned is forearmed for extreme events

Extreme weather events remain a key risk for the Australian red meat industry.

MLA is leading a large partnership developing new forecasts of extreme rain (or dry), heat or cold events for producers to inform key decisions and actions in the weeks and months ahead of these events, with the aim of decreasing the adverse impacts of extreme weather.

Five forecast products will be selected to become operational on the Bureau of Meteorology website, with the first of the products being released in the second half of 2021.

The products will be focused on providing information related to key questions of common interest to producers around heat, cold and rainfall extremes.

For example:

- What is the likelihood of having a decile 10 (top 10%) rainfall this spring?
- What is the chance of having a heatwave in the week after next?
- What is the chance that the upcoming month will be extremely hot?
- What is the likelihood of having heavy rainfall in the upcoming fortnight?

Risk management

A Rapid Climate Decision Analysis framework is also being developed for producers, industry bodies and governments to compare outcomes from decisions depending on extreme rainfall, for example.

The partnership has come together under the five-year (2017–22) Forewarned is Forearmed (FWFA) project. The FWFA project is managed by MLA and supported by funding from the Federal Department of Agriculture, Water and the Environment with further cash and in-kind contributions from 14 partners covering rural research and development corporations, the Bureau of Meteorology, universities and state government departments.

Digging deeper on carbon benefits

Central Queensland beef producers Adam and Jacynta Coffey are not interested in carbon sequestration to make a quick buck – for them, increasing soil carbon goes hand-in-hand with increasing productivity.



Adam and Jacynta Coffey, central Queensland.

The couple are continually trying to improve their enterprise – every time they increase environmental gains in terms of more ground cover, less erosion and better water management, the more infiltration and (potentially) soil carbon they have up their sleeve.

Five years ago, the Coffeys moved to a central Queensland property that had previously been used for timber plantations, leaving 40,000 10-year-old trees on 400ha. After the trees were removed, paddock redevelopment was the first priority.

The Coffeys grow improved perennial pastures and maintain a good legume content consisting of different secas, centros and Agrimix Progardes® Desmanthus. They have also installed reliable water infrastructure (including sinking bores with solar-powered pumps).

When they first arrived, heavy rains would fall and the water would virtually run straight off the place. By focusing on soil health, the Coffeys now see the moisture soak straight in and then fill the creeks.

The Coffeys have always benchmarked their livestock production and felt carbon accounting was a natural extension of this. In the second half of 2020, they participated in MLA's pilot carbon accounting training.

After participating, the Coffeys now know how they can improve carbon mitigation but believe all options must be profitable solutions and subject to business analysis before being implemented.

Focus areas they've identified to potentially support reductions in their net greenhouse gas emissions include:

- soil health supported by high levels of ground cover, species diversity and well managed rotational grazing
- lifting cattle productivity by removing non-performers and seeking genetic traits for growth while keeping reproductive traits
- dedicating larger areas for tree planting to help offset emissions and increase productivity by providing livestock shade and shelter.

Feedlot

The feedlot program addresses the specific research, development and adoption requirements of the beef feedlot sector.

The key undertaking of the program is implementation of initiatives to enable the Australian feedlot industry to be world-leaders in animal health, welfare, sustainability and production practices.

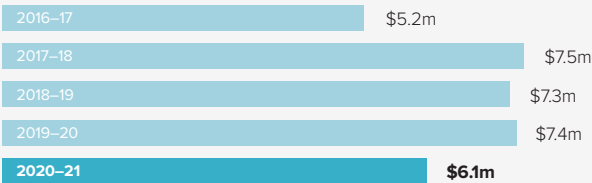
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

BunkBot demonstrations begin

MLA continues to invest grainfed levies in technologies to improve both production and profits within Australian feedlots.

Part of this has been supporting monthly demonstrations of the Bunkbot, which began in April 2021 at Mort & Co's Pinegrove Feedlot on Queensland's Darling Downs.

The BunkBot is technology developed by Manabotix with investment from MLA, designed to automatically manoeuvre the Bunk Scanner around a feedlot to determine feed remaining in bunks.

The system has proven to be more precise and accurate than human callers, allowing robust feeding behaviour data to be collected, reducing feed wastage and increasing feedlot productivity.

In the ongoing demonstrations, producers are given the chance to see how the technology has been applied to a commercial environment and operations at Pinegrove.

The technology and demonstrations align with MLA's core value of customer centricity, as feedback from the Australian Lot Feeders' Association helped determine that automation was a priority for the industry. The demonstrations ensure interested parties are able to see the technology in action and have the chance to discuss its applications.

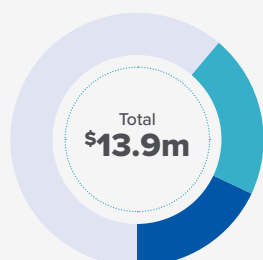
Up to June 2021, there were more than 50 feedlot industry stakeholders in attendance at the demonstrations, with a high level of satisfaction in the technology's performance and comments on it being an industry game changer. The demonstrations will conclude in September 2021.



Mort & Co host monthly BunkBot demonstrations at their Pinegrove Feedlot on Queensland's Darling Downs. Image: Mort & Co.

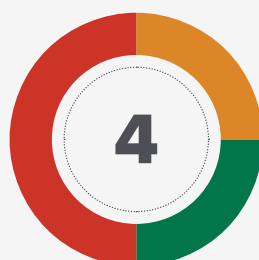


2020–21 investment by funding source



■ Producer levies **\$2.5m**
■ Government funding **\$2.9m**
■ Other sources **\$8.5m**

Key performance indicators



■ 1 achieved
■ 1 partially achieved
■ 2 not achieved

See Appendix A for a full list of KPIs.

Using 3-NOP to reduce methane emissions by up to 90%

MLA is committed to achieving carbon neutrality in the Australian red meat industry by 2030 (CN30) and has made significant investments in the feedlot space to reach this goal.

An area of research undertaken in 2020–21 to lower industry emissions related to feed additives that reduce the amount of methane cattle emit – a particularly relevant area for feedlots as feed is ingested in a controlled environment.

3-nitrooxypropanol (3-NOP) is a feed additive supplement that inhibits methane production in ruminants. Testing of the additive was funded by MLA through a trial run by the University of New England, with results showing that it drastically reduced cattle methane emittance by up to 90%.

The trial used 20 steers that were provided with different rates of the supplement from 0.5–1.25g a day for 112 days as part of a typical finisher ration. The lowest observed methane reduction from the trial was 60% for starter diets, while the highest observed was 90% in finisher diets.

The trial also demonstrated that the steers that were given the supplement experienced no negative effects on overall animal performance. The results were in line with 3-NOP tests globally, highlighting its effectiveness under Australian conditions. MLA is now scoping commercial feedlot trials with the supplier of 3-NOP (DSM Nutritional Products) to determine revenue opportunities for lot feeders.

Lower emissions in feedlot cattle will not only support the red meat industry's CN30 goal and improve sustainability credentials, but also allow lot feeders to take advantage of growing interest for low footprint products such as carbon neutral beef.

3-NOP is now referred to as Bovaer®, and plans are underway to commercialise the product by DSM for Australian and global lot feeders in 2020–22.

Shade trials begin in southern feedlots

Quantifying the animal welfare and production benefits of shade structures in southern feedlots is the focus of a new research project that began in summer 2020. The MLA-funded project is being undertaken at the University of New England's Tullimba feedlot research facility.

Researchers are investigating the impacts of two different types of shade on feedlot cattle compared with no shade. One part of the feedlot has a shade structure installed in a two-tiered design, comprising 290/300 GSM knitted monofilament polyethylene 80% UV solar block shade.

Another will have a shade structure installed in a similar two-tiered design, comprising a translucent waterproof 340 GSM high UV polyethylene.

The two-tiered shade and shelter systems feature a large, vented apex to allow air flow through the structures. The north-south orientation, combined with the waterproof shade reducing rainfall, will help manage pen surface conditions.

The research involves *Bos taurus* pregnancy-tested empty heifers, fed for 100–110 days.

The first cohort of cattle entered the feedlot in December, while a second cohort entered in mid-January to measure the difference between early and late summer conditions on different components of the feeding term.

The cattle were followed to slaughter for a Meat Standards Australia (MSA) grade to reveal carcass characteristics, with adrenal glands also collected as indicators of chronic stress.

Another cohort will enter the feedlot in winter 2021, to quantify the benefits of the waterproof shade structures as shelter during winter conditions. Keeping cattle and pens dry in winter by preventing rainfall could reduce the amount of energy animals use to stay warm, allowing more energy for growth.



The two-tiered shade system being trialled at UNE's Tullimba feedlot research facility.

Integrity systems

MLA's integrity systems program assists MLA to foster the prosperity of the Australian red meat and livestock industry by helping to protect its disease-free status and underpinning the marketing of Australian product as clean, safe and traceable. It also helps Australia capture price premiums from customers and consumers willing to pay more for higher levels of product assurance.

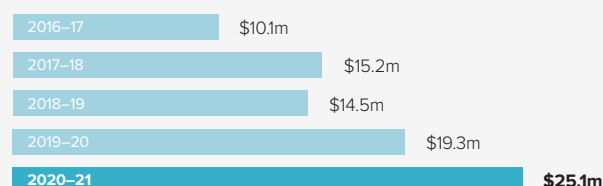
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

eNVD adoption

To boost the traceability of Australian red meat and the efficiency and accuracy of livestock transfers, Integrity Systems Company (ISC) launched three important developments over 2020–21 related to the Livestock Production Assurance (LPA) National Vendor Declaration (NVD).

The first was the launch of an enhanced electronic National Vendor Declaration (eNVD) in May 2020 to simplify the transfer of information between properties or from a farm to processors or saleyards, and to improve the system's efficiency and accuracy.

Along with improved useability of the system at any location, it also uses the latest version of the NVD and saves industry time and money because consignment information instantly appears online.

The launch of the enhanced eNVD coincided with the release of an updated NVD for all species from 1 July 2020. The main changes included the removal of the Agent's Declaration (Part C) from the NVD and the inclusion of a Destination PIC section (a legislative requirement in WA and Tasmania and optional in other states).

For sheep producers, there is a new section for the number of electronic devices included in the consignment. The changes have helped the LPA NVD align with the industry goal of ensuring the integrity system is easy to use, valued and trusted.

A final change that has supported eNVD adoption was the decommissioning of the eDEC system in December 2020, due to the new eNVD system being a more user-friendly service

to submit the same data. From 1 July 2020 to 30 June 2021 there were 236,000 consignments via eNVDs, with 68,000 unique users to the system during that time.

The Australian AgriFood Data Exchange partnership

ISC has taken the lead in a cross-sector partnership, developing an Australian Agrifood Data Exchange.

The partnership has been developed as a result of the scoping project delivered by KPMG, who will continue to be the project management office for the partnership.

The data exchange partnership aims to scope how an interconnected data highway for Australia's agrifood value chains can be initiated, to enable data to be exchanged between supply chain participants, with data owners controlling access to data they wish to share.

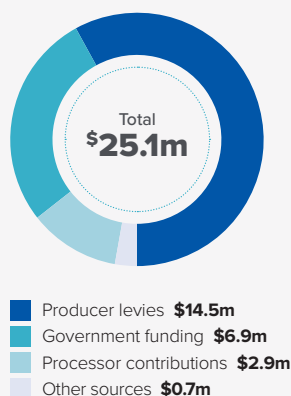
Currently, there is no single, easy-to-use platform in Australia that allows primary producers from across agricultural supply chains to exchange their data efficiently and on agreed terms with trusted service providers.

The partnership aims to determine the benefits to the agri-food industry, and tackle key challenges associated with the interoperability and analytical potential of data and drive a collaborative culture through data sharing across multiple stakeholders. It will be of use to industry, government, research organisations, regulators, biosecurity agencies, finance providers and others in support of agricultural supply chain participants.

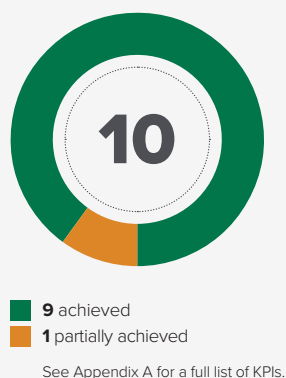
Phase 1 of the project was funded by MLA/ISC and delivered in 2020–21 following extensive industry consultation to co-design a vision for the Australian Agrifood Data Exchange and validate industry support of the partnership.



2020–21 investment by funding source



Key performance indicators



Phase 2 and 3 will develop a proof-of-concept for the exchange of data and demonstrate use cases for the sharing and exchange of data. This will be used to inform a business case for the build of an Australian Agrifood Data Exchange to be delivered in December 2022. Key partners including RDCs, research organisations and commercial partners are funding the next stages of the project.

MLA, via ISC, is heavily involved in the project as a top tier funder with a place on the steering committee of the Exchange. The work supports MLA's *Strategic Plan 2025* to ensure industry decisions are informed through data and insights, which will increase production and profits for Australian red meat.

The partnership aims to determine the benefits to the agri-food industry, and tackle key challenges associated with the interoperability and analytical potential of data.

eNVD a game changer for Kerwee Feedlot

Just six to seven minutes is all it takes for Kerwee Feedlot Livestock Manager, Stevie-Lee Wayman, to complete a livestock consignment of 200 head of grainfed cattle using the electronic National Vendor Declaration (eNVD) system.

Kerwee Feedlot has a 20,200-head capacity, operating as part of the vertically integrated Kerwee Group. With hundreds of cattle transported in and out of the feedlot each day, the business started using the eNVD system when it was first launched to industry in 2017 as a digital alternative to paper NVDs.

Stevie-Lee said the eNVD was an efficient way of digitally completing not just the LPA NVD, but all consignment paperwork needed to comply to NFAS and MSA requirements.

"Each lot we send might be up to 200 head. In a good season, we are sending out 600 to 700 head a week and that includes six or seven different lots comprising heifers, steers, Angus, Natural Angus and Wagyu," Stevie-Lee said.

"When we're trucking out during the week I'm probably doing eight or nine different LPA NVDs, depending on how many lots we're sending. When we send cattle to the abattoir, we've got a lot of paperwork that accompanies the LPA NVD.

"The ability to complete all of the necessary paperwork online using the LPA eNVD means we're not having to fill in everything three times like you have to with paper versions.

"The updated eNVD system allows you to only answer questions once – the answers to similar questions are automatically applied across the relevant forms.

"It now takes us only six or seven minutes maximum to complete all the paperwork for each lot, compared to 10 to 15 minutes for each lot using paper versions. That is a huge time saving."

Other stakeholders in Kerwee Feedlot's supply chain are also using the eNVD system.

"About a quarter of our vendors are using the eNVD system. When I log in, I can see their eNVDs in the system," Stevie-Lee said.



Objective measurement

Objective measurement of livestock and carcase attributes is an essential enabler for industry to improve grading accuracy, transparency and enable value-based marketing (VBM) that underpins the industry's *Red Meat 2030* goal to double the value of Australian red meat sales as the trusted source of the highest quality protein. These include unlocking decisions informed through data measurements across key traits to describe carcase value, such as lean meat yield, eating quality, health attributes and sensing to drive meat-cutting automation.

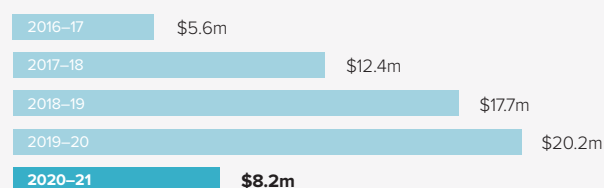
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

From tech perfection to deployment and impact

Objective measurement of carcase quality traits is considered a high priority for MLA, with several carcase grading camera technologies demonstrating promise to move into commercial supply chains, following accreditation.

An internal team worked for 10 weeks on fast-tracking the commercialisation of these technologies and business models for adoption, while also working with processors to understand their motivations and pain points to adopting these technologies and discussing opportunities to capture increased carcase value.

Data collection on 2,000 carcasses was accelerated during the 10-week period to confirm accuracy and repeatability of the technologies, providing necessary documentation ahead of AUS-MEAT accreditation in the second half of 2021.

While the technologies will enable faster, more accurate, repeatable, and more transparent grading outcomes, the collaboration revealed that the opportunity for objective measurement goes beyond the technologies themselves.

The team created a data analytics toolbox and has initially released it to MSA processors and brand owners, giving them access to lean meat yield data generated from more than 33 million MSA carcase records since 2010 (37% of Australian cattle slaughter). The toolbox revealed a large variation in eating quality (more than 40 MSA index points) and a 15% variation in yield across MSA graded carcasses, equating to a 45kg difference in the amount of meat in the average carcase. In time, other traits such as animal health could be included in this carcase feedback to construct a more holistic view of carcase value and expand the toolbox for producer access.

The availability of such data equips supply chains to potentially capture increased carcase value – paying more for high performing carcasses demanded by customers when balancing both quality and yield (and vice versa) and sending

this price signal and carcase feedback to producers – ultimately evolving from price averaging to a clearer path for contributing to the industry's objective of doubling the value of red meat sales that can include branded products being underpinned by measured trait credentials.

ALMTech I and II

MLA has continued to support the development of objective measurement technologies through collaboration with the Advanced Livestock Measurement Technologies (ALMTech) programs I and II in 2020–21.

The programs are expected to generate as much as \$510 million by 2040 for Australia's beef, lamb and pork industries through producing technologies that support the accurate objective measurement of meat quality and quantity.

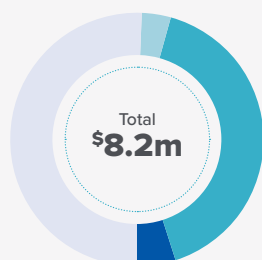
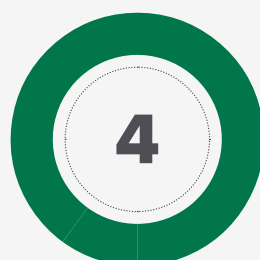
There have been a number of significant developments within the program over the year that will support greater automation along the red meat supply chain, help the industry respond to market demands and minimise product wastage.

Microwave probe proves effective for fat depth measurements

A hand-held, portable microwave probe has been developed under the ALMTech program to measure fat depth in live animals and carcasses.

The probe is held against a carcase and projects a microwave through the fat cap, returning real time fat depth data back to the system user.

Accurately and efficiently measuring fat depth will support more profitable live trading and will help determine finishing time for slaughter through the ability to individually select the most suitable animals.

**2020–21 investment by funding source****Key performance indicators**

4 achieved
See Appendix A for a full list of KPIs.

The probe has been trialled through ALMTech at Dardanup Butchering Company in 2020–21 to produce datasets that will prove its ability to meet AUS-MEAT standards. MLA will continue to support ALMTech to have the probe accredited as a measurement tool for both GR and P8 fat depth in 2021–22.

MEQ probe approaching market readiness

The MEQ probe is a hyperspectral probe being developed by ALMTech with MLA support, which can be inserted into the loin of hot lamb carcasses to predict the intramuscular fat (IMF) percentage. The probe has been tested at a number of Australian processing plants for its accuracy and ability to work at line speeds and is approaching market readiness.

Measuring IMF in sheepmeat supports greater MLA work to improve eating quality consistency in Australian red meat through the MSA program. Through the Sheep CRC, an MSA cuts-based model has been developed for lamb and sheepmeat, however, for the model to become active an accurate measurement of IMF is required.

The successful development, commercialisation and implementation of accurate IMF measurement technology in processing plants around Australia will support the activation of this model. In turn, this will increase feedback to producers on the attributes that influence eating quality in their flocks.

DEXA update

Around half of Australia's lamb slaughter is now measured by the DEXA system, increasing the amount of data on lean meat yield, which will help industry build a value-based pricing system for lamb.

In 2020 and 2021, improvements were also made to DEXA technology to separate the whole carcass into fore, middle and hindquarter regional yield, helping to maximise carcass value through optimised lean meat yield predictions.

Medical innovation pinpoints IMF

A medical needle fitted with a camera that was developed to detect human cancer cells is now being used by medical engineers from the University of Adelaide with support from MLA to measure intramuscular fat (IMF) in sheepmeat and beef.



The work is currently focused on lamb, however, it also has application for the beef industry as a hot IMF measurement tool to inform preliminary carcass sorting.

The research is led by medical engineer Professor Robert McLaughlin, who has spent the past 12 years developing optical technologies for human surgeries.

"While developing these technologies, we realised almost every medical technology we've worked on has some equivalent usage in the livestock industry," Robert said.

"One of these was a tiny camera made of optical fibre that we could fit in the end of a needle, with the goal of identifying cancer cells.

"We found when testing it though that it was really good at seeing individual fat cells, but not as good at seeing cancer cells."

"We secured funding from MLA to adapt this needle and try it out in hot and cold sheep carcasses, which demonstrated it has good potential for measuring and estimating the percentage of IMF in the meat."

The technology is being used in conjunction with the MLA Resource Flock based at Armidale, NSW, to assess the progeny of around 150 rams a year.

As well as measuring IMF, the needle offers other benefits for the red meat industry including:

- the ability to assess carcasses without damaging them
- an opportunity to provide feedback to producers who can use this information to improve ram selection and management decisions for best returns.

Another MLA Donor Company funded project being run is testing if the needle can provide effective measurements at production speeds, something that will be critical for adoption.



Producer adoption

The producer adoption program provides the vehicle to convey the productivity messages and findings from MLA's latest research and development investments to red meat producers with the aim of ultimately improving productivity in livestock farming businesses. The program engages producers in large scale awareness events, capability building and practice change projects that lead to productivity outcomes as a result of the adoption of R&D. The outcomes are evaluated to determine program level impact.

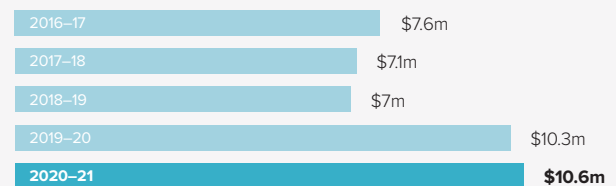
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



During 2020–21, PGS established 23 new groups, with a total of 603 producer participants engaged across 45 active groups – a 13% increase in producer involvement on 2019–20. There were also 14 PGS projects completed, with 86% of producers adopting learnt practices by the conclusion of the program.

The delivery of PGS in northern Australia also expanded, as the program engaged producers with the satellite-assisted forage budgeting learning package. Further growth is expected in the upcoming financial year, with three additional northern learning packages nearing completion.

The PDS program commenced 14 new projects in 2020–21 across 73 demonstration sites and with 126 producers engaged. Sixty-four PDS projects are now underway nationwide.

Three projects were also completed for the financial year, demonstrating up to \$20.73/ha benefit and with an average of 82% of core producers adopting the learnt practices.

The toolbox – online training, tools and resources

To increase the rate of adoption and use of key digital resources, MLA released 'The toolbox' in March 2021 – a free, one-stop shop of helpful training courses, tips, tools and calculators.

The easy to access upskilling tool covers practical learning opportunities across a range of topics, including:

- animal health and welfare for pain relief
- sheep genetics
- beef production and productivity
- healthy soils and pastures.

There is also work underway to include new packages in 2021–22, including modules on vaccinations, integrity, eating quality and pastures.

Highlights

Changes to MLA's Investment Call

MLA is committed to delivering R&D outcomes that will have the greatest impact on the red meat industry. To align with this, MLA's Investment Call, which empowers grassfed beef and sheepmeat producers to influence how their levies and MDC projects are focused, evolved in 2020–21.

The changes support MLA's *Strategic Plan 2025* to direct resources into fewer, high impact programs.

MLA's Investment Call will reflect this new strategic direction with a shift away from an annual project call for the 2022–23 financial year. The focus will be on longer-term projects that operate over multiple years with collaborative partners and potentially various funding sources.

The established Red Meat Panel and Research Advisory Councils that have been fundamental to previous Investment Calls will continue to be critical to the delivery of this long-term strategy.

PGS and PDS drive practice change

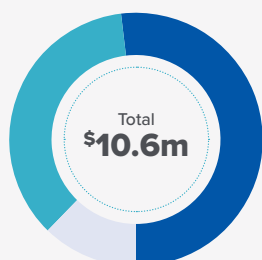
MLA has continued its support of long-term practice change programs through Profitable Grazing Systems (PGS) and Producer Demonstration Sites (PDS).

PGS is a group-based program that delivers training and coaching to improve producer skills and knowledge in grazing practices.

PDS aims to increase the rate of adoption of key management practices and technologies that improve business profitability, productivity and sustainability through peer-to-peer learning groups.

Both support MLA's goal to maximise benefits to producers from R&D outcomes by creating clear adoption and extension pathways for industry.

2020–21 investment by funding source



■ Producer levies **\$5.5m**
■ Government funding **\$3.8m**
■ Other sources **\$1.3m**

Key performance indicators



■ **4** achieved
See Appendix A for a full list of KPIs.

Since launch, 'The toolbox' has had over 600 users; 63% of overall users have been producers, 17% livestock advisors and the remaining 20% coming from other areas of industry. Nearly two thirds of users have indicated they will change on-farm practices as a result of completing modules.

MeatUp and BeefUp forums

To deliver R&D investments through extension pathways, MLA has continued to host workshops and forums that deliver practical outcomes back to producers.

BeefUp and MeatUp forums were two of these events carried out in 2020–21 to inform producers of the latest region-specific on-farm research, best management practices and technologies.

There have been four BeefUp forums held so far in 2021 in Roma, Esk, Charters Towers and Boulia, with 372 attendees. Topics covered in the workshops included walk-over-weighing technology, genomics and carbon neutral production.

Out of 10, producers indicated overall event satisfaction of 8.9, increased understanding and skill of topics covered of as 8.2 and motivation to improve their enterprises as a result of attending of as 8.6 across all workshops.

MLA's new southern forum, MeatUp, has also been successful, with three events delivered in 2021 so far at Gawler, Cobar and Charleville, with 128 attendees. Topics included supplementary feeding, processor feedback and improving ewe and lamb survival rates.

At the three workshops, producers indicated overall event satisfaction of 8.5 out of 10, increased understanding and skill of topics covered of 8 and motivation to improve their enterprises as a result of attending of 7.9.



An eye for detail underpins profitability



Mike De Long and Anne Marie Huey, west Kimberley WA.

Operating an extensive beef enterprise in the remote west Kimberley region of WA is not without its challenges, but Anne Marie Huey and her partner Mike De Long are making incremental changes to improve their bottom line.

Anne Marie and Mike run 'Dampier Downs Station', a 265,000ha cattle property geared to the live export market.

Anne Marie credits participating in MLA's Business EDGE course with helping her to improve her business skills to drive the profitability of the business.

Business EDGE is a two-day financial and business management training workshop for producers who want to improve the efficiency and profitability of their business.

"Mike and I are really focused on the cattle side of our business and I have a strong background in natural resource management, but we needed to strengthen our business management skills," Anne Marie said.

"By attending MLA's course we were able to better focus on the profit drivers of our station and make changes to maximise our bottom line."

Transport costs

The first thing Anne Marie did after attending the Business EDGE course in Broome was reorganise their financial statements to drill down and work out where the money was going in and out.

"Through this process I realised that a few days spent realigning a small section of our main trucking road would enable us to send an extra trailer of sale cattle out at a time."

Objective decisions

Anne Marie also came away with an understanding of the importance of calculating the real operating costs of their business.

"I realised I needed to allocate myself and Mike a wage in order to work out the true profitability of the business," she said.

"We'll focus on this going forward so we can have an objective view of the business and make informed decisions rather than going on gut feelings."

Product and packaging innovation

MLA's product and packaging innovation program explores new products and occasions, packaging and business model innovations to transform commodity red meat (and its components) into higher valued solutions.

It supports the industry's *Red Meat 2030* goal to double the value of Australian red meat sales as the trusted source of the highest quality protein by identifying and understanding consumer segments and preferences and capturing high value opportunities through new product concepts and innovations.

By evolving from commodity meat trading to more value-adding, this program also contributes to changing the diversity of people in our industry with subject matter experts from adjacent sectors to the meat industry innovating and making it a more inclusive place to work.

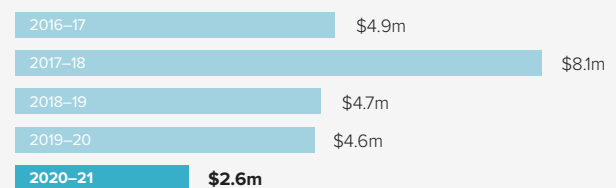
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Sustainable red meat packaging

MLA participated in FoodBytes! – a five-month pilot led by Rabobank – which paired industry leaders and innovators from across the food and agribusiness value chain.

MLA partnered with start-ups Mori and NotPla to:

- co-develop new products
- gain market and consumer insights
- experiment with new technologies to find new occasions to consume Australian red meat.

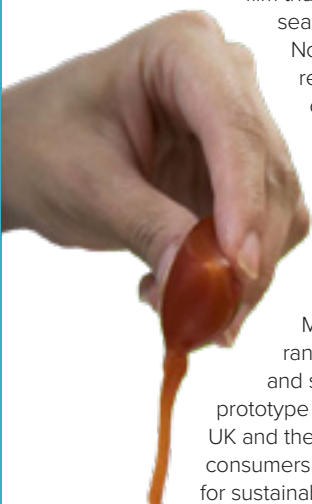
The focus of the pilot for MLA was to explore innovations that reduced plastic packaging and develop eco-conscious products that can also inspire shoppers to experiment with new occasions for consuming Australian red meat.

The pilot was conducted virtually due to the inability to travel internationally.

NotPla developed an edible seaweed film that can package as well as carry seasoning to raw beef cuts. The NotPla 'butcher paper' concept reflects a trend in Australia as consumers are increasing their trips to the butcher, presenting an opportunity to look beyond retail-ready packaging options.

NotPla reduces plastic usage while creating a luxury experience for the consumer.

MLA and NotPla successfully ran their pilot over three countries and selected the 'butcher paper' prototype to deploy in butchers in the UK and the Netherlands with 87% of the consumers surveyed willing to pay more for sustainable packaging.



An early target for NotPla is investigating the supply opportunity of up to 5% of Australian retail butchers in the near term.

MLA collaborated with Mori to conduct research into the applicability of their natural silk-derived coating within the Australian red meat supply chain, specifically preservation efficacy within wrapped raw meat cuts, mince and offal. This aligns with the community's expectations for waste mitigation and plastic reduction.

Mori is now developing its understanding into using their solution in a pre-sliced retail butcher environment and in a pre-packed retail meat supply chain, presenting their findings in early 2022.

Packaging alternatives

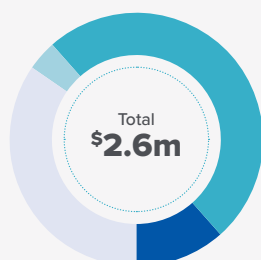
MLA is also supporting the development of other innovations that reduce packaging waste. The Liquid Lock Red Meat Trays project was conducted in partnership with Coles Retail

Ready Operations Australia and included the completion of a preliminary review of soaker pads used for red meat and explored the potential benefits of incorporating an array of small cells into the bottom of an inline thermoformed tray to capture and retain moisture from the packaged product.

Replacing traditional soaker pads in red meat trays would contribute to significant manufacturing productivity gains, including labour savings, reduced packaging and reduced waste.

A range of trays using liquid lock technology is performing well in the domestic marketplace. Refinements are ongoing including using recycled polyethylene terephthalate



**2020–21 investment by funding source****Key performance indicators**

3 achieved
See Appendix A for a full list of KPIs.

which is a general-purpose thermoplastic polymer and one of the most recycled thermoplastics available across the food and beverage sector.

New shelf life calculator

A new tool which improves how the shelf life of red meat is predicted is assisting the Australian red meat industry gain better access to markets and reducing waste.

MLA, in conjunction with the University of Tasmania, collected data on the temperature of chilled meat products and the time it takes to send them to Australia's overseas markets, so red meat brand owners and exporters can more accurately determine shelf life.

The calculator is an equation, in the form of a spreadsheet, which uses time and temperature data (collected through data loggers) to work out how much the shelf life of a chilled, vacuum-packed red meat product has been used up and how much is left, based on certain storage conditions.

The addition of this new shelf life calculator allows the red meat supply chain to ensure product quality is maintained until the labelled expiry date.

It has been used in pilot studies to:

- find and fix problems in cold chain management
- reduce customer complaints and insurance claims
- assist red meat brand owners to negotiate trade in export markets.

The shelf life calculator gives exporters the ability to control the supply chain, identify where the problem is and work to fix it – ultimately making the supply chain more efficient.

The calculator is available through the MLA Creative Commons website and MLA is working with consultants to help exporters use the tool to analyse their supply chains. Exporters can now see the shelf life of their product displayed on 'dashboards' provided by datalogger suppliers.

Red meat joins the war on waste

Plastic-free meat trays and technologies which extend shelf life are just two of the ways MLA is helping the red meat industry to reduce food wastage.

Plastic-free meat tray

MLA worked with American start-up company, Corumat, which has developed patented technology using food and meat waste to make a plastic-free, compostable meat tray.

The project takes a 'circular economy' approach to upcycle resources (in this case, food waste) to extract value rather than discarding them.

Upcycling waste streams could potentially add to True Aussie Beef and Lamb in international markets as not only safe, clean and green but also plastic-free.

This complete value-chain story of sustainability provides Australian red meat with a significant competitive advantage in the global protein market. The Corumat meat tray is also approximately 20% cheaper than plastic meat trays.



MLA is continuing to work with Corumat to explore agricultural/ food waste streams that could be combined with red meat waste to refine this opportunity and create commercial opportunities.

Reinventing the traditional meat tray

Another MLA-supported project uses zero-scrap packaging technology. The Darfresh® 'on board' packaging uses a board made from paper pulp. The meat sits directly on the board and is vacuum-sealed with plastic to seal in freshness and extend shelf life. This technology uses 70% less plastic than standard trays.

The packaging is now used on a range of Coles branded meat lines after receiving positive response from consumers. It instils consumer confidence when selecting meat, as the clear film offers a front and side view of the meat so consumers can easily inspect the thickness, fat content, marbling and colour before purchase.

More local and international export opportunities are being explored to use this packaging format.



The Darfresh® packaging is now used on a range of Coles branded meat lines.

Value chain information and efficiency

MLA's value chain information and efficiency program assists MLA to foster the prosperity of the Australian red meat and livestock industry by capturing and appropriately managing data for increased productivity, integrity, market access and consumer trust in the red meat value chain.

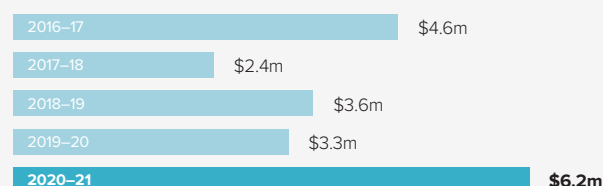
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Livestock Data Link

Several enhancements to the online carcass feedback tool, Livestock Data Link (LDL), have resulted in a significant increase in the number of producers using the system. The number of producers using LDL has increased by 47% since June 2020, with 2,972 producers now accessing feedback on carcasses through LDL.

The key change made to the system has been the introduction of new animal disease and defect feedback for beef producers supplying certain processors, following a series of red meat pilot trials conducted as part of the Rural Research & Development for Profit's Health 4 Wealth project.

This enhancement means that for the first time ever, beef producers can access feedback on their consignments that will enable them to better manage disease within their herds and ultimately improve profitability on-farm.

The system enhancement is also expected to help reduce significant industry losses sustained due to animal disease and defects, with meat and offal condemnations estimated to cost the beef processing sector between \$11.8 million and \$50 million a year.

The animal disease feedback for beef carcasses provided via LDL additionally forms part of MLA's commitment to providing feedback that can improve decision making along the supply chain and minimise carcass condemnations.

Another key change made to LDL has been the standardisation of data reporting processes so different processors are reporting the same data, now readily available to producers through LDL and other feedback systems. This ensures all producers have the same practical and consistent feedback on consignments, no matter what processor the consignment was sent to.

Work to improve the LDL system will continue into 2021-22. A roadmap has been developed to inform the creation of an enhanced feedback system for producers to access insights into carcass performance which serves to drive improvement in carcass compliance and overall industry profitability.

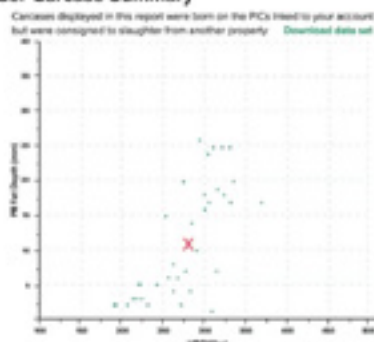
Animal disease feedback to producers and lotfeeders

In 2020-21, several improvements were made to ensure the availability, accuracy and standardisation of animal disease data feedback for producers and lotfeeders through MLA resources.

Cattle that do not meet customer requirements are costing the beef industry up to \$163 million annually.

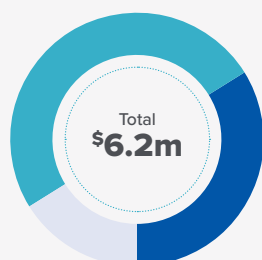
Reducing meat, offal and carcass condemnations is one of the key ways MLA can support the industry to help achieve the *Red Meat 2030* goal of doubling the value of Australia's red meat sales, ensuring minimal carcass wastage and increasing industry compliance.

Breeder Carcass Summary



Compliance by Gender				
	Male	Female	Unknown	All
No. Head	0	26	0	26
No. Condemned	0	0	0	0
Total HSC/Weight	1,472.0	6,749.2	0	8,221.2
Max HSC/Weight	640.0	385.0	0	445.0
Min HSC/Weight	300.0	187.0	0	187.0
Avg HSC/Weight	368.0	259.6	0	290.0
Max PSE Fat (g/100g)	25.0	30.0	0	30.0
Min PSE Fat (g/100g)	0.0	2.0	0	0.0
Avg PSE Fat (g/100g)	10.0	10.0	0	10.0
Min Lean Meat Yield %	0	90.82	0	90.82
Max Lean Meat Yield %	0	92.04	0	92.04
Avg Lean Meat Yield %	0	91.04	0	91.04

Several enhancements to the online carcass feedback tool, LDL, have resulted in a significant increase in the number of producers using the system.

**2020–21 investment by funding source****Key performance indicators**

Maximising carcass performance through feedback systems

Many producers have carcass performance data available for animals they have bred or consigned, accessible through Livestock Data Link (LDL).

LDL provides a range of data on animal disease and carcass compliance for livestock sent to processors participating in the program, including information on:

- carcass compliance with processors' custom grids for individual market requirements
- animal disease and defect information
- beef carcasses bred but not directly consigned by a producer
- Meat Standards Australia (MSA) performance, where available.

This data can explain why consignments did or did not comply with market specifications, to help producers make more informed on-farm decisions to improve carcass performance and overall productivity.

South Australian producer Jane Kellock has been using LDL feedback to maximise carcass performance and boost profits on-farm.

The Kellock family run a mixed farming operation producing sheep, cattle and a range of crops on the 1,820-hectare property 'Farrell Flat' in South Australia.

Consignments of lambs sent from the family's Farrell Flat property consistently achieve 98% Meat Standards Australia (MSA) compliance, and Jane credits the LDL system for providing the information needed to optimise consignment performance.

"For me, the LDL information and feedback is fantastic. It shows that we are meeting our targets as far as our meat and fat condition score," Jane said.

"If we're outside those guidelines it costs us money and LDL tells us exactly what it's costing us if we're not meeting those targets."

Farrell Flat has been supplying lambs to JBS Bordertown for the past three years and according to JBS Southern's Farm Assurance Supply Chain Manager, Mark Inglis, the ability of the processing plant to provide feedback to producers through LDL has proved invaluable for improving consignments.

"Processors in their own right are collectors of huge amounts of data," Mark said.

"So what LDL allowed us to do from our perspective was to get that data back to producers in a form that they can actually understand and work with."



Cattle that do not meet customer requirements are costing the beef industry up to \$163 million annually.

A significant boost for ISC's animal disease feedback system in 2020–21, including LDL, has been the enhancements made to animal disease and defect feedback available to producers as a result of trials conducted through the Health 4 Wealth Rural Research & Development for Profit project.

These trials have provided beef producers with new disease and defect feedback via LDL and other feedback systems on five conditions observed in cattle carcasses consigned to processors, including:

- liver abscesses
- liver fluke
- hydatids
- nephritis
- pneumonia.

For sheep, these trials also included a study to develop a severity scoring system for arthritis in sheep carcasses that will help estimate producer revenue losses due to the disease while demonstrating the use of retain-rail trim information.

Long-term, this system may enable individual carcass information related to disease and defects to be shared with producers through LDL, rather than as mob-based feedback, to support more targeted management of diseases like arthritis.

Revenue losses from diseases during the trial were up to \$18.08 per carcass according to a participating processor, indicating the potential value of the work when applied across the industry.

Productivity (off-farm)

The productivity (off-farm) program focuses on the development and adoption of supply chain technologies that deliver productivity benefits to the red meat value chain by reducing costs, improving yield, optimising production, improving feedback and transparency.

Improving supply chain productivity enhances Australia's global competitiveness and contributes towards the industry's Red Meat 2030 goal of doubling the value of Australian red meat sales as the trusted source of the highest quality protein from these improved systems.

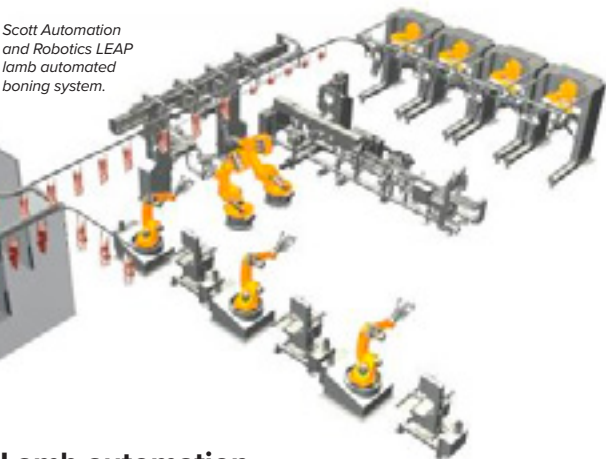
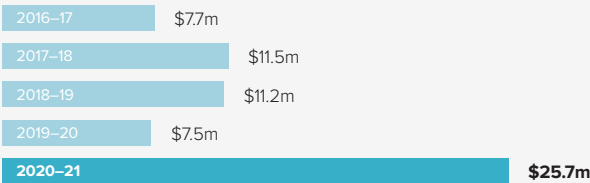
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Scott Automation and Robotics LEAP lamb automated boning system.

Automation underpins global competitiveness

MLA continues to work with industry partners to develop innovative solutions for Australia's red meat value chain to sustain efficiency and productivity to maintain global competitiveness.

For example, average costs per head (excluding livestock purchases) incurred in processing beef in Australia are:

- 24% higher than in the United States of America
- more than twice the costs in Brazil
- 75% higher than in Argentina.*

To help address these challenges, MLA has identified automation as a strategic opportunity for innovation in the Australian red meat processing industry to support producers and brand owners.

The productivity (off-farm) program's major focus remains on the automated beef boning development with major partners Teys Australia, Scott Automation & Robotics and Greenleaf, where six streams of work are being advanced and aligned to advance sensing technologies (aviation CT and DEXA x-ray) so as to determine accurate beef carcass cutting lines.

A beef chine removal prototype module has been developed and tested. It has demonstrated the ability to apply the computer tomography information to the chine removal of rack and loin primal portions. Additionally, two more cutting prototypes were also built - one for the removal of button bones from beef loins, and the other for trimming fat to a defined depth over the length of a beef loin and off a rack primal.

*Source: AMPC

Lamb automation

The success of MLA and industry's investment in lamb boning technology continues to deliver improved product quality and increased yield of high value cuts. Adoption is continuing – in 2021, Scott Automation and Robotics were contracted to design and build a LEAP lamb automated boning system for Thomas Foods International's plant in Tamworth, NSW.

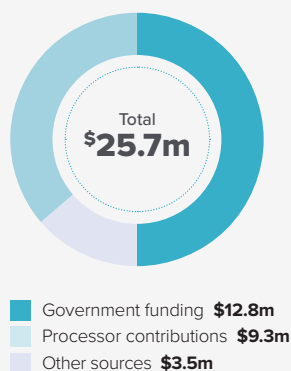
Partnership funded projects have been completed for ongoing accuracy improvement to the lamb boning automation with the DEXA integrated system to deliver improved value proposition for adoption.

Beef automation

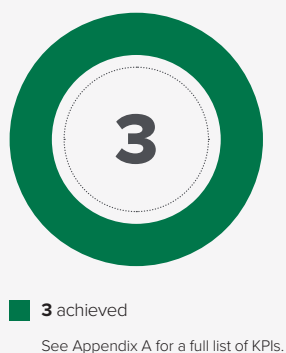
MLA and industry partners are advancing the learnings and successful developments of the lamb LEAP series of automated boning room systems to focus on a similar development path for more challenging tasks of beef boning automation.



2020–21 investment by funding source



Key performance indicators



This forms a key pillar of MLA's transformational beef productivity strategy and is referred to as Leap4Beef. This is a similar model to lamb processing, where the carcase is processed in three sections – hindquarter, middle and forequarter – rather than traditional beef side or quarter boning.

The estimated benefit of beef boning automation is more than \$20/head. Additional outcomes include improved return on investment by increasing the beef boning room yield, accuracy and transparency of feedback systems to producers and the overall processing efficiency in beef boning.

MLA was involved in establishing the Teys Research and Development Room in Rockhampton, Queensland, to create a production environment where the outcomes from these projects can be tested and trialled, and is working with co-funding partner Teys Australia to identify commercial opportunities.

The construction of the beef boning R&D facility at Teys Processing Plant in Rockhampton has been successfully completed where beef prototype modules will be integrated and tested.

An industry steering group has been established to plan out the future work program to complete R&D and facilitate the MLA beef boning program, Leap4Beef.

MLA was involved in establishing the Teys Research and Development Room in Rockhampton, Queensland, to create a production environment where the outcomes from these projects can be tested and trialled.

BladeStop™ technology

BladeStop™ technology is now bringing significant safety benefits for workers in processing plants across 25 countries.

In 2020, Scott Technology, the industry developer, reached the milestone of 1,000 BladeStop™ band saws installed worldwide.

Processing beef and sheep carcasses can be dangerous work, so in 2008 MLA commenced the initial research to develop a mechanical braking mechanism for band saws (commonly used in meat processing) that were capable of stopping the blade when the unit senses that the operator has come in contact.

BladeStop™ bandsaw technology can stop the blade within 15 milliseconds, which can mean the difference between an operator losing a limb or just receiving a skin cut.

In a 2020 report by Worksafe Australia, safety systems like BladeStop™ have helped reduce serious injury and compensation claims by 28% since 2008.

This lessens the economic and social effects that result from serious workplace injuries and provides an even safer work environment to help attract to and retain staff in the meat industry.

BladeStop™ is designed and manufactured in Australia.



BladeStop™ bandsaw technology can stop the blade within 15 milliseconds. Image: Scott Automation.

Productivity (on-farm)

MLA's productivity (on-farm) program assists MLA to foster the prosperity of the Australian red meat and livestock industry by supporting new research which leads to increased productivity and profitability across the beef, sheepmeat and goat production sectors.

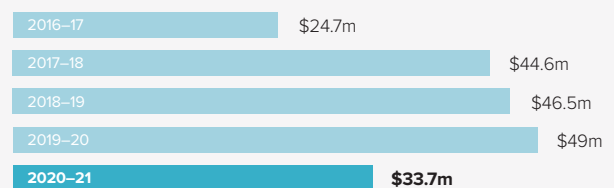
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



NB2 will provide multiple benefits to northern producers and the wider beef industry, including a 5:1 return on investment by improving reproductive rates, decreasing mortality, increasing turn-off weight and improving genetic potential in northern herds.

The Sheep Reproduction Strategic Partnership (SRSP)

The SRSP is a sheep industry initiative managed by MLA that seeks to improve reproductive performance and weaning rates by providing producers with solutions for their businesses across the entire reproductive cycle. These will also deliver productivity, animal health and animal welfare benefits.

ASBVs now easier to access

MLA launched a redeveloped Sheep Genetics website in August 2020, greatly enhancing producers' abilities to search for and purchase genetics that will have the most impact on their flock.

The site includes data displays suitable to different learning styles, including graphs and tables, a saveable search function, new pen card creation tools and new percentile highlights.

The new site was launched in August 2020. More than 18,000 unique users have visited the site since launch, with 25% of all users arriving through third party search sites.

MLA boosts investment in pasture dieback R&D

MLA has continued with solution-focused R&D investments into pasture dieback through six new projects added to its portfolio in 2020–21. The projects are funded by a \$2.7 million Federal Government grant and levy funds.

Information is available on MLA's new pasture dieback hub, along with the new *Pasture dieback: a management guide* for producers and agronomists.

Highlights

Strategic partnerships

MLA invests in a number of strategic partnerships to boost the productivity and profitability of Australia's red meat industry. Examples include:

BeefLinks

This four-year partnership was launched in August 2020 with the University of Western Australia. It aims to assist northern WA beef producers by enhancing red meat value chain opportunities through a greater understanding of efficient use of farm resources, better use of grazing mosaics and the production of cattle that reach and exceed domestic and export ready standards.

SheepLinks

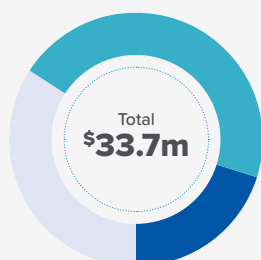
This five-year program is a strategic partnership with DPIRD in WA. The program will seek to better manage livestock, reduce business risk, improve consistency of supply and create value for the WA sheep industry, in the context of potential further disruption to, or cessation of, the live export market.

The Livestock Productivity Partnership (LPP)

This collaborative R&D partnership focuses on improving national productivity in the livestock industry from 1% to 2.5% a year through the development of regional and system-specific feedbase options and new animal phenotyping and farm management tools. The partnership has been running since 2017 and there are 14 projects currently running under the LPP.

Northern Breeding Business (NB2)

Known as NB2, this partnership is an initiative developed by MLA to address calf loss, low profitability and low adoption of proven management practices and technologies in northern beef herds. NB2 aims to deliver at least \$20 million a year in net benefits by 2027 to at least 250 northern beef enterprises.

**2020–21 investment by funding source**

■ Producer levies **\$6.8m**
 ■ Government funding **\$15.4m**
 ■ Other sources **\$11.5m**

Key performance indicators

■ 16 achieved
 ■ 2 partially achieved
 ■ 5 not achieved

See Appendix A for a full list of KPIs.

Multi breed evaluations

MLA continues to be committed to delivering multi breed evaluations to producers through the new five-year Southern Multi Breed Project. The project is one part of a greater array of R&D investments by MLA that aim to increase the rate of genetic progress within industry.

Data will be collected for a range of traits including fertility, weight and feed intake. Up to 8,000 calves will be born and tested under the project from 2020 to 2025.

The evaluations will allow producers to compare estimated breeding values (EBVs) between different breeds, meaning they can target the best genetics to meet their breeding objective when purchasing bulls, irrespective of breed.

Data from the project will also be made available on BREEDPLAN for each individual breed, improving the accuracy of EBVs for those evaluations.

Improving genetic accuracy doesn't only increase production, but stronger genetic management also builds a sustainable industry at a lower cost, ensuring alignment with MLA's *Strategic Plan 2025*.

Prickly acacia control measure

Prickly acacia covers several million hectares in Queensland. Thanks to a joint project between MLA and Granular Products, the latter has developed and commercialised Regain 750 WG herbicide.

It is a water dispersible product that treats young prickly acacia plants, which reduces the spread and cost of treatment in the short- and long-term. The herbicide has been tested under efficacy trials over two years, with results showing it is 100% effective.

Lamb finishing: is it worth it?

High-performance forage crop and perennial pasture systems were put to the test in NSW's Monaro region in an MLA-funded Producer Demonstration Site (PDS) to see how finishing lambs stacked up compared to the traditional store lamb system.

Average net profits from establishing and finishing lambs on the pasture/crops ranged from \$305/ha to \$1,492/ha over the two years of the PDS, despite poor seasonal conditions in the second year.

This PDS was run by Monaro Farming Systems producer group, with technical support from consultant Doug Alcock.

It followed an earlier project by Doug and the group, where they used GrassGro modelling software to quantify the benefits of finishing lambs.

It reflects changing enterprises in the region, which is traditionally a Merino grazing area.

"In the last decade, as wool prices waned in relation to sheepmeat prices, there's been a lot of opportunistic joining to terminal sires or Border Leicesters," Doug said.

"The vast majority of those animals end up in the store market, unfinished."

Monaro Farming Systems chairman John Murdoch said the group invested in GrassGro modelling to quantify the relative profitability of retaining these store lambs and finishing them on specialised, high quality pastures.

"The modelling showed that in nine out of 10 years you're going to be significantly better off, economically, by finishing lambs on specialised pastures," John said.

"As the PDS wasn't conducted under strict pasture trial conditions, the systems cannot be directly compared to each other," Doug said.

"However, the results indicate producers on the Monaro should feel confident in the reliability of increased profit from lamb finishing, regardless of the pasture/crop system chosen."



Monaro Farming Systems chairman John Murdoch.

Capability building

MLA's capability building program fosters the prosperity of the Australian red meat and livestock industry by investing in current and emerging industry leaders, innovators, scientists, value chain partners and representative organisations. It aims to enhance professional leadership and business skills, support industry advocates, accelerate adoption and build a culture of innovation and cross-sectoral performance.

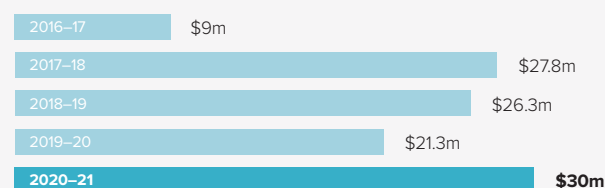
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Postgraduate sponsorships

As part of MLA's commitment to investing in future leaders for the red meat industry, 10 postgraduate students were sponsored in 2020–21.

MLA's academic scholarship program supports students to complete agricultural research that will have practical benefits for the red meat industry, and which align with MLA's priorities such as sustainability, animal health and welfare and objective measurement.

Students receive an annual top-up stipend provided in conjunction with a Research Training Program Scholarship awarded by their university, as well as support costs for their project.

More than 70% of students supported by this scheme continue to work within the red meat and livestock industry after they complete their studies, with many going on to perform important leadership roles in the industry. Their research also often has practical benefits for producers seeking to boost productivity and profitability on-farm.

Leading the industry forward

MLA invests in current and emerging leaders to build their skills through a range of professional development, graduate training and mentoring opportunities.

Three initiatives that MLA invested in were:

Internships

Following two successful Livestock Consulting Internship programs in 2016–17 and 2018–19, a third program launched in 2020–21.

Participants undertake internships with livestock consulting businesses over a two-year period. The project is co-funded by MLA, Meridian Agriculture (who manages the project) and the contributing employer to pay for the wages of interns.

Ten employers from around Australia are taking part in the current two-year program, to support 10 interns.

The internship includes workshops and retreats to build skills useful to the consulting sector such as people management, network building and presentation skills.

One of the new aspects of the 2020–21 program includes interns spending four weeks working with another livestock consulting business to gain more experience.

With the outbreak of COVID-19, the training became virtual with interns accessing webinars run by guest speakers and experts to develop their training skills.

Impacts from the first two programs include:

- half the interns are currently working with the employer they commenced the program with
- 79% of the interns continue to work in livestock consulting, reflecting the success of the program in boosting the number of new entrants to the livestock consultancy field.

Ten employers from around Australia are taking part in the current two-year program, to support 10 interns.





Advocating for a brighter industry future

For Hugh Dawson, head stockman of the 2.6 million acre, 80,000 head Beetaloo Station near Elliott in the Northern Territory, participation in the Livestock Leaders workshop didn't just offer a chance for positive industry promotion, but was an opportunity to strengthen his own communication skills.

Promoting opportunities in agriculture

"There's a bright future for every young Australian in agriculture if they choose that path. I want to become the best advocate I can be, which Livestock Leaders helped me to do," Hugh said.

Hugh saw the workshop as a chance to address common misconceptions about the industry and share these with the public.

"It's disappointing a lot of Australians don't recognise that animal welfare is at the front and centre of what we do," he said.

"Everything hinges on healthy and happy animals, and we need to keep actively promoting this to Australia and the world."

Hugh said the workshop helped him steer clear of industry jargon and instead using simple language to ensure consumers aren't intimidated and the message about sustainable livestock production is still heard.

A better leader both off and on the farm

The Livestock Leaders workshop gave Hugh the skills to become a better leader of his on-farm team.

"The workshop taught me that you need to be able to remove yourself from a situation and put yourself in someone else's shoes to understand what they're going through.

"Gaining that appreciation has been invaluable for me as a leader."

Building an industry profile

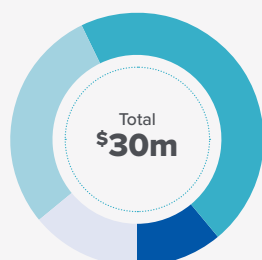
The Livestock Leaders also provided Hugh with an opportunity to meet likeminded individuals.

"The workshop made my own profile more accessible to key industry leaders, it opened up an incredible range of opportunities and helped further develop my career," he said.



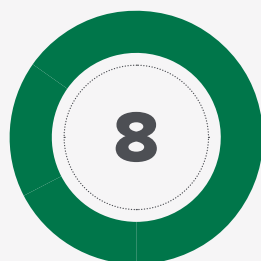
Hugh Dawson, head stockman Beetaloo Station NT.

2020–21 investment by funding source



Producer levies **\$3.3m**
 Government funding **\$13.8m**
 Processor contributions **\$8.6m**
 Other sources **\$4.2m**

Key performance indicators



8 achieved
 See Appendix A for a full list of KPIs.

Entrepreneurial producers

Farmers2Founders is a unique entrepreneurship program supported by MLA and designed to attract proactive, innovative producers looking to grow their businesses through the adoption of new technologies.

The program focuses on developing producers' skills in entrepreneurship, as well as their technology development and commercialisation capabilities to solve critical industry challenges and bring new ag-tech and food-tech to the market.

Farmers2Founders participant and producer, Bill Mitchell, won the 2021 MLA Producer Innovation Award for his remote cattle weighing system, Optiweigh, that enables in-paddock weighing and monitoring.

Livestock leaders

In 2020–21, MLA invested in the Livestock Leaders program to identify future leaders within the Australian red meat and livestock industry and upskill them through communications and media training, so they can confidently represent and defend the industry to the wider community.

Livestock Leaders, managed by The Livestock Collective, aims to engage a variety of advocates from across the red meat supply chain around Australia to ensure industry voices are heard from all sectors and are actively engaging with the community around the credentials of the red meat industry.

The Livestock Leaders course has been completed by 125 emerging leaders, with 85% of these actively sharing stories of their role in the red meat industry.

Farmers2Founders participant Bill Mitchell receiving the 2021 MLA Producer Innovation Award at Beef Australia 2021 from MLA managing director, Jason Strong.



Communication

MLA's communication program assists MLA to foster the prosperity of the Australian red meat and livestock industry by ensuring that MLA's marketing, research, development and adoption products and services are known and accessible to levy payers and stakeholders. It also seeks to build confidence in the industry, ensuring the community support and have increasing trust in the Australian red meat and livestock industry.

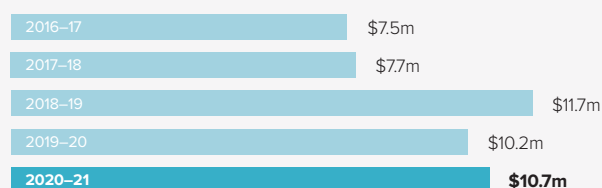
Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Beef Australia 2021

MLA was a principal partner of Beef Australia 2021, the triennial beef industry showcase held in Rockhampton in May. This year's event attracted a record 115,866 attendees.

MLA's theme of 'redefining resilience' was reinforced across three flagship events to equip producers with information and tools to build future-focused and agile beef businesses.

Trade site

MLA's trade site presented the key activities MLA is investing in to address ongoing challenges, such as market access and productivity, as well as technological solutions that can deliver sustainable growth for the red meat industry.

Digital farm

MLA's digital farm – part of Beef Australia's AgTech & Innovation Hub – demonstrated the latest technologies to monitor water, soil and livestock, manage infrastructure and support on-farm decision making.

Seminars

MLA hosted four seminars at Beef Australia. The seminars provided producers with information about innovation and the adoption of research outcomes to drive on-farm profit, presented by MLA staff, researchers, industry specialists and producers.

More than 2,500 people attended MLA's activities – visitor feedback was overwhelmingly positive, with an average rating of 4.5 out of 5 as 'extremely satisfied' in quality and relevance of content.

Red Meat, Green Facts

MLA launched a new resource – *Red Meat, Green Facts* – at Beef Australia, to bring together clear,

evidence-based messages and information to empower Australia's red meat producers and advocates on topics including the environment, animal welfare, nutrition and plant-based alternative proteins.

This work forms a critical part of MLA's efforts to position red meat accurately and bust the myths that exist around the industry, products and practices.

Consumer and community insights continue to show that perceptions of the red meat industry are improving. However, consumers are less informed about the specifics of the industry and are increasingly turning to a variety of sources for information. MLA developed *Red Meat, Green Facts* for producers and red meat champions to use as a basis for engaging in conversations with their communities and networks.

More than 50,000 *Red Meat, Green Facts* pocket guides were distributed in May and June, and more than 4,440 people viewed the *Red Meat, Green Facts* website by 30 June 2021.

Match-fit soils

MLA launched a new online healthy soils hub in April, strategically timed leading into autumn when soil management is critical for producers.

The healthy soils hub was the first of four feedbase hubs to provide practical resources to producers following independent research that found potential for a five-fold increase in above-ground dry matter production by addressing feedbase underperformance issues.

The healthy soils hub includes tips and tools on soil testing and management, practical 'how to' guides and videos, and case studies demonstrating the benefits that soil testing has delivered to red meat enterprises.



Beef 21: MLA Key Stakeholder Engagement Manager Sabina Kindler talks with producers.



Australian Beef goes for gold in classrooms

As an official team partner of Australia's Paralympic and Olympic teams, Australian Beef launched two virtual modules for schools, offering students an exciting opportunity to engage with athletes around healthy lifestyles and join a virtual cooking class with celebrity chef Matt Sinclair.

Australian Beef played a key role in the Be Your Greatest Virtual Classroom Program, featuring Paralympians and Olympians to inspire students and teach them the importance of active lifestyles and healthy meals ahead of the Tokyo Games in 2021.

The first module, launched in Term 3 August 2020, focused on athlete stories allowing students to gain insight into their journey to greatness, including their connection to agriculture.

Australian Beef's athlete ambassadors were:

- Paralympians Eliza Ault-Connell and Scott Reardon
- Rugby Sevens' most capped female player Emilee Cherry and vice-captain Lewis Holland
- Hockeyroos co-captain Emily Chalker
- Olympian Basketball player Chris Goulding.

In Term 1 and 2 in 2021, MasterChef Australia alumni Matt Sinclair joined the athlete ambassadors in Be Your Greatest Virtual Classrooms for a virtual cooking class to show students the delicious versatility of cooking with Australian beef as part of a balanced lifestyle.

These new education activities have been a great way to further engage with students to show the value of an active lifestyle as well as the health and nutrition credentials of Australian beef in a healthy diet.



100m track para-athlete Scott Reardon picks up some burger tips from former MasterChef Matt Sinclair's Be Your Greatest Virtual Cooking Class.

2020–21 investment by funding source



- Producer levies **\$9.4m**
- Government funding **\$1m**
- Other sources **\$0.2m**

Key performance indicators



- 5 achieved
- 3 not achieved

See Appendix A for a full list of KPIs.

The hub also linked to MLA's new eLearning platform, 'The toolbox', featuring soil testing and assessment modules (see page 30).

Communication highlights:

- 10,471 visitors to the healthy soils hub as of 30 June 2021
- 727 downloads of soils resources.

Taking stock of RD&A

MLA released a new, easy-to-read summary of completed and in-progress research, to improve the accessibility and transparency of research, development and adoption (RD&A) in response to stakeholder feedback.

The document summarises MLA-funded projects across the Research, Development & Adoption, Integrity Systems Company and International Marketing R&D portfolios, from June 2018 through to November 2020.

Redefining resilience

MLA hosted a new webinar series in the lead-up to MLA's 2020 Annual General Meeting, in response to COVID-19 related travel restrictions. The five-part series, *MLA updates: Redefining resilience*, examined what resilience in the red meat industry will look like in the years ahead, and how the industry must evolve to meet new challenges.

The webinars were presented by MLA Managing Director Jason Strong and MLA senior leaders, producers and other industry participants, who provided information designed to help build business profitability and to ensure they remain resilient into the future in the changing global environment.

More than 500 people tuned in to watch the live webinars, and the webinar recordings have been watched more than 1,470 times (up to 30 June 2021) and 78% of survey respondents were very or extremely satisfied with the webinars.

Corporate services

MLA's corporate services program assists MLA to foster the prosperity of the Australian red meat and livestock industry by:

- effectively managing levy and government matching investments through accounting, contracting, project management, foreign exchange management, advice, IP transfer, evaluation and reporting
- ensuring MLA meets its statutory and legislative requirements through a robust corporate governance framework including audit, risk and legal services
- providing the frameworks to attract and retain a diverse and talented workforce.

Red Meat 2030 priorities



MLA Strategic Plan 2025 strategic focus areas



Investment over time



Highlights

Industry vision

MLA's *Strategic Plan 2025* was released in June 2020 and is founded on the industry's 10-year strategic plan, *Red Meat 2030*, to ensure it's aligned with the vision and priorities shared across the supply chain and with the other red meat research and development corporations.

The *Strategic Plan 2025* highlights MLA's contribution to the red meat industry's long-term vision to double the value of red meat sales by 2030 and for Australia to be the trusted source of the highest quality protein, as outlined in *Red Meat 2030*.

The plan ensures MLA can capitalise on the areas where it already has a competitive advantage but also asks some tough questions about what MLA can do better for producers and how it can turn today's challenges into tomorrow's opportunities. Success will be measured by producers' ability to create and capture additional value from these investments.

MLA's *Strategic Plan 2025* will undergo a constant cycle of review and inform MLA's Annual Investment Plans, which outline MLA's programs and the activities, key performance indicators and budgets for each financial year.

The *Strategic Plan 2025* ensures MLA can capitalise on the areas where it already has a competitive advantage but also asks some tough questions.

Delivering value for producers

MLA's *Strategic Plan 2025* was developed through consultation with representatives from across the red meat supply chain.

Representatives from across the cattle, sheep and goat industry supply chains were involved in workshops, meetings and discussions and their feedback was a key input into the plan's development.

MLA will increase investment in the following areas to deliver the strategy:

Adoption and extension

MLA's *Strategic Plan 2025* sees a significant increase in funds allocated to adoption and extension activities. MLA programs will have clear adoption and extension pathways helping to ensure red meat producers can successfully implement practical solutions for their farm businesses.

Programs to support red meat industry integrity systems

The plan highlights the importance of strengthening existing systems in support of biosecurity, food safety and traceability.

It also highlights the importance of activities that accelerate data capture, end-to-end supply chain verification and knowledge transfer within the supply chain to support business decision making.

There's an emphasis on ensuring MLA investments contribute to a socially, environmentally and economically sustainable Australian red meat industry.

On-farm practice change will go hand-in-hand with adapting to climate variability, delivering world-leading animal health and welfare outcomes and adopting Carbon Neutral by 2030 (CN30) pathways.



MLA's strategic focus areas

MLA's *Strategic Plan 2025* has six focus areas to help producers and their supply chains:



Decisions informed through data and insights

Transitioning to a culture which captures and shares data across every point in the supply chain to enable the highest value opportunities to be identified and a shared understanding of challenges to be addressed.



Developing new, high value products which maximise the whole carcass

Diversifying products to drive growth through new usages and occasions for red meat.



Beyond today's farm gate

Balancing the known challenges and opportunities and anticipating the future issues industry will face, by fostering a culture which looks both to the future and to other industries to inform today's decision-making.



Targeted investment to address the industry's big, complex challenges

Prioritising the challenges to combat by the impact they could deliver for the industry. MLA will explore ways to optimise resources and address seasonal and climate variability. It will also continue to focus on meeting community expectations of animal health, animal welfare and environmental stewardship.



Strengthening our core

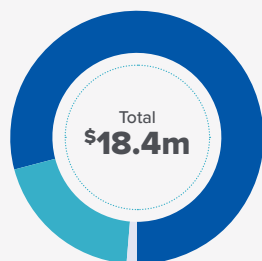
Continuing to invest in the essential services which underpin the competitiveness of our industry, specifically integrity systems, market access, nutrition and domestic and international marketing and promotion activities.



Enabling new sources of revenue

Identifying new sources of revenue to capture value and increase profitability alongside red meat production, including providing environmental and ecosystem services.

2020–21 investment by funding source



■ Producer levies **\$12.1m**
 ■ Government funding **\$3.0m**
 ■ Other sources **\$3.3m**

Key performance indicators



■ **12** achieved

See Appendix A for a full list of KPIs.





About MLA

What we do

MLA invests in research and marketing activities for the benefit of the Australian red meat and livestock industry.

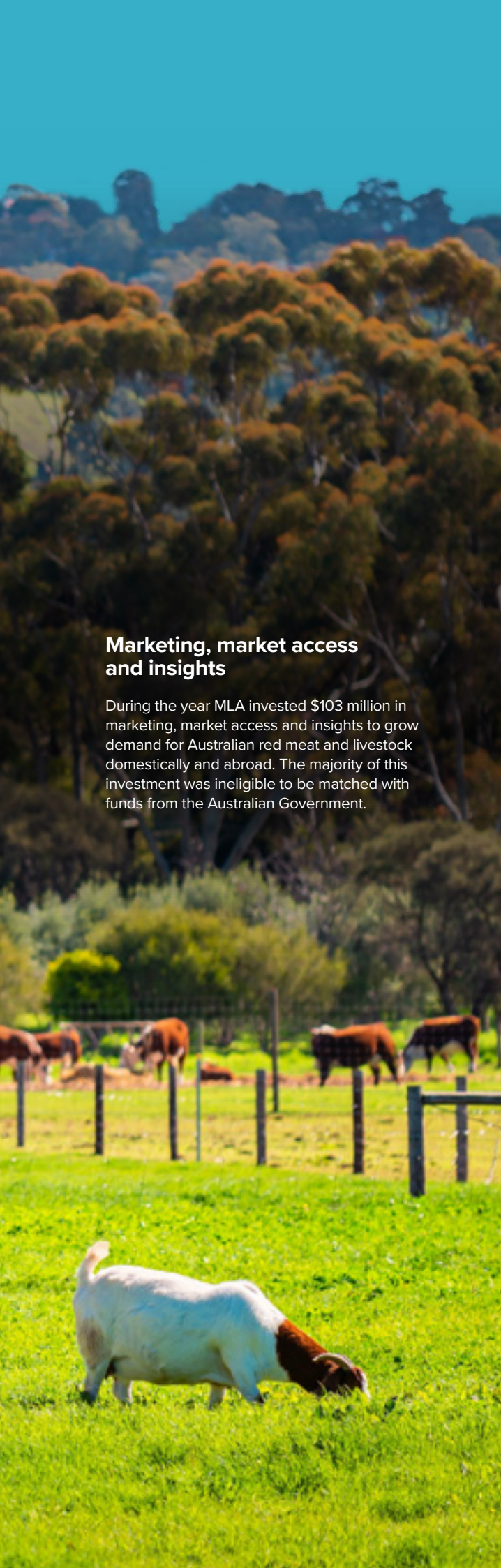
Research, development and adoption

MLA invested \$179.5 million in a range of research, development and adoption programs during 2020–21. This included \$69.5 million invested through MLA Donor Company (MDC). This investment includes matching funds from the Australian Government and grants.

These programs are linked to the Australian Government's science and research priorities and rural research, development and extension priorities. This alignment is shown in the graphs below.

In 2020–21, MLA completed or terminated 297 research contracts, worth \$101.3 million. These include 66 MDC contracts, contributing a total value of \$52.8 million. MLA commenced 231 new research and development contracts totalling \$83.2 million in 2020–21. This included 58 contracts through MDC that were worth \$46.8 million, with milestones across multiple years. This has resulted in 583 current contracts as at 30 June 2021, worth \$554.2 million.

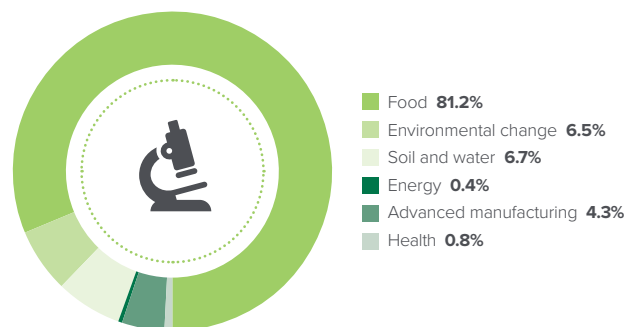
For a list of all third parties that MLA entered into research and development and marketing agreements with, please visit mla.com.au/mla-agreements.



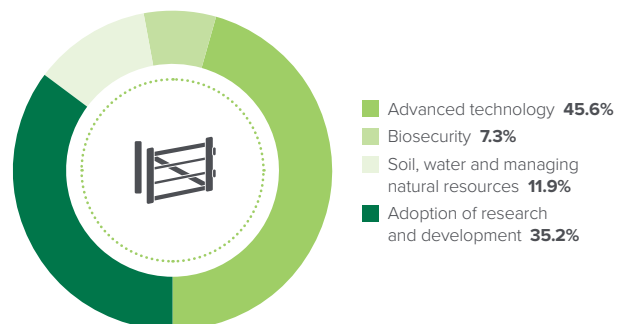
Marketing, market access and insights

During the year MLA invested \$103 million in marketing, market access and insights to grow demand for Australian red meat and livestock domestically and abroad. The majority of this investment was ineligible to be matched with funds from the Australian Government.

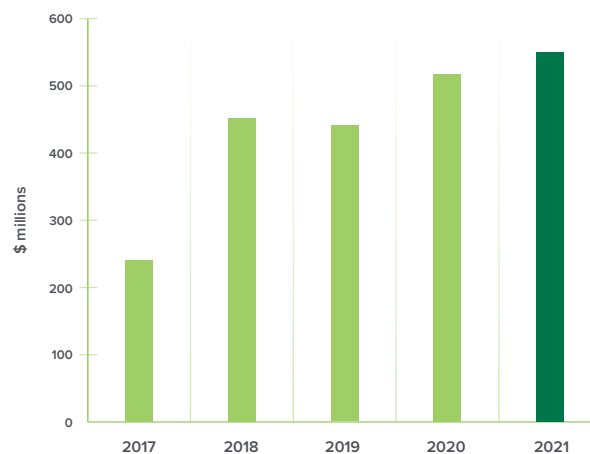
Graph 1: Alignment with government science and research priorities



Graph 2: Alignment with government rural research, development and extension priorities



Graph 3: Value of research contracts at 30 June



How we work

Strategic alignment

MLA's Annual Investment Plan 2020–21 has guided the company's investment over the past year, outlining the company's programs, budgets and key performance measures.

The strategic direction of this plan was informed by the Australian Government's science and research priorities and rural research, development and extensions priorities, *Red Meat 2030* and MLA's *Strategic Plan 2025*.

MLA's *Strategic Plan 2025* is aligned closely with *Red Meat 2030*, giving focus and direction to MLA's work to build demand, productivity and trust for the Australian red meat and livestock industry. The figure adjacent provides an overview of MLA's strategic and operational planning process.

Stakeholders

MLA operates in partnership with the Australian Government and value chain partners to deliver research, development and marketing to benefit red meat and livestock producers, value chain partners and the Australian community.

The Australian Government sets high priority research and development objectives covering community, industry and environmental concerns.

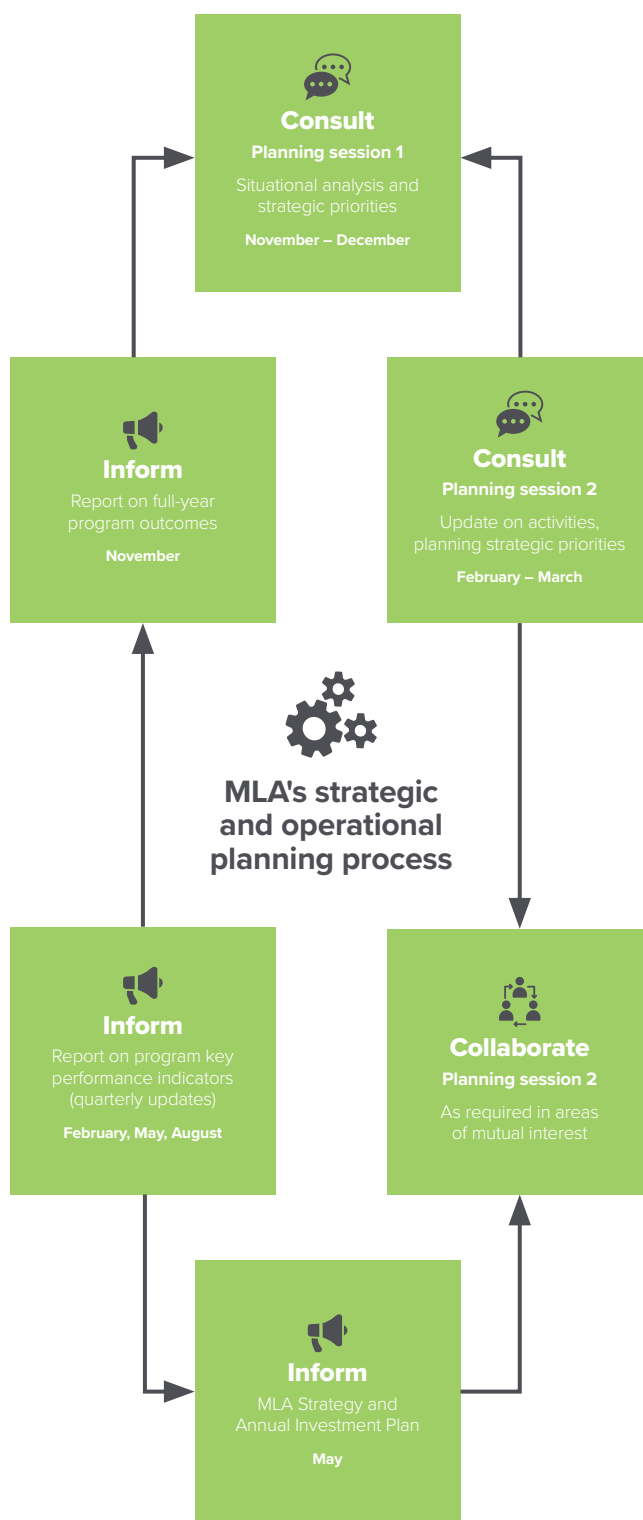
Peak industry councils assist MLA in consulting with levy payers on industry needs and priorities and provide guidance to ensure MLA strategy reflects these. The councils are the Australian Lot Feeders' Association, the Cattle Council of Australia, the Goat Industry Council of Australia and Sheep Producers Australia. MLA meets with the peak industry council committees quarterly to:

- report on program performance against approved plans
- respond to direct requests for information that supports their policy processes.

MLA also works closely with the Red Meat Advisory Council, the Australian Meat Processor Corporation, the Australian Meat Industry Council, LiveCorp and the Australian Livestock Exporters' Council to develop programs that address key industry issues and opportunities through the supply chain, manage projects and communicate outcomes.

MLA's Strategic Plan 2025 is aligned closely with *Red Meat 2030*, giving focus and direction to MLA's work to build demand, productivity and trust for the Australian red meat and livestock industry.

Figure 1: Overview of MLA's strategic and operational planning process



Industry consultation arrangements

The Red Meat Advisory Council (RMAC) is the peak body that represents the collective interests of the Australian red meat industry. RMAC is responsible for the development of the red meat industry's strategic plan (*Red Meat 2030*) which provides the overarching strategic framework that enables the direction, measurement and reporting of overall industry progress to government and industry stakeholders. Levy payers and the wider industry were consulted by RMAC during the development of *Red Meat 2030*.

Decisions on levy investments, across all levy streams, are never made in isolation and MLA consults regularly with the peak industry councils on strategy, budget allocations and key performance indicators. The red meat industry provides MLA with advice on strategic direction for a wide range of programs including marketing, research and development.

Regular consultation is a priority for MLA. The red meat industry Memorandum of Understanding specifies MLA's responsibility to develop a five-year business plan and an Annual Operating Plan in consultation with the Peak Industry Councils (PICs).

Livestock producers influence the investment of their levies through a number of industry consultation mechanisms and can do so through their State Farm Organisation or Peak Industry Council. The Peak Industry Council Engagement Framework and Quarterly Consultation Updates with Peak Industry Councils, LiveCorp and Australian Meat Processor Corporation are both mechanisms where industry informs MLA on the priorities of each sector.

Examples of areas where consultation occurs include:

On planning and whole-of-red-meat-industry priority areas:

- *Red Meat 2030*
- MLA Strategic Plan
- MLA Annual Investment Plan
- Beef Industry Sustainability Framework and Sheep Sustainability Framework.

Each year, MLA also consults with the peak industry councils regarding research, development and marketing investments.

On research and development:

- Red Meat Panel
- Regional consultation model that sits under the Red Meat Panel through the Southern Australia Meat Research Council, the Western Australian Livestock Research Council and the North Australia Beef Research Council
- Sheep and beef forecasting committees
- Sheep Genetics Advisory Committee
- BREEDPLAN owners
- MSA Taskforce
- Sheepmeat Industry Taskforce
- Resource Flock Steering Committee
- Genetics Steering Committee
- MSA Beef and Sheepmeat R&D Pathways Committee
- Integrity Systems Taskforce
- Producer Adoption Reference Group
- Live Export Research & Development Advisory Committee
- Objective Measurement Advisory Committee
- National Livestock Genetics Consortium Taskforce.

On marketing:

- Region-specific global marketing and market access strategies for beef, sheepmeat and goatmeat (Australia, Japan, Korea, North America, Middle East, Europe/Russia, Indonesia, China and South Asia)
- Market Access Taskforce supporting red meat market access initiatives – EU & UK FTA Taskforce
- MSA Taskforce
- Sheepmeat Industry Taskforce.

MLA runs and participates in numerous industry engagement activities each year which are largely face-to-face (though with recent travel restrictions many of these have been delivered virtually). Recent examples include MLA hosted stakeholder events at Beef Australia 2021, BeefUp and MeatUp forums, MLA's AGM, Beef Industry Breakfasts, cattle projections and sheep projections meetings, meeting with the Northern Pastoral Group, Northern Territory Cattleman's Association Conference, and senior MLA staff attending a range of industry-led events through the course of the year to speak and engage with producers and industry.

MLA strives to ensure all members have the opportunity to participate in the Annual General Meeting (AGM) by rotating its location around the nation. Due to COVID-19 restrictions, the 2020 Annual General Meeting was held online alongside a series of webinars. The 2019 AGM was held in Tamworth, NSW and was preceded by Canberra, ACT (2018), Alice Springs, NT (2017), Hahndorf, SA (2016), Brisbane, Queensland (2015), Sydney, NSW (2014), Wodonga, Victoria (2013), Fremantle, WA (2012), Longreach, Queensland (2011), and Launceston, Tasmania (2010).



How we work *continued*

Collaboration

MLA continues its long history of collaborating with the Australian Government, research organisations, value chain partners, cooperative research centres and other research and development corporations by co-investing in projects and consortiums with mutual benefits.

As part of the Department of Agriculture, Water and the Environment Rural R&D for Profit program, MLA leads five projects and is a partner organisation in a further three projects. Refer to Appendix C for an overview of all Rural R&D for Profit projects involving MLA.

During 2020–2021 MLA also partnered with various consortiums:

- Northern Breeding Business (NB2)
- Sheep Reproduction Strategic Partnership
- National Livestock Genetics Consortium
- Producer Adoption Reference Group
- National Sheep Health Monitoring project
- Animal Welfare Strategic Partnership
- Livestock Productivity Partnership
- Australian Pastures Genebank
- Rural Safety and Health Alliance
- Australian Agrifood Data Exchange
- Climate Research Strategy for Primary Industries.

Some partnerships, such as the Managing Climate Variability Program, ended – making way for new initiatives such as the RDC's Climate Initiative. Using producer-led design principles, the Climate Initiative identified areas for cross-sectoral RDC investment.

Agricultural Innovation Australia (AIA) (below) was established to facilitate joint investment and collaboration in cross-industry agricultural issues of national importance. AIA will identify, develop and invest in strategies that address shared challenges and opportunities. Member RDCs and their levy payers benefit from increased collaboration and more effective leveraging of knowledge, tools and resources to achieve and accelerate transformational outcomes.

MLA also continued its participation in the National RD&E framework strategies such as animal biosecurity, animal welfare, climate research, water use and soil. Collaboration with relevant CRCs included SmartSat CRC, Food Agility CRC and the CRC for North Australia.



Agricultural Innovation Australia Ltd (AIA)

Agricultural Innovation Australia (AIA), a new company targeting transformational innovation across agriculture, was formed in October 2020. All 15 Rural Research and Development Corporations (RDCs), including MLA, were its founding members.

AIA was established to catalyse public and private sector investment, and enhance collaboration, in solving the biggest cross-sectoral challenges in Australian agriculture. As a single point of contact for cross-industry strategies, AIA will make it easier for investors from around the world to navigate and partner with the Australian agricultural system.

RDCs contribute subscription fees and will benefit from enhanced collaboration and more effective leveraging of funding, knowledge and resources.

The scope of its strategies will cover the agriculture, fisheries and forestry value chains.

More information: aginnovationaustralia.com.au.

Membership

Membership of MLA is voluntary and free to all levy-paying grassfed cattle, grainfed cattle, sheep, lamb and goat producers.

MLA had 49,302 members at 30 June 2021, a decrease of 288 members from 2020. The table below shows the composition of MLA's members.

Table 1: Composition of MLA's members

Members	2016–17	2017–18	2018–19	2019–20	2020–21
Grassfed cattle	42,087	42,266	41,910	41,774	41,629
Grainfed cattle	5,453	5,478	5,456	5,497	5,482
Sheep/prime lamb	18,634	18,963	18,820	18,710	18,586
Sheep only	9,415	9,363	9,135	8,988	8,865
Goats	2,403	2,426	2,402	2,380	2,364
Total members	49,726	50,128	49,692	49,590	49,302

How we're funded

Transaction levies

MLA is primarily funded by transaction levies paid on livestock sales by producers. Levies received by MLA are accounted for in two streams – one to support marketing activities and the other to support research and development.

Transaction levies are charged by the Australian Government on the sale of each head of cattle, sheep and goat sold under the *Primary Industries (Excise) Levies Act 1999*.

Transaction levies are collected, administered and disbursed by the Department of Agriculture, Water and the Environment on a cost-recovery basis and invested back into the industry to assist in research and development, marketing and market access services. Total levies charged in 2020–21 were \$5/head of grassfed and grainfed cattle transacted, \$1.50/head for lambs*, 20¢/head for sheep+ and 37.7¢/head for goats transacted (see figures adjacent).

MLA is not the only recipient of livestock transaction levies – it is one of three organisations alongside Animal Health Australia and the National Residue Survey.

Government-matched contributions

The Australian Government also contributes up to one dollar for each levy dollar MLA invests in eligible research and development.

Government-matched voluntary contributions

MLA generates additional income via voluntary contributions that are matched by the Australian Government. This funding is invested in research and development partnerships that benefit the Australian red meat industry through MLA Donor Company.

Unmatched grants and partner contributions

MLA also receives unmatched grants from the Australian Government and cooperative contributions from other Research and Development Corporations, individual processors, wholesalers, foodservice operators and retailers. This includes grants as part of the Rural R&D for Profit program (see Appendix C).

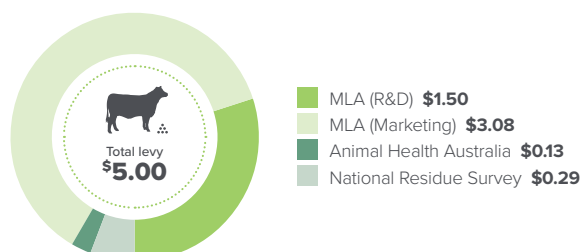
CoMarketing funding

Exporters and importers can also co-invest with MLA (via transaction levies) on marketing activities through the CoMarketing Program (see page 17).

Other levies

Processors and livestock exporters also co-invest levies into MLA programs through their service companies: Australian Meat Processor Corporation and LiveCorp. See page 73 for a summary of MLA's income and expenditure by funding source in 2020–21.

Graph 4: Grainfed cattle levy allocation



Graph 5: Grassfed cattle levy allocation



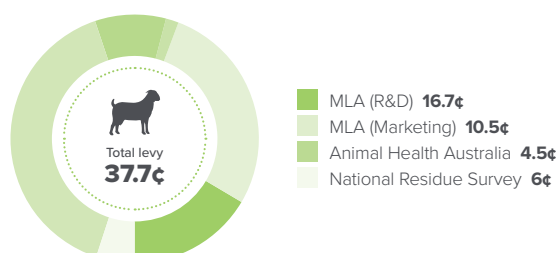
Graph 6: Sheep levy allocation



Graph 7: Lamb levy allocation



Graph 8: Goat levy allocation



^ Per head, where defined sale price is greater than or equal to \$10. Where defined sale price is less than or equal to \$10, levy is 2% of the sale price. Where there is no defined sale price, levy is set at 20 cents per head. * Per head, where defined sale price is greater than \$75. Where defined sale price is less than or equal to \$75, levy is 2% of the sale price. Where there is no defined sale price, levy is set at 80 cents per head.

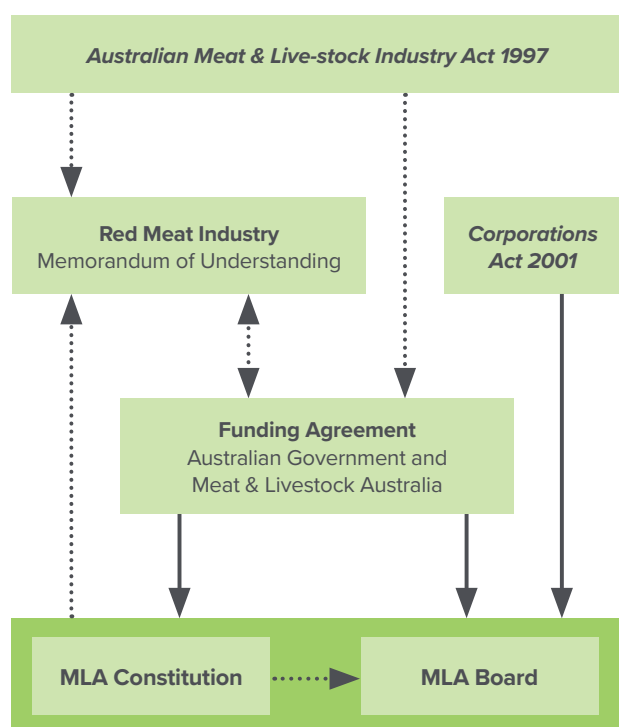
How we're governed

Corporate governance

MLA's corporate governance framework is set by the Board having regard to the best interests of our members, the values of our organisation, MLA's obligations set out under our Funding Agreement with the Commonwealth of Australia dated 8 October 2020, and in accordance with the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (4th edition).

This long-established framework operates to ensure we remain accountable to our stakeholders and that stakeholder interests are protected. MLA's governance arrangements are reviewed regularly to reflect industry developments, stakeholder expectations and regulatory and legislative changes. This statement, and documents and policies relevant to our corporate governance framework, are also available on MLA's website.

Figure 2: MLA's governance framework



The Board

The MLA Board's nine directors combine a broad range of skills, experience and expertise to work with industry to set strategic priorities for the company and to approve and monitor progress against MLA's *Strategic Plan 2025*. It evaluates performance and budgets, oversees risk management and compliance, and ensures the company abides by its obligations under the Red Meat Industry Memorandum of Understanding, the Funding Agreement, and under corporations law. Many directors are also producers and members of the company.

See pages 62–64 for the Board member biographies.

Board selection

The Managing Director is the only executive director and is appointed by the Board. Otherwise, directors are nominated through the Selection Committee and appointed by members at MLA AGMs for a three-year term. After such term, a director may reapply for a position on the Board in the same way as other candidates. Further information about the Selection Committee is on page 54.

Board committees

Three Board committees met during the year:

- Audit, Finance and Risk Committee
- Remuneration Committee
- Research & Development Investment Committee.

These committees are comprised solely of non-executive directors, with management attending committee meetings by invitation only.

The chair of each committee provides a verbal update of each committee meeting to the Board. The role of each committee is set out in the committee charters, which are regularly reviewed. The members of each committee, together with each member's attendance at meetings, are set out in the 'Directors' report' on page 76.

Audit, Finance and Risk Committee

The Audit, Finance and Risk Committee assists the Board to fulfil its oversight responsibilities relating to MLA's risk management framework, the company's treasury and financial reporting, internal control structure and the internal and external audit functions. In keeping with community expectations, the Chair of the committee is not the Chair of the Board.


The Audit, Finance and Risk Committee is required to meet at least four times a year and holds closed sessions with the auditors at least once each year. The Audit, Finance and Risk Committee is responsible for making recommendations to the Board for the approval of the annual audit plan and annual financial statements.

As at 30 June 2021, the Audit Finance and Risk Committee consisted of Rob Fitzpatrick (Chair), Russell Lethbridge and John Lloyd. Details of each members' attendance at meetings is set out in the 'Directors' report' on page 76.

Internal auditor

The Audit, Finance and Risk Committee reviews the adequacy and effectiveness of internal controls, including the company's policies and procedures, to assess, monitor and manage business risk, legal and ethical compliance programs. This review includes monitoring the implementation of MLA's Risk Management Plan, Fraud Control Plan and Intellectual Property Management Plan. It also reviews the company's foreign exchange and treasury management and oversees the company's risk management program.

To assist its function, the Audit, Finance and Risk Committee, with management and a dedicated Risk & Compliance Manager, worked with internal auditor KPMG. During 2020–2021, KPMG conducted reviews of IT General Controls, Crisis Readiness Review, Payroll and Modern Slavery.



“I think environmental responsibility goes hand-in-hand with productivity. You can’t have one without the other. It is counter-intuitive to think you could not look after your land then make a profit off it.”

Jacynta Coffey - Coffey Cattle Co. Central QLD

How we're governed *continued*

Internal audit activities are designed to assist management with independent and objective assurance on the effectiveness of our governance, risk management and internal control processes.

External auditor

MLA's external auditor is Ernst & Young (EY). The Audit, Finance and Risk Committee holds discussions with the external auditors and management before the annual financial statements are submitted to the Board. The Committee oversees MLA's relationship with EY, including:

- making recommendations to the Board about the appointment of MLA's auditors based on their qualifications, independence, engagement, fees and performance
- reviewing and assessing the performance, independence and objectivity of EY
- reviewing EY's proposed annual audit scope and audit approach, including materiality levels.

Remuneration Committee

The Remuneration Committee consisted of Erin Gorter (Chair), Alan Beckett and Jo Pye as at 30 June 2021.

The responsibilities of the Remuneration Committee include the review and oversight of:

- remuneration matters, including:
 - establishing and monitoring KPIs, a remuneration framework for, and the performance of, the Managing Director
 - remuneration and incentive framework for senior executives and all staff
 - recruitment, remuneration and retention strategies
- succession plans for senior executives and key staff
- strategic human resources policies and practices to ensure they are appropriate and consistent with MLA's objectives and values.

Details of each members' attendance at meetings is set out in the 'Directors' report' on page 76.

Research & Development Investment Committee

The Research & Development Investment Committee was established in 2021 to assist the Board to ensure that MLA achieves its research, development and adoption (RD&A) strategies and priorities within the framework of RD&A investments.

The Research & Development Investment Committee consisted of John Lloyd (Chair), Andrew Michael, Erin Gorter and Manny Noakes as at 30 June 2021.

The responsibilities of the Research & Development Investment Committee include monitoring/advising on the following aspects of the RD&A portfolio:

- income sources
- innovation strategy
- portfolio, planning and budgeting process
- industry consultation

- RD&A governance
- monitoring, evaluation, and reporting activities, including return on investment at a portfolio level.

Details of each members' attendance at meetings is set out in the 'Directors' report' on page 76.

Selection Committee

Each year the Selection Committee is tasked to assess Board candidates against a range of criteria, including experience and skills, personal qualities and their available time commitment, and report to MLA members on the suitability of candidates for election.

Following a rigorous interview and selection process of candidates by the Selection Committee and in accordance with good governance practice, appropriate checks of each candidate are undertaken before each nominee is put forward to members as a candidate for election as a director.

The composition of the Selection Committee, together with each member's attendance at meetings, is set out in the 'Directors' report' on page 76.

Board meetings

The Board had six scheduled meetings during 2020–21. The agendas for each of the MLA Group of companies are formulated in preparation for each meeting. They incorporate items from an annual work plan to ensure regular review of key aspects of the business of the MLA Group including performance, compliance and governance.

Meeting agendas include regular reviews of MLA's financial position and management reports, detailed reviews of the company's strategic imperatives and marketing and R&D programs.

The Board continually strives to ensure its meetings are conducted efficiently to enable sufficient discussion and contribution from all directors. The Board regularly considers and discusses key strategic issues at both a group company and industry level. Management attends and presents information relevant to their portfolios and to respond to information requested in Board meetings.

Independence

The Board considers each director's independence on an annual basis. Directors are considered to be independent if they are not a member of management and are free of any business or other relationship that materially interferes with – or could reasonably be perceived to materially interfere with – the independent exercise of their judgement.

In assessing a director's independence, materiality is considered on a case-by-case basis by reference to each director's circumstances. A policy on the independence of directors, which requires that the Board assess independence annually, or more regularly if a director's circumstances change, is currently implemented and in force. The Board has determined that all the non-executive directors are independent.

Conflicts of interest

In accordance with the requirements of the Corporations Act, the Funding Agreement and MLA's conflict of interest policy and procedures, directors must declare any conflict of interest they may have and must follow the procedures set out in MLA's policy.

In certain circumstances, directors will abstain from participating in any discussion or voting on matters in which they have a material personal interest. At the time of their appointment and as notified from time to time, each director provides to the Board information about their business and other interests. The Board records such notifications in its minutes and maintains a register in accordance with the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (4th edition) and in compliance with the requirements of MLA's Funding Agreement.

Reporting framework

On 8 October 2020, MLA and the Commonwealth of Australia (through its Department of Agriculture, Water and the Environment) agreed to a Funding Agreement for the period 2020–2030. The Funding Agreement sets out the requirements for the company's expenditure of levy funds and matching funds and provides a framework under which the company must report to the Department.

On an annual basis MLA's Chair, Managing Director and key management personnel meet with government representatives to discuss MLA's performance of its functions and compliance with the terms of the Funding Agreement.

Funding agreements

MLA's 2020-2030 Funding Agreement takes a principles-based approach to accountability and reporting. The five principles are:

1. Stakeholder engagement

Engage stakeholders to identify research, development and extension (RD&E) priorities and activities that provide benefits to portfolio industries.

Intended outcomes:

- facilitate opportunities for stakeholders to contribute to setting RD&E priorities and activities.

2. Research, development & extension (RD&E) activities

Ensure RD&E (and marketing) priorities and activities are strategic, collaborative and targeted to improve profitability, productivity, competitiveness and preparedness for future opportunities and challenges through a balanced portfolio.

Intended outcomes:

- balancing long-term, short-term, high and low risk, and strategic and adaptive research
- RD&E activities address levy payer and government priorities.

3. Collaboration

Undertake strategic and sustained cross-industry and cross-sectoral collaboration that addresses shared challenges and draws on experience from other sectors.

Intended outcomes:

- collaborate across the agricultural innovation system to address common challenges and opportunities
- enable broader consideration of innovations and technology and present a united approach in promoting Australia's agriculture.

4. Governance

Governance arrangements and practices to fulfil legislative requirements and align with contemporary Australian best practice for open, transparent, and proper use and management of funds.

Intended outcomes:

- good governance ensures stakeholders are well informed and have visibility of the RDC's investments, priorities and achievements
- committee structures and corporate policies enable the RDC to manage day-to-day business activities and fulfil reporting obligations.

5. Monitoring and evaluation

Demonstrate positive outcomes and delivery of RD&E (and marketing) benefits to levy payers and the Australian community in general, and continuous improvement in governance and administrative efficiency.

Intended outcomes:

- suitable mechanisms and processes in place that enable regular impartial reviews of performance, and identify improvement opportunities
- demonstrate that investments are effective and achieving desired RD&E outcomes and priorities
- communicate the results of the impact and benefits of RD&E activities and investments to stakeholders and the government.

Financial management

The Audit, Finance and Risk Committee has received a written declaration from the Managing Director and Chief Operating Officer that the financial reports represent a true and fair view, in all material respects, of the company's financial condition and operating results, and are in accordance with relevant accounting standards.

How we're governed *continued*

Risk management

MLA's Risk Management Plan outlines the process of identifying, assessing and managing risks, which is in line with AS/NZS ISO 31000:2018 Risk Management Standard and undertaken by the business. MLA reviews its Risk Management Plan and updates its risk profile annually. A risk register is maintained to outline identified risks and how they are managed and monitored within the Board's risk appetite. This register is reported to the Audit, Finance and Risk Committee quarterly.

In 2021, the Risk Management Plan was reviewed by the MLA Board, during which time the Board reviewed its risk appetite and endorsed updates to the plan. These updates included continuous improvement mechanisms through a range of risk management training provided through the induction program, business unit workshops and online training modules, to raise the awareness of risk management and risk culture within the organisation.

Mitigation strategies are also monitored regularly by both the Audit, Finance and Risk Committee and the Board.

A full summary of the drivers affecting MLA's operating environment can be found in MLA's *Annual Investment Plan 2021–22* which outlines the risk outlook for the year ahead: mla.com.au/aip.

In addition, MLA's Risk and Compliance team also conducted key business process controls reviews of the Japan, Korea, Singapore and Indonesia offices.

Code of business conduct and ethics

The Board has endorsed the Code of Business Conduct and Ethics (the code), which embodies the company's values of customer centricity, accountability through transparency and outcomes that make a difference. The Code otherwise sets out principles which must be met to ensure the company and its business associates meet its commitments to all stakeholders.

A copy of the code is on MLA's website and is provided to all new employees on commencement. It is a feature of the formal induction training which is provided to new employees. It is reviewed regularly to maintain its relevance and to reflect changes in the regulatory environment.

In 2020–21, MLA reviewed its supply chain using a risk-based assessment of potential modern slavery risks. In compliance with the Modern Slavery Act 2018, MLA submitted an annual modern slavery statement to the Australian Border Force, which is available on the Australian Government's Online Register for Modern Slavery Statements and on MLA's website - mla.com.au/general/modern-slavery-statement. Additionally, a review of MLA's modern slavery maturity level and its readiness to comply and respond to the Act was independently performed by KPMG.

As part of an annual program of training and capability building within MLA, staff received training in contract fundamentals, modern slavery legislation and procedures and cyber security awareness training. Leaders from across the organisation also participated in a leadership development program to enhance leadership capability and support our drive for results now and into the future. Additionally, an external training platform operates and is available to all staff on-demand for a wide range of courses.

As at 30 June 2021, 54% of MLA's staff were women. On the Leadership Team, two of the seven (29%) executives are female. On the MLA Board, three of the eight non-executive directors are female (38%).

Diversity

MLA recognises the importance of a workforce that represents a range of experience and backgrounds as well as age, ethnicity, sexual orientation, religious beliefs and physical abilities. The diversity and inclusion policy recognises that a diverse workforce enables MLA to provide a better service and improve long-term performance, as well as creating a source of competitive advantage and benefit to industry and its people.

As at 30 June 2021, 54% of MLA's staff were women. On the Leadership Team, two of the seven (29%) executives are female. On the MLA Board, three of the eight non-executive directors are female (38%).

As part of our ongoing commitment to diversity and inclusion, we lodged our annual public report with the Workplace Gender Equality Agency (WGEA) on Wednesday 11 August 2021 in accordance with the requirements of the *Workplace Gender Equality Act 2012*. Our WGEA public report 2020–21 can be accessed on the MLA website.

Remuneration and performance arrangements

As a result of the economic conditions brought on by the COVID-19 pandemic, MLA did not apply a general increase to staff or director salaries in 2020–21.

MLA aims to reward our people fairly and equitably for the roles they perform and continues to benchmark director and employee remuneration with like organisations in the market. MLA uses Aon Hewitt remuneration data to benchmark and confirm market movements.

The total limit for directors' remuneration (excluding the Managing Director) is \$750,000. This limit was determined by members at the 2008 Annual General Meeting.

The total per annum cost for non-executive directors is \$630,515.15. The remuneration arrangements for each member of the Leadership Team, including the Managing Director, comprise both fixed and performance-based remuneration.

The remuneration packages for the MLA Leadership Team are reviewed each year and include several gateways before eligibility to the performance-based component. This ensures the remuneration structure aligns management effort with organisational objectives and attracts, retains and motivates quality management personnel.

Table 2: Comparison of MLA's corporate governance principles to ASX corporate governance principles and recommendations

Principle/recommendation	Description/reference of disclosure/compliance
Principle 1. Lay solid foundations for management and oversight	
Recommendation 1.1	
A listed entity should have and disclose a board charter setting out: (a) the respective roles and responsibilities of its board and management; and (b) those matters expressly reserved to the board and those delegated to management.	This is outlined in the Board Charter and a detailed Delegations of Authority policy.
Recommendation 1.2	
A listed entity should: (a) undertake appropriate checks before appointing a director or senior executive, or putting forward for election as a director; and (b) provide security holders with all material information in its possession relevant to a decision on whether or not to elect or re-elect a director.	As part of the Selection Committee process in relation to annual director selection, appropriate background checks are undertaken each year. Candidates are shortlisted by reference to the selection criteria that act as terms of reference for the committee to ensure there is an appropriate mix of skills in the candidates nominated for election. Candidates' biographical details, included on the MLA Notice of Meeting, are prepared from the material submitted through the Selection Committee process.
Recommendation 1.3	
A listed entity should have a written agreement with each director and senior executive setting out the terms of their appointment.	MLA has written engagement letters for directors and executive employment contracts with all members of the Leadership Team.
Recommendation 1.4	
The company secretary of a listed entity should be accountable directly to the board, through the chair, on all matters to do with the proper functioning of the board.	The company secretary is accountable to the Board through the Chair on all matters related to the proper functioning of the MLA Board.
Recommendation 1.5	
A listed entity should: (a) have and disclose a diversity policy (b) through its board or committee of the board set measurable objectives for achieving gender diversity in the composition of its board, senior executives and workforce generally; and (c) disclose in relation to each reporting period: <ul style="list-style-type: none"> ■ the measurable objectives set for that period to achieve gender diversity ■ the entity's progress towards achieving those objectives ■ either: <ul style="list-style-type: none"> – the respective proportions of men and women on the board, in senior executive positions and across the whole workforce (including how the entity has defined 'senior executive' for these purposes) – if the entity is a 'relevant employer' under the <i>Workplace Gender Equality Act</i>, the entity's most recent 'Gender Equality Indicators, as defined in and published under that Act. <p>If the entity was in the S&P/ASX 300 Index at the commencement of the reporting period, the measurable objective for achieving gender diversity in the composition of its board should be to have not less than 30% of its directors of each gender within a specified period.</p>	<p>The Diversity Policy is available on MLA's website: mla.com.au/corporate-governance</p> <p>The Board recognises and fosters a culture that encourages divergent views and robust discussion. In assessing candidates, the Selection Committee considers diversity of education, the nature of the businesses and business functions in which candidates have gained experience and the roles held, as well as the more obvious aspects of diversity such as gender, age, ethnicity and cultural background. In 2018 the Board also set a goal of 30% of females on the Board by 2019, which was actually realised in 2018.</p> <p>MLA also enunciates its commitment to diversity in other policies such as EEO and Anti-discrimination policy and Misconduct and Discipline policy which are regularly reported to, monitored by and adjusted with approval by the Board.</p> <p>The proportion of women as at the date of this report:</p> <ul style="list-style-type: none"> ■ Board members: 38% ■ Leadership team: 29% ■ Whole organisation: 54%
Recommendation 1.6	
A listed entity should: (a) have and disclose a process for periodically evaluating the performance of the board, its committees and individual directors; and (b) disclose for each reporting period whether a performance evaluation has been undertaken in accordance with that process during or in respect of that period.	<p>The Board evaluates its performance through an annual performance review, which is facilitated by an external specialist.</p> <p>As part of the Board's review process in 2020–21 it completed the Australian Institute of Company Directors Board Review Tool survey and reviewed this as part of the annual review.</p>
Recommendation 1.7	
A listed entity should: (a) have and disclose a process for evaluating the performance of its senior executives at least once every reporting period; and (b) disclose for each reporting period whether a performance evaluation has been undertaken in accordance with that process during or in respect of that period.	<p>The Remuneration Committee and Board conduct an annual assessment of the performance of the Managing Director and the Leadership Team against agreed KPIs.</p> <p>In accordance with the annual work plan, the performance evaluation process for the Managing Director and the Leadership Team was completed.</p>


How we're governed *continued*

Principle/recommendation	Description/reference of disclosure/compliance
Principle 2. Structure the board to be effective and add value	
Recommendation 2.1	
<p>The board of a listed entity should:</p> <p>(a) have a nomination committee which:</p> <ol style="list-style-type: none"> 1. has at least three members, a majority of whom are independent directors; and 2. is chaired by an independent director, and disclose: 3. the charter of the committee; 4. the members of the committee; and 5. as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or <p>(b) if it does not have a nomination committee, disclose that fact and the processes it employs to address board succession issues and to ensure that the board has the appropriate balance of skills, knowledge, experience, independence and diversity to enable it to discharge its duties and responsibilities effectively.</p>	<p>MLA's Constitution and operation of the Selection Committee reflects this requirement.</p> <p>Refer also to the section about Selection Committee in the 'Corporate Governance Statement'.</p>
Recommendation 2.2	
A listed entity should have and disclose a board skills matrix setting out the mix of skills that the board currently has or is looking to achieve in its membership.	Biographical details of directors are published on the MLA website: mla.com.au/board-of-directors
Recommendation 2.3	
<p>A listed entity should disclose:</p> <p>(a) the names of the directors considered by the board to be independent directors;</p> <p>(b) if a director has an interest, position, association or relationship of the type described in Box 2.3 but the board is of the opinion that it does not compromise the independence of the director, the nature of the interest, position, association or relationship in question and an explanation of why the board is of that opinion; and</p> <p>(c) the length of service of each director.</p>	<p>The MLA Board currently considers the independence of its directors on an annual basis.</p> <p>Refer also to the Director Independence section in the 'Corporate Governance Statement'.</p> <p>Length of service of each director is included in the Director biographies.</p>
Recommendation 2.4	
A majority of the board of a listed entity should be independent directors.	All of the directors are independent with the exception of the Managing Director.
Recommendation 2.5	
The chair of the board of a listed entity should be an independent director and, in particular, should not be the same person as the CEO of the entity.	The role of the Chair and the Managing Director are not performed by the same person.
Recommendation 2.6	
A listed entity should have a program for inducting new directors and for periodically reviewing whether there is a need for existing directors to undertake professional development to maintain the skills and knowledge needed to perform their role as directors effectively.	MLA has a program for inducting new directors and provides appropriate professional development.
Principle 3. Instil a culture of acting lawfully, ethically and responsibly	
Recommendation 3.1	
A listed entity should articulate and disclose its values.	Values are published on MLA's website: mla.com.au/mla-at-a-glance
Recommendation 3.2	
<p>A listed entity should:</p> <p>(a) have and disclose a code of conduct for its directors, senior executives and employees; and</p> <p>(b) ensure that the board or a committee of the board is informed of any material breaches of that code.</p>	MLA has a Code of Conduct which covers the governance and sets the expectation for the Board and all MLA personnel. The Code of Conduct is available on MLA's website.
Recommendation 3.3	
<p>A listed entity should:</p> <p>(a) have and disclose a whistleblower policy; and</p> <p>(b) ensure that the board or a committee of the board is informed of any material incidents reported under that policy.</p>	The Whistleblower Policy is on MLA's website. Any incidents emanating from the whistleblower policy are reported to the quarterly Audit, Finance and Risk Committee.
Recommendation 3.4	
<p>A listed entity should:</p> <p>(a) have and disclose an anti-bribery and corruption policy; and</p> <p>(b) ensure that the board or a committee of the board is informed of any material breaches of that policy.</p>	<p>MLA has an Anti-Bribery and Corruption Policy as well as Guidelines to support the application of the policy.</p> <p>Any significant and material breaches to the ABC Policy will be reported to the Audit, Finance and Risk Committee.</p>

Principle/recommendation	Description/reference of disclosure/compliance
Principle 4. Safeguard the integrity of corporate reports	
Recommendation 4.1	
<p>The board of a listed entity should:</p> <p>(a) have an audit committee which:</p> <ol style="list-style-type: none"> 1. has at least three members, all of whom are non-executive directors and a majority of whom are independent directors; and 2. is chaired by an independent director, who is not the chair of the board, and disclose: 3. the charter of the committee; 4. the relevant qualifications and experience of the members of the committee; and 5. in relation to each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or <p>(b) if it does not have an audit committee, disclose that fact and the processes it employs that independently verify and safeguard the integrity of its corporate reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner.</p>	<p>The Board has established an Audit, Finance and Risk Committee which is structured so that it:</p> <ul style="list-style-type: none"> ■ consists of only non-executive, independent directors; ■ is chaired by an independent chair who is not Chair of the Board; and ■ consists of at least three members of the Board. <p>The charter of the committee is on MLA's website. Biographical details of directors are published to the MLA website: mla.com.au/board-of-directors. Refer also to the Audit, Finance and Risk Committee section in the 'Corporate Governance Statement'.</p>
Recommendation 4.2	
<p>The board of a listed entity should, before it approves the entity's financial statements for a financial period, receive from its CEO and CFO a declaration that, in their opinion, the financial records of the entity have been properly maintained and that the financial statements comply with the appropriate accounting standards and give a true and fair view of the financial position and performance of the entity and that the opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.</p>	<p>The wording of the declaration reflects the wording in the recommendation.</p>
Recommendation 4.3	
<p>A listed entity should disclose its process to verify the integrity of any periodic corporate report it releases to the market that is not audited or reviewed by an external auditor.</p>	<p>As MLA is an unlisted public company it is not an ASX disclosing entity but does report annually to members and to the Commonwealth Government on its operations and financial results.</p>
Principle 5. Make timely and balanced disclosure	
Recommendation 5.1	
<p>A listed entity should have and disclose a written policy for complying with its continuous disclosure obligations under listing rule 3.1.</p>	<p>As MLA is an unlisted public company it is not an ASX disclosing entity but does report annually to members and to the Commonwealth Government on its operations and financial results.</p>
Recommendation 5.2	
<p>A listed entity should ensure that its board receives copies of all material market announcements promptly after they have been made.</p>	<p>As MLA is an unlisted public company it is not an ASX disclosing entity.</p>
Recommendation 5.3	
<p>A listed entity that gives a new and substantive investor or analyst presentation should release a copy of the presentation materials on the ASX Market Announcements Platform ahead of the presentation.</p>	<p>As MLA is an unlisted public company it is not an ASX disclosing entity.</p>
Principle 6. Respect the rights of security holders	
Recommendation 6.1	
<p>A listed entity should provide information about itself and its governance to investors via its website.</p>	<p>MLA provides information about itself and its governance framework on its website.</p>
Recommendation 6.2	
<p>A listed entity should have an investor relations program that facilitates effective two-way communication with investors.</p>	<p>MLA has a Communications team and program to promote effective two-way communication with members, levy payers, representative councils and the Commonwealth Government.</p>
Recommendation 6.3	
<p>A listed entity should disclose how it facilitates and encourages participation at meetings of security holders.</p>	<p>Information about how MLA facilitates and encourages participation by members at meetings is on MLA's website.</p>
Recommendation 6.4	
<p>A listed entity should ensure that all substantive resolutions at a meeting of security holders are decided by a poll rather than by a show of hands.</p>	<p>Polls are conducted and managed by an independent external body for all substantive resolutions at the MLA AGM.</p>

How we're governed *continued*

Principle/recommendation	Description/reference of disclosure/compliance
Principle 7. Recognise and manage risk	
Recommendation 7.1	
<p>The board of a listed entity should:</p> <p>(a) (a) have a committee or committees to oversee risk, each of which:</p> <ol style="list-style-type: none"> 1. has at least three members, a majority of whom are independent directors; and 2. is chaired by an independent director, and disclose: 3. the charter of the committee; 4. the members of the committee; and 5. as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or <p>(b) if it does not have a risk committee or committees that satisfy (a) above, disclose that fact and the processes it employs for overseeing the entity's risk management framework.</p>	<p>The Board has established an Audit, Finance and Risk Committee which is structured so that it:</p> <ul style="list-style-type: none"> ■ consists of only non-executive, independent directors; ■ is chaired by an independent chair who is not Chair of the Board; and ■ consists of at least three members of the Board. <p>The charter of the committee is on MLA's website.</p> <p>Refer also to the section about the Audit, Finance and Risk Committee in the 'Corporate Governance Statement'.</p>
Recommendation 7.2	
<p>The board or a committee of the board should:</p> <p>(a) review the entity's risk management framework at least annually to satisfy itself that it continues to be sound and that the entity is operating with due regard to the risk appetite set by the board; and</p> <p>(b) disclose, in relation to each reporting period, whether such a review has taken place.</p>	<p>Refer to the section about the Audit, Finance and Risk Committee and Risk Management sections in the 'Corporate Governance Statement'.</p>
Recommendation 7.3	
<p>A listed entity should disclose:</p> <p>(a) if it has an internal audit function, how the function is structured and what role it performs; or</p> <p>(b) if it does not have an internal audit function, that fact and the processes it employs for evaluating and continually improving the effectiveness of its governance, risk management and internal control processes.</p>	<p>Refer to the section about the Internal Audit program in the 'Corporate Governance Statement'.</p> <p>In addition to the internal audits undertaken by KPMG, MLA's own Group Risk and Compliance Manager works in parallel with KPMG and undertakes a number of reviews of overseas offices to ensure compliance with MLA policy and controls.</p>
Recommendation 7.4	
<p>A listed entity should disclose whether it has any material exposure to environmental and social risks and, if it does, how it manages or intends to manage those risks.</p>	<p>Refer to the section about MLA's Risk Management on page 56 of this Annual Report. A risk register is maintained to outline identified risks and how they are managed and monitored within the Board's risk appetite and is broadly engaged with across the business. Mitigation strategies are regularly monitored by both the Audit, Finance and Risk Committee and the Board.</p>
Principle 8. Remunerate fairly and responsibly	
Recommendation 8.1	
<p>The board of a listed entity should:</p> <p>(a) have a remuneration committee which:</p> <ol style="list-style-type: none"> 1. has at least three members, a majority of whom are independent directors; and 2. is chaired by an independent director, and disclose: 3. the charter of the committee; 4. the members of the committee; and 5. as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or <p>(b) if it does not have a remuneration committee, disclose that fact and the processes it employs for setting the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive.</p>	<p>The Board has established a Remuneration Committee which is structured so that it:</p> <ul style="list-style-type: none"> ■ consists of three non-executive, independent directors; and ■ is chaired by an independent chair. <p>The charter of the committee is on MLA's website.</p> <p>Refer also to the Remuneration Committee and Remuneration and performance arrangements sections in the 'Corporate Governance Statement'.</p>
Recommendation 8.2	
<p>A listed entity should separately disclose its policies and practices regarding the remuneration of non-executive directors and the remuneration of executive directors and other senior executives.</p>	<p>Refer to the Remuneration and performance arrangements section in the 'Corporate Governance Statement'.</p>
Recommendation 8.3	
<p>A listed entity which has an equity-based remuneration scheme should:</p> <p>(a) have a policy on whether participants are permitted to enter into transactions (whether through the use of derivatives or otherwise) which limit the economic risk of participating in the scheme; and</p> <p>(b) disclose that policy or a summary of it.</p>	<p>Not applicable as MLA does not have an equity-based remuneration scheme.</p>



“I believe graziers have a bigger part to play in the climate change solution than most people realise, and we can’t go without protein. We need to do it successfully and economically, and we need to consider the environment.”

Darren Hamblin - Middelmount QLD

Who we are

MLA Board as at 30 June 2021



Alan Beckett Chair

BEc, FICA, GAICD
 Director since November 2014

Mr Beckett runs an Angus breeding and background operation in Yea, Victoria. He brings 40 years' experience with a major professional services firm, practising in the area of audit and corporate services to large companies with an emphasis on listed public companies along with practical experience in doing business in Oceania, South-East Asia, China, Japan and India. Mr Beckett is Chair of Defence Health Limited, a non-executive director of Westbourne Capital Pty Ltd and Westbourne Credit Management Limited.

Previous roles

Chairman of ASX-listed Basper Limited (formerly Berklee Ltd), Deputy Chairman of the Department of Defence Audit & Risk Committee, independent member of the Audit & Risk Committee of Reserve Bank of Australia's wholly owned subsidiary, Note Printing Australia Limited.

Chair Director
 Director Member
 Member



Jason Strong Managing Director

MAICD
 Appointed 25 March 2019

Mr Strong has more than 30 years' red meat and livestock experience, knowledge and connections from the farm through to the end consumer in both domestic and international markets. He is a well-recognised and respected senior executive with extensive skills in commercial and industry business management and administration, supply chain development, meat science and grading, genetics and marketing as well as on-farm experience.

Previous roles

Chair EU and UK Red Meat Market Access Taskforce, CEO of Smithfield Cattle Company, Managing Director of AA Co, MLA's regional manager in Europe and Russia, Pfizer (now Zoetis), past Chair of the Australian Beef Industry Foundation. Manager and coach of the Australian Inter Collegiate Meat Judging Team and councillor and NSW Chairman and National Vice President of Cattlemen's Union of Australia.

Managing Director
 Chair Director
 Chair Director



Robert Fitzpatrick

BEc, LLB, MBA, GAICD
 Director since November 2015

Mr Fitzpatrick is an industry and technology expert with more than 30 years' experience in senior executive roles across the spectrum of large corporates, government agencies, and small and medium enterprises and start-ups. He has a detailed understanding of industry representative bodies, research and higher education, retail, fast-moving consumer goods, telecommunications, and information and communications technology sectors. Mr Fitzpatrick has a passion for improving the integrity and efficiency of Australia's agricultural sector, applying new analytics to improve on-farm productivity, de-bottleneck supply chains and reduce the cost of moving product from farm gate to global markets. Mr Fitzpatrick is director of the Australian Academic and Research Network, NPS MedicineWise, Laava and Farmbot.

Previous roles

Board and senior executive roles at McKinsey & Company, Optus, ShopFast, Monitoring Division Inc and wishlist.com.au, councillor of Charles Sturt University, senior executive of Data61 (formerly NICTA) and CEO of Australian Information Industry Association, Gelion UK and Gelion Technologies.

Director Member
 Chair



Erin Gorter

🎓 BA (education), GAICD
📅 Director since November 2015

Ms Gorter is a rural industry consultant with many years of experience as a WA livestock producer. Ms Gorter comes from a farming background and was a landholder and involved in running a mixed farming operation in Kojonup, WA, producing prime lamb, wool and grains, conducting sheep trading and a small amount of agroforestry for nearly 30 years. Ms Gorter runs her own business in providing business and industry management advice and events planning in rural areas. She was awarded the WA RIRDC Rural Women's Award Runner Up in 2010 and is a director of AgVivo and the Grower Group Alliance.

Previous roles

Producer representative on the Board of the WA Meat Industry Authority, non-executive director on Primary Industries Education Foundations Australia and managed all aspects of two WA-based grower production groups.

MLA Director R Chair
R&D Member



Andrew Michael

🎓 GAICD
📅 Director since November 2017

Mr Michael is a fourth generation farmer, working his 1,500ha family farm at Snowtown, SA. Over the last 45 years he's built and operated a largescale sheepmeat and wool business including both terminal and maternal sheep. He has extensive experience in the use of breeding technologies in both the sheep and cattle industries, and for over 35 years, has incorporated all the latest leading-edge animal breeding technologies available.

Mr Michael is a great supporter and user of all sheep industry groups, including Sheep CRC, Sheep Genetics, Information Nucleus Flock and many more. For many years he's had a close association with commercial producers all round Australia, New Zealand and South America, holding presentation and educational field days and helping their marketing and genetic selection programs.

Previous roles

President of the Royal Adelaide Show Pastoral Committee, Board member of the Lumeah Trust, member with SA Sheep Disease Management Committee focusing on OJD and Spider Syndrome, and an Australian White Suffolk Foundation committee member, honorary life member and Distinguished Service Award member.

MLA Director ISC Director
R&D Member



Russell Lethbridge

🎓 Dip Rural Bus Mgt,
Cert AH & FarmEng (Hons), GAICD
📅 Director since November 2017

Mr Lethbridge, with his family, runs Werrington Cattle Company, a commercial beef cattle breeding, growing and fattening enterprise in northern Queensland. The Werrington business runs over 13,000 head of cattle and comprises a breeding program on 120,000ha of natural eucalypt forest country, approximately 250km west of Townsville and 200km north of Hughenden in north Queensland. The business also consists of Rainmore Station, a 27,000ha property near Alpha in central Queensland. Mr Lethbridge has a deep understanding of cattle production systems, managing breeder and feeder cattle under extreme environmental conditions and pasture nutrition levels, utilising genetic selection and strategic herd management to achieve production and business success.

Previous roles

Chair of the Hann Highway Action Group, an elected representative of AgForce for seven years, beginning as Regional Vice President for the north region, then as Regional President and Board Member and member of AgForce Finance Audit and Risk and Agribusiness Finance Drought and Climate Policy Committees. Member of the steering committee for the Northern Gulf Resource Management.

MLA Director ISC Director
A Member

Who we are *continued*

MLA Board *continued*



Manny Noakes

BSc, Dip Nut & Diet, PhD, GAICD
 Director since November 2018

Professor Noakes is a research scientist in nutrition and health with over 30 years of R&D and nutrition communication experience. She has extensive knowledge in the food regulatory system and functional food substantiation, as well as the role of red meat in human nutrition. She has also published research on diet and sustainability and challenged the environmental agenda from a food and health perspective.

Professor Noakes was instrumental in the development of the CSIRO Total Wellbeing Diet which positions red meat as part of a healthy diet for weight control and has been further commercialised to a successful online program.

Professor Noakes currently runs her own nutrition consultancy and is a Fellow of the Nutrition Society of Australia.

Previous roles

Senior Principal Research Scientist and Director for the Nutrition and Health Program at CSIRO, and a member of the National Committee for Nutrition for the Australian Academy of Sciences as well as on its Expert Working Group Special Project: 'Nourishing Australia: A decadal plan for nutrition science'.

Director

Member



Jo Pye

BSc Food & Nutrition, MBA,
Diploma in Leadership Coaching, GAICD
 Director since November 2018

Ms Pye has 20 years' experience in large-scale customer engagement, marketing and strategy within the fast-moving consumer goods industry (with a focus on food and beverage) across numerous roles covering food science, product and strategic marketing management, consumer insights and strategic planning. She has held senior positions across local, regional (APAC) and global (USA, UK, APAC) markets including a three-year assignment in Shanghai, China where she was responsible for strategic planning and implementation to drive regional business growth. Ms Pye has excelled in both global corporate and lean start up environments and in designing and delivering high quality strategic market advisory and implementation projects.

Ms Pye currently runs her own coaching business, HumblePye, specialising in leadership, food and wellness.

Previous roles

Director of Food Service for The NPD Group, Global Head of Insights & Customer Experience at Watch Me Think, Global Director of Insights & Client Service, Mintel International, Marketing Director at Australia & NZ DuPont (formerly Danisco).

Director

Member



John Lloyd

BSc, MBA
 Director since November 2019

Mr Lloyd runs a small agricultural enterprise with his family at Borenore, NSW. He has a deep understanding of red meat industry dynamics, knowledge and connections across the agri-food ecosystem including the RDC sector, government and research providers. Mr Lloyd has led and created new funding models catering for longer-term strategic issues such as export markets, biosecurity, health and nutrition, pollination, major pests, intensive farming systems and urban greening as well as accessing broader and non-traditional sources of investment. Mr Lloyd has also completed the Company Directors course with the Australian Institute of Company Directors. He is a Member of Council of Charles Sturt University, a director of Fisheries RDC, Agribusiness Australia and Menari Business Solutions Pty Ltd.

Previous roles

CEO of Horticulture Innovation Australia/ HAL, Managing Director of Case IH/ New Holland ANZ, General Manager of Commercial Incitec Pivot, and General Manager of Merchandise Wesfarmers Dalgety.

Director

Chair

Member

MLA Leadership Team as at 30 June 2021



Joanne Taylor-Craig Company secretary

Appointed March 2020

Ms Taylor-Craig joined MLA in 2012 and was appointed as Company Secretary in 2020. She is responsible for all governance matters, ensuring compliance with all corporate and ethical standards and monitoring that board policy and procedures are followed.

Previous roles
PwC.

Director

Jason Strong Managing Director

MAICD
 271* employees

See page 62
for Mr Strong's
biography.



Andrew Ferguson Chief Operating Officer

BA, CA 47* employees

Mr Ferguson joined MLA as Chief Financial Officer in 2016 and was recently appointed as Chief Operating Officer. He is responsible for MLA's financial integrity, including reporting, information systems and compliance, as well as the legal, human resources and risk functions. He is a chartered accountant with over 25 years of experience in both the UK and Australia.

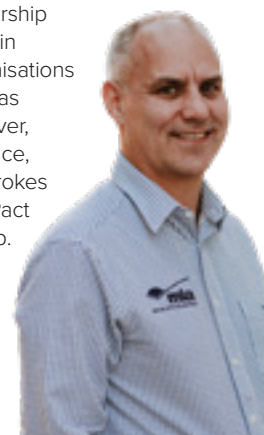


Director
 Director
 Director

Nathan Low General Manager – Marketing and Insights

MCom 46* employees

Mr Low joined MLA in July 2020 and leads the Marketing and Insights team which includes brand marketing, business development, nutrition, consumer insights, industry insights and the National Livestock Reporting Service. Nathan brings extensive global and domestic marketing, brand and consumer insight experience in large fast-moving consumer goods, retail, e-commerce, agribusiness and manufacturing organisations. Nathan has held senior management, business development and marketing leadership roles in organisations such as Unilever, SunRice, Ladbroke's and Pact Group.



Dr Jane Weatherley Chief Executive Officer, Integrity Systems Company

PhD (Farming sys), GAICD 35 employees

Dr Weatherley took on the role of Chief Executive Officer of Integrity Systems Company (ISC) in 2016. Before this role, she was General Manager – Livestock Productivity, managing Meat Standards Australia, livestock genetics and sheep productivity RD&E. Prior to MLA, Dr Weatherley held positions spanning red meat extension, farming systems research and development and evaluation.



Who we are *continued*



MLA Leadership Team *continued*



Lucy Broad
General Manager – Communications

 BAGSc, GAICD  33* employees

Ms Broad joined MLA in June 2020 and leads MLA's Communications team. She has brought a wealth of experience in strategic communications, extension and behaviour change across Australia's agricultural industries

to the organisation. Ms Broad has held many senior management and leadership roles over her career, including heading up the Australian Broadcasting Corporation's national rural department, Managing Director of Cox Inall Communications, and General Manager Communication and Extension with the Grains Research and Development Corporation.

Michael Crowley
General Manager – Research, Development and Adoption

 B. Rural Science, Grad Cert Business Administration, GAICD
 75* employees

Mr Crowley joined MLA in 2009 as the manager of Meat Standards Australia (MSA). In 2012 he moved to Brussels as MLA's International Business Manager for EU and Russia. He returned in 2015 to manage Meat Standards Australia, then joined MLA's Leadership Team in 2016. Prior to joining MLA, Mr Crowley held commercial positions within red meat processing, production, procurement, marketing and sales.



Dr Sam Bucolo
Design Strategy and Leadership Lead

 BA, CA  0* employees

Dr Bucolo joined MLA in 2017 and focuses on enhancing collaboration and innovation models to drive research impact. He oversaw the development of MLA's *Strategic Plan 2025* and will continue to shape MLA's ways of working as it implements this strategy. Prior to joining MLA, Dr Bucolo was a Professor of Design Innovation at the University Technology Sydney and Queensland University of Technology. In these roles, he led various innovation programs to drive transformational change.














Andrew Cox
General Manager – International Markets

 BEc  40* employees

Mr Cox joined MLA in 2006 after eight years managing insights projects for clients such as Unilever, Campbell-Arnotts, Kelloggs and Ferrero. Upon joining MLA, he took on a number of roles within the domestic marketing team. Mr Cox moved to Tokyo in 2014 to manage MLA's operations in Japan and Korea before taking on the General Manager – International Markets role in January 2020. As well as extensive markets experience, Mr Cox also brings an agricultural background to his position at MLA.

Key: MLA Subsidiary Companies and Committees

 Meat & Livestock Australia	 Red Meat Traceability Systems Pty Ltd	 Selection Committee
 MLA Donor Company Limited	 AUS-MEAT Limited	 Audit, Finance and Risk Committee
 Integrity Systems Company Limited	 Remuneration Committee	 Research & Development Investment Committee

*This excludes MLA Leadership team, Executive to MD and Company Secretary

MLA organisational chart as at 30 June 2021



Who we are *continued*

Our subsidiary companies

MLA Donor Company

MLA Donor Company (MDC) accelerates innovation across the value chain so the Australian red meat and livestock industry can remain competitive on the world stage. It does this by attracting commercial investment from individual enterprises and others that share a mutual interest to co-invest in innovation that will benefit the industry (see figure below).

MDC supports MLA's strategic purpose of fostering the long-term prosperity of the Australian red meat and livestock industry via:

- extending MLA's strategic priorities into future-focused, transformational impact areas
- facilitating capability and adoption of innovation by industry
- acting as a catalyst to accelerate the development of innovations with new types of provider partnerships
- partnerships that facilitate 'big picture' change in the industry
- engaging leading global providers and entrepreneurs that bring new ideas and new value to the industry
- attracting new investment partners to co-develop key priority areas.

MDC's strategic investment portfolio is directly aligned to extending the achievement of *Red Meat 2030* and MLA's *Strategic Plan 2025*.

Further detail about MDC is available at mla.com.au/mdc

Integrity Systems Company

Integrity Systems Company (formerly NLIS Ltd) is a wholly owned subsidiary of MLA. Its expanded remit began in September 2016, being responsible for delivering the red meat and livestock industry's traceability and quality assurance systems: the Livestock Production Assurance (LPA) program, National Vendor Declarations (NVDs) and the National Livestock Identification System (NLIS) (see figure below).

Integrity Systems Company (ISC) was launched following a recommendation by industry and government in 2015 – through their SAFEMEAT partnership – that one company be given responsibility for delivering a fully integrated integrity system. The streamlined structure helps to ensure resources are more effectively directed to further develop and improve these key systems that underpin market access, customer expectations and the safety of Australian red meat and livestock. ISC's strategic investment portfolio is directly aligned to extending the achievement of *Red Meat 2030* and MLA's *Strategic Plan 2025*.

Figure 3: The role of MDC

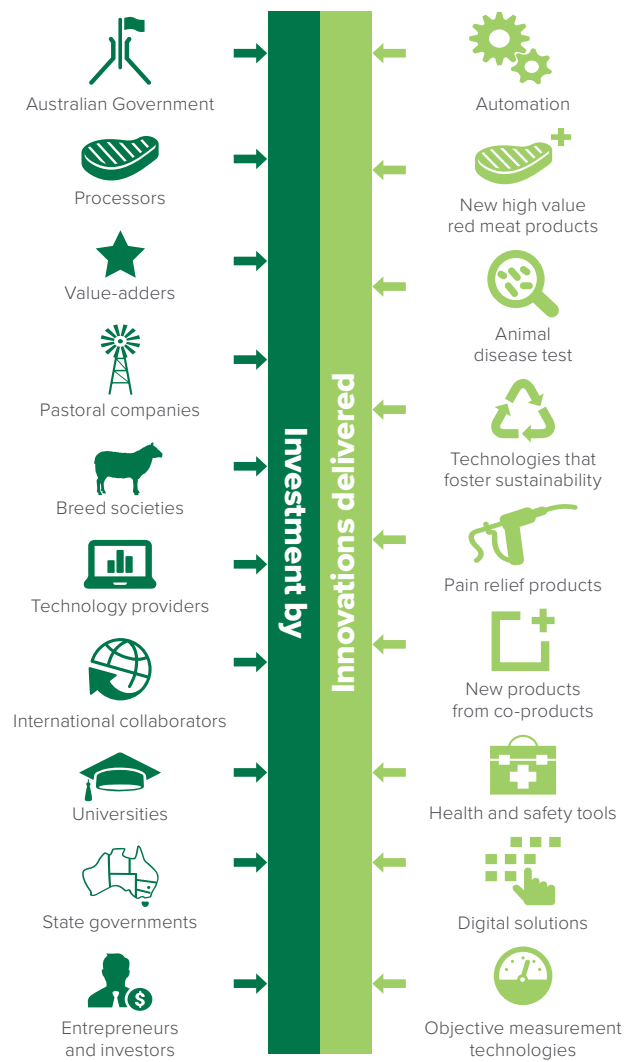
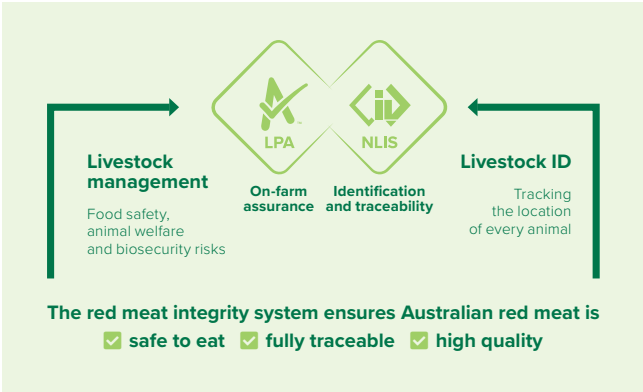


Figure 4: The role and scope of Integrity Systems Company



Human resources

At 30 June 2021, MLA had 279 employees, both domestically and internationally.

Voluntary turnover for the reporting year was 13.9% compared to 11.6% in 2019–20. Total turnover in 2020–21 was 20.3%, which includes voluntary and involuntary turnover and end of fixed-term contracts.

MLA employee profile at 30 June 2020

Table 3: Composition of MLA's employees

	2016–17	2017–18	2018–19	2019–20	2020–21
Female	131	140	153	153	152
Male	112	125	118	129	127
Full-time	208	232	231	248	248
Part-time	35	33	40	34	31
Australian-based ¹	205	222	227	239	242
Overseas-based ²	38	43	44	43	37
Total staff	243	265	271	282	279

¹Includes MLA Leadership Team but excludes Board of Directors and Company Secretary as well as employees on parental leave or extended leave of absence.

²Part-time total includes two casual employees. ²Overseas-based includes both locally engaged employees and expatriates/international assignees.

Performance and remuneration process

MLA's performance management framework aligns MLA's strategic priorities and organisational values to individual performance and outcomes to encourage, recognise and reward employee performance.

Employee remuneration is reviewed on an annual basis, taking into consideration changes to the Consumer Price Index, external salary survey information and employee development and performance.

During 2020–21 MLA continued to benchmark roles against remuneration data from global human resources consulting firm Aon Hewitt to ensure remuneration remains competitive to attract and retain talent.

The total employee benefit expense in 2020–21 was \$38,787,000 (see page 88).

Training and professional development

MLA invests in ongoing training and professional development so employees have the necessary knowledge and skills to deliver MLA's Strategic Plan while enabling growth and innovation to build capability for the future.

In 2020–21 MLA continued to support employees through training and professional development through its 70/20/10 model approach to learning and development:

70% of learning and development is on the job (including workplace tasks and stretch assignments)

20% is through others (including managers, peers and coaching arrangements)

10% is through formal learning initiatives (such as risk management, performance management and anti-bullying and harassment training, and training courses identified between individual employees and their managers).

MLA also provides financial and study assistance to employees undertaking a professionally recognised qualification related to their work such as an undergraduate or postgraduate course at university, TAFE or other recognised education institutions.

In 2020–21, assistance was provided to 23 employees studying undergraduate and postgraduate courses ranging from rural science to agriculture, sustainability, marketing and public relations, international trade and business management as well as professional certifications.

Who we are *continued*

Employee engagement

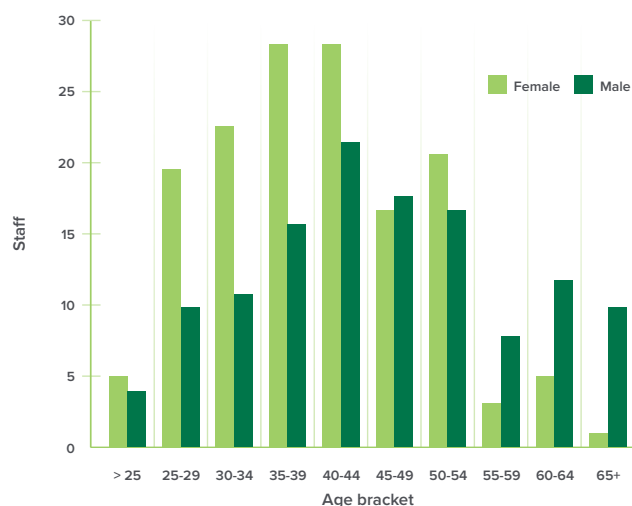
As a service provider to industry, MLA's employees are vital to delivering outcomes that support MLA's strategic priorities for the red meat industry. MLA undertakes an annual employee engagement survey and pulse surveys to measure engagement and strive for continuous improvement across the company.

Diversity and gender equality

MLA is committed to diversity, equal employment opportunity and inclusive workplace practices. The diversity and inclusion policy can be viewed at mla.com.au.

At 30 June 2021, MLA's employee profile reflects a balanced gender profile with greater female representation between 25–44 years of age (see figure below).

Figure 4: **MLA employees – age and gender composition**



Flexible work and support

Flexible working arrangements were extended to all employees in 2020–21 during the COVID-19 pandemic. This included working from home and flexible hours of work around care giving responsibilities.

MLA continues to offer employees flexible work arrangements that support work/life balance, including family or caring responsibilities. Provisions include flexible hours of work, telecommuting, part-time work, paid parental leave and personal/carer's leave.

MLA also offers employees access to an employee assistance program and has training and formal policies to educate and protect employees against discrimination, harassment and bullying.

“We are determined to leave the land in a better state than what we got it and to not only regenerate the soils and the pastures but also the trees, by putting in a wildlife corridor. We want to make this something that generations to come will be proud of.”

Erica and Stuart Halliday - 'Ben Nevis' Angus Stud, Walcha NSW



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Leather Cattle Co. Banana QLD



Total investment increased by 3.2% in 2020–21 to \$282.5 million. The uplift is primarily attributable to R&D investment, which increased by \$7.6m or 4.4%.

Financial summary

Revenue and expenditure summary

Status	2016–17	2017–18	2018–19	2019–20	2020–21	% change 2020–21 compared with 2019–20
Grassfed cattle levies	53.8	55.3	58.9	63	52.8	-16.2%
Grainfed cattle levies	10.9	11.3	11.4	13.9	12.8	-7.9%
Lamb/mutton levies	35.8	39.1	37.3	37	35.2	-4.9%
Goat levies	0.7	0.7	0.5	0.5	0.4	-20%
Total producer levies	101.2	106.4	108.1	114.4	101.2	-11.5%
Government contributions	52.1	80.4	80.9	78.5	85.7	9.2%
Other	47.2	85.7	80.8	76.7	73.1	-4.7%
Total revenue	200.5	272.5	269.8	269.6	260	-3.6%
Marketing, market access and insights	88.9	90.4	104.1	101.8	103	1.2%
Research and development	104.2	171.8	170.3	171.9	179.5	4.4%
Total expenditure	193.1	262.2	274.4	273.7	282.5	3.2%

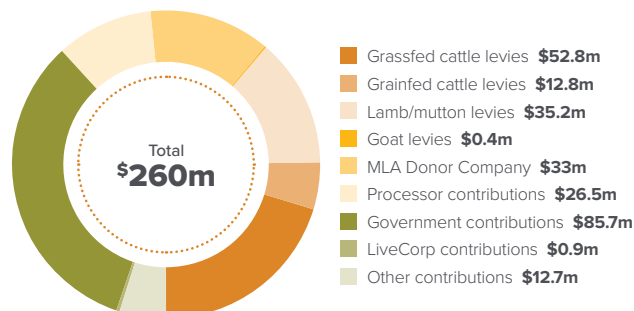
Revenue

MLA's total income of \$260.0m for 2020–21 is \$9.6m or 3.6% lower than the prior period.

Levy income decreased by \$13.2m or 11.5% to \$101.2m in 2020–21, as a result of improved weather conditions in several key production regions. The ensuing abundance of feed has encouraged stock retention, as the industry enters a herd and flock rebuilding phase. Although all producer levy streams decreased in 2020–21, the \$10.2m reduction in grassfed cattle transaction levies during the period was by far the greatest contributor to the reduction in dollar terms.

Government contributions of \$85.7m increased by \$7.2m or 9.2% during the period, which is primarily attributable to eligible Government matching contributions applied to the uplift in R&D investment.

Revenue summary

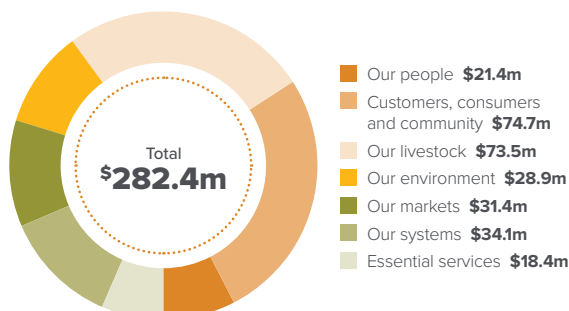


Expenditure

Total investment increased by 3.2% in 2020–21 to \$282.5 million. The uplift is primarily attributable to R&D investment, which increased by \$7.6m or 4.4% and has been assisted by an uplift in the red meat industry's Government matching cap. The cap is increasing as a function of the gross value of production of the red meat industry, which continues to enjoy strong demand and prices.

Marketing, market access and insights investment of \$103.0m increased by \$1.2m or 1.2%. The increase is partially driven by some investment deferred from 2019–20 that was impacted by COVID-19 restrictions, including marketing activities related to the Tokyo Olympics.

Expenditure summary

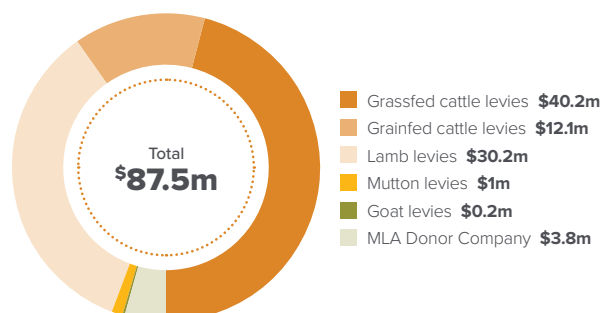


Retained earnings

MLA returned a deficit of \$22.5m in 2020–21, which reduced the Group's retained surplus as at 30 June 2021 to \$87.5m. The deficit is primarily the result of the deliberate draw-down on excess accumulated levy reserve balances, in accordance with MLA's Levy Reserve Policy. Overall, MLA's levy reserve balance decreased by 21.5m, which is a function of both softer levy income receipts and increased levy investment.

MLA Donor Company returned a deficit of \$950,000 as a result of lower access fee receipts.

Retained earnings by funding source 2020–21



Cash flow

MLA's cash balance decreased in 2020–21 as a result of a shift in investment mix from fixed term deposits to a managed fund, and because of the underlying operating deficit.

Financial summary *continued*

Income and expenditure by funding source 2020–21

		Goat		Mutton		Lamb		Total sheep		Grassfed cattle		Grainfed cattle	
		R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	M \$000
Animal health and welfare		1.3	-	127.9	-	788	-	915.9	-	468.5	-	-	-
Domestic market		10.2	25.7	65.2	106.6	392.5	8,511.9	457.7	8,618.5	621.5	10,395.8	222	1,272.5
International markets		0.8	78.9	60.3	352.1	195.4	9,874.6	255.7	10,226.7	237.2	24,280	171	2,883
Eating quality		-	-	60.5	65.4	751	697	811.5	762.4	754.6	953.4	305.3	356.7
Environmental sustainability		1.3	-	43.6	-	356	-	399.6	-	340.3	-	53.5	-
Feedlot		-	-	-	-	-	-	-	-	-	-	2,111.1	371.6
Integrity systems		38.1	114.2	205.7	573	1,244.2	1,889.6	1,449.9	2,462.6	2,154	4,771.6	642.6	2,835.5
Objective measurement		-	-	29.7	0.9	220.2	-	249.9	0.9	165.5	-	32.4	-
Producer adoption		74.8	19.3	161	147.1	1,337.3	1,514.6	1,498.3	1,661.7	986.3	1,301.7	-	-
Product and packaging innovation		3.8	-	28.1	-	199.5	-	227.6	-	92.5	-	-	-
Value chain information and efficiency		37.3	-	86.4	-	681.8	-	768.2	-	973.6	-	310.6	-
Productivity (off-farm)		-	-	-	-	-	-	-	-	-	-	-	-
Productivity (on-farm)		125.9	-	217.2	-	2,944.9	289.9	3,162.1	289.9	3,081.4	-	129	-
Capability building		4.5	60	38.3	19.6	402.1	831.7	440.4	851.3	459.6	971	38.8	477.2
Communication		8.4	3.9	34.3	116.2	549.2	3,076.5	583.5	3,192.7	376.5	4,368.8	68.1	770.5
AUS-MEAT		-	2	-	9.2	-	181.6	-	190.8	-	301.5	-	55.7
Total expenditure pre corporate services		306.4	304	1,158.2	1,390.1	10,062.1	26,867.4	11,220.3	28,257.5	10,711.5	47,343.8	3,930.5	9,022.7
Corporate services		35.4	29.8	127.4	135.7	1,119.6	2,621.3	1,247	2,757	1,167.2	4,610.3	441.4	877
Levy collection costs		1.3	1.1	4.1	5.2	40.2	102.4	44.3	107.6	38.6	170	15	31.4
Total expenditure		343	334.9	1,289.6	1,531	11,221.9	29,591.1	12,511.5	31,122.1	11,917.3	52,124.1	4,386.8	9,931.1
Income available	Levies	252.4	158.7	874.2	987.7	9,667.8	23,637.3	10,542	24,625	10,613.2	42,170.7	4,181.9	8,586.9
	Government												
	Processors												
	Live export												
	R&D partnerships												
	External												
Total actual income 2020–21		252.4	158.7	874.2	987.7	9,667.8	23,637.3	10,542	24,625	10,613.2	42,170.7	4,181.9	8,586.9
Surplus/(deficit)		-90.6	-176.2	-415.4	-543.3	-1,554.1	-5,953.8	-1,969.5	-6,497.1	-1,304.1	-9,953.4	-204.9	-1,344.2

Total cattle		Total levy funds		Processor		LiveCorp		External		Government	MLA
R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	M \$000	R&D \$000	Total \$000
468.5	-	1,385.7	-	-	-	-	-	3,179.1	-	4,564.8	9,129.6
843.5	11,668.3	1,311.4	20,312.5	422.3	1,323.8	3	6.9	-	492.1	1,736.7	25,608.7
254.3	27,163	510.8	37,468.6	32.9	1,814.6	410.3	451.2	545.2	476.1	1,499.2	43,208.9
1,059.9	1,310.1	1,871.4	2,072.5	43.1	-	-	-	216.8	315.2	2,131.3	6,650.3
393.8	-	794.7	-	2,788.7	-	-	-	4,855.4	3,639.8	8,438.8	20,517.4
2,111.1	371.6	2,111.1	371.6	12	-	-	-	751.4	-	2,874.5	6,120.6
2,796.6	7,607.1	4,284.6	10,183.9	1,957.1	965.1	8.1	19.8	695.6	33.4	6,945.4	25,093
197.9	-	447.8	0.9	298.4	-	-	-	2,567.7	1,554.7	3,313.9	8,183.4
986.3	1,301.7	2,559.4	2,982.7	-	-	-	-	1,256	31	3,815.4	10,644.5
92.5	-	323.9	-	102.3	-	-	-	887	-	1,313.2	2626.4
1,284.2	-	2,089.7	-	17.3	-	-	-	962	86.6	3,069	6,224.6
-	-	-	-	9,315.6	-	-	-	3,528.8	-	12,844.4	25,688.8
3,210.4	-	6,498.4	289.9	-	-	-	-	8,866.5	2,683.5	15,364.9	33,703.2
498.4	1,448.2	943.3	2,359.5	8,642.3	-	-	-	4,213.1	-	13,798.7	29,956.9
444.6	5,139.3	1,036.5	8,335.9	-	-	-	-	-	244.6	1,036.5	10,653.5
-	357.2	-	550							-	550
14,642	56,366.5	26,168.7	84,928	23,632	4,103.5	421.4	477.9	32,524.6	9,557	82,746.7	264,559.8
1,608.6	5,487.3	2,890.9	8,274.1	-	-	-	-	-	3,241.9	2,890.9	17,297.7
53.6	201.4	99.1	310.1						85.5	99.1	593.7
16,304.1	62,055.2	29,158.6	93,512.2	23,632	4,103.5	421.4	477.9	32,524.6	12,884.4	85,736.6	282,451.2
14,795.1	50,757.6	25,589.5	75,541.3								101,130.8
										85,736.6	85,736.6
				23,632	4,103.5						27,735.5
						421.4	477.9				899.3
								31,552.5			31,552.5
									12,906.9		12,906.9
14,795.1	50,757.6	25,589.5	75,541.3	23,632	4,103.5	421.4	477.9	31,552.5	12,906.9	85,736.6	259,961.2
-1,509.00	-11,297.60	-3,569.10	-17,970.90	-	-	-	-	-972.1	22.5	0	-22,490

Directors' report

The Board of Directors of Meat & Livestock Australia Limited ("MLA" or "the Company") has pleasure in submitting its report for the financial year ended 30 June 2021.

Directors

The names and details of the company's directors in office during the financial year and until the date of this report are as follows:

- Mr Alan Beckett
- Mr Jason Strong
- Mr Robert Fitzpatrick
- Ms Erin Gorter
- Mr Russell Lethbridge
- Mr Andrew Michael
- Dr Manny Noakes
- Ms Jo Pye
- Mr John Lloyd.

All directors were in office for the entire year unless otherwise stated.

Company secretary

Joanne Taylor-Craig joined MLA in April 2012 and was appointed Company Secretary in March 2020.

Subsidiaries

MLA Donor Company Limited

At 30 June 2021, the members of the board were Mr Jason Strong, Mr Alan Beckett and Mr Andrew Ferguson.

Integrity Systems Company Limited

At 30 June 2021, the members of the board were Mr Jason Strong, Mr Alan Beckett, Mr Russell Lethbridge and Mr Andrew Michael.

Directors' meetings

During the period 1 July 2020 to 30 June 2021 the MLA Group Board and its Committees held 6 meetings of directors. The attendances of the directors at meetings of the Board and of its committees were:

Board member	Scheduled meetings	Committees of the Board of Directors		
		Audit, Finance & Risk	Remuneration	Research & Development Investment
A Beckett	6 (6)	-	4 (4)	-
A Michael	6 (6)	2 (3)	-	2 (2)
E Gorter	6 (6)	3 (3)	4 (4)	2 (2)
J Pye	6 (6)	-	4 (4)	-
J Lloyd	6 (6)	5 (5)	-	2 (2)
M Noakes	6 (6)	-	2 (2)	2 (2)
R Fitzpatrick	6 (6)	5 (5)	-	-
R Lethbridge	6 (6)	5 (5)	-	-

The number of meetings for which the director was eligible to attend is shown in brackets.

Selection Committee

During the year, the Selection Committee held 3 meetings. The current members of the Selection Committee and their attendance at meetings are listed below. The number of meetings for which the selection committee member was eligible to attend is shown in brackets.

	Scheduled meetings
MLA director	
Alan Beckett	1 (1)
Erin Gorter	2 (2)
Robert Fitzpatrick	3 (3)
Peak council representative	
Tony Hegarty	2 (2)
Bryce Camm	3 (3)
Jamie Heinrich	3 (3)
Markus Rathsmann	1 (1)
MLA member elected representative	
Mick Hewitt	3 (3)
Jane Kellock	2 (2)
Peter Quinn	2 (2)
Tony Fitzgerald	3 (3)
Dan Radel	1 (1)
Mark Wootton	1 (1)

Principal activities

The major activities of Meat and Livestock Australia Ltd and its subsidiaries (the Group) during the financial year comprised:

- providing research and development support to the Australian red meat and livestock industry
- providing marketing and promotion services to the Australian red meat and livestock industry both domestically and overseas.

There have been no significant changes in the nature of these activities during the year.

Review and results of operations

Operating result for the period

The result of the Group for the financial year was a net deficit from continuing operations of \$22,490,000 (2020: net deficit of \$3,965,000). The deficit predominantly reflects the application of the MLA's Levy Reserve Policy, which required an increase in levy investment. The Accelerated Adoption Initiative also contributed to the result.

Group overview

The Group earned total revenue of \$259,961,000 (2020: \$269,688,000) which is comprised of the following:

- Transaction levies \$101,131,000 (2020: \$114,510,000)
- Research and development matching grants \$85,736,000 (2020: \$78,452,000)
- Research and development contributions (unmatched) \$6,194,000 (2020: \$11,083,000)
- Other income and revenues \$66,900,000 (2020: \$65,643,000)

Total income received/receivable was less than total expenditure, which resulted in a net deficit from continuing operations of \$22,490,000 for the year.

Significant changes in the state of affairs

There were no significant changes in the state of affairs of the Group.

Significant events after the balance date

No significant events after balance date.

Environmental regulation and performance

The Group does not have a material exposure to any environmental regulations.

Indemnification and insurance of directors and officers

Under its constitution, the Company may indemnify each director and each executive officer against any claim or any expenses or costs which may arise as a result of work performed in their respective capacities.

The Company paid an insurance premium in respect of a contract insuring all the directors, secretaries and executive officers of the group entities against all liabilities and expenses arising as a result of work performed in their respective capacities, to the extent permitted by law. The terms of that policy prohibit disclosure of the premium paid or the monetary limit of this indemnity.

Indemnification of auditors

To the extent permitted by law, the Company has agreed to indemnify its auditors, Ernst & Young Australia, as part of the terms of its audit engagement against claims by third parties arising from the audit (for an unspecified amount). No payment has been made to indemnify Ernst & Young during or since the financial year.

Rounding of amounts

The amounts contained in the financial report have been rounded to the nearest thousand dollars (where rounding is applicable) where noted (\$000) under the option available to the Company under ASIC Corporation (Rounding in Financial/ directors' Reports) Instrument 2016/191. The company is an entity to which this legislative instrument applied.

Registered office and principal place of business

Level 1, 40 Mount Street
North Sydney
New South Wales 2060
(02) 9463 9333

Auditor independence

The auditor's independence declaration which forms part of the Directors' report for the financial year ended 30 June 2021 has been received and can be found following this report.

This report has been made in accordance with a resolution of directors.



Alan Beckett
Chair



Jason Strong
Managing director

15 September 2021

Auditor's independence declaration



Ernst & Young
200 George Street
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Auditor's Independence Declaration to the Directors of Meat & Livestock Australia Limited

As lead auditor for the audit of Meat & Livestock Australia Limited for the financial year ended 30 June 2021, I declare to the best of my knowledge and belief, there have been:

- (a) no contraventions of the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- (b) no contraventions of any applicable code of professional conduct in relation to the audit.

This declaration is in respect of Meat & Livestock Australia Limited and the entities it controlled during the financial year.

Ernst & Young

Rob Lewis
Partner

Sydney

15 September 2021

Income statement

For the year ended 30 June 2021	Notes	Consolidated \$ '000	
		2021	2020
Continuing operations			
Revenues from continuing operations	3	259,961	269,688
Expenditure from continuing operations			
Animal Health and Welfare		9,130	12,836
Feedlot		6,121	7,440
Capability Building		29,957	21,265
Communication		10,653	10,201
Environmental Sustainability		20,518	15,216
Integrity Systems		25,093	19,347
International Markets		43,209	41,901
Objective Measurement		8,183	20,164
Producer Adoption		10,645	10,337
Product and Packaging Innovation		2,626	4,568
Productivity (Off-farm)		25,689	7,473
Productivity (On-farm)		33,703	49,005
Eating Quality		6,650	5,709
Domestic Market		25,609	26,924
Value Chain Information & Efficiency		6,224	3,262
AUS-MEAT		550	550
Corporate Services		17,891	17,454
Total expenditure		282,451	273,653
Net (deficit) from continuing operations		(22,490)	(3,965)
Total change in members' funds		(22,490)	(3,965)

The accompanying notes form an integral part of this Income statement.

Statement of comprehensive income

For the year ended 30 June 2021	Consolidated \$ '000	
	2021	2020
Net deficit from continuing operations	(22,490)	(3,965)
Other comprehensive income		
Items that may be subsequently reclassified to the income statement		
Cash flow hedges:		
(Loss) taken to equity	(32)	(30)
Transferred to Statement of comprehensive income	30	(157)
Other comprehensive (loss) for the year	(2)	(187)
Total comprehensive (deficit) for the year	(22,492)	(4,152)

The accompanying notes form an integral part of this Statement of comprehensive income.

Statement of financial position

As at 30 June 2021	Notes	Consolidated \$ '000	
		2021	2020
Current assets			
Cash and short-term deposits		64,107	145,246
Trade and other receivables	7	66,411	48,026
Prepayments and deposits	8	1,949	1,997
Total current assets		132,467	195,269
Non-current assets			
Property, plant and equipment	12	2,180	2,794
Intangible assets	13	5,494	4,818
Right of use assets	14	16,145	14,772
Other financial assets	15	58,799	1,080
Total non-current assets		82,618	23,464
Total assets		215,085	218,733
Current liabilities			
Trade and other payables	16	73,506	62,610
Provisions	17	2,216	2,083
Lease liabilities	14	3,367	225
Other liabilities	18	22,286	16,159
Total current liabilities		101,375	81,077
Non-current liabilities			
Provisions	19	1,290	1,206
Lease liabilities	14	15,855	17,393
Total non-current liabilities		17,145	18,599
Total liabilities		118,520	99,676
Net assets		96,565	119,057
Equity - members' funds			
Contributed equity	26	9,031	9,031
Retained surplus		87,566	110,056
Cash flow hedge reserve	20	(32)	(30)
Total equity - members' funds		96,565	119,057

The accompanying notes form an integral part of this Statement of financial position.

Statement of changes in equity

For the year ended 30 June 2021	Consolidated \$ '000			
	Contributed equity	Retained earnings	Cash flow hedge reserve	Total
As at 1 July 2019	9,031	114,021	157	123,209
Deficit for the year	-	(3,965)	-	(3,965)
Other comprehensive (loss)	-	-	(187)	(187)
Total comprehensive (loss)	-	(3,965)	(187)	(4,152)
As at 30 June 2020	9,031	110,056	(30)	119,057
Deficit for the year	-	(22,490)	-	(22,490)
Other comprehensive (loss)	-	-	(2)	(2)
Total comprehensive (loss)	-	(22,490)	(2)	(22,492)
As at 30 June 2021	9,031	87,566	(32)	96,565

The accompanying notes form an integral part of this Statement of changes in equity.

Statement of cash flows

For the year ended 30 June 2021	Notes	Consolidated \$ '000	
		2021	2020
Cash flows from operating activities			
Net (deficit)		(22,490)	(3,965)
Adjustments for:			
Net loss on disposal of property, plant and equipment		-	2
Depreciation of property, plant and equipment and right-of-use assets		4,271	3,586
Amortisation of software		2,275	1,340
Interest received		(805)	(3,679)
Right-of-use leases		-	5,197
Net foreign exchanges differences		-	161
Working capital changes:			
(Increase) in trade and other receivables		(18,385)	(6,712)
Decrease/(increase) prepayments and deposits		48	(81)
Decrease/(increase) in other financial assets		1	(1)
Increase/(decrease) in trade and other payables		10,896	(889)
Increase in other liabilities		6,125	16
Increase/(decrease) in provisions		217	(2,726)
Net cash flows from operating activities		(17,847)	(7,751)
Cash flows from investing activities			
Purchase of property, plant and equipment and right-of-use assets		(1,070)	(838)
Purchase of software		(2,951)	(3,193)
Purchase of other financial assets		(57,720)	-
Interest received		805	3,679
Net cash flows from investing activities		(60,935)	(352)
Cash flows from financing activities			
Net repayments of lease liability		(2,357)	(4,887)
Net cash flows from financing activities		(2,357)	(4,887)
Net (decrease) in cash held		(81,139)	(12,990)
Add opening cash brought forward		145,246	158,236
Closing cash carried forward		64,107	145,246

Notes to the financial statements

1. Corporate information

The financial report of Meat & Livestock Australia Limited and its subsidiaries ("the Group") for the year ended 30 June 2021 was authorised for issue in accordance with a resolution of the directors on 15 September 2021.

MLA has prepared a consolidated financial report incorporating the Company and the entities that it controlled during the financial year.

MLA is a company limited by guarantee incorporated in Australia.

The nature of the operations and principal activities of the Group are described in the Directors' report.

2. Summary of significant accounting policies

a. Basis of preparation

The financial report is a general-purpose financial report, which has been prepared in accordance with the requirements of the Corporations Act 2001, Australian Accounting Standards and other authoritative pronouncements of the Australian Accounting Standards Board (AASB). The financial report has also been prepared on a historical cost basis except for derivative financial instruments and financial assets which have been measured at fair value.

The financial report is presented in Australian dollars and all values are rounded to the nearest thousands (\$000).

b. Statement of compliance

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

New, revised or amending Accounting Standards and Interpretations adopted

No new, revised or amending Accounting Standards and Interpretations issued by the AASB that are mandatory for the current reporting period have been adopted. Any new or amended Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

c. Principles of consolidation

The consolidated financial statements comprise the financial statements of MLA and its subsidiaries (the Group) as at 30 June 2021 (as outlined in Note 10). Controls are achieved where the Group has power over the investee, exposure, or rights to variable returns from its involvement with the investee and the ability to use its power to affect its returns. The results of subsidiaries acquired or disposed during the year are included in the consolidated income statement and statement of comprehensive income from the effective date of acquisition or up to the effective date of disposal, as appropriate.

The financial statements of the subsidiaries are prepared for the same reporting period as the Group, using consistent accounting policies. All intercompany balances and transactions have been eliminated in full.

d. Cash and short-term deposits

Cash on hand and at banks and short-term deposits are stated at nominal value.

For the purposes of the consolidated Statement of cash flows, cash and cash equivalents includes cash on hand and at banks, and money market investments readily convertible to cash within two working days, net of outstanding bank overdrafts.

e. Trade and other receivables

Trade receivables are recognised and carried at original invoice amount less a provision for any uncollectible debts. An estimate for doubtful debts is made when there is objective evidence that the Group will not be able to collect the debt. Bad debts are written-off as incurred.

f. Taxes

Income tax

The Group is exempt from income tax under section 50–40 of the *Income Tax Assessment Act 1997*.

Goods and Services Tax (GST)

Revenue, expenses and assets are recognised net of the amount of GST except:

- where GST incurred on a purchase of goods and services is not recoverable from the taxation authority, in which case the GST is recognised as part of the cost of acquisition of the asset or as part of the expense item as applicable
- receivables and payables (except accrued income and expenditure) are stated with the amount of GST included.

The net amount of GST recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the Statement of financial position.

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

Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the taxation authority.

g. Revenue recognition

The Group recognises revenue under AASB 1058 or AASB 15 when appropriate. In cases where there is an 'enforceable' contract with a customer with 'sufficiently specific' performance obligations, the transaction is accounted for under AASB 15 where income is recognised when (or as) the performance obligations are satisfied (i.e. when it transfers control of a product or service to a customer). Revenue is measured based on the consideration to which the Group expects to be entitled in a contract with a customer and excludes amounts collected on behalf of third parties. In other cases, AASB 1058 applies when a NFP entity enters into transactions where the consideration to acquire an asset is significantly less than the fair value of the asset principally to enable the entity to further its objectives and the excess of the asset recognised (at fair value) over any 'related amounts' is recognised as income immediately.

Notes to the financial statements *continued*

The Group recognises revenues from the major business activities as follows:

- transaction levies – revenue is recognised in the period to which it relates based on confirmations received from the Levies and Revenue Service who collect and distribute levies to the Group
- research and development Commonwealth matching payments – revenue is recognised for the matching funding from the Australian Government to the extent that the entity obtains control of the funding, it is probable that the economic benefits comprising the funding will flow to the entity and the funding can be measured reliably. These conditions are considered to be met when approved eligible research and development expenditure has been incurred. Accrued matching payments represent unclaimed funding for the amount incurred on research and development
- research and development contributions (unmatched) – the company receives funding from various external parties (including the Department of Agriculture, Water and Environment and the Australian Government) to conduct collaborative research and development programs. Revenue is recognised when the company obtains control of the contribution or the right to receive the contribution based on conditions around expenditure incurred
- processor and live exporter contributions are recognised as revenue when the company obtains control of the contribution or the right to receive the contribution when it is probable that the economic benefits comprising the funding will flow to the entity and the funding can be measured reliably. These conditions are considered to be met based on conditions around expenditure incurred
- interest income is taken up as income on an accrual basis
- income generated from financial assets is recognised at fair value through profit or loss
- government grants are recognised when the Group obtains control of the grant or the right to receive the grant, which is considered to occur when all attaching conditions have been met. The grant received or receivable will be recognised as income when it is probable that the economic benefits of the grant will flow to the entity and the amount of the grant can be measured reliably.

h. Derivative financial instruments and hedging

The Group uses derivative financial instruments such as forward currency contracts and options contracts to hedge against the risks associated with foreign currency fluctuations. These contracts are initially recognised at fair value on the date they are entered into and are subsequently remeasured to fair value. Derivatives are carried as assets when their fair value is positive and as liabilities when their fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives, except for those that qualify as cash flow hedges, are taken directly to net surplus or deficit for the year.

The fair value of forward currency contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles.

For the purposes of hedge accounting, hedges are classified as cash flow hedges when they hedge exposure to variability in cash flows that is attributable either to a particular risk associated with a recognised asset or liability or to a forecast transaction.

A hedge of the foreign currency risk of a firm commitment is accounted for as a cash flow hedge.

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- there is 'an economic relationship' between the hedged item and the hedging instrument
- the effect of credit risk does not 'dominate the value changes' that result from that economic relationship
- the hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Hedges that meet the strict criteria for hedge accounting are accounted for as follows:

Cash flow hedges

Cash flow hedges are hedges of the Group's exposure to variability in cash flows that is attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction and that could affect the surplus or deficit. The effective portion of the gain or loss on the hedging instrument is recognised directly in equity while the ineffective portion is recognised in the Statement of comprehensive income.

Amounts taken to equity are transferred to the Statement of comprehensive income when the hedged transaction affects the surplus or deficit, such as when hedged income or expenses are recognised or when a forecast sale or purchase occurs. When the hedged item is the cost of a non-financial asset or liability, the amounts taken to equity are transferred to the initial carrying amount of the non-financial asset or liability.

If the forecast transaction is no longer expected to occur, amounts previously recognised in equity are transferred to the Statement of comprehensive income. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, amounts previously recognised in equity remain in equity until the forecast transaction occurs. If the related transaction is not expected to occur, the amount is taken to the Statement of comprehensive income.

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

i. Foreign currency translation

Both the functional and presentation currency of the Company and its subsidiaries is Australian dollars (\$). For each entity, the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded in the functional currency by applying the budget exchange rate and subsequently revaluing it to the average exchange rate of the month. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the balance sheet date.

All exchange differences in the consolidated financial report are taken to the Income statement. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item.

j. Impairment of assets

The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If any such indication exists, or when annual impairment testing for an asset is required, the Group makes an estimate of the asset's recoverable amount. When the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

k. Intangible assets

Intangible assets acquired are initially measured at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses.

The useful lives of intangible assets are assessed to be either finite or indefinite. Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at each financial year-end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, which is a change in accounting estimate. The amortisation expense on intangible assets with finite lives is recognised in the Income statement in the expense category consistent with the function of the intangible asset.

Intangibles are amortised as follows:

- Computer software - 1–5 years

l. Leases

Except for short-term leases and leases of low-value assets, right-of-use assets and corresponding lease liabilities are recognised in the statement of financial position. Right-of-use assets are depreciated over the term of the lease (included in operating costs) and interest expenses recognized in lease liabilities (included in finance costs). For classification within the statement of cash flows, the interests and principal portion of the lease payments are disclosed in financing activities. For lessor accounting, the standard does not substantially change how a lessor accounts for leases.

Right-of-use assets and lease liabilities

The Group applied a single recognition and measurement approach for all leases except for short-term leases and leases of low-value assets.

The right-of-use assets for most leases were recognised based on the amount equal to the lease liabilities, adjusted for any related prepaid and accrued lease payments previously recognised. Lease liabilities were recognised based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at the date of initial application.

Depreciation

Depreciation is provided on a straight-line basis on all right of use assets.

	Term of lease
Leasehold properties	1–10 years
Motor vehicles	3–5 years

Leasehold improvements

The cost of improvements to or on leasehold property is capitalised, disclosed as leasehold improvements, and amortised over the unexpired period of the lease or the estimated useful lives of the improvements, whichever is the shorter, if there is no certainty the Group will obtain ownership by the end of the lease.

m. Property, plant and equipment

Cost

All classes of property, plant and equipment are measured at cost, net of accumulated depreciation and accumulated impairment losses if any.

Depreciation

Depreciation is provided on a straight-line basis on all property, plant and equipment.

	Life
Leasehold improvements	Remaining term of lease
Plant and equipment	2–5 years
Furniture and fittings	3–5 years

The assets' residual values, useful lives and amortisation methods are reviewed and adjusted, if appropriate at each financial year end.

Notes to the financial statements *continued*

Derecognition and disposal

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal.

Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the income statement in the year the asset is derecognised. The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

n. Trade and other payables

Liabilities for trade and other payables are carried at amortised cost, which is the fair value of consideration to be paid in the future for goods and services received prior to the end of the financial year and which are unpaid. These amounts are unsecured and will be paid when due.

o. Financial assets

Financial assets are classified, at initial recognition, as subsequently measured at fair value through profit or loss.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss, and includes derivative instruments and listed equity investments. Fair values of these equity shares are determined by reference to published price quotations in an active market.

The classification of the financial asset is dependent on the financial asset's contractual cash flow characteristics and the Group's business model for managing them.

The Group holds financial assets with the objective to collect contractual cash flows and not in the business model of both collecting contractual cash flows and selling. The Group therefore measures financial assets at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. The financial assets are subsequently measured at fair value through profit and loss.

Financial Assets at fair value through profit or loss

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognised in the statement of profit or loss. This category includes derivative instruments and listed equity investments. Dividends on listed equity investments are recognised as income in the statement of profit or loss when the right of payment has been established. A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognised in profit or loss. Reassessment

only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

p. Financial liabilities

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

q. Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The expense relating to a provision is presented in the statement of profit or loss net of any reimbursement.

r. Unearned income

Unearned income consists of funds which have been received or invoiced but income recognition has been deferred to future years because the project milestones have not been met or the expenditure to which they relate has not been incurred.

s. Employee benefits

Provision is made for employee benefits accumulated as a result of employees rendering services up to the reporting date. These benefits include wages and salaries, annual leave, long service leave and other employee benefits.

Short-term employee benefits

Liabilities for wages and salaries, including non-monetary benefits, annual leave and long service leave expected to be settled wholly within 12 months of the reporting date are measured at the amounts expected to be paid when the liabilities are settled.

Other long-term employee benefits

The liability for annual leave and long service leave not expected to be settled within 12 months of the reporting date are measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on corporate bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

t. Fit-out contribution and rent-free period

The Company negotiated the lease of new premises in North Sydney in April 2013 which included incentives that involved a combination of a fit-out contribution and rent-free period. These incentives are treated as per AASB 16 lease standard.

u. Investment in associate

The Group's investment in its associate is accounted for using the equity method of accounting in the consolidated financial statements. The associate is an entity over which the Group has significant influence and that are neither subsidiaries nor joint ventures.

Under the equity method, investment in the associate is carried in the consolidated statement of financial position at cost plus post-acquisition changes in the Group's share of net assets of the associates. After application of the equity method, the Group determines whether it is necessary to recognise any impairment loss with respect to the Group's net investment in associates.

Pursuant to the constitution of the associate (AUS-MEAT), the Group has no entitlement to a share of the associate's net results. The Group is also not entitled to the net assets of the associate except in the event of a winding up of the associate.

The reporting dates of the associate and the Group are identical and the associate's accounting policies conform to those used by the Group for like transactions and events in similar circumstances.

Interests in associated entities are included in non-current assets at the recoverable amount. Detailed equity accounting information concerning the Group's material interests in its associate is provided in Note 9.

v. Leasehold make good provision

The Company has entered into a number of office premises lease agreements which include make good clauses. A make good clause requires the Company to restore the premises to its original condition at the conclusion of the lease. The provision has been calculated as the present value of the expected cost, which has been based on management's best estimate.

w. Current versus non-current classification

The Group presents assets and liabilities in the statement of financial position based on current/non-current classification. An asset is current when it is:

- expected to be realised or intended to be sold or consumed in the normal operating cycle
- held primarily for the purpose of trading
- expected to be realised within twelve months after the reporting period.

A liability is current when:

- It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period or
- there is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period.

The Group classifies all other liabilities as non-current.

3. Revenue from continuing operations

		Consolidated \$ '000	
	Notes	2021	2020
Revenues from operating activities			
Transaction levies	4	101,131	114,510
R&D Commonwealth matching payments		85,736	78,452
R&D contributions (unmatched)		6,194	11,083
Other income	5	64,237	62,947
Total revenues from operating activities		257,298	266,992
Revenues from non-operating activities			
Bank interest		553	2,695
Income from financial asset at fair value through profit or loss		2,110	-
Total revenues from non-operating activities		2,663	2,695
Total revenues from continuing operations		259,961	269,687

Notes to the financial statements *continued*

4. Transaction levies

	Consolidated \$ '000	
	2021	2020
Transaction levies:		
■ Grainfed cattle	12,769	13,911
■ Grassfed cattle	52,784	63,005
■ Lambs	33,305	34,560
■ Sheep	1,862	2,484
■ Goats	411	550
Total transaction levies	101,131	114,510

5. Other income

	Consolidated \$ '000	
	2021	2020
Processor contributions	26,540	12,921
Live exporter contributions	899	1,638
Co-operative funding	1,697	3,835
R&D partnership income	29,725	35,710
Sale of products or services	1,248	4,014
Other	4,128	4,829
Total other income	64,237	62,947

6. Expenses and losses

	Consolidated \$ '000	
	2021	2020
Depreciation and amortisation of non-current assets included in the Income statement:		
■ Leasehold improvements	602	630
■ Plant and equipment	489	561
■ Furniture and fittings	41	20
■ Intangible assets	2,275	1,340
■ Right of use assets	3,139	2,375
Total depreciation and amortisation of non-current assets	6,546	4,926
Loss on sale of assets	-	2
Operating lease rentals included in the Income statement (note 14)	1,327	1,793
Employee benefit expense:		
■ Wages and salaries	32,837	31,603
■ Workers compensation costs	113	97
■ Annual leave provision	2,386	2,292
■ Long service leave provision	576	(27)
■ Superannuation expense	2,874	2,698
Total employee benefit expense	38,787	36,663

7. Trade and other receivables (current)

	Consolidated \$ '000	
	2021	2020
Trade receivables, net	5,900	3,912
Accrued revenue		
▪ Levies	11,206	8,651
▪ R&D Commonwealth matching payments	33,654	28,612
▪ Other	13,197	5,262
Total accrued revenue	58,057	42,525
Other receivables	2,454	1,589
Total current receivables, net	66,411	48,026

There have been no movements in the provision for impairment loss.

The ageing analysis of trade receivables (net of impairment) is as follows:

Trade receivables (net of impairment)	Total	Current	Past due but not impaired \$ '000				
			1-30 days	31-60 days	61-90 days	91-120 days	>120 days
30 June 2021	5,900	5,870	30	-	-	-	-
30 June 2020	3,912	3,510	155	213	-	33	-

a. Allowance for impairment of receivables

A provision for impairment loss is recognised when there is objective evidence that a trade receivable is individually impaired (refer Note 2(e)). Financial difficulties of the debtor or defaulting in payments are considered objective evidence of impairment.

Receivables past due but not impaired are: \$30,000 (2020: \$401,000). Each business unit has been in contact with the relevant debtor and is satisfied that payment will be received in full. Other balances within trade and other receivables do not contain impaired assets and are not past due. It is expected these balances will be received when due.

b. Interest rate risk

Trade debtors, R&D matching grants, levies and other accrued revenue are non-interest bearing and generally on 14 to 30 day terms.

c. Security

The Group does not hold any collateral or security on trade receivables.

d. Credit risk

The carrying value at the reporting date approximate the fair value for each class of receivable. Details regarding credit risk exposure are disclosed in Note 27 (iii).

8. Prepayments and deposits

	Consolidated \$ '000	
	2021	2020
Prepayments	1,440	1,445
Deposits	509	552
Total prepayments and deposits	1,949	1,997

Notes to the financial statements *continued*

9. Investment in associate

	Consolidated \$ '000	
	2021	2020
Unlisted:		
■ AUS-MEAT Limited	-	-

AUS-MEAT Limited became an associated entity in 1998/99 and is jointly owned (50% each) by MLA and Australian Meat Processor Corporation Limited.

AUS-MEAT Limited is an independent company limited by guarantee with operations split into two principal areas, the Standards division and the Services division. It is incorporated in Australia.

MLA has a continuing commitment to support AUS-MEAT Limited. The contribution for the financial year ended 30 June 2021 was \$550,000 (2020: \$550,000).

Summary results of the associate entity	AUS-MEAT Limited \$ '000	
	2021	2020
Revenue	21,197	19,899
Accumulated surplus at beginning of the year	4,754	5,571
Net surplus/(deficit) for the year	386	(817)
Accumulated surplus at end of the year	5,140	4,754
Financial summary of associated entity		
Total current assets	10,223	9,967
Total non-current assets	4,498	4,633
Total current liabilities	3,958	4,041
Total non-current liabilities	773	955
Net assets	9,990	9,604

The investment in AUS-MEAT Limited has been taken up at nil value (2020:\$nil). There is no entitlement to a share of the net results or net assets except in the event of a winding up of the entity.

10. Investments in subsidiaries

The consolidated financial statements include the financial statements of MLA and the subsidiaries listed in the following table.

Name	% Equity Interest		Investment \$ '000	
	2021	2020	2021	2020
a) MLA Donor Company Limited	100	100	-	-
b) Integrity Systems Company Limited	100	100	-	-
			-	-

- a) MLA Donor Company Limited was incorporated in Australia on 6 August 1998 and is limited by guarantee. If the company is wound up, its Constitution states that MLA is required to contribute a maximum of \$5 towards meeting any outstanding obligations of the company.
- b) Integrity Systems Company Limited was incorporated in Australia on 24 December 2008 and is limited by guarantee. If the company is wound up, its Constitution states that MLA is required to contribute a maximum of \$5 towards meeting any outstanding obligations of the company.

11. Parent entity information

Information relating to Meat & Livestock Australia Ltd	\$ '000	
	2021	2020
Current assets	131,439	195,014
Total assets	210,485	215,702
Current liabilities	94,172	74,994
Total liabilities	111,212	93,427
Contributed equity	9,031	9,031
Reserves	(32)	(30)
Retained surplus	83,800	113,274
Total equity – Members' funds	92,799	122,276
Deficits for the year	(21,540)	(3,279)
Other comprehensive (loss) for the year	(32)	(30)

As at balance date, the parent entity has not entered into any material contractual commitments for the acquisition of property, plant or equipment other than as noted in the financial statements.

12. Property, plant and equipment

	Consolidated \$ '000	
	2021	2020
Plant and equipment		
At cost	5,697	5,397
Accumulated depreciation	(5,010)	(4,527)
Total plant and equipment	687	870
Furniture and fittings		
At cost	303	141
Accumulated depreciation	(138)	(97)
Total furniture and fittings	165	44
Leasehold improvements		
At cost	6,388	6,338
Accumulated depreciation	(5,060)	(4,458)
Total leasehold improvements	1,328	1,880
Total property, plant and equipment		
At cost	12,388	11,876
Accumulated depreciation	(10,208)	(9,082)
Total written down value	2,180	2,794

Notes to the financial statements *continued*

12. Property, plant and equipment *continued*

Reconciliations of the carrying amounts of property, plant and equipment at the beginning and end of the current financial year.

	Consolidated \$ '000	
	2021	2020
Plant and equipment		
Carrying amount at beginning	870	964
Additions	306	470
Disposals	-	(3)
Depreciation expense	(489)	(561)
	687	870
Furniture and fittings		
Carrying amount at beginning	44	61
Additions	162	3
Disposals	-	-
Depreciation expense	(41)	(20)
	165	44
Leasehold improvements		
Carrying amount at beginning	1,880	2,145
Additions	51	365
Disposals	-	-
Depreciation expense	(603)	(630)
	1,328	1,880

13. Intangible assets

	Consolidated \$ '000	
	2021	2020
Software		
At cost	17,476	14,525
Accumulated amortisation	(11,982)	(9,706)
Total software	5,494	4,818
Reconciliation		
Carrying amount at beginning	4,818	2,965
Additions	2,951	3,193
Amortisation expense	(2,275)	(1,340)
	5,494	4,818

14. Right of use assets

The Group leases motor vehicles, office and residential premises. Information about leases for which the Group is a lessee is presented below:

	Consolidated \$ '000	
	2021	2020
Property – right of use		
<i>At cost</i>	20,619	16,744
<i>Accumulated depreciation</i>	(4,621)	(2,205)
Total written down value	15,998	14,539
Reconciliations		
<i>At cost</i>		
Carrying amount at beginning	16,744	-
Additions	4,586	16,832
Disposals	(541)	(88)
Foreign exchange translation difference	(171)	-
	20,619	16,744
<i>Accumulated depreciation</i>		
Carrying amount at beginning	2,205	-
Additions	3,003	2,293
Disposals	(546)	(88)
Foreign exchange translation difference	(41)	-
	4,621	2,205
Total written down value	15,998	14,539
Motor vehicle – right of use		
<i>At cost</i>	329	315
<i>Accumulated depreciation</i>	(182)	(82)
Total written down value	147	233
Reconciliations		
<i>At cost</i>		
Carrying amount at beginning	315	-
Additions	151	315
Disposals	(136)	-
Foreign exchange translation difference	(1)	-
	329	315
<i>Accumulated depreciation</i>		
Carrying amount at beginning	82	-
Additions	135	82
Disposals	(34)	-
	182	82
Total written down value	147	233
Total right of use asset, net	16,145	14,772

Notes to the financial statements *continued*

14. Right of use assets *continued*

	Consolidated \$ '000	
	2021	2020
Lease Liabilities		
Less than one year	3,367	225
More than one year	15,855	17,393
Amounts recognised in Profit and Loss		
Lease interest on lease liabilities	943	955
Rent expenses relating to short term and low value leases	1,327	1,793

The Group leases motor vehicles and properties under agreements between 1 to 5 years in Australia and Overseas. There are options to extend under the property lease agreements.

15. Other financial assets

	Consolidated \$ '000	
	2021	2020
Financial assets at fair value through profit or loss	57,720	-
Other	1,079	1,080
	58,799	1,080

Financial assets at fair value through profit or loss include investments in a portfolio of listed equity shares, fixed income financial assets and real estates. Fair values of these assets are determined by reference to published price quotations in an active market.

Other financial assets consist of restricted cash which relates to cash held as rental bonds in bank account which is pledged as collateral to landlords for risks retained by the group.

16. Trade and other payables (current)

	Consolidated \$ '000	
	2021	2020
Trade payables (a)	30,105	19,575
Accrued R&D and other creditors (a)	40,029	39,944
Derivative financial instruments (b)	32	30
Employee entitlements		
▪ Annual leave	2,793	2,546
▪ Other	547	515
	73,506	62,610

a) Trade payables, accrued R&D and other creditors are non-interest bearing and are normally settled on 30-day terms. In the case of accrued R&D, any payments are further subject to milestones being satisfactorily completed.

b) Pursuant to Note 2(h), the Group remeasured to fair value its outstanding forward currency and option contracts as at year end.

17. Provisions (current)

	Consolidated \$ '000	
	2021	2020
Long service leave	2,216	2,014
Leasehold make good	-	69
Total current other liabilities	2,216	2,083

Movements in provisions	\$ '000		
	Long service leave	Leasehold make good	Total
Carrying amount at the beginning of the financial year	2,014	69	2,083
Additional provisions	287	-	287
Utilised	(213)	-	(213)
Amounts transferred from/(to) non-current during the year	128	(54)	74
Write back in provisions	-	(15)	(15)
Carrying amount at the end of the financial year	2,216	-	2,216

18. Other liabilities (current)

	Consolidated \$ '000	
	2021	2020
Unearned income	21,607	15,268
Other	679	891
Total current other liabilities	22,286	16,159

19. Provisions (non-current)

	Consolidated \$ '000	
	2021	2020
Long service leave	647	649
Leasehold make good	643	557
Total non-current provisions	1,290	1,206

Movements in provisions	\$ '000		
	Long service leave	Leasehold make good	Total
Carrying amount at the beginning of the financial year	649	557	1,206
Additional provisions	226	35	261
Utilised	(46)	-	(46)
Amounts transferred (to)/from current during the year	(128)	54	(74)
Write back in provisions	(54)	(3)	(57)
Carrying amount at the end of the financial year	647	643	1,290

Notes to the financial statements *continued*

20. Cash flow hedge reserve

	Consolidated \$ '000	
	2021	2020
At the beginning of the financial year	(30)	157
Net surplus on cash flow hedges	(32)	(30)
Transfer of cash flow hedge reserve to Statement of comprehensive income	30	(157)
Total cash flow hedge reserve (a)	(32)	(30)

- a) The full amount of hedged cash flows as at 30 June 2021 are expected to affect the Statement of comprehensive income within one year.

As at 30 June 2021, the Company did not have any portion of cash flow hedges deemed ineffective.

21. Employee entitlements

	Consolidated \$ '000	
	2021	2020
The aggregate employee benefit liability is comprised of:		
■ Provisions - current (refer note 17)	2,216	2,014
■ Provisions - non-current (refer note 19)	647	649
■ Payables - current (refer note 16)	3,339	3,061
	6,202	5,724

22. Remuneration of auditors

	Consolidated \$ '000	
	2021	2020
Amounts received or due and receivable by Ernst & Young for:		
■ auditing or reviewing of the financial report of the entity and any other entity in the consolidated entity	222,924	215,592
■ other services in relation to the entity and any other entity in the consolidated entity:		
– other non-audit services	48,012	191,980
	270,936	407,572

23. Director and executive disclosures

a. Details of key management personnel (KMP)

(i) Directors		(ii) Executives	
Alan Beckett	Chair	Lucy Broad	General Manager – Communications
Robert Fitzpatrick		Andrew Cox	General Manager - International Markets
Erin Gorter		Michael Crowley	General Manager – Research, Development and Adoption
Russell Lethbridge		Andrew Ferguson	Chief Operating Officer
John Lloyd		Nathan Low	General Manager – Marketing and Insights (appointed 21 July 2020)
Andrew Michael		Jane Weatherley	Chief Executive Officer - ISC
Manny Noakes			
Jo Pye			
Jason Strong	Managing Director		

(iii) Compensation of key management personnel by categories	2021	2020
Directors (a)		
Short-term benefits	1,315,219	1,340,458
Post-employment benefits	76,397	75,744
Other long-term benefits	4,345	2,389
(a)	1,395,961	1,418,591
Executives (b)		
Short-term benefits	2,341,659	2,612,042
Post-employment benefits	132,364	137,545
Other long-term benefits	34,197	36,119
(b)	2,508,220	2,785,706

a) Compensation includes all benefits paid, payable or provided by the entity, or on behalf of the entity, in exchange for services rendered to the entity. Compensation includes wages, salaries, superannuation and other employees' provisions.

b) Executive compensation refers to all compensation earned by the General Managers of the Company with the exception of the Managing Director whose compensation has been included under Directors' compensation.

b. Related party transactions

Directors of the Group and directors of its related parties, or their director-related entities, conduct transactions with entities within the Group that occur within a normal employee, customer or supplier relationship on terms and conditions no more favourable than those which it is reasonable to expect the entity would have adopted if dealing with the director or director-related entity at arm's length in similar circumstances. These transactions include the following and have been quantified below where the transactions are considered likely to be of interest to users of these financial statements:

- Mr John Lloyd is a Member of Council of Charles Sturt University which invoiced the company 2020-21: \$3,680,692 (2019-20: \$403,224) for various R&D projects including 'Addressing Herbicide Resistance for Mixed Farmers' and 'Eating quality potential of older female cattle' and postgraduate scholarships. The company has invoiced Charles Sturt University 2020-21: \$809,514 (2019-20: \$834,701) for a number of Rural R&D for Profit programs relating to dung beetle ecosystem engineers, as well as various MDC projects including 'Diagnostic technologies in the beef feedlot sector' and 'Creating a dairy beef supply chain to increase the value and volume of beef and veal products.'
- Mr Russell Lethbridge is a Member of Agforce Queensland which invoiced the company 2020-21: \$39,126 (2019-20: \$14,300) for Pasture Dieback project. The company has invoiced AgForce Queensland 2020-21: \$9,240 (2019-20: \$124,740) for an MDC project relating to 'Adoption of best practice vertebrate pest control in Northern Queensland'
- Mr Rob Fitzpatrick is a Director of Farmbot which invoiced the company 2020-21: \$2,434 (2019-20 \$77,143) for Australian Digital Farm Program rollout. Mr Rob Fitzpatrick is an Advisory Board Member of ExoFlare which invoiced the company 2020-21: \$220,000: (2019-20 \$nil) for Cross-sector Operational Biosecurity Risk Assessment (COBRA) project
- Ms Gorter is a Member of Southern DIRT which invoiced the company 2020-21: \$43,276 (2019-20 \$5,500) for 'Alternative Fodder Crops for Turning Off Weaner Lambs/Hoggets' and 'Increasing profit with dual purpose crops' projects.
- Ms Jo Pye is a Member of Australian Institute Food Science & Technology which invoiced the company 2020-21: \$320 (2019-20: \$14,300) for membership renewal.

Notes to the financial statements *continued*

24. Expenditure commitments

	Consolidated \$ '000	
	2021	2020
Expenditure (primarily research and development) contracted for is payable as follows:		
■ Not later than one year	191,972	125,411
■ Later than one year but not later than five years	123,524	123,939
■ Later than five years	2,571	-
Aggregate R&D expenditure contracted for at balance date	318,067	249,350
Operation expenditure contracted for is payable as follows:		
■ Not later than one year	1,910	1,550
■ Later than one year but not later than five years	1,542	1,164
■ Later than five years	-	-
Aggregate operation expenditure contracted for at balance date (a)	3,452	2,714

a) The operation commitments include maintenance contracts and existing leases for properties with terms less than one year.

25. Members' funds

The Company is incorporated in Australia and is a company limited by guarantee. If the Company is wound up, its Constitution states that each member is required to contribute a maximum of \$5 each towards meeting any outstanding obligations of the Company. At 30 June 2021, the number of members was 49,302 (2020: 49,589).

26. Contributed equity

	Consolidated \$ '000	
	2021	2020
Capital contribution	9,031	9,031

This amount represents contributions from the Commonwealth Government as initial working capital and property, plant and equipment at written down value transferred from the Australian Meat and Live-stock Corporation and the Meat Research Corporation at nil consideration.

27. Financial risk management objectives and policies

MLA's principal financial instruments include derivatives, cash and cash equivalents. The Group has various other financial assets and liabilities such as trade receivables and trade payables which arise directly from its operations.

MLA enters into derivative transactions, including forward currency contracts and currency option contracts. The currency option contracts are limited to vanilla options and collar options. The purpose is to manage the currency risks arising from the Group's overseas operations. The main risks arising from the Group's financial instruments are interest rate risk, foreign currency risk, credit risk and liquidity risk.

The Board reviews and agrees policies for managing each of these risks and they are summarised below.

Oversight responsibility for identification and control of financial risks rests with the Audit and Risk Committee under the authority of the Board.

Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial instrument are disclosed in note 2 to the financial statements.

Risk exposures and responses

(i) Interest rate risk

The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's cash and short-term deposit holding with a floating interest rate. Cash at bank earns interest at floating rates based on daily bank deposit rates. On call deposits are made for varying periods of between one day and twelve months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

Cash deposits and short-term cash assets are held at floating exchange rates of interest that range between 0% and 0.71% at 30 June 2021. Some of these assets are held in foreign currency accounts.

Sensitivity analysis:

At 30 June 2021, if interest rates moved, as illustrated in the table below, with all other variables held constant, the effect on the Group's net surplus would have been as follows:

Judgements of reasonable possible movements:	Consolidated surplus \$ '000	
	2021	2020
+0.50% (2020: +0.50%)	286	671
- 0.50% (2020: -1.00%)	(286)	(1,341)

There is no direct impact on other comprehensive income.

(ii) Foreign currency risk

The Group has a policy of hedging the offshore component of its annual expenditure. In doing so, it works within Board-approved risk management bands which establish the upper and lower limits of hedge cover for each period out on a rolling twelve month basis. The objective is to ensure that the annual budget allocation for offshore expenditure for the next financial year is fully hedged by 30 June.

The Group is primarily exposed to the risk of adverse movements in the Australian dollar relative to certain foreign currencies and uses derivative financial instruments to manage these specifically identified foreign currency exposures.

Forward exchange contracts and options are purchased to hedge a majority of the Australian dollar value of United States dollar, Japanese yen, Chinese RMB and Korean won payments arising from the activities of overseas branches.

These contracts hedge highly probable forecasted future cash outflows and they are timed to mature when the payments are scheduled to be made.

Foreign exchange contracts commit the Group to purchase specific amounts of foreign currency at an agreed rate of exchange maturing at specific times up to 12 months from balance date.

Option contracts give the Group the right to purchase specific amounts of foreign currency at an agreed rate of exchange maturing at specific times up to 12 months from balance date.

At 30 June 2021, the Group held forward exchange contracts designated as hedges of forecasted future cash outflows to its overseas offices. The cash flows are expected to occur within 12 months from 30 June 2021.

Sensitivity analysis:

There is minimal sensitivity to foreign currency risk exposures on the Group's net surplus/deficit for the year and on equity as overseas spending is subject to a fixed budget which is determined in Australian dollars. As there is no material impact on the net surplus/deficit or equity in local currency, a sensitivity analysis has not been prepared.

Notes to the financial statements *continued*

11. Risk management

(iii) Credit risk

Credit risk arises from the financial assets of the Group, which comprise cash and cash equivalents, trade and other receivables and derivative instruments. The Group's exposure to credit risk arises from the potential default of the counter party, with a maximum exposure equal to the carrying amount of these instruments. Exposure at balance date is addressed in each applicable note.

The Group's objectives in relation to credit risk are to ensure minimum impairment of its financial assets and minimise the possibility of loss.

The Group's financial assets are largely due from government related bodies, recognised creditworthy third parties and highly credit-rated financial institutions that have minimal risk of default. No collateral is held as security.

All receivable balances are monitored on an ongoing basis with the result that the Group's experience of bad debts has not been significant.

There are no significant concentrations of credit risk and financial instruments are spread amongst a number of financial institutions to minimise the risk of default of counterparties.

The Group's maximum exposure to credit risk at reporting date in relation to each class of recognised financial assets is the carrying amount of these assets.

(iv) Liquidity risk

Liquidity risk arises from the financial liabilities of the Group and the Group's subsequent ability to meet its obligations to repay its financial liabilities as and when they fall due.

Pursuant to its reserving policy, the Group maintains minimum levels of reserves by specie. The Group's objective is to invest the surplus funds represented by these reserves in financial instruments with maturities that match its forecast payment obligations. The surplus funds are invested primarily in term deposits with differing maturity terms that can be easily liquidated in the event of an unforeseen interruption of cash flow.

The Group manages its liquidity risk by monitoring the cash inflows and outflows expected on a weekly basis.

Non Derivative financial liabilities

The table below summarises the maturity profile of the Group's financial liabilities as at the reporting date based on contractual undiscounted repayment obligations. The Group ensures that sufficient liquid assets are available to meet all the short-term cash payments.

Financial liabilities	Consolidated \$ '000	
	Less than 6 months	6 to 12 months
Trade and other payables	70,134	-

(v) Fair value

The carrying values of all financial assets and liabilities approximate their fair value at the balance date. The net fair value of a financial asset is the amount at which the asset could be exchanged in a current transaction between knowledgeable and willing parties after allowing for transaction costs.

The Group uses various methods in estimating the fair value of a financial instrument. The methods comprise:

Level 1 – the fair value is calculated using quoted prices in active markets.

Level 2 – the fair value is estimated using inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 – the fair value is estimated using inputs for the asset or liability that are not based on observable market data.

The fair value of the financial instruments as well as the methods used to estimate the fair value are summarised in the table below.

Financial assets	Consolidated \$ '000 – year ended 30 June 2021		
	Level 1	Level 2	Total
Financial assets at fair value through profit or loss	57,720	-	57,720
Derivative instruments - forward currency contracts	-	(119)	(119)
	57,720	(119)	57,601

Financial instruments that use valuation techniques with only observable market inputs include forward currency contracts. The fair value of forward currency contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles.

MLA presents derivative assets and derivative liabilities on a gross basis. Certain derivative assets and liabilities are subject to enforceable master netting arrangements with individual counterparties if they were subject to default. As at 30 June 2021, if these netting arrangements were to be applied to the derivative portfolio, derivative assets are reduced by \$118,589 (30 June 2020: \$90,031) and derivative liabilities are reduced by \$118,589 (30 June 2020: \$90,031).

28. Financing arrangements

MLA has access to two funding facilities which are available under special circumstances in response to industry crisis from the Red Meat Advisory Council Limited (RMAC).

- A \$500,000 (2020: \$500,000) emergency fund can be accessed by MLA for scoping purposes following consultation with the affected species sector/sectors.
- In addition, a \$5 million (2020: \$5 million) contingency fund for the management of industry crisis may be accessible. Use of this facility requires a two-thirds majority decision of RMAC directors with terms and conditions as agreed by RMAC and the Commonwealth Government.
- No amount has been withdrawn from these funding facilities.

Directors' declaration

In accordance with a resolution of the directors of Meat & Livestock Australia Limited, we state that:

In the opinion of the directors:

- (a) the financial statements and notes of Meat & Livestock Australia Limited for the financial year ended 30 June 2021 in accordance with the *Corporations Act 2001*, including:
 - (i) giving a true and fair view of the consolidated entity's financial position as at 30 June 2021 and of its performance for the year ended on that date; and
 - (ii) complying with *Australian Accounting Standards* (including *Australian Accounting Interpretations*) and *Corporations Regulations 2001*; and
- (b) there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

This declaration has been made after receiving the declarations required to be made to the directors by the managing director and chief financial officer in accordance with section 295A of the *Corporations Act 2001* for the financial year ended 30 June 2021.

On behalf of the Board



Alan Beckett
Chair



Jason Strong
Managing director

15 September 2021

Independent auditor's report



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Independent Auditor's Report to the Members of Meat & Livestock Australia Limited

Opinion

We have audited the financial report of Meat & Livestock Australia Limited (the Company) and its subsidiaries (collectively the Group), which comprises the statement of financial position as at 30 June 2021, the income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

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

- (a) giving a true and fair view of the consolidated financial position of the Group as at 30 June 2021 and of its consolidated financial performance for the year ended on that date; and
- (b) complying with *Australian Accounting Standards* and the *Corporations Regulations 2001*.

Basis for opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's *APES 110 Code of Ethics for Professional Accountants* (including *Independence Standards*) (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information other than the Financial Report and Auditor's Report thereon

The directors are responsible for the other information. The other information is the directors' report accompanying the financial report.

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

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

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

Responsibilities of the Directors for the Financial Report

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

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

Independent auditor's report *continued*



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Auditor's Responsibilities for the Audit of the Financial Report

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

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ernst & Young

Rob Lewis
Partner

Sydney

15 September 2021

Supporting information

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Will Coffey - Coffey Cattle Co., Miriam Vale QLD

Appendix A

Status of MLA's 2020–21 key performance indicators

as at 30 June 2021

Status	Achieved	Partly achieved	Not achieved	On track
KPIs in <i>Annual Investment Plan 2020–21</i>	99	6	18	-
Strategic focus KPIs in <i>MLA's Strategic Plan 2025</i>	-	-	-	20
Total result / percentage	99 80.49%	6 4.88%	18 14.63%	20 100%

Programs

Key performance indicator	Status	Commentary
Animal health and welfare		
Animal health		
Complete proof-of-concept for P0 tick antigen efficacy and receive approval for a further tick vaccine development program.	■	Efficacy tests of the paralysis tick vaccine did not yield promising results. This has led to a pivot towards a focus on the two CRC antigens that have delivered results that may prove to be highly beneficial to industry.
Sheep disease decision support tool for comparing interventions for abattoir-diagnosed conditions adopted by 10% of producers receiving animal health feedback.	■	The revisions to the sheep disease decision support tool will be released in Q1 2021–22 and adoption by industry will then be measured.
Stage 1 investigation of the productivity loss and health risk of Apicomplexan parasites (toxoplasma, sarcocystis, neospora) completed.	■	This review did not take place, with a changed focus for 2021–22 to be on the funding of the scour worm vaccine project.
Animal welfare		
Complete efficacy testing of contraceptive vaccine and explore commercialisation possibilities.	■	The zona pellucida fertility vaccine completed its contracted testing.
At least 200,000 lambs treated at marking time with NumNuts.	■	At least 400,000 lambs were marked in 2020–21 using the NumNuts device.
Complete a large-scale field validation of NumNuts which could be reference in adoption promotion materials.	■	Field testing of the efficacy of NumNuts for use in castration is well underway, but will not be completed until Q3 2021–22.
Continued reduction in stock losses due to predation measured, resulting from MLA investments.	■	The Centre for Invasive Species Solutions reported a reduction of stock losses from MLA-funded predator exclusion programs.
Domestic market		
Market knowledge (domestic)		
Pre-sale inspection and automated data transfer trialled by at least four saleyards.	■	Four trials conducted for pre-sale inspection and automated data transfer.
High levels of satisfaction (above 85%) by industry stakeholders with MLA's market information services.	■	The MLA member subscriber survey revealed a satisfaction score of 86%.
Strategic growth drivers available for domestic market.	■	Workshop completed. Strategic growth drivers aligned and available for domestic marketing team.
Nutrition		
At least 60% of general practitioners and dietitians believe MLA's nutrition information and practical resources are credible and relevant.	■	Bi-annual attitudinal tracking of general practitioners and dietitians showed an increase to 65% with strong agreement that our latest guide to balanced meals resource are relevant and credible to their patients.
Marketing and promotion (domestic)		
Year-on-year increase in main grocery buyer endorsement of the statement "Willing to pay more for beef/lamb" to 24% (beef) and 23% (lamb).	■	Tracking of consumer willingness to pay more shows that Australians continue to see value in beef and lamb despite continued high prices at retail. Willingness to pay more for beef and lamb are tracking at 26%.
Maintain mean number of serves per week: 1.5-1.7 for beef and 0.65-0.85 for lamb.	■	Both beef and lamb are tracking within or above benchmarks for number of weekly serves.

Key performance indicator	Status	Commentary
Restrict the percentage of main grocery buyers limiting red meat for health reasons to 19% (beef) and 21% (lamb).	■	Consumers reducing lamb consumption for health reasons is stable and within benchmark. However, main grocery buyers limiting beef consumption for health reasons continues to track above 19% benchmark.
50% of all branded program volumes deliver a premium over unbranded (commodity) product as evidenced from CoMarketing participant feedback.	■	63% of respondents confirmed that their branded program delivered a premium compared with unbranded product.

International markets 		
Market access		
Industry positions/submissions on priority trade reform issues (in particular the A-EU FTA and A-UK FTA negotiations) are acknowledged and acted on by government, and support delivery of import regime reform.	■	Significantly improved (ultimately liberalised) beef, sheepmeat and goatmeat access to the UK to be delivered via the A-UK FTA. Positioning continues for access improvements via the ongoing A-EU FTA negotiations.
Non-tariff barrier alleviation plans (i.e. China, MENA shelf-life and global halal positioning) are implemented.	■	Non-tariff barrier (NTB) alleviation, specifically improved shelf-life standards in the Middle East, has helped reduce the impact of NTBs by a cumulative \$290m to date against a target of \$1b by 2030. Defence of favourable access remains a priority as does improving access to China.
Market knowledge (international)		
Strategic growth drivers aligned with the international market team and are made available across Australia, US, Japan, Korea, Southern Asia, MENA and China markets.	■	Strategic growth drivers were aligned and made available with the international in-market teams for Australia, Japan, Korea, US, Southern Asia, MENA and China markets.
Marketing and promotion (international)		
Build or maintain customer awareness and preference of Australia's positive attributes (safe, quality, healthy and sustainable image) within target range.	■	Australian beef and lamb is the number one preferred amongst surveyed trade globally (score of 8.2 out of 10), and ranked first for quality perceptions (75%) and safety perceptions (72%).
Increase consumer preference for Australian red meat in key international markets to be above 23.4% for beef and 21.4% for lamb.	■	Increased consumer preference for Australian red meat across key international markets for beef of 28.5% and lamb of 24.3%.
75% of CoMarketing participants rated their overall outcomes (based on their objectives for the year) as 'successful'.	■	Reporting to date indicated 88% of participants rated their overall outcomes as successful or very successful.
Produce case studies from at least five international CoMarketing participants that demonstrate Australian beef or lamb is available in more product formulations, channels or outlets as a result of MLA business development activity.	■	Five CoMarketing related case studies were featured in Feedback magazine (Dec/Jan 2021).
Livestock export market activities		
Produce two case studies per country or region which relate to LEP programs, have provided insights, and result in a direct impact on Government/ industry policy.	■	Seven case studies across three regions were completed. In-market insights around market access and welfare issues continue to be highly valued by industry and government stakeholders, regularly informing policy approaches and positions across all live export markets.
Produce two case studies per country or region which relate to LEP programs which have improved industry's ability to maintain existing market share position or to increase industry's competitiveness.	■	Seven case studies across three regions were completed. Market research in the two largest live cattle export markets of Vietnam and Indonesia have provided investment clarity regarding consumer insights and market share in an increasingly competitive fresh beef marketplace.
Two major supply chains per country or region undertake adoption of industry research and development (R&D) or direction of investment in R&D from market insights.	■	In-market R&D and associated mitigation strategies across three regions have informed LEP investment decisions around key areas including MENA heat management; Asia wet markets; Israel market access and Vietnam Government welfare standards development. The R&D adoption environment in the hardest commercial trading year on record underpinned the partial achievement outcome.
Successful adoption of Livestock Global Assurance Program (LGAP), assessed by >80% of eligible Tranche 1 facilities signing onto the program.	■	Exporter support of AniMark and LGAP ceased during 2020–21, preventing the LEP from rolling out LGAP in the Tranche 1 countries of Indonesia and Vietnam. No facilities signed onto the program.
Livestock export (research and development)		
Deliver an IT Conformance System to support Livestock Global Assurance Program implementation and complete required research for control and traceability.	■	The LGAP ITS Conformance system is now live and supporting LGAP implementation and adoption. A Control and Traceability standard for LGAP has been developed and out for public comment, and scheduled for finalisation in July 2021.
Complete implementation of the Livestock Export Program research, development and extension review recommendations.	■	Live Export Program R&D is fully operational under a new governance structure and the program strategy is driven by the five year 'The Livestock Export Program (LEP) R&D Blueprint'.

Appendix A *continued*

Status of MLA's 2020–21 key performance indicators *continued*

Key performance indicator	Status	Commentary
Complete winter trials for salmonella vaccine.	■	The winter trials for salmonella have been deferred to 2021–22.
Continue to invest in research projects that improve and manage heat stress, bedding and stocking densities during shipping and in respective destination markets.	■	The sheep stocking density and cattle bedding research has been completed. The heat stress risk assessment (HSRA) model and the input climate data has been updated as per the recommendations of the HSRA technical advisory panel review.
Animal Welfare Surveillance framework adopted and refined according to outcomes from the Animal Welfare Indicator research and in line with the ASEL 3.0 reporting requirements.	■	The Shipboard Animal Welfare Surveillance (SAWS) framework has been integrated into LIVEX Collect and has been approved by the Department of Agriculture as the way for the live export industry to meet reporting requirements for ASEL 3.0, effective from 1 November 2020.

Eating quality



Eating quality

Price differentials for MSA-compliant cattle demonstrate an annual return to farm gate of more than \$140 million in 2020–21.	■	An additional \$157m in estimated farm gate returns were delivered for MSA compliant cattle. Despite lower MSA graded numbers due to supply (-12%), heavier carcase weights, favourable conditions leading to improved MSA compliance and maintained MSA premiums resulting in a strong 2020–21 MSA farm gate return.
More than 50% of Australian lamb has been produced and processed through supply chains that manage and optimise eating quality.	■	56% of Australian lamb was processed through supply chains that manage eating quality, accounting for 3.4m lambs in 2020–21.
Operators representing 50% of MSA beef volume describe MSA beef by consumer outcome represented by Eating Quality Graded cipher, as opposed to dentition category.	■	Operators representing 53% of MSA beef volume are utilising the Eating Quality Graded (EQG) cipher to describe MSA beef as a part of their business, as opposed to a dentition category cipher. This includes 13 businesses that span across 16 processing sites.

Environmental sustainability



Sustainability (off-farm)

Development of technology for the Australian red meat and livestock industry to achieve a 25% reduction in waste or increase in efficiency relative to 2015 levels.	■	Through the Wastes to Profits RRDIP investment, hydrothermal carbonisation (HTC) technology has been identified to achieve volume reduction between 65% to 70% for sludge and digestate from abattoir waste water treatment.
Development of technology for the off-farm sector to achieve a 10% reduction in carbon dioxide equivalent (CO2e) emissions relative to 2015 levels.	■	The Wastes to Profits RRDIP investment developed flexible and modular anaerobic digestion technology to trial on multiple abattoir waste streams and used additives to increase biogas yields and improve downstream water quality. This technology has the potential to reduce carbon dioxide equivalent emissions from abattoirs by more than 10%.
Development of technology for industry to achieve a 35% reduction in water and fossil fuel-derived energy use intensity relative to 2015 levels.	■	An AMPC-managed project was completed examining technologies capable of advanced water recycling from meat processing waste water treatment plants. A fit-for-purpose approach has been developed targeting technologies for wastewater treatment up to Class A recycled water standard. These technologies have the potential to reduce water use by more than 35%.

Sustainability (on-farm)

Demonstrated uptake/use of weather information products (Climate Kelpie, CliMate), forecasting products (Climate Outlook, Drought Monitor, Climate Watch and new extreme event forecasts products as they become available) by producers.	■	Two new extreme weather event forecast products arising from the Forewarned is Forearmed Rural R&D for Profit project were launched in June 2021. A training course, entitled "Forecasting for Decision Making" has been developed for producers through the Northern Australia Climate Project (NACP). Within weeks of going live, and before advertising, nearly 100 people had registered for the online course. Every month, 756 people receive the Climate Outlook Report and 559 the weekly Climate and Weather Newsletter generated by the NACP Project.
At least one novel feedstock or supplement tested in vivo and/or undergoing commercial trials confirming methane avoidance and livestock productivity benefits.	■	A feedlot trial (methane emissions of Australian feedlot cattle as influenced by 3-Nitrooxypropanol and diet) showed that the additive, 3-NOP (Bovaer™), reduced methane production by up to 90% in finishing diets. However, productivity benefits have not yet been confirmed.
Three dung beetle species/strains successfully released and meeting expected adoption targets.	■	In winter 2020, a second strain of dung beetle was introduced under the Dung Beetle Ecosystem Engineers (DBEE) project. Further field releases of both strains of Vacca (and a hybrid variety) are currently taking place across Southern Australia. The third species was delayed by COVID-19 and will be released in 2021–22.

Key performance indicator	Status	Commentary
Feedlot		
Feedlot productivity		
Cattle performance value proposition trials for automated bunk scanning and management completed, and adoption by more than 10 Australian lot feeders.	■	Slaughter of three of seven replicates have been completed. Results will be presented at ALFA Smart Beef Conference in October. The bunk scanner has been adopted by three lot feeders.
Determine the methane suppression potential of 3-NOP (Bovaer), and lodge the Emissions Reduction Fund methodology with the Australian government for approval.	■	3-NOP feed additive evaluation completed, showing that methane emissions have been reduced by over 90% in finisher diets. However, lodgement has been delayed until the Australian Government opens applications in August.
Implementation of animal welfare benchmarking pilot across seven Australian feedlots.	■	The welfare benchmarking framework has been implemented across seven Australian feedlots.
Construction of the Australian Feedlot Research Institute to enable and accelerate research and adoption of world-leading animal health, welfare and biosecurity production practices.	■	The ALFA board did not support the Australian Feedlot Research Institute initiative.

Integrity systems		
Integrity systems		
Field trialling of at least one enhanced livestock identification method (using the current technology base) underway.	■	Implantable RFID rat trials have been successfully completed and live cattle trials are being contracted. Two trial sites have been confirmed, one of which is a commercial feedlot.
Desktop audit model for LPA developed and implemented.	■	A desktop audit model for the LPA program was developed and is now being used as one of the primary mechanisms to assess compliance with LPA program requirements.
10% of the LPA participant base are submitting records to support their accreditation.	■	Of the 889 LPA participants requested to submit records to support their on-going accreditation, 23% have used the electronic portal to provide evidence of their on-farm record keeping.
Development and implementation of an offline solution for eNVD data transfer.	■	A comprehensive user experience research project was completed and prototypes for the offline solution for eNVD data transfer were developed. The mobile application that will form the basis for the offline solution is scheduled for completion by the end of 2021.
Average online eNVD form completion is above 30%	■	65% of eNVDs submitted through the platform were fully completed online.
Producer integrity program awareness levels (NLIS, LPA and NVDs) at 95% or above.	■	Producer integrity program awareness levels averaged 97% (LPA, NLIS and NVDs) through the annual producer survey. eNVD awareness was measured for the first time in 2020–21 and achieved 95%. NLIS awareness levels reached 100% for the first time.
Technology approaches for identification, real-time tracking and automated verification determined and at least two proof-of-concept studies underway.	■	Two projects are progressing to assist with identification of technology approaches (retinal scanning and facial recognition). Use of DNA for individual identification is under investigation. Two projects are being contracted to develop risk mitigation tools for residues in red meat.
Market access science		
Complete a two-year frozen beef and lamb shelf life assessment, with results provided to industry and government so as to support changes in expiry date labelling practices and extension of allowable shelf life in markets that currently have restrictions.	■	A completed two year shelf life study of the frozen shelf life of primals and manufacturing product supports the extension of shelf life in markets that impose restrictions, and industry and government have been provided with the relevant data.
Establish methods for antimicrobial stewardship surveillance data collection and associated value proposition to industry.	■	A simple tool to assist producers measure the amount of antimicrobials used on farms has been piloted. Additionally, comprehensive surveys of antibiotic resistance have been conducted for beef and sheepmeat products. Industry has been engaged in discussing the implementation of measurement systems.
At least two product integrity-focused value chain pilots concluded and their benefits assessed.	■	Two pilot studies have been completed demonstrating the value of maintaining and demonstrating the integrity and provenance of Australian beef through to consumers.

Appendix A *continued*

Status of MLA's 2020–21 key performance indicators *continued*

Key performance indicator	Status	Commentary
Objective measurement		
Objective measurement		
Complete calibration of an intra-muscular fat measurement device for lamb intra-muscular fat, and (pending accuracy) develop a proposal for AUS-MEAT accreditation.	■	Three intramuscular fat (IMF) measurement devices were calibrated to measure IMF in lamb. A hyperspectral intramuscular needle probe is undergoing commercial trials in an abattoir in preparation to seek AUS-MEAT approval during 2021–22. A hyperspectral camera has been calibrated to measure IMF on the loin cut surface. A near infrared device to measure IMF on the loin cut surface has completed calibration and will undertake independent validation during 2021–22.
Evaluate at least eight technologies to measure existing traits for MSA grading, and new quality grading traits, in cut or uncut carcasses. Examples include cut-surface grading devices, inter-muscular probes and non-invasive technologies, including x-ray.	■	10 technologies (five cut-surface grading cameras, two intramuscular probes, x-ray, near infrared and nuclear magnetic resonance devices) are progressing development and testing to measure eating quality characteristics. Of these, one new beef grading camera has achieved AUS-MEAT accreditation and three additional cameras have completed calibration data collection in preparation to seek AUS-MEAT accreditation during 2021–22.
One beef and five lamb DEXA systems calibrated to output lean meat yield and enable producer feedback.	■	Five lamb DEXA systems are installed which will measure lean meat yield in an estimated 35% of lambs processed. One beef DEXA system has completed an initial calibration based on detailed carcass bone-outs. Its final calibration is pending completion of a mobile CT as a 'gold standard' comparison. One lamb processor has launched OM value based pricing grids underpinned by both eating quality and lean meat measurement.
Four novel x-ray technologies under evaluation for meat industry application for carcass or live-animal yield or eating quality assessment, disease and effects, and automation.	■	Single energy aviation CT has demonstrated it can provide the sensing required for the development of automated chine cutting for the beef boning automation program. Data collection to assess the potential for dual-view multi-energy CT combined with surface imaging to identify offal defects is completed and will inform further investment in 2021–22. A multi-energy CT development is progressing and will deliver a system for evaluation during 2021–22.
Producer adoption		
Producer adoption		
3,500 producers are involved in MLA awareness activities, and rate their satisfaction >7/10.	■	4,849 participants were involved in MLA awareness activities, with satisfaction levels averaging 8.4/10.
1,500 producers are involved in short-term training programs and workshops, and increase their knowledge and skills by 20%.	■	1,906 producers were involved in short-term training activities including Pasture Paramedic, Bred Well Fed Well, Livestock Enterprise Planning, EDGE network courses and bushfire recovery workshops. On average, participating producers increased their knowledge and skills by 81%.
1,000 producers are active in long-term practice change programs. Of those finishing, 75% of producers adopt these practices and, as a result, increase business performance and sustainability.	■	1,503 producers participated in long-term practice change programs. Of the producers completing their participation, 84% have adopted these new practices.
200 livestock advisors participate in MLA capability building programs and 5% continue to participate in MLA adoption activities.	■	550 livestock advisors were involved in capability building programs. On average 10% of these advisors have then participated in other MLA adoption activities.
Product and packaging innovation		
High value food frontiers		
Five new high value growth red meat products or supply chains developed and tested that will deliver \$15 million a year in revenue with additional profit margin compared to commodity pricing baseline for partner enterprises by 2023.	■	Five high value growth products or value chains were developed and tested including red meat protein snacking bars, bovine collagen based food and cosmetics, beef and lamb glandular based nutraceuticals, goat tongue powder, and ovine collagen based beauty bar. Revenue from the above was \$1.3 million in 2020–21 and is forecasted to exceed \$15 million by 2023.
Two new food technology platforms investigated that demonstrate higher value for Australian red meat inclusion.	■	The two new food technology platforms investigated were freeze drying technology for nutraceuticals and ASAP/IXON technology for increased shelf life.
Two new consumer/market signals/trends reviewed and partially validated for Australian red meat opportunity spaces - includes completion of at least two design sprint challenges.	■	The two trends reviewed and validated, including design sprint challenges, were active ageing interventions and convenience foods.

Key performance indicator	Status	Commentary
Value chain information and efficiency		
Digital value chain information		
Key datasets such as the property identification code (PIC) register are enhanced and expanded.	■	This KPI was achieved through enhancement of key datasets, including sheep health data, meat exports data, climate data and PIC register data.
Tools to enable supply chain data sharing are established and in use by at least two supply chain organisations.	■	The MLA data platform infrastructure has been enhanced to accommodate automated scheduling of data transformation and to enable easy linking with industry datasets. Five trials have been completed with saleyards to ingest, transform and support accurate and consistent market reporting. Two other tools to support sheep health data and meat exports data have enabled improved data sharing for supply chains.
Processor animal health feedback provided to producers for 400,000 cattle and 700,000 sheep via Livestock Data Link or other feedback mechanisms.	■	Processor animal health feedback has been provided to producers for 856,533 cattle via Livestock Data Link (LDL) and other feedback mechanisms. Sheep producers have access to the National Sheep Health Monitoring Project (NSHMP) data where around 5.1 million records are available through LDL.
A revised version of Livestock Data Link has been developed and is being actively used by the supply chain.	■	Following the development of the product roadmap it was identified that to successfully revise LDL and deliver maximum impact to industry, the platform technology needed to be updated. This will be completed in 2021–22.

Productivity (off-farm)		
Productivity (off-farm)		
Productivity benefit of technologies adopted in 2020–21 and previous years delivers productivity impact of \$60 million a year.	■	Technologies adopted as at June 2021 provide annual net benefits of \$70 million, primarily from x-ray enabled lamb boning automation, BladeStop saw safety devices and adoption of spray chilling technology.
Complete development and validation trial of one beef automation advanced vision module prototype.	■	A beef chine removal prototype module has been developed and tested. It demonstrated the ability to apply the Computer Tomography (CT) information to the chine removal of racks and loins primal portions. Additionally, two more cutting prototypes were also built; one for the removal of button bones from beef loins, and the other for trimming fat to a defined depth over the length of a beef loin and off a rack primal. A prototype for a combined conveyor system was designed, and proposals for a full production machine were developed.
Construction of R&D and demonstration boning room site at one processor and/or pilot facility for beef automation modules.	■	The construction of the beef boning R&D facility at Teys processing plant in Rockhampton was successfully completed.

Productivity (on-farm)		
Beef productivity		
Demonstrate the value of two alternative supply chain practices which support and grow beef production best practice from northern WA rangelands.	■	Two supply chain projects under BeefLinks demonstrated best practices. These were improved transitioning of cattle along the value chain and identifying causes of live weight loss; and implementation of grazing practices that target plant species with known antimethanogenic properties.
Document three case studies which promote and increase the use of phosphorus supplements across northern Australia for reproduction and annual weight gain benefits	■	Three case studies were completed for inclusion in the revised MLA phosphorus manual.
Collaboration with Carbon Neutral by 2030 (CN30) initiatives which demonstrate the application of two targeted supplementation practices for mitigating enteric methane intensity from grassfed beef production systems by at least 20%.	■	One collaborative CN30 project has demonstrated potential of biochar to lower emissions intensity for grassfed production systems. However, a red algae supplement based application has only been trialled in a feedlot based production system.
Sheep productivity		
Successful establishment of the Sheep Reproduction Strategic Partnership, NEXUS climate adaptation program and lamb lot feeding program.	■	The Sheep Reproduction Strategic Partnership has been established and a foundational series of projects are underway. The NEXUS and Lamb Feedlotting Programs are also now underway.
50 producer participatory research sites established and demonstrating a 5% reduction in lamb mortality rates.	■	114 producer participatory research sites focused on improving reproductive performance and lamb survival were established in 2020–21. Key outcomes to date include 8% higher lamb survival for triplet mobs with reduced mob size. Another project showed an increased reproductive rate of 13% for ewe lambs under a higher growth rate treatment.

Appendix A *continued*

Status of MLA's 2020–21 key performance indicators *continued*

Key performance indicator	Status	Commentary
Quantification of the average and range (quartiles) of ewe mortality in maternal composite flocks and identification of the top five causes of mortality.	■	Average maternal ewe mortality rates, determined through two years of necropsy and producer data submissions, is 2-2.5% with a range of 1.3 - 5.9%. The most common causes of mortality include septicaemia, primary dystocia, trauma, hypocalcemia, and uterine prolapse.
Oestrogenic clover removal results in 40,000 additional lambs weaned from 2017 to 2021.	■	An independent economic impact assessment at the mid-point of the project estimated that likely adoption rates would see the target of an additional 40,000 lambs weaned annually being achieved in 2028. However, higher adoption rates may allow this to be achieved earlier.
Goat productivity		
Successfully engage producers in adoption activities and provide technical advice via a new goat field officer position.	■	Due to COVID-19 and budget constraints this has not been achieved.
Investigate and communicate the benefits of supplementary feeding rangeland goats via extension to industry.	■	Findings suggest that high rates of liveweight gain (150 to 200 g/day; 1 to 1.4 kg per week) are achievable for young entire male rangeland goats with access to a concentrate ration, roughage and water. Results have been presented to industry through a webinar, article and field days.
Engage 200 goat producers in extension activities including but not limited to BredWell FedWell, Feeding Fundamentals, National Goat Roadshow, Going into Goats workshops and the Goat Industry Development data.	■	More than 380 producers have been engaged in extension activities including the National Goat Roadshow webinars, MeatUp Forums, a Goat PGS Feeder event and MLA sponsored field days.
Livestock genetics		
Minimum 2% increase in annual rate of gain for each of the default Sheep Genetics indexes for Terminal, Maternal and Merino analyses.	■	The improvement in annual rate of genetic gain in the Sheep Genetics Indexes was Terminals by 2.5%, Maternals by 3.8% and Merino by 2.9%.
Three major Sheep Genetics analyses indicate that terminal animal numbers were maintained at 2019 - 20 levels, maternal numbers increased by 1% and Merino numbers increased by 3%.	■	With a 12% increase in flocks joining Sheep Genetics, each of the major evaluations has also continued to grow with the LAMBPLAN analysis that incorporates maternals and terminals, recording an increase of 7%, and MERINOSELECT, an increase of 13%.
Model for the delivery of multi-breed BREEDPLAN evaluations developed and tested.	■	Several potential business models to enable the delivery of multi-breed BREEDPLAN evaluations have developed and have been tested through presentation and consultation with breeder and breed association stakeholder groups.
Feedbase production		
Produce case studies from four demonstration sites of the Wambiana long-term grazing trial that highlight management approaches to achieve higher value livestock production and resilience of the feedbase.	■	Collaborator case studies demonstrated best practice in grazing land management to show that producers can, and are, managing their land well, while remaining productive and viable.
20 'Legume Best Management Practice' producer-initiated trials in place, with >340 businesses participating in a learning package and >75% of those intending a pasture practice change.	■	Two of three KPI elements were achieved, being on farm trials in place and weight of evidence from evaluation that >75% of participants intend a pasture practice change. 229 businesses participated against the target KPI of 340.
Brigalow belt businesses sow >10,000ha of new legumes as a result of the Legume Best Management Practice project.	■	Project survey reported 937ha of on-farm trials underway, with 2,114ha being planned but postponed. Survey indicated intention to sow 105,000ha of legumes over the next five years. Planned sowings impacted by low summer rainfall.
Commercialisation paths in place for powdery mildew resistant medics, tall fescue, and prickly acacia chemical control products.	■	Commercialisation paths are in place for powdery mildew resistant medics, tall fescue and prickly acacia chemical control products. Agreements are being developed.
Model soil biocrust's contribution to total soil carbon fixation, nitrogen content, landscape and soil stability.	■	Initial modelling done on carbon and nitrogen and demonstrated that biocrusts in moderately grazed paddocks can generate more carbon (+30%) and more nitrogen (+10%) than heavy stocking. Biocrust contributions support stable soil and plant function and so landscape stability.
Achieve 113,000ha of novel pasture legumes in low rainfall zones.	■	Based on seed sales and pre-orders, there is evidence of 59,700ha of novel legume for pasture sowing in the low rainfall zone of southern Australia.
Parthenium and parkinsonia biological controls applied to at least 400,000ha	■	Parkinsonia agents released across 266 sites in northern Australia. Agent spread has been measured, then modelled to have occurred over 1.5 million ha. Parthenium data was not available.

Key performance indicator	Status	Commentary
Digital agriculture		
At least 25% of producers who attended an MLA 'digital demonstration farm forum' indicate that, as a result of the demonstration, they are likely to introduce new technology to their business.	■	Due to COVID-19 impacts, planned digital farm forums were not completed. However, equivalent producer feedback at Beef Australia, Beeftech Emerald and Red Meat and Wool Growth Program Tech Expo in Karoonda SA indicated that in excess of 25% of producers engaged through these processes are intending to or have already begun investing in Ag Tech.
Establish a value proposition based on diverse and user business models to inform return on investment.	■	Independent economic analysis has validated an attractive return on investment for 90% of producers surveyed for the adoption of connectivity and simple use cases such as water management. Producer engagement has also provided valuable insights into return on investment considerations for more complex use cases such as pasture and livestock management.
Trial and demonstrate available and developing hardware and software for commercial use across top 10 high impact opportunity spaces/technology solutions.	■	Outcomes from collaborative producer led site trials are demonstrating the value of agricultural technology hardware and software for commercial use, focussing on livestock tracking, pasture management, data integration and improved decision support throughout industry supply chains.

Capability building		
Innovation capability building		
Co-innovation program partners achieve 80% of their documented innovation objectives with at least a 75% attendee rate at MLA innovation network events.	■	Co-innovation program partners achieved 100% of their documented innovation objectives with a 100% attendee rate at MLA innovation network event.
At least 10 early career scientists employed in MLA-funded research and development.	■	MLA sponsored 10 students undertaking postgraduate studies covering a range of industry-related topics which align with MLA's strategic priorities such as sustainability, animal health and welfare and objective measurement.
90% of Livestock Consulting Internship employers and interns express satisfaction with the value and benefits of the program.	■	The satisfaction survey found 90% of employers and interns are satisfied with the program, with 100% finding value in the program.
The Australian Intercollegiate Meat Judging program delivers an industry education program to tertiary students and young industry professionals.	■	The ICMJ education program was successfully moved to a virtual online forum with six webinars and a podcast series of 11 episodes successfully delivered, resulting in 1,200 downloads.
Industry leadership and capacity building		
Grant a minimum of two scholarships a year to ensure ongoing investment in industry leadership capability.	■	Australian Rural Leadership Foundation and Nuffield scholarships awarded.
70% of advocacy workshop participants tell their red meat supply chain story through social media platforms and MLA community events.	■	125 industry supply chain advocates have completed communications advocacy training. 85% of advocates are active on social media and where required have participated in MLA community events.
Successful completion of all milestones in the capacity building programs with Cattle Council of Australia, Sheep Producers Australia, Australian Lot Feeders' Association and Goat Industry Council of Australia.	■	The peak industry council annual agreements were fully implemented with delivery of services to the industry to build capacity and leadership.
Year-on-year improvement in the perception of the Australian cattle and sheepmeat industry, attributable to MLA investment in industry issues research and management.	■	There was an improvement in the perception that Australian beef and sheepmeat producers make a positive contribution to society.

Communication		
Communication (community)		
10% increase in Australian Good Meat page views from 43,000 benchmark (monthly average).	■	The Good Meat website saw an 11.6% increase in page views compared to the same period last year.
Increase in community engagement via social and digital platforms from 7% to 10%.	■	Organic engagement for Good Meat 2020–21 was 6.6% (2019–20 was 3.1%). Facebook engagement from this period was 7.2% while Instagram was 5.8%.
60% of those who participated in an Australian Good Meat activation feel that the Australian red meat industry plays a vital role in food security and have a heightened trust in the Australian red meat industry.	■	95% of survey respondents had a heightened level of trust in the red meat industry as a result of visiting the Australian Good Meat activation at the Sydney Show.
Reach at least 2,800 students via virtual classroom.	■	8,265 students participated in 36 virtual classroom sessions, as part of the Australian Good Meat Virtual Classrooms and the Australian Beef Be Your Greatest Virtual Classrooms.

Appendix A *continued*

Status of MLA's 2020–21 key performance indicators *continued*

Key performance indicator	Status	Commentary
Communication (stakeholder)		
70% satisfaction with beef sustainability framework approach and reporting from key stakeholders using GRI criteria.	■	Overall satisfaction with the The Australian Beef Sustainability Framework (ABSF) approach (amongst those who are aware of the framework) is 67%.
71% member satisfaction with MLA printed and digital communications.	■	Average member satisfaction with printed and digital communications is 73% (71% for digital and 75% for printed).
85% of MLA's media coverage promotes pre-determined 'key messages' in line with corporate communications strategy and wider business objectives and values.	■	89% of MLA media carried a pre-determined positive key message, with total media clippings increasing on the same period last year with the media impact score increasing from 4.5 to 4.6.
Increase MLA membership from 49,376 (June 2019 benchmark) to 49,500.	■	Membership at 1 Jun 2021 was 49,279 due to numerous reasons - main one being members retiring and exiting the industry, and consolidation within the industry.

Corporate services		
Corporate services		
Legal		
Reduce contract development time within MLA by adopting a standardised research and development contract template.	■	Standardised research terms were released to the business, resulting in considerable efficiencies.
Crisis management		
Maintain the crisis portal and ensure it reflects the latest Risk Management Plan.	■	A crisis portal has been maintained to manage MLA crises, and reflects risks identified in the risk register.
Risk and compliance management		
Regular identification and assessment of risks to MLA (operational) and industry, as well as implementation of action plans to address risk, and regularly report to the Audit, Finance and Risk Committee.	■	Risks pertinent to MLA and the industry were regularly identified, assessed, managed and reported to the Audit, Finance and Risk Committee on a quarterly basis.
Deliver the 2020–21 internal audit plan to the Audit, Finance and Risk Committee.	■	Eight out of nine internal audits from the 2020–21 Internal Audit Plan have been delivered to the Audit, Finance and Risk Committee. The remaining internal audit is in progress and will be delivered in September 2021.
Regularly report on the compliance management program to the Audit, Finance and Risk Committee.	■	Biannual report on the compliance management program was provided to the Audit, Finance and Risk Committee.
Finance		
Clean audit report received.	■	Financial statements were audited and a clean audit report was received.
Ensure financial reporting to internal and external stakeholders is timely, accurate and insightful.	■	Quarterly reporting to the PICs was submitted on time and to the satisfaction of stakeholders. MLA's Annual Report (2020–21) and Annual Investment Plan (2021–22) were published on time.
Evaluation		
Develop and implement ongoing cumulative and 2020–25 periodic reporting on the outcomes and dollar impacts of MLA's investment portfolio for the Australian red meat industry.	■	Cumulative and 2020–25 impact reporting was developed and implemented, with this migrated successfully onto Oracle's Planning and Budgeting Cloud Service. The new platform will greatly enhance MLA's economic impact reporting capability.
Commercialisation		
At least 80% of high/medium impact commercial ready products have commercial partners or identified commercialisation pathways.	■	Over 80% of all commercialisable ready IP has a commercialisation pathway, with most having a commercial partner identified.
Human resources		
Employee engagement to support talent retention and organisational performance is greater than or equal to the Australian average.	■	The MLA employee engagement score was 72%, which was above the Australian average of 70%.
Information technology		
Internal stakeholder satisfaction measures at 80% or more for MLA IT infrastructure and services.	■	The annual IT survey measured a satisfaction level of 95% for MLA IT infrastructure and services.
Business services		
Meet service level agreement performance levels as agreed within corporate services and for MLA business units in relation to contract/project processes.	■	Processing times for project creation, invoice processing and variations were within the approved and agreed time frames.



Leather Cattle Co. Banana QLD

Appendix A *continued*

Status of MLA's *Strategic Plan 2025* key performance indicators

Decisions informed through data and insights	
We have established a central data and insights platform with year-on-year improvement in stakeholder satisfaction scores.	Work has commenced on improving content within Prices & Market (public platform); and planning commenced for levy payer portal.
There has been an increase in the number of supply chains and % of livestock production utilising value based pricing (MSA/OM/productivity off-farm).	One sheepmeat processor partnering with MLA on objective measurement and MSA sheepmeat has publicly announced the launch of a new lamb pricing model in the previous quarter. Working with two sheepmeat plants to upload Lean Meat Yield (DEXA) data in the data platform in the current quarter. ISC and MSA have combined animal disease data with MSA index to demonstrate relationships with carcase value.
Increased compliance to industry quality assurance and integrity systems.	The measure for this is defined as the reduction in proportion of non-conformances raised across Livestock Production Assurance (LPA) program random and targeted audits. 104% of the audits conducted in 2020–21 resulted in a non-conformance (*2019–20 benchmark was 50%). This increase is due to an auditor education campaign that is focusing on improved consistency in the approach for raising non-conformances, shifting what might have previously been minor non-conformances into the major non-conformance category. Additional measures are being explored to provide the % of non-conformances being closed out within the required timeframe, which provides a better view as to whether identified risks are being addressed or not. It is expected that this data will be used to support this KPI in 2021–22.

Targeted investment to address the industry's big, complex challenges	
60% of Australians surveyed agree/strongly agree with the statement 'Australian cattle and lamb are farmed and raised in a humane manner.'	MLA's consumer sentiment survey tracks this performance indicator. Results of the 2021 survey indicate an improvement from 51% to 55% in relation to this statement.
60% of Australians surveyed agree/strongly agree with the statement 'the Australian cattle and sheep industry are committed to sustainable production'.	MLA's consumer sentiment survey tracks this performance indicator. Results of the 2021 survey are static at 51% compared to 51% in 2019–20, while those consumers with good industry knowledge tend to think more positively (at 75%) about industry's environmental sustainability.
Improvement in consumer perception of Australian production practices, relative to other beef and sheep producing nations.	Current baseline values for beef is 0.37 and lamb is 0.50. (vs US beef 0.16, NZ beef 0.34 and NZ lamb 0.52). This KPI is measured through the annual consumer global tracker and is a combined one number score of the attributes - 'The industry is environmentally sustainable' and 'The animal is well-cared for', both attributes are weighted equally. 2021 Global Tracker and one number scores are due later in 2021–22.
Improved market specification compliance across defined quality, animal health and other value based pricing dimensions.	MSA beef compliance is tracking at 95% for the end of 2020–21 (sheep compliance 2020–21 data not yet available). Six processing plants are collecting and sharing animal disease and defect data via Livestock Data Link (LDL) or proprietary systems, with three additional processing plants working towards releasing this information to their clients and producers. Also, Integrity Systems Company is working on enhancing the animal disease reporting to industry to give better feedback, enabling improved decision making, better disease management and increased profitability. A project underway with an epidemiologist to advance animal disease benchmarking and linking disease data with other datasets such as eating quality. A company's livestock compliance portal is now built and piloting feedback to producers. Livestock Data Link is currently in the process of redesigning its systems with the aim of building a single feedback system for users, and to enable greater sharing of the feedback via the data platform. LDL has completed user research and are entering into the co-design phase of the project.
Objective measures of animal welfare for live export, feedlot and extensive production systems implemented, with year-on-year increase in practice change.	For live export, LIVEX Collect has been mandated for daily and end of voyage reporting under ASEL 3.0, effective 1 November 2020. Over the next year, standardised, quality welfare indicator data will be available to monitor change. For the feedlot industry, the first phase of consultation on a draft framework has been completed with pilots initiated in 7 Australian feedlots during July 2021. For extensive production systems, a suite of 10 research projects is underway, establishing the behavioural (e.g. accelerometer-enabled smart tags, with appropriate algorithms) and physiological parameters necessary for an objective assessment of livestock wellbeing. ISC has an animal disease data pilot underway with Oakey, where one of the deliverables is to test and validate whether ante mortem data can be captured against the draft national data standard.



Enabling new sources of revenue

The number of producers deriving revenue from environmental services and/or natural capital trading markets has increased year-on-year.

- KPI to be measured via ABARES Farm Income Survey which was issued in Q3 and results not available for 2020–21 reporting. Data is also being collected through relevant levy and MDC investments with producers. Revenue to be derived from sale of carbon credits and/or natural capital credits, or price premiums for environmental branding. NAPCo's Five Founders and Arcadian Organic Meat Company are some examples of companies that have developed a carbon neutral brand. MLA is working with various other brand owners through MLA Donor Company (Harvest Road, McDonalds, Cape Grim) to design value chains enabling these value chains to derive additional revenue from low/zero carbon red meat.

Increase in the rate of adoption of data and evidence to inform production led environmental outcomes.

- KPI to be measured via MLA producer survey in MLA adoption program. Draft technical manual for on-farm carbon accounting developed as part of a pilot program that saw >70 producers undertake carbon accounting. Final stage of development undertaken for two national consortiums, the Emissions Avoidance Partnership and Carbon Storage Partnership, with contracting commenced in Q4 2020–21. Profitable Grazing Systems packages and Grazing Land Management EDGE workshops were conducted that increase the skills and knowledge of producers to utilise data. Strategic partnerships such as the Rangelands Living Skin with NSW Department of Primary Industry are underway which aims to increase best management practices by producers in the NSW rangelands.

Progress towards CN30 with improvement in carbon net position.

- Industry tracking is measured via annual update of industry's carbon account undertaken by CSIRO. Two major investments, the Emissions Avoidance Partnership and the Carbon Storage Partnership were initiated in Q4 2020–21.



Developing new, high value products that allow us to maximise the whole carcass

Increase in value of currently low value items through new uses or new products.

- Several technology platforms that can derive shelf stable meat powders continue to perform well in terms of yields, costs and sustainability footprints. These products will become inclusions in high value snacks and capsules, adding significant value to byproducts, hides and glandular meats in particular. Target channels will be beyond the meat unit department and butcher shop and centre of plate foodservice sector.

Improvement in customer endorsement of the quality of Australian beef and lamb.

- This is measured as part of the biennial trade survey, of which results will be updated late 2021. Current score is Australia 75 (US 47; NZ 44)



Beyond today's farm gate

There has been an improvement in the rate of return to total capital for beef and sheep farms.

- Monitoring and evaluation projects are assessing the on-going post 2020 benefits and impacts coming from on-farm MLA investments and this KPI is expected to be achieved.

Cross-sectoral projects account for a growing share of MLA investment portfolio.


- Investment via RDCs outside of the red meat sector will be impacted by the phasing out of the RRnD4P grants. However, additional budget has been allocated to Agriculture Innovation Australia in 2021–22 to fund cross-sectoral investment in environmental sustainability including the Future Drought Innovation Hub.

Projects funded by commercial investment account for a growing share of MLA investment portfolio.

- Commercial investment as a proportion of total investment is budgeted to increase in 2021–22, mainly due to an uplift in the Government matching cap. While alternate funding models that stretch the Government matching cap further (e.g. matching commercial investment with less than 'dollar for dollar') are being explored, the focus in the short-term will be in filling the current MLA Donor Company pipeline.

Appendix A *continued*

Status of MLA's Strategic Plan 2025 key performance indicators *continued*

Strengthening our core 	
Improvement in customer and consumer preference for Australian beef and Australian lamb.	<p>■ Global tracking study schedule has faced COVID-19 delays and will be ready in Q1 2021–22; consumer preference figures will be drawn from there. Trade survey is updated biennially and customer data will therefore be updated end of 2021–22. Integrated domestic and global brand and business development programs continue to drive preference for Australian red meat. Domestically, for beef MLA's Olympics sponsorship reframes beef as an essential part of a balanced diet. For lamb, purposeful and relevant campaigns designed to bring people together over lamb aim to increase the frequency of lamb purchase by consumers. Globally, investment has focussed on more on newer forms of media (live streaming, TikTok etc) and digital business development activities, as traditional activities such as trade shows, events and seminars have not been possible.</p>
Value sales growth in support of industry 2030 goal.	<p>■ Red meat export value to end of May 2021 declined to A\$12.96 billion (-22% on 12 months to May 2020) as the reduced supply affects export volumes. Beef export value declined to A\$8.55 billion (-25% on 2020) while total sheepmeat value declined to A\$3.48 billion (-16% on 2020). Demand remains high, especially in retail, whilst foodservice will only recover in major markets as COVID-19 related restrictions ease. MLA's international markets team continued to support the establishment of new high-value supply chains and markets to support the increasing export per kg price. Major marketing initiatives included the Kuk! Cook! campaign in Korea with online retail partnerships that grew sales for Australian beef by up to 540%; and the summer campaign in Japan including the establishment of the 'Aussie Beef clubhouse' during the Olympic games and beyond.</p>
Significant contribution to improving preferential access to key markets and to a \$1b reduction in technical trade barriers.	<p>■ 86% of red meat exports currently covered by preferential access – target is 90%. A-UK FTA set to deliver on industry's priority of trade liberalisation (via a phased transition) and increase preferential %; A-EU FTA progressing – with firm commitment by Australian Government/Trade Minister to improve access (following MLA submissions/direct engagement). Recent improvement in shelf-life standards in the Middle East has seen non-tariff barrier alleviation exceed \$300m.</p>
Improvement in member satisfaction with MLA products and services (+0.9pt).	<p>■ Overall member satisfaction with MLA in 2021 remained unchanged on 2020 levels, averaging 6.8/10 (source: MLA member survey). Since 2017, satisfaction levels have remained in a band of 6.6 to 6.8. Satisfaction increased in 2020–21 for MLA's printed communications, marketing activities, R&D, and domestic market and consumer insights. Satisfaction declined slightly for MLA's customer service, digital communications and international market and consumer insights. Satisfaction is a function of member knowledge of what MLA does and their level of involvement in MLA programs. There are opportunities to increase both aspects with the implementation of MLA's content strategy and developing more compelling value propositions for producers to engage in MLA programs.</p>

Appendix B

CoMarketing program participants 2020–21



Beef and veal

AAco
AgriGate Australia
Andrews Meat Industries
Arcadian Organic & Natural Meat Co
Argyle Prestige Meats
Australian Meat Emporium
Australian Meat Group
Bindaree Beef
Bingil Bay Beef
Coral Coast Beef
Dardanup Butchering Company
FarmGate MSU
Flinders + Co
G&K O'Connor
Greenham Tasmania
Harmony Fine Foods
Harvey Beef
Hunter Valley Cattle Co
Irongate Nominees
JBS Australia
JR Exports
KC Natural Meats
Kilcoy Pastoral Company
Lotte International
McMahon Brothers
Meat Tender
Mort & Co.

MPhee Bros (Export)
Mulwarra Export
NH Foods
Nolan Meats
Northern Cooperative Meat Company
OBE Beef
Outback Beef
Paradigm Foods
Pardoo Beef Corporation
Penfold Grazing
Providore Global
Rangeland Quality Meats
Rangers Valley
S.Kidman & Co
South Australian Cattle Co
Stanbroke Pty Ltd
Stockyard Pty Ltd
Tabuan Pty Ltd
Tasmania Feedlot
Tasmanian Agricultural Company
Teys Australia
The North Australian Pastoral Company
Thomas Foods International
Top Cut Foods
Warmoll Foods
Western Meat Packers
White Stripe Foods



Lamb

Arcadian Organic & Natural Meat Co
Dardanup Butchering Co
Dorper Lamb
Flinders + Co
JBS Australia
Junee Lamb
Marga Lamb
McMahon Brothers
McPhee Bros Export
Meat Tender
Mulwarra Export
Pandurra Premium
Stella Foods
Thomas Foods International
Top Cut Foods Ltd
WAMMCO
White Stripe
Wide Open Agriculture



Goatmeat

Thomas Foods International
McPhee Bros Export
Proom Pty Ltd



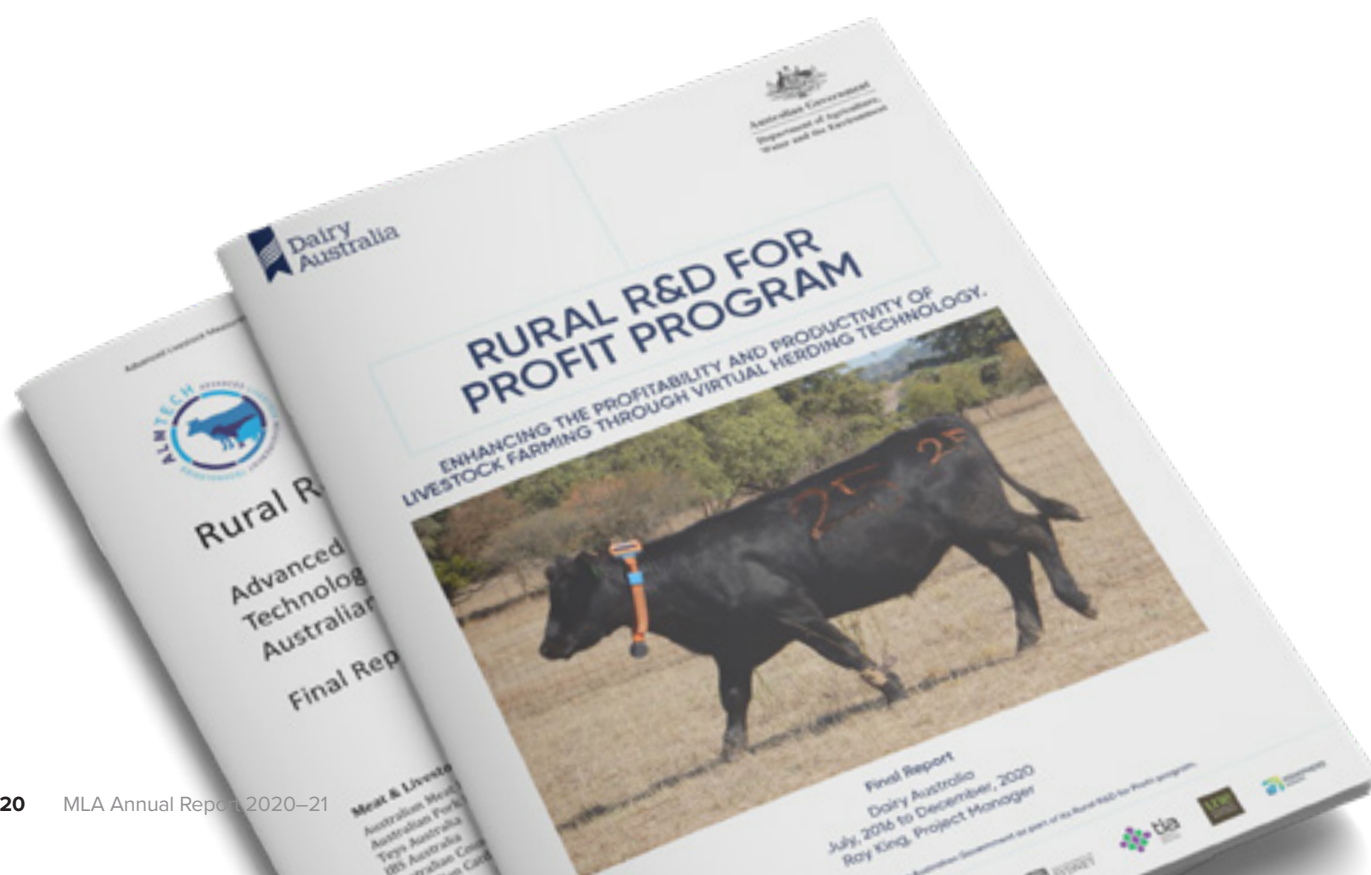
CoMarketing program participants Dan and Karen Penfold of Penfold Grazing and their daughters Bonnie, Molly, Jemima and Matilda.
Image: Josh Kelly from Jack Harlem Photography.

Appendix C

Rural R&D for Profit projects

The Australian Government's Rural R&D for Profit program boosts funding to the rural Research and Development Corporations (RDCs) – of which MLA is one – for nationally coordinated, strategic research that delivers outcomes for Australian producers. Four rounds of funding have been announced to date. Below are the projects which have been awarded funding where MLA is either the lead or a partner organisation. For more information go to agriculture.gov.au and search 'R&D for profit'.

Project	Lead organisation	Round	Contributors	Total budget	Expected finish date
Wastes to profits: Technologies and business models for the management of wastes in the animal industries	MLA	3	Australian Meat Processor Corporation; Dairy Australia Limited; Australian Pork Limited; Queensland University of Technology; University of Queensland; University of Southern Queensland; Murdoch University; Pacific Northwest National Laboratory; JBS Australia; Teys Australia; Australian Country Choice; Australian Lamb Company; Harvey Beef; Ridley Corporation Ltd; Aduro Biopolymers; Zeolite Australia Pty Ltd; Barwon Water; Queensland Urban Utilities	\$14,373,729	24/1/22
Forewarned is forearmed: equipping farmers and agricultural value chains to proactively manage the impacts of extreme climate events	MLA	3	Grains Research & Development Corporation; AgriFutures Australia; Cotton Research & Development Corporation; Sugar Research Australia; Wine Australia; Dairy Australia; Australian Pork Limited; Australian Bureau of Meteorology; University of Melbourne; University of Southern Queensland; Queensland Department of Agriculture and Fisheries; Suncorp; Monash University; South Australian Research & Development Institute; Department of Economic Development, Jobs, Transport & Resources Victoria	\$14,662,435	28/2/22
Improved surveillance, preparedness and return to trade for emergency animal disease incursions using FMD as a model.	MLA	2	CSIRO; Animal Health Australia; Charles Sturt University; Bureau of Meteorology; Australian Bureau of Agricultural and Resource Economics and Sciences; Australian Government Department of Agriculture – Animal Health Policy Branch	\$11,739,936	30/3/22
Soil engineers – community-based realisation and augmentation of soil ecosystem services from Dung beetles	MLA	3	CSIRO; Invetec Pty Ltd; University of Western Australia; Landcare Research New Zealand; Mingenew Irwin Group; University of New England; Charles Sturt University; WA Department of Agriculture and Food; Dung Beetles for Landcare Farming; Dung Beetle Solutions Australia; Warren Catchment Council; Leschenault Catchment Council	\$22,693,536	30/3/22



Project	Lead organisation	Round	Contributors	Total budget	Expected finish date
Developing and commercialising advanced measurement technologies and feedback systems into globally competitive Australian meat value chains	MLA	4	Australian Meat Processor Corporation; Murdoch University; Australian Pork Limited; PorkScan Pty Ltd; University of Adelaide; Woolworths; JBS Australia; Teys Australia; Fletcher International Exports; Gundagai Meat Processors; Stockyard; WAMMCO; Primary Industries and Regions South Australia; Department of Primary Industries NSW; Department of Economic Development, Jobs, Transport & Resources Victoria; Department of Primary Industries and Regional Development WA; University of New England; University of Melbourne; University of Technology Sydney; Frontmtec Group; Angus Australia; Scott Automation and Robotics; Thomas Foods International; Coles	\$19,043,427	5/4/22
Boosting profit and reducing risk of mixed farms in low and medium rainfall areas with newly discovered legume pastures enabled by innovative management methods	Grains Research & Development Corporation	2	Australian Wool Innovation; Meat & Livestock Australia; Murdoch University; South Australian Research & Development Institute; WA Department Agriculture and Food; Charles Sturt University; CSIRO	\$16,558,866	28/4/22
Enhancing supply chain profitability through reporting and utilisation of peri-mortem information by livestock producers	Australian Pork Limited	2	Meat & Livestock Australia; Australian Meat Processor Association; South Australian Research & Development Institute; Department of Economic Development, Jobs, Transport & Resources Victoria	\$1,725,594	1/5/22
Underpinning agricultural productivity and biosecurity by weed biological control	AgriFutures Australia	4	Grains Research & Development Corporation; Meat & Livestock Australia; Cotton Research & Development Corporation; CSIRO; Department of Primary Industries NSW; Queensland Department of Agriculture and Fisheries; Department of Economic Development, Jobs, Transport & Resources Victoria; AgForce; Bundaberg Regional Council; Castlereagh Macquarie County Council; Cramond Clan Environmental Consultants; Far North Queensland Regional Organisation of Councils; Gympie Regional Council; Hancock Queensland Plantations Pty Ltd; Hudson Pear Taskforce; Landcare Research; Malanda Beef Plan Group Inc; Mareeba Shire Council; Noosa & District Landcare Group Inc; NSW Environmental Trust; NSW Weed Biocontrol Taskforce; Primary Industries and Regions South Australia; South-East Queensland Water; South-East Local Land Services NSW; SunWater; Tablelands Regional Council; TasWeed Biocontrol; University of Queensland; University of Southern Queensland; US Department of Agriculture	\$15,842,570	31/12/22
Globally competitive Australian meat value chains enabled by advanced measurement technologies and integrated flock feedback systems	MLA	2	Australian Pork Limited; Scott Technology Ltd; Murdoch University; University of Technology Sydney; WA Department of Agriculture and Food; VIC Department of Economic Development, Jobs, Transport and Resources; NSW Department of Primary Industries; South Australian Research and Development Institute; JBS Australia; Australian Cattle and Beef Holdings; Australian Country Choice Pty Ltd; Teys Australia Management Pty Ltd; Harvey Beed; Carometec; PorkScan Private; University of Melbourne; Australian Meat Processor Corporation	\$11,947,000	Completed 2020
Phosphorus efficient pastures – delivering high nitrogen and water use efficiency and reducing of production across southern Australia	MLA	2	Dairy Australia; Australian Wool Innovation; CSIRO; Department of Primary Industries NSW; University of Western Australia; Murdoch University; Bookham Agricultural Bureau; Tablelands Farming Systems; Central Ranges Grassland Society; Monaro Farming Systems; Association for Sheep Husbandry, Excellence, Evaluation and Production (ASHEEP); Southern Dirt; Boggabri grazing group; Purlawaugh NSW Farmers	\$8,437,829	Completed 2020
Enhancing the profitability and productivity of livestock farming through virtual herding technology	Dairy Australia	2	Meat & Livestock Australia; Australian Wool Innovation; Australian Pork Limited; CSIRO; Tasmanian Institute of Agriculture at University of Tasmania; University of Sydney; University of New England; University of Melbourne; Agersens Pty Ltd	\$3,965,000	Completed 2020

Acronyms, glossary and index

Acronyms and glossary

AA Co	Australian Agricultural Company Ltd
AAFDX	Australian Agrifood Data Exchange
ABC	Anti-Bribery and Corruption Policy
ACT	Australian Capital Territory
AGM	Annual General Meeting
AIP	Annual Investment Plan
ALFA	Australian Lot Feeders' Association
ALMTech	Advanced Livestock Measurement Technologies
AMIC	Australian Meat Industry Council
APAC	Asia-Pacific
ASBV	Australian Sheep Breeding Values
ASX	Australian Stock Exchange
BDM	Business Development Manager
BOM	Bureau of Meteorology
CEO	Chief Executive Officer
CN30	Carbon Neutral by 2030
CRC	Cooperative research centre
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAWE	Department of Agriculture, Water and the Environment
DEXA	Dual Energy X-Ray Absorptiometry
EBV	Estimated Breeding Values
EEO	Equal Employment Opportunity
eNVD	Electronic National Vendor Declaration
EQG	Eating Quality Graded
EU	Europe
FICA	Food Import Compliance Agreement
FMCG	Fast-moving consumer goods
FTA	Free trade agreement
FWFA	Forewarned is Forearmed
GAICD	Graduate of the Australian Institute of Company Directors
GHG	Greenhouse gas emissions
GMP	Gundagai Meat Processors
GSM	Grams per square metre
IMF	Intramuscular fat
ISC	Integrity Systems Company
IT	Information technology
KPI	Key performance indicator
LDL	Livestock Data Link
LEP	Livestock Export Program
LPA	Livestock Production Assurance
LPP	Livestock Productivity Partnership
MAICD	Member of the Australian Institute of Company Directors
MDC	MLA Donor Company
MENA	Middle East and North Africa
MEQ	Meat Eating Quality
MLA	Meat & Livestock Australia
MSA	Meat Standards Australia
NB2	Northern Breeding Business
NFAS	National Feedlot Accreditation Scheme
NLIS	National Livestock Identification System
NLRS	National Livestock Reporting Service
NSW	New South Wales
NT	Northern Territory
NTB	Non-tariff barriers
NVD	National Vendor Declaration
NZ	New Zealand
OJD	Ovine Johne's Disease
PAM	Pramana Austindo Mahardkia

PDS	Producer Demonstration Site
PGS	Profitable Grazing Systems
PIC	Property Identification Code
RCDA	Rapid Climate Decision Analysis
RD&A	Research, development and adoption
RDC	Research Development Company
RIRDC	Rural Industries Research and Development Corporation
RMAC	Red Meat Advisory Council
rPET	recycled polyethylene terephthalate
SRSP	Sheep Reproduction Strategic Partnership
TAFE	Technical and Further Education
UK	United Kingdom
USA	United States of America
UV	Ultraviolet
WA	Western Australia

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