

# Annual Investment Plan



2021–22





MLA acknowledges the matching funds provided by the Australian Government to support the research and development detailed in this report. Numbers in graphs and tables within the report may be affected by rounding.

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# Introduction

**This *Annual Investment Plan (AIP)* has been developed to inform levy payers, peak industry councils, the Australian Government and the wider industry about MLA’s planned work program in 2021–22.**

Meat & Livestock Australia (MLA) is a research, development and marketing service provider to the Australian red meat and livestock industry. MLA’s purpose is to foster the long-term prosperity of the Australian red meat and livestock industry, by collaborating with stakeholders to invest in research, development and marketing initiatives that contribute to producer profitability, sustainability and global competitiveness. It is funded by levy payers, the Australian Government and value chain partners.

MLA prepares an AIP each financial year to guide the practical delivery of MLA’s long-term investment priorities and outcomes, which are set out in MLA’s *Strategic Plan 2025* and align with the Australian Government’s science and research priorities, and its rural research, development and extension priorities.

MLA has taken its strategic direction from *Strategic Plan 2025*, the Australian Government priorities mentioned above and the six priorities that the Australian red meat industry has set through its own strategic plan, *Red Meat 2030* (see Figure 1). *Red Meat 2030* also describes a shared vision and direction for the industry through two objectives:

- **to help double the value of Australian red meat sales**, product must meet or exceed consumer needs and the focus be on where we have a competitive advantage
- **to become the trusted source of the highest quality protein**, the focus should be on product quality and product attributes, including animal health, welfare and environmental credentials.

The alignment of the *Strategic Plan 2025* and *Red Meat 2030* is shown in Figure 2.

Figure 1: The six industry priorities outlined in Red Meat 2030



Figure 2: Alignment between *Red Meat 2030*, *MLA's Strategic Plan 2025* and *MLA's Annual Investment Plan*



This AIP outlines the programs, sub-programs, product groups, key performance indicators and budgets that will guide MLA's activities in 2021–22. Successful delivery of this plan will act as a stepping-stone towards achieving *MLA's Strategic Plan 2025*.

This *Annual Investment Plan* also denotes the sub-programs and product groups carried out by MLA's subsidiaries, *MLA Donor Company (MDC)* and *Integrity Systems Company (ISC)*. MDC's and ISC's activities are also summarised on pages 10–12.



# Aligning MLA programs and sub-programs to MLA's six strategic focus areas

MLA's *Strategic Plan 2025* contains six strategic focus areas:

1

Decisions informed through data and insights



2

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



3

Enabling new sources of revenue



4

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



5

Beyond today's farm gate



6

Strengthening our core



Table 1 shows the alignment of these six areas to MLA's sub-programs.

**Table 1: Alignment of MLA's sub-programs to strategic focus areas**

Sub-program	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
Animal wellbeing	●	●		●	●	●
Market knowledge (domestic)	●	●		●	●	●
Nutrition	●					●
Marketing and promotion (domestic)	●			●		●
Market access	●	●		●		●
Market knowledge (international)	●	●		●	●	●
Marketing and promotion (international)	●	●	●	●		●
Livestock export market activities	●	●		●		●
Livestock export (research and development)	●	●		●		●
Eating quality	●	●	●	●		●
Sustainability (off-farm)	●	●	●	●	●	●
Sustainability (on-farm)	●	●	●	●	●	●
Feedlot productivity	●	●	●	●	●	●
Market access science	●	●		●	●	●
Integrity systems	●	●			●	●
Objective measurement	●	●	●	●	●	●
Producer adoption	●	●	●	●	●	●
High value food frontiers	●	●		●	●	●
Digital value chain information	●	●	●		●	●
Productivity (off-farm)	●	●	●	●	●	●
Beef productivity	●	●	●	●	●	●
Digital agriculture	●	●	●	●	●	●
Feedbase production	●	●	●	●	●	●
Goat productivity		●	●	●	●	●
Livestock genetics	●	●	●	●	●	●
Sheep productivity	●	●	●	●	●	●
Innovation capability building		●	●	●		
Industry leadership and capacity building		●				●
Communication (community)		●				
Communication (stakeholder)	●	●	●	●	●	●
Corporate services					●	●

# Budget summary

In 2021–22, MLA plans to invest \$304.9 million in research, development and marketing activities across 16 program areas.

Tables 2–4: Projected 2021–22 investment by (\$ millions):

\*Total may not add up due to rounding

Pillar	Total \$304.9 million
 Our people	22.3
 Our customers, consumers and community	73.7
 Our livestock	79.6
 Our environment	47.9
 Our markets	30.1
 Our systems	33.3
 Essential services	18.1

Funding source	Total \$304.9 million
 Sheep levies	40.6
 Grainfed cattle levies	13.6
 Grassfed cattle levies	63.0
 Goat levies	0.5
 Government	95.0
 Australian Meat Processor Corporation	23.4
 LiveCorp	1.4
 External	67.5

Program	Total \$304.9 million
 Animal wellbeing	5.3
 Capability building	20.4
 Communication	9.5
 Corporate services	18.1
 Domestic market	25.0
 Eating quality	5.5
 Environmental sustainability	39.1
 Feedlot	5.8
 Integrity systems	27.8
 International markets	47.2
 Objective measurement	14.5
 Producer adoption	18.4
 Product and packaging innovation	3.5
 Productivity (off-farm)	15.0
 Productivity (on-farm)	42.0
 Value chain information and efficiency	7.8

# Funding by industry priority

Tables 5–11: Red Meat 2030 objectives, projected 2021–22 investment by funding source (\$ million)

\*Total may not add up due to rounding



## Our people

People see being part of the Australian red meat and livestock industry as attractive now and into the future.

Sheep levies	3.0	Goat levies	0.1	LiveCorp	0
Grainfed cattle levies	0.9	Government	8.8	External	4.0
Grassfed cattle levies	3.0	AMPC	2.5	<b>Total \$22.3 million</b>	

## Our customers, consumers and communities

People feel good about eating Australian red meat. Our customers, consumers and communities recognise the vital role our industry plays in food production and food security, and trust us to deliver high value, high quality products.

Sheep levies	17.2	Goat levies	0.1	LiveCorp	0.2
Grainfed cattle levies	5.0	Government	8.5	External	7.3
Grassfed cattle levies	32.2	AMPC	3.2	<b>Total \$73.7 million</b>	

## Our livestock

We set the standard for world class animal health, welfare, biosecurity and production practices.

Sheep levies	5.6	Goat levies	0.2	LiveCorp	0.2
Grainfed cattle levies	2.2	Government	35.5	External	24.2
Grassfed cattle levies	6.0	AMPC	5.7	<b>Total \$79.6 million</b>	

## Our environment

We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.

Sheep levies	3.0	Goat levies	0	LiveCorp	0
Grainfed cattle levies	1.1	Government	20.5	External	18.2
Grassfed cattle levies	3.0	AMPC	2.2	<b>Total \$47.9 million</b>	

## Our markets

We improve the economic resilience for our industry by increasing access to, and the performance of, existing and new markets.

Sheep levies	4.7	Goat levies	0.1	LiveCorp	0.7
Grainfed cattle levies	1.6	Government	6.9	External	3.3
Grassfed cattle levies	7.4	AMPC	5.5	<b>Total \$30.1 million</b>	

## Our systems

We are a trusted brand because of our integrity systems, built on trust and respect that supports strong partnerships and sharing of information, reducing unnecessary industry and government regulation.

Sheep levies	2.8	Goat levies	0.1	LiveCorp	0.3
Grainfed cattle levies	1.3	Government	11.7	External	8.3
Grassfed cattle levies	4.6	AMPC	4.4	<b>Total \$33.3 million</b>	

## Our essential services

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

Sheep levies	4.4	Goat levies	0.1	LiveCorp	0
Grainfed cattle levies	1.5	Government	3.1	External	2.3
Grassfed cattle levies	6.8	AMPC	0	<b>Total \$18.1 million</b>	

# Operating environment – challenges and opportunities

**Twelve months after the COVID-19 pandemic hit, the impacts on Australia’s key global meat markets are varied – most markets continue to struggle with outbreaks, uncertainty and subsequent economic fallout, while a few markets that implemented quick control measures have seen their economies largely recover. The overall market outlook is becoming more positive. Vaccination rollouts are underway around the world, which are expected to improve market stability.**

Severely restricted foodservice channels in many markets have seen higher-value beef and lamb cuts impacted, while sales through retail channels have grown through the pandemic, as people have shifted to eating more at home. The foodservice channel is expected to struggle for some time before a return to pre-pandemic levels. This channel and demand shift during an economic slowdown will continue to make ‘using the whole carcass’ a challenge.

Constrained supply and high prices of Australian livestock, along with a strong increase in the Australian dollar, continues to challenge the industry. With Australia’s herd and flock at historically low levels, and the contraction in livestock supply forecasted over the next couple of years as producers seek to rebuild livestock numbers, Australian cattle and sheep prices are likely to remain sheltered from global forces.

## Key challenges and opportunities

**The Australian red meat and livestock industry operates in a dynamic environment that presents a variety of challenges and opportunities.**

MLA is working in each of these areas to foster the prosperity of Australian red meat. For a full list of MLA’s sub-programs, see Table 1 on page 5.

## Challenges

### Competitors

Rising production and export volumes from key competitors are expected to continue to intensify competition in coming years, particularly within Asian markets. African Swine Fever (ASF) has had a significant impact on the global meat market, particularly in growing China’s import demand across all proteins. ASF continues to spread across South-East Asia, highlighting the importance of biosecurity controls and Australia’s integrity systems. Competitors will continue to strengthen integrity systems in support of market access gains with heightened focus on food safety, traceability and reliable supply.

### Customers and consumers

With uncertain economic conditions and consumer confidence, and increasing costs of production, the affordability of Australia’s red meat will likely challenge the willingness of customers and consumers to pay more.

### Lower income and economic uncertainty

Tight livestock supply as producers enter a re-build phase will result in a lower levy income in 2021–22. Economic uncertainty may impact the appetite and ability of the private sector to invest in research, development and innovation, which may have implications for new MLA Donor Company (MDC) projects.

## Scrutiny following COVID-19

As governments seek to recover from the unplanned budget fall-out of the pandemic, there may be extra scrutiny on the Research & Development Corporation model, and this could have an impact on matched R&D investments.

## Market access

Barriers, particularly non-tariff measures, continue to impede trade flows. While Australia's comparatively more favourable international access provides a market entry advantage, competitors are starting to close the gap. COVID-19 induced port disruptions and customs clearance delays for meat imports, while easing overall, may continue to impact importers.

## On-farm productivity

Productivity performance remains a challenge, with the perception being Australian red meat producers are below the productivity improvements secured by major international competitors.

## Input costs

Australian red meat processing costs are consistently higher than all of our major competitors and energy prices continue to escalate.

## Environment

The role of red meat as part of a sustainable, environmentally friendly food system is continuing to be challenged. Policy makers, customers, consumer and community members are seeking evidence of the industry's commitment to sustainable practices.

# Opportunities

## Livestock

The rebuilding of Australia's herd and flock post drought, floods and bushfires is expected to continue, with speed and scale determined by favourable seasonal conditions as well as prevailing economic conditions and business confidence. The global protein gap created by African Swine Fever (ASF) is expected to continue to bolster global protein markets over the next few years.

## Food security

Food security is expected to rise in importance, presenting market, channel and segment risks and opportunities. In Australia, this may present an opportunity to strengthen the importance of agriculture and food production to community and government.

## Consumer interest and preferences

Long-term demand for high quality, safe and nutritious food is set to continue to grow, with the rate largely determined by income growth in developing markets.

Communication of Australian red meat's benefits to customers and consumers will continue to increase in importance, supported by verified, country of origin, provenance and nutrition claims and strengthened integrity systems.

## Adoption of new research and development, technologies and systems

Industry-wide adoption of research and development outcomes, technology and objective carcass measurement and assurance systems is likely to prompt a transition from price averaging systems to pricing based on defined quality, yield and integrity attributes. These improvements will support an increase in productivity and will reduce the costs of production.

## Environmental credentials

The industry continues to demonstrate its environmental credentials through the sustainability of its production systems and by capturing productivity gains while reducing emissions.

## Animal welfare

The industry continues to demonstrate its commitment to animal welfare by ensuring policies and practices evolve with community expectations.

# Our subsidiary companies

MLA owns two operating subsidiary companies.

**MLA Donor Company (MDC) partners with organisations to co-invest in innovation and new technologies that bring value to the red meat industry.**

The Australian Government matches voluntary partner contributions (up to 50% of project value) through MDC, where eligible projects deliver outcomes that address broader industry and/or government priorities and benefit the entire industry.

Integrity Systems Company (ISC) is responsible for delivering the red meat industry's on-farm assurance and through-chain traceability programs. These are the Livestock Production Assurance Program (LPA program) and the National Livestock Identification System (NLIS) that together with National Vendor Declarations (NVD), make up Australia's red meat integrity system.

## MLA Donor Company

**MLA Donor Company Limited (MDC) is a fully owned subsidiary of Meat & Livestock Australia.**

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 3 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.

As MDC activities are directly aligned to deliver against MLA's overall strategic plan, key program deliverables have been included in the relevant sections of this *Annual Investment Plan*.

Further detail about MDC is available at [mla.com.au/mdc](http://mla.com.au/mdc)

**Figure 3: Investment partners and innovations delivered by MDC**

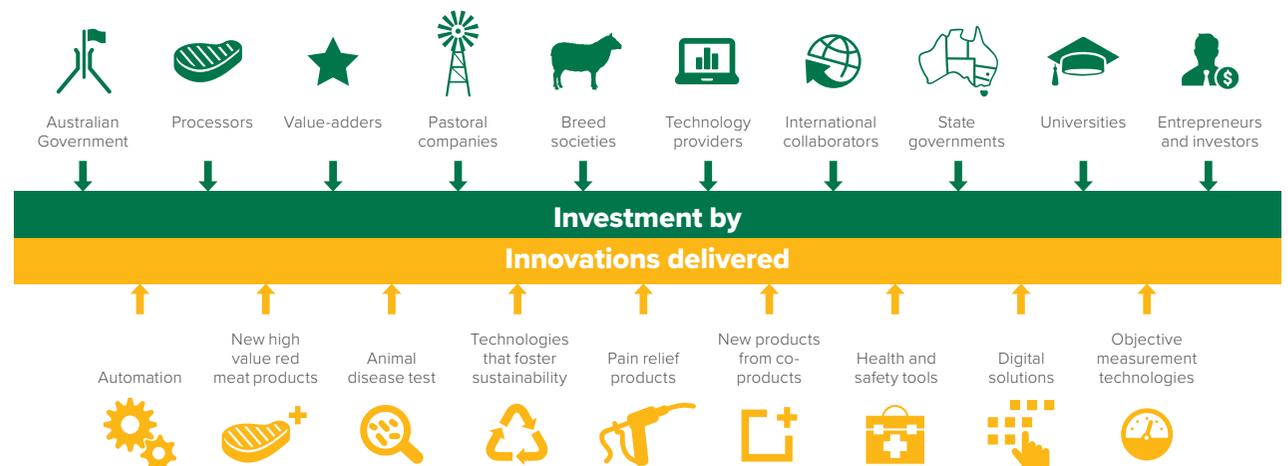


Table 12: Projected 2021–22 investment by funding source – MDC (\$ '000)

\*Total may not add up due to rounding

Funding source	Sub-program																			Total	
	Animal wellbeing	Innovation capability building	Sustainability (off-farm)	Sustainability (on-farm)	Feedlot	Market access science	Integrity systems	Livestock export (research and development)	Objective measurement	Producer adoption	High value food frontiers	Productivity (off-farm)	Beef productivity	Feedbase production and infrastructure	Digital agriculture	Goat productivity	Sheep productivity	Livestock genetics	Eating quality		Digital value chain information
Goat R																					
Goat M																					
Mutton R																					
Mutton M		19																			19
Lamb R																		316			317
Lamb M		61																			61
Grassfed cattle R																		322			322
Grassfed cattle M		99																29			128
Grainfed cattle R																		43			43
Grainfed cattle M		1																			1
AMPC R		1,555	180		28	5			786		189	1,174						34	50		4,000
AMPC M																					
LiveCorp R																					
LiveCorp M																					
External R	2,051	2,442	133	12,466	1,035	645	1,238	350	2,161	4,823	1,219	4,193	2,434	4,614	885	210	932	5,237	172	1,342	48,580
Government R	2,051	3,998	313	12,466	1,062	650	1,238	350	2,948	4,823	1,408	5,367	2,434	4,614	885	210	932	5,917	205	1,392	53,262
External M																		324			324
Sum of R	4,102	7,996	625	24,933	2,125	1,300	2,476	700	5,895	9,646	2,817	10,733	4,867	9,228	1,769	419	1,864	11,834	410	2,784	106,524
Sum of M		179																354			533
Sum of AIP 2021–22	4,102	8,175	625	24,933	2,125	1,300	2,476	700	5,895	9,646	2,817	10,733	4,867	9,228	1,769	419	1,864	12,188	410	2,784	107,058



# Integrity Systems

red meat customer assurance

## Integrity Systems Company

**Integrity Systems Company (ISC) is a fully owned subsidiary of Meat & Livestock Australia.**

ISC aims to develop and grow opportunities through innovation in integrity and information systems. This serves to strengthen our integrity systems, maintain and increase customer trust in our product, and enhance our reputation for food safety, biosecurity, sustainability and ethical production.

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

- providing, delivering and administering meat and livestock integrity programs enhancing integrity
- enhancing programs to improve their performance for the benefit of the red meat and livestock industry
- developing, delivering and administering information technology platforms for the benefit of the meat and livestock industry
- maintaining a framework for consultation with peak industry councils, SAFEMEAT partners, industry committees and government stakeholders
- pursuing commercial opportunities, provided such opportunities do not detract from the provision of the core business of Integrity Systems Company or conflict with the company's not-for-profit status.

ISC activities are directly aligned to deliver against MLA's overall strategic plan through the *Integrity Systems 2025 and Beyond Strategy*. Key program deliverables have been included in the relevant sections of this Annual Investment Plan.

**Table 13: Projected 2021–22 investment by funding source – Integrity Systems Company (\$ '000)**

Funding source	Sub-program		Total
	Digital value chain information	Integrity systems	
<b>Goat R</b>	41	15	<b>57</b>
<b>Goat M</b>		26	<b>26</b>
<b>Mutton R</b>	110	191	<b>301</b>
<b>Mutton M</b>		161	<b>161</b>
<b>Lamb R</b>	819	1,038	<b>1,857</b>
<b>Lamb M</b>		1,101	<b>1,101</b>
<b>Grassfed cattle R</b>	1,154	1,915	<b>3,069</b>
<b>Grassfed cattle M</b>		1,935	<b>1,935</b>
<b>Grainfed cattle R</b>	389	657	<b>1,046</b>
<b>Grainfed cattle M</b>		572	<b>572</b>
<b>AMPC R</b>		1,124	<b>1,124</b>
<b>AMPC M</b>		1,460	<b>1,460</b>
<b>LiveCorp R</b>		9	<b>9</b>
<b>LiveCorp M</b>		28	<b>28</b>
<b>External R</b>			
<b>Government R</b>	2,513	4,950	<b>7,463</b>
<b>External M</b>		5,915	<b>5,915</b>
<b>Sum of R</b>	<b>5,027</b>	<b>9,900</b>	<b>14,926</b>
<b>Sum of M</b>		<b>11,198</b>	<b>11,198</b>
<b>Sum of AIP 2021–22</b>	<b>5,027</b>	<b>21,098</b>	<b>26,124</b>

\*Total may not add up due to rounding

# Our strategic focus areas

MLA's six strategic focus areas within its *Strategic Plan 2025* guide the direction of MLA's investments. These areas are:

1

Decisions informed through data and insights



2

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



3

Enabling new sources of revenue



4

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



5

Beyond today's farm gate



6

Strengthening our core



# Decisions informed through data and insights

MLA will focus on transitioning to a culture that captures and shares data across every point in the supply chain. This will enable the identification of the highest value opportunities and a shared understanding of challenges that need addressing. Collectively, we can then make more informed, strategic decisions and align responses for greatest impact.

## This means MLA will:

- prioritise investments that allow for the seamless transfer of information through a national data platform
  - invest in our people, providing them with the skills and confidence to interpret and use integrated data to drive their decision-making.
- By 2025, success will be:
- more producers with access to data and feedback on animal performance to inform production decisions
  - industry has a data culture, with supply chain decisions based on data capture and analysis.



The following MLA programs and sub-programs are aligned to this strategic focus area:

Program	Sub-programs	
 Animal wellbeing	Animal wellbeing	
 Domestic market	Market knowledge (domestic) Nutrition Marketing and promotion (domestic)	
 International markets	Market access Market knowledge (international) Marketing and promotion (international) Livestock export market activities Livestock export (research and development)	
 Eating quality	Eating quality	
 Environmental sustainability	Sustainability (off-farm) Sustainability (on-farm)	
 Feedlot	Feedlot productivity	
 Integrity systems	Market access science Integrity systems	
 Objective measurement	Objective measurement	
 Producer adoption	Producer adoption	
 Product and packaging innovation	High value food frontiers	
 Value chain information and efficiency	Digital value chain information	
 Productivity (off-farm)	Productivity (off-farm)	
 Productivity (on-farm)	Beef productivity Digital agriculture Feedbase production	Livestock genetics Sheep productivity
 Communication	Communication (stakeholder)	

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

MLA will focus on prioritising which challenges to address by the impact they could deliver for the industry. MLA's starting point will be exploring mechanisms to optimise resources and address seasonal and climate variability. MLA will also continue its focus on meeting the expectations of customers, consumers and the community around animal health, animal welfare and environmental stewardship.

## This means MLA will:

- have a focused and targeted investment portfolio
  - increase investment in and explore new approaches to producer adoption around areas such as adaption to climate variability, reproduction, mortality and objective measurement
  - invest in the strengthening of our integrity systems, demonstrating the important role of red meat in a sustainable food system.
- By 2025, success will be:
- producers have the capability to adopt R&D outcomes that directly improve their productivity and profitability
  - improved market specification compliance across defined quality, animal health and other value-based pricing dimensions
  - objective measurement of animal welfare for live export, feedlot and extensive production systems implemented, with an increase in practice change
  - progress towards net zero carbon emissions goal by 2030
  - strengthened perception of Australian production practices, across domestic and international markets.



The following MLA programs and sub-programs are aligned to this strategic focus area:

Program	Sub-programs	
 Animal wellbeing	Animal wellbeing	
 Domestic market	Market knowledge (domestic)	
 International markets	Market access Market knowledge (international) Marketing and promotion (international) Livestock export market activities Livestock export (research and development)	
 Eating quality	Eating quality	
 Environmental sustainability	Sustainability (off-farm) Sustainability (on-farm)	
 Feedlot	Feedlot productivity	
 Integrity systems	Market access science Integrity systems	
 Objective measurement	Objective measurement	
 Producer adoption	Producer adoption	
 Product and packaging innovation	High value food frontiers	
 Value chain information and efficiency	Digital value chain information	
 Productivity (off-farm)	Productivity (off-farm)	
 Productivity (on-farm)	Beef productivity Digital agriculture Feedbase production	Goat productivity Livestock genetics Sheep productivity
 Capability building	Innovation capability building Industry leadership and capacity building	
 Communication	Communication (community) Communication (stakeholder)	

# Enabling new sources of revenue

MLA will focus on identifying new sources of revenue to capture value and increase profitability, alongside red meat production.

## This means MLA will:

- identify opportunities and explore business models around the provision of services and reward mechanisms for good environmental stewardship
  - invest in partnerships across the supply chain and across sectors, to identify high value opportunities for the conversion of production waste into valuable products.
- By 2025, success will be:
- across the supply chain, additional sources of revenue through new business models have been enabled
  - more producers have diversified their revenue to include service offerings.



The following MLA programs and sub-programs are aligned to this strategic focus area:

Program	Sub-programs	
 International markets	Marketing and promotion (international)	
 Eating quality	Eating quality	
 Environmental sustainability	Sustainability (off-farm) Sustainability (on-farm)	
 Feedlot	Feedlot productivity	
 Objective measurement	Objective measurement	
 Producer adoption	Producer adoption	
 Value chain information and efficiency	Digital value chain information	
 Productivity (off-farm)	Productivity (off-farm)	
 Productivity (on-farm)	Beef productivity Digital agriculture Feedbase production	Goat productivity Livestock genetics Sheep productivity
 Capability building	Innovation capability building	
 Communication	Communication (stakeholder)	

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

MLA will focus on diversifying products to drive growth through new usages and occasions for red meat. Currently 20% of the carcass delivers 80% of the value and we need to shift this balance, including by transforming what is currently considered waste attracting little or no value into high value products or ingredients.

## This means MLA will:

- identify opportunities to capture value and increase producer profitability through product and market diversification.
- By 2025, success will be:
  - more producers and brand owners diversify revenue earned from commodity to higher value products
  - customers and consumers globally value Australian red meat as a quality ingredient.



The following MLA programs and sub-programs are aligned to this strategic focus area:

Program	Sub-programs	
 Animal wellbeing	Animal wellbeing	
 Domestic market	Market knowledge (domestic) Marketing and promotion (domestic)	
 International markets	Market access Market knowledge (international) Marketing and promotion (international) Livestock export market activities Livestock export (research and development)	
 Eating quality	Eating quality	
 Environmental sustainability	Sustainability (off-farm) Sustainability (on-farm)	
 Feedlot	Feedlot productivity	
 Integrity systems	Market access science	
 Objective measurement	Objective measurement	
 Producer adoption	Producer adoption	
 Product and packaging innovation	High value food frontiers	
 Productivity (off-farm)	Productivity (off-farm)	
 Productivity (on-farm)	Beef productivity Digital agriculture Feedbase production	Goat productivity Livestock genetics Sheep productivity
 Capability building	Innovation capability building	
 Communication	Communication (stakeholder)	

# Beyond today's farm gate

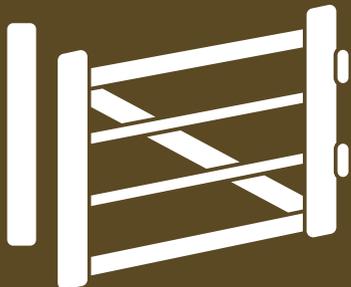
MLA will focus on balancing the current 'known' challenges and opportunities and anticipating the future issues industry will face. MLA needs to foster a culture that looks both to the future and to adjacent industries to inform today's decision-making.

## This means MLA will:

- capture and apply valuable insights from beyond the farm gate and outside food in order to mitigate risks and enhance sustainability and global competitiveness
- strengthen collaboration with current and new partners to achieve efficiencies and impact.

## By 2025, success will be:

- improvement in the rate of return to total capital for beef and sheep farms
- cross-sectoral projects and projects funded by external investment account for a growing share of MLA's investment portfolio
- enhanced project management and milestone delivery.



The following MLA programs and sub-programs are aligned to this strategic focus area:

Program	Sub-programs	
 Animal wellbeing	Animal wellbeing	
 Domestic market	Market knowledge (domestic)	
 International markets	Market knowledge (international)	
 Environmental sustainability	Sustainability (off-farm) Sustainability (on-farm)	
 Feedlot	Feedlot productivity	
 Integrity systems	Market access science Integrity systems	
 Objective measurement	Objective measurement	
 Producer adoption	Producer adoption	
 Product and packaging innovation	High value food frontiers	
 Value chain information and efficiency	Digital value chain information	
 Productivity (off-farm)	Productivity (off-farm)	
 Productivity (on-farm)	Beef productivity Digital agriculture Feedbase production	Goat productivity Livestock genetics Sheep productivity
 Communication	Communication (stakeholder)	
 Corporate services	Corporate services	

# Strengthening our core

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

## This means MLA will:

- continue to invest in the development and delivery of our essential services and seek to achieve efficiencies in these activities to maximise our return on investment
- support market growth and market diversification with investments prioritised by market, channel and segment attractiveness
- support market access, including alleviation of technical trade barriers
- share knowledge with commercial supply chain participants to support development of branded and high value products.

## By 2025, success will be:

- Australian red meat occupies preferred status amongst customers, consumers and governments
- contribution towards red meat sales value growth and 2030 industry target
- contribution to improving preferential access to key markets and to the industry 2030 target of a \$1b reduction in technical trade barriers
- integrity systems are globally competitive, easy to use, and valued by industry, with increased rates of compliance
- producers are confident in the MLA *Strategic Plan 2025* and understand the social, environmental and economic impact and value of MLA investments.



The following MLA programs and sub-programs are aligned to this strategic focus area:

Program	Sub-programs
 Animal wellbeing	Animal wellbeing
 Domestic market	Market knowledge (domestic) Nutrition Marketing and promotion (domestic)
 International markets	Market access Market knowledge (international) Marketing and promotion (international) Livestock export market activities Livestock export (research and development)
 Eating quality	Eating quality
 Environmental sustainability	Sustainability (off-farm) Sustainability (on-farm)
 Feedlot	Feedlot productivity
 Integrity systems	Market access science Integrity systems
 Objective measurement	Objective measurement
 Producer adoption	Producer adoption
 Product and packaging innovation	High value food frontiers
 Value chain information and efficiency	Digital value chain information
 Productivity (off-farm)	Productivity (off-farm)
 Productivity (on-farm)	Beef productivity Digital agriculture Feedbase production Goat productivity Livestock genetics Sheep productivity
 Capability building	Industry leadership and capacity building
 Communication	Communication (stakeholder)
 Corporate services	Corporate services

# 2021–22 accelerated initiatives

MLA continues to seek out investment areas within its *Strategic Plan 2025* that can be accelerated to deliver increased impact to the industry. Seven investment areas have been identified that, with more intense activity, will deliver even greater and faster returns to producers.

## Objective measurement

MLA is prioritising the measurement of carcass quality traits with several technologies showing promise to move into commercial supply chains. This will deliver faster, more accurate, repeatable, and more transparent grading outcomes. However, the real ‘game changer’ will be objective measurement as a key enabler for the red meat industry to implement value-based marketing. MLA is accelerating the accreditation of the technology while developing the commercialisation plan with the target supply chain adopters.

## Northern beef

MLA is accelerating the commercialisation of a single dose tick vaccine for use in northern beef operations. A viable vaccine will be transformational, significantly reducing the more than \$150 million in lost production caused by ticks every year. MLA is also working closely with its northern regional advisory council (NABRC) to expand the use of peer-to-peer learning in producer groups and help accelerate the adoption of best practice management and improve calf survival.

## Carbon Neutral by 2030

Through a national call for investment projects under CN30 and the Emissions Avoidance Partnership, MLA has brought forward multiple significant investments in carbon storage and emissions avoidance. Working with a diversity of providers and a mix of levy and MDC funding, this will boost progress towards the industry becoming carbon neutral by 2030.

## Category management

MLA is re-allocating resources into developing a Category Management Playbook that will deliver a comprehensive Category Growth Plan based on the MLA Category Growth Drivers. The Category Growth

Plan will be underpinned by size of prize modelling that identifies the biggest opportunities for red meat growth as an end product or ingredient in retail and foodservice in the domestic market, and in modern retail for international markets. New category growth plans will build confidence in red meat's ability to deliver increased commercial returns for retail and foodservice customers, thereby driving demand.

## MLA's Integrity Systems Company

A strategy refresh of MLA's *Integrity Systems 2025 and Beyond Strategy* (IS2025) is re-aligning resourcing to ensure core services meet the needs of today and are delivered in a way that create a seamless and integrated experience for customers.

## Red meat positioning

MLA is shifting communication resources and priorities to ensure the industry is armed and ready to quickly respond to community concerns around the positioning of red meat. MLA has accelerated multiple streams of work including producing easy-to-use resources to enable voices within and outside the industry supply chain to be effective advocates to engage with the broader community.

## Industry corporate affairs unit

MLA is investing in a red meat industry corporate affairs unit that works across the supply chain to support effective stakeholder engagement, issues and crisis management and help build capacity in policy development.

The unit will coordinate and align messages and support the Red Meat Advisory Council and the peak industry councils in communications about red meat and livestock issues such as alternative proteins, environmental impact, nutrition and animal welfare.

# Programs

22  Animal wellbeing

25  Domestic market

30  International markets

36  Eating quality

39  Environmental sustainability

43  Feedlot

47  Integrity systems

51  Objective measurement

55  Producer adoption

59  Product and packaging innovation

62  Value chain information and efficiency

65  Productivity (off-farm)

68  Productivity (on-farm)

77  Capability building

80  Communication

85  Corporate services



# Program

## Animal wellbeing



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.

### Sub-programs

- Animal wellbeing



### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

The community has high and increasing expectations about the way livestock is treated. These expectations encompass the management of animal health, the application of animal welfare standards, the maintenance of Australia's freedom from exotic diseases and minimising the impact of endemic diseases.

MLA's investment works towards minimising the impact of disease, environmental factors and human intervention, and by ensuring the continued support and trust of the community. Minimising the impact of animal diseases requires a multi-pronged approach, comprising early recognition (diagnosis), containment (preventing entry and/or spread), prevention, and treatment.

There are significant productivity gains for the industry as it continues to improve the health and welfare of livestock by enhancing husbandry practices, diagnosis testing and commercialising preventative treatment options including the reduction of livestock mortality and the impacts of parasitic disease.



# Animal wellbeing

The animal wellbeing sub-program will be consolidated into three focused programs of work:

1. Ongoing development of vaccines utilising modern technology (novel antigens, sustained release formulations) against parasites, infectious diseases, and for effective contraception.
2. A continuation of the search for new effective analgesia (efficacy and duration of effect) for unavoidable painful procedures – castration, tail docking and dehorning.
3. The development of a system of wellbeing assessment (a lifetime animal wellbeing index) that underpins producers’ commitment to continuous improvement, and secures the confidence of the Australian community and Australian and international customers.
4. We will also maintain preparedness for possible exotic disease incursions, e.g. through appropriate vaccine stocks and cutting-edge diagnostic methods, and continue to be a significant contributor to the Centre for Invasive Species Solutions.

## Key performance indicators in 2021–22

1. Pathway for an Animal Wellbeing Lifetime Index established.
2. Two commercialisation partners engaged in order to commercialise single shot cattle tick and immuno-contraceptive vaccine.
3. 60% of Australians surveyed agree/strongly agree with the statement ‘Australian cattle and lamb are farmed and raised in a humane manner’.

Product group	Core activities
Animal wellbeing diagnosis and enablers	<p>The ‘animal wellbeing diagnosis and enablers’ product group includes improvements in the diagnosis of diseases such as sheep footrot and worm infestation, as well as exotic pathogens such as capripox and foot and mouth disease, and developing the technology for objective assessment of parameters that would constitute a lifetime animal wellbeing index. Other initiatives include:</p> <ul style="list-style-type: none"> <li>■ exploring the epidemiology of conditions such as arthritis, sheep measles, pneumonia, toxoplasmosis, sarcosporidiosis, neosporosis, and bovine theileriosis</li> <li>■ developing decision support tools and prediction models for parasite management and disease interventions</li> <li>■ encouraging producer participation in disease surveillance.</li> </ul>
Animal wellbeing prevention and treatment	<p>Initiatives in the ‘animal health prevention and treatment’ product group include:</p> <ul style="list-style-type: none"> <li>■ facilitating the integration of parasite and pest management with the husbandry calendar</li> <li>■ avoiding and or neutralising plant toxicities</li> <li>■ identifying animals that are inherently resistant or resilient against e.g. cattle tick, internal parasites and infectious diseases</li> </ul> <ul style="list-style-type: none"> <li>■ developing a single shot cattle tick vaccine</li> <li>■ exploring possibilities of vaccines against other parasites</li> <li>■ enabling producers to make informed decisions on cost-effective interventions for diseases diagnosed at slaughter.</li> </ul>
Invasive animal control	<p>Management of invasive animals (foxes, wild dogs, cats, feral pigs, rabbits) to minimise their impacts, which include:</p> <ul style="list-style-type: none"> <li>■ predation (an important contributor to neonatal mortality of lambs and calves)</li> <li>■ habitat destruction (rabbits and pigs)</li> <li>■ disease transmission (hydatids, toxoplasmosis, sarcosporidiosis, neospora).</li> </ul>
Improve and replace husbandry practices	<p>Initiatives within the ‘improve and replace husbandry practices’ product group include:</p> <ul style="list-style-type: none"> <li>■ providing analgesia in unavoidable painful procedures</li> <li>■ contraceptive vaccine, instead of spaying/castration</li> <li>■ promoting the polled gene test to replace dehorning.</li> </ul>

Table 14: Projected 2021–22 investment by funding source – animal wellbeing (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																	Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R	External M			
Animal wellbeing			50		399		154								2,051	2,653		5,306		5,306
Total			50		399		154								2,051	2,653		5,306		5,306





# Program

## 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.

### Sub-programs

- Market knowledge (domestic)
- Marketing and promotion (domestic)
- Nutrition

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

Australia continues to be one of the highest per capita consumers of red meat, and one of the most highly penetrated, with over 95% of households consuming each year.

The combination of strong global demand for Australian red meat and tight supply has driven a consistent increase in the price of red meat paid by Australian consumers, increasing the need to justify beef and lamb’s premium. The core category needs of ease and convenience, consistent trusted quality, versatility and nutrition, form the key battlefields where all protein types compete to be seen as good value for money.

The Australian market continues to evolve as generational trends such as the aging population, growth from migration, and the increasing prevalence of singles and couples without children impact lifestyles, needs and wants, and perceptions of value. Many younger Australians, who are increasingly ethnically diverse, educated and urban, also tend to be lighter consumers of red meat. Ensuring beef and lamb are seen as relevant ingredients in a wide range of cuisines and dishes, while also providing easy

access to education on cuts and cook methods, will be key to capturing a younger consumer.

As one of the largest categories in Australian supermarkets, retailers are increasingly looking for innovation and sustainable growth opportunities for fresh meat. The retail landscape is highly concentrated with Woolworths and Coles commanding approximately 70% market share, with Aldi, Costco, IGA and the butcher channel making up the balance. All retailers are highly focused on getting the right mix of range, promotions, shelf organisation and convenience to win the fresh meat shopper. Providing thought leadership in the form of a robust, insight-led Category Management Playbook that will inform category tactics will be a critical tool in delivering sustainable growth and increased profitability for the value chain.

The foodservice sector has been significantly impacted by the COVID-19 pandemic. Social distancing restrictions imposed on outlets have forced the closure, both temporarily and permanently, of many high-end restaurants, clubs, events and

catering businesses, and tourism and leisure operators. Many outlets have focused on limited menus, delivery and alternative product offerings to maintain a revenue stream. In contrast, quick service restaurants (QSR), delivery services and meal kits have experienced strong growth, as consumers seek to maintain an out-of-home eating experience. Restricted international visitors will hurt some destinations and sectors more than others, but a reasonably upbeat domestic economy should see Australian diners continue to use eating out as an affordable indulgence and experience.

While continually having to satisfy the need of 'what's for dinner tonight?', Australian households are increasingly bombarded by a constant stream of messaging from many sources on health and nutrition. The expansion of the wellness industry, the rise of influencers and social media, and product innovation in functional foods has left consumers more confused than ever about what constitutes a healthy balanced diet, often resorting to quick fixes for weight and energy management. While red meat has historically held a consistent perception of being an essential component of

healthy eating, beef and lamb have become an easy target for plant-based alternatives.

Red meat's nutritional credentials are a question of frequency of consumption and balanced meals. Recommending consumption of red meat in three to four balanced meals a week is consistent with Australian eating habits and Australian Dietary Guidelines, and will deliver both industry and public health benefits (since average per capita consumption of red meat is approximately 57g/day compared to the recommended 65g/day).

To be successful, MLA will require policy makers and other influencers to accept industry-funded evidence on the role of red meat in a healthy and sustainable diet to ensure its continued representation in dietary guidelines and nutrition policy.



# Market knowledge (domestic)

**MLA's market knowledge (domestic) sub-program collects, analyses and interprets signals into insights. The insights allow the red meat industry to anticipate and respond to future opportunities and disruption.**

## Key performance indicators in 2021–22

1. High levels of satisfaction (above 85%) by industry stakeholders with MLA's market information services.
2. Saleyard transaction database complete, allowing for automation of data transfer from saleyards.
3. Deliver automated cattle projections data model.
4. At least two case studies demonstrating impact via domestic growth drivers.

Product group	Core activities
National Livestock Reporting Service (NLRS)	<p>The 'National Livestock Reporting Service (NLRS)' product group produces timely, accurate and independent Australian livestock price data. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ physical assessment of sheep and cattle at saleyards is reported with pricing data across major saleyards to cover throughput in line with the saleyard strategy</li> <li>■ reporting livestock pricing data across all selling methods</li> <li>■ automation of data collection enabling future ready data collation and pre-assessment to facilitate online sales and increase reach to livestock buyers.</li> </ul>
Market information	<p>The 'market information' product group interprets livestock production data from NLRS and other sources into insights to assist stakeholders in making informed business decisions.</p>
Domestic market and consumer insights	<p>The 'domestic market and consumer insights' product group collects, analyses and interprets data and signals into insights from the end of the supply chain, focusing on consumers and those who purchase red meat (shoppers). Initiatives include:</p> <ul style="list-style-type: none"> <li>■ market insights: shopper insights</li> <li>■ consumer insights: consumer tracking</li> <li>■ collaboration: cross-functional collaboration of all domestic market research.</li> </ul>



# Nutrition

**MLA's nutrition sub-program incorporates research and communication activities to promote the consumption of Australian red meat as part of a healthy and sustainable diet.**

## Key performance indicators in 2021–22

1. At least 60% of general practitioners and dietitians believe MLA's nutrition information and practical resources are credible and relevant.

Product group	Core activities
Nutrition research	The 'nutrition research' product group generates and connects data and insights to understand and explain the role of Australian red meat in a healthy and sustainable diet. Initiatives include publication of research reports, including <i>The Role of Australian Red Meat in a Healthy and Sustainable Diet</i> , which includes information and resources to make it easier for Australians to enjoy red meat in a healthy diet.
Nutrition communications	<p>The 'nutrition communications' product group provides key stakeholders, including health professionals and relevant MLA programs, with information and resources to deliver credible and relevant messages about consumption of Australian red meat in a healthy diet.</p> <p>Initiatives include:</p> <ul style="list-style-type: none"> <li>■ the MLA Healthy Meals website</li> <li>■ health professional campaigns, which distribute nutrition resources to GPs and dietitians that support healthy eating.</li> </ul>

# Marketing and promotion (domestic)

**MLA's marketing and promotion (domestic) sub-program delivers initiatives aimed at improving consumer preference for Australian red meat, and ensuring retail and foodservice customers are actively engaged and supported in the promotion of red meat, as part of a healthy balanced diet.**

## Key performance indicators in 2021–22

1. Year-on-year increase in main grocery buyer endorsement of the statement 'willing to pay more for beef/lamb' to 27% (beef) and 27% (lamb).
2. Maintain mean number of serves per week at 1.7 for beef and 0.7 for lamb.
3. Decrease the percentage of main grocery buyers who claim to be limiting red meat for health reasons below 20% for beef and 18% for lamb.
4. 70% of all CoMarketing participants believe their branded program delivers a higher price over unbranded product and delivers a livestock price premium to producers (as evidenced from CoMarketing participant feedback).

Product group	Core activities	
Domestic business development	<p>Initiatives within the ‘domestic business development’ product group include:</p> <ul style="list-style-type: none"> <li>ensuring marketing activities are supported by retailer/trade partners</li> <li>collaborating with retailers and industry on insight-led growth initiatives as part of the Category Management Playbook</li> </ul>	<ul style="list-style-type: none"> <li>developing and implementing bespoke key foodservice and retail customer plans</li> <li>setting appropriate targets for promotional activities and conducting post evaluations.</li> </ul>
Domestic brand building	<p>Initiatives within the ‘domestic brand building’ product group include:</p> <ul style="list-style-type: none"> <li>ensuring marketing activities are targeted against consumer purchase drivers, and leverage key messages and resources developed in the red meat positioning project</li> <li>delivering consumer-focused activities along the entire ‘path to purchase’ to build awareness</li> </ul>	<ul style="list-style-type: none"> <li>evaluating domestic consumers’ willingness to pay more for Australian red meat</li> <li>setting appropriate targets for promotional activities and conducting timely post evaluations</li> <li>evaluating the impacts of marketing activity, sharing the results and taking corrective action as required.</li> </ul>
Domestic CoMarketing program	<p>The ‘domestic CoMarketing program’ product group provides support to brand owners to develop their own brand propositions. Initiatives include:</p>	<ul style="list-style-type: none"> <li>building awareness of key brand attributes</li> <li>building preference among target customers.</li> </ul>

**Table 15: Projected 2021–22 investment by funding source – domestic market (\$ '000)**

\*Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R			
Market knowledge (domestic)	2	7	49	31	263	708	489	1,233	167	253	331	346	2	7	1,303	527	2,606	3,111	5,718
Marketing and promotion (domestic)		20		65		6,929		8,248		1,275		1,451						17,987	17,987
Nutrition	1	2	16	12	89	88	165	154	57	48	103	148	1	3	433		867	454	1,321
<b>Total</b>	<b>3</b>	<b>29</b>	<b>65</b>	<b>108</b>	<b>352</b>	<b>7,725</b>	<b>654</b>	<b>9,635</b>	<b>224</b>	<b>1,576</b>	<b>434</b>	<b>1,944</b>	<b>3</b>	<b>10</b>	<b>1,736</b>	<b>527</b>	<b>3,473</b>	<b>21,553</b>	<b>25,026</b>



# Program

## 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.

### Sub-programs

- Market access
- Market knowledge (international)
- Marketing and promotion (international)
- Livestock export market activities
- Livestock export (research and development)

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

Australia exports approximately 70% of beef and 65% of sheepmeat production.

The current operating environment contains a number of challenges, the most significant being the highly uncertain economic environment caused by the COVID-19 pandemic, but also widespread trade protectionism and increasing competition from other red meat suppliers.

At the same time, Australian supply is constrained as the herd and flock recovers from widespread drought and goes into a rebuilding phase. With recent favourable seasonal conditions and strong domestic competition from restockers and feedlots, supply issues have caused higher prices for feeder cattle in particular, which have pushed the viability of the live export trade to the limit for many exporters and importers.

However, the overall demand outlook is positive, underpinned by growth in population and household wealth in the developing markets of Asia, and boosted in the immediate term by African Swine Fever's impact on pig herds. There is also cause for optimism regarding the potential for improved market access to the high value markets of the European Union and the United Kingdom. The Australian red meat and livestock industry has a well-earned and hard-won

reputation among global consumers, customers and governments. It's vital the industry protects its strong country of origin brand image in mature markets and nurtures it in developing markets, ensuring confidence in our sustainability and health credentials, eating quality, animal welfare and food safety systems are maintained.

This will be achieved via:

- building brand equity for Australian products amongst targeted consumers
- increasing the 'physical availability' of Australian beef, lamb and goatmeat products
- developing 'educated ambassadors' to advocate for Australian products/industry
- coordination of industry input into removing trade barriers
- cultivating commercial investment to grow overall sales and marketing presence
- delivering trusted insights up and down the supply chain.

Doubling the value of Australian red meat sales will rely heavily on extracting full value from our existing buyers, but also developing new high value opportunities globally.

## Market access

**MLA's market access sub-program aims to defend existing favourable access conditions, position Australia favourably in trade negotiations and alleviate technical trade barriers.**

### Key performance indicators in 2021–22

1. 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 future delivery of import regime reform.
2. MLA makes a significant contribution to the joint industry effort by alleviating \$100m of the impact of non-tariff barriers in 2021–22.

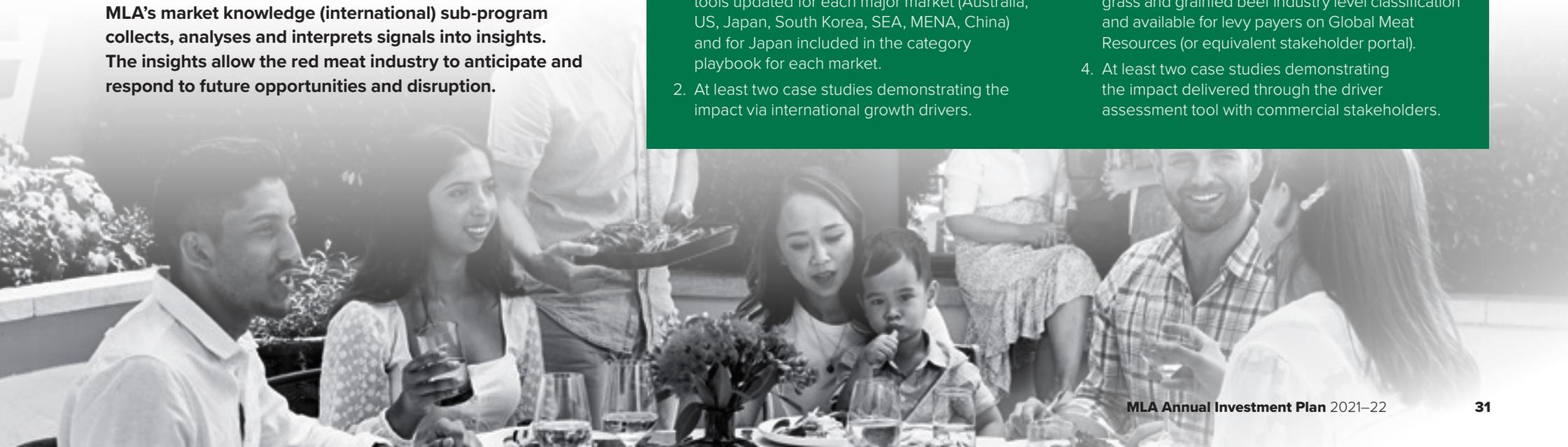
Product group	Core activities
Economic access	<p>Initiatives within the 'economic access' product group include:</p> <ul style="list-style-type: none"> <li>■ supporting industry to defend existing favourable market access conditions</li> <li>■ reducing economic barriers to trade through the delivery of targeted advocacy strategies.</li> </ul>
Technical access	<p>Initiatives within the 'technical access' product group include:</p> <ul style="list-style-type: none"> <li>■ supporting industry to mitigate access risks through monitoring access conditions</li> <li>■ prioritising initiatives in conjunction with the Australian Meat Industry Council and government to avoid/alleviate/reduce non-tariff barriers (NTB) to trade.</li> </ul>

## Market knowledge (international)

**MLA's market knowledge (international) sub-program collects, analyses and interprets signals into insights. The insights allow the red meat industry to anticipate and respond to future opportunities and disruption.**

### Key performance indicators in 2021–22

1. Category growth drivers and stakeholder tools updated for each major market (Australia, US, Japan, South Korea, SEA, MENA, China) and for Japan included in the category playbook for each market.
2. At least two case studies demonstrating the impact via international growth drivers.
3. Market classification model automated for grass and grainfed beef industry level classification and available for levy payers on Global Meat Resources (or equivalent stakeholder portal).
4. At least two case studies demonstrating the impact delivered through the driver assessment tool with commercial stakeholders.



Product group	Core activities	
International market insights	<p>Initiatives within the 'international market insights' product group include:</p> <ul style="list-style-type: none"> <li>■ monitoring market trends</li> </ul>	<ul style="list-style-type: none"> <li>■ monitoring competitors</li> <li>■ monitoring media.</li> </ul>
International consumer insights	<p>Initiatives within the 'international consumer insights' product group include:</p> <ul style="list-style-type: none"> <li>■ translating market signals and data into insights that positively influence the supply chain</li> <li>■ market research: consumer, shopper, trade, retail and foodservice (as agreed with stakeholders in key Australian red meat markets)</li> <li>■ translating insights from across both product groups (market insights and consumer insights) and from across other MLA programs' market research into strategic growth drivers</li> </ul>	<ul style="list-style-type: none"> <li>■ identifying opportunities to contribute to doubling the value of Australian red meat</li> <li>■ developing online access for levy payers to access market classification and growth opportunities tools</li> <li>■ developing MLA's global market strategic portfolio model</li> <li>■ MLA market research library: collaborating across MLA to house all market research in the one area for expanded use and value.</li> </ul>

## Marketing and promotion (international)

**MLA's marketing and promotion (international) sub-program aims to position Australian red meat as a protein of choice for global customers and consumers.**

### Key performance indicators in 2021–22

1. Build or maintain customer awareness and preference of Australia's positive attributes (safe, quality, healthy and sustainable image) within target range.
2. Increase consumer preference for Australian red meat in key international markets to be above 23.4% for beef and 21.4% for lamb.
3. 80% of CoMarketing participants rated their overall outcomes (based on their objectives for the year) as 'successful'.

Product group	Core activities	
International brand building	<p>Initiatives within the 'international brand building' product group include:</p> <ul style="list-style-type: none"> <li>■ creative and impactful communications to targeted segments (both campaigns and 'always-on' components such as websites, public relations and social media messaging)</li> </ul>	<ul style="list-style-type: none"> <li>■ promotional activities conducted with key customers (e.g. point of purchase promotions).</li> </ul>
International business development	<p>Initiatives within the 'international business development' product group include:</p> <ul style="list-style-type: none"> <li>■ building and maintaining a strong network of informed key accounts, strategic stakeholders and key influencers to ensure industry is responsive to consumers' changing needs and wants</li> </ul>	<ul style="list-style-type: none"> <li>■ delivery of events, trade shows, seminars and other communications that educate customers and drive positive awareness, attitudes and behaviours towards Australian red meat</li> <li>■ strategic supply/value chain projects with commercial partners to help extend the penetration and breadth of Australian red meat globally.</li> </ul>
International CoMarketing program	<p>The 'International CoMarketing program' product group provides support to Australian brand owners to develop and implement their own business development and brand building activities.</p>	

# Livestock export market activities

**MLA, together with LiveCorp, jointly invest in the Live Export Program (LEP). The LEP includes both market access activities and activities from the associated Livestock Export R&D sub-program. The LEP supports the growth, productivity improvements and sustainability of the livestock export trade for the benefit of both producers and exporters.**

The LEP shift from intensive industry compliance-related support to productivity, efficiency and business development focused work will continue. A major shift in 2021–22 will be an expansion of the LEP to a whole of supply chain focus, with particular emphasis on Australian producer stakeholders and linking the entire live export supply chain through data capture and sharing.

### Key performance indicators in 2021–22

1. Produce one live export program of work case study per region that has provided insights and impacted government/industry policy.
2. Produce one program of work case study per region that showcases live export activities that have improved industry's ability to maintain existing market share or have contributed to industry's competitiveness.
3. Successful roll-out of the Livestock Global Assurance Program (LGAP) – assessed by >50% of eligible tranche one facilities signing onto the program.

Product group	Core activities
Livestock export animal welfare	The 'livestock export animal welfare' product group supports industry to identify and mitigate welfare risks and implement adoption of best practice welfare systems and innovations.
Livestock export productivity gains	The 'livestock export productivity gains' product group joins the improvement of supply chain productivity and efficiency with business development to improve operator competitiveness and trade sustainability.

A key initiative includes the co-funding program, which supports commercial participants in developing and implementing strategic welfare and productivity improvements.



## Livestock export (research and development)

The purpose of the livestock export R&D sub-program is to invest in projects that seek to build knowledge, fill gaps in existing understanding, and develop, trial and implement practical extension outputs in the areas of animal health and welfare, supply chain efficiencies and market access.

Day-to-day management of the LEP R&D sub-program has been transitioned out of MLA and over to LiveCorp. LERDAC will continue to provide strategic research advice and represent industry priorities and community expectations. The management committee (representing LiveCorp and MLA) will be the decision-making group for the RD&E sub-program.

### Key performance indicators in 2021–22

1. Complete winter trials for salmonella vaccine.
2. Animal Welfare Surveillance framework adopted and refined according to outcomes from the Animal Welfare Indicator and SAWS research and in line with the ASEL 3.0 reporting requirements.
3. Complete a whole live export supply chain data audit and present resulting recommendations to live export stakeholders.
4. Live Export Animal Welfare Surveillance framework adopted by all exporters.

Product group	Core activities
Livestock export animal integrity research and development	The 'livestock export animal integrity research and development' product group supports the implementation of the Livestock Global Assurance Program (LGAP) and other initiatives that enhance and secure animal welfare and sustainability of the trade.
Livestock export animal welfare research and development	<p>Initiatives within the 'livestock export animal welfare research and development' product group include:</p> <ul style="list-style-type: none"> <li>■ standardise data collection to promote completeness of supply chain information, transparency and benchmarking</li> <li>■ improve information recording and facilitate automation of reporting</li> <li>■ identifying economic, practical and non-invasive animal welfare measures</li> <li>■ implementing a standardised monitoring and reporting framework to identify problems and enable corrective actions. This will be facilitated via tools such as LIVEX Collect and the learnings from the Animal Welfare Indicators and Shipboard Animal Welfare Surveillance (SAWS) projects</li> <li>■ collecting data on and assessing the farm-level influences and pre-ship boarding factors that affect animal welfare</li> </ul> <ul style="list-style-type: none"> <li>■ improving understanding of, and identify effective controls for, animal health and welfare risks that operate along the supply chain, including in overseas markets, along with timely prevention management strategies</li> <li>■ better understand and aim to address public expectations of animal health and welfare across the supply chain</li> <li>■ improve the training environment to encourage uptake of leading animal health and welfare practices across industry</li> <li>■ conducting research on strategic issues to reduce welfare risks</li> <li>■ continuation of research in bedding management and stocking densities on board livestock vessels and identification of onboard environmental monitoring technologies that support animal welfare indicators.</li> </ul>
Livestock export productivity research and development	<p>The 'livestock export productivity research and development' product group monitors market access barriers and delivers action plans to support industry to reduce technical and economic barriers to trade and improve market access. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ provide stakeholders with knowledge of trends, preferences and expected market requirements that can inform their business practices</li> <li>■ enable better risk assessment and risk management across regions, species and environmental factors to support a risk-based regulatory approach.</li> </ul>

Product group	Core activities	
Livestock export extension and adoption	<p>Initiatives within the 'livestock export extension and adoption' product group include:</p> <ul style="list-style-type: none"> <li>■ supporting industry extension and adoption of best practice systems and procedures to achieve continuous improvements in animal welfare and mitigate risk of trade suspension or closure</li> <li>■ drive adoption of tools and techniques for identifying and assessing animal health and welfare risks through the supply chain</li> <li>■ targeted communications of the LIVEX Collect, UNE Project Partnership, Animal Welfare Indicators and SAWS projects</li> </ul>	<ul style="list-style-type: none"> <li>■ communicating research, development and adoption outcomes and program performance to stakeholders via tools such as LIVEX Collect</li> <li>■ consulting with industry through live export research and development advisory committee</li> <li>■ implementing the new Livestock Export Program (LEP) research, development and extension systems and processes, including investment management training of management committee personnel</li> <li>■ implementing the LEP RD&amp;E Blueprint 2020–2025</li> <li>■ support adoption of practices to improve livestock performance through the live export supply chain.</li> </ul>

Table 16: Projected 2021–22 investment by funding source – international markets (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																	Sum of R	Sum of M	Sum of AIP 2021–22			
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R	External M						
Livestock export market activities		14		94		424		2,005						748							3,284	3,284	
Livestock export (research and development)			74		181		124						551		350	1,280					2,560	2,560	
Market access	1	24	7	167	41	1,175	75	2,067	26	646	47	1,979		38		197					394	6,096	6,490
Market knowledge (International)		21		20		627		1,364		481												2,513	2,513
Marketing and promotion (international)		42		191		7,634		20,479		2,602		525								877		32,350	32,350
<b>Total</b>	<b>1</b>	<b>100</b>	<b>81</b>	<b>473</b>	<b>222</b>	<b>9,860</b>	<b>199</b>	<b>25,915</b>	<b>26</b>	<b>3,729</b>	<b>47</b>	<b>2,504</b>	<b>551</b>	<b>786</b>	<b>350</b>	<b>1,477</b>	<b>877</b>				<b>2,954</b>	<b>44,244</b>	<b>47,198</b>



# Program

## 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 (VBM). 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 carcass, providing consistency and confidence in brands to ensure eating quality for consumers. This builds consumer trust and increases demand for Australian red meat.

### Sub-programs

- Eating quality

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

The MSA system predicts a cut x cook method eating quality outcome from traits that influence eating quality across the supply chain. The success and sophistication of the program has positioned Australia as the world leader in eating quality measurement, standards and eating quality research. This will enable Australia to leverage our position internationally to result in greater benefits for the Australian red meat industry and recognition of our eating quality language.

The program is unique as it integrates research and development (R&D) with commercial activities and involves participation along the entire Australian red meat value chain. This includes education and practice change initiatives to maximise returns and productivity on-farm, along with off-farm supply chain partnerships to support increased value and consumer demand for red meat producers.

The ever-enhanced data and feedback mechanisms underpinning the program will enable identification of opportunities and improved decision-making across the value chain. The success of the MSA program is evidenced by its continued

growth and delivery of returns to the farm gate, with a record-breaking 3.8 million cattle and 4.3 million sheep presented for MSA grading during 2019–20. The program also delivered an estimated additional \$172 million in farm gate revenue thanks to price differentials paid for MSA-accredited and compliant cattle, with more than 2,900 additional cattle and sheep producers becoming MSA registered. MSA now underpins almost 200 beef and sheepmeat brands as the independent endorsement of eating quality.

In 2019–20, 46% of the Australian adult cattle slaughter and 22% of the lamb slaughter were presented for MSA grading, highlighting the opportunity to increase adoption of MSA along the supply chain. There is also potential to increase the eating quality of MSA eligible cattle – as measured by the MSA Index and compliance rates – through supply chain driven producer engagement and adoption activities, as well as on-farm predictive tools. New opportunities for supply chains will be enabled through new pathways for cattle and cuts-based grading system for sheepmeat.

# Eating quality

**In 2021–22, the MSA program will drive value growth across the supply chain and grow trust among our stakeholders and customers through:**

- progressing the industry towards value-based marketing through greater utilisation of new and existing MSA pathways, extracting optimum value from carcasses, and decisions driven by data and feedback
- preparing the sheepmeat industry for an eating quality focus via the release of the MSA cut x cook sheepmeat model that will inform on-farm practice change, and generate value from brands underpinned by eating quality
- increase the global recognition and value of eating quality language through growing international partnerships and leveraging the Australian eating quality leadership position for greater industry value and outcomes
- enhancing integrity solutions and data systems to build further trust in Australian red meat.

## Key performance indicators in 2021–22

1. Price differentials for MSA-compliant cattle demonstrate an annual return to farm gate of more than \$145 million.
2. The MSA sheepmeat cut x cook model is endorsed by industry and commercially tested in supply chains representing at least 30% of MSA national slaughter.
3. Operators representing greater than 56% of MSA beef volume describe MSA beef by consumer outcome represented by Eating Quality Graded cipher, as opposed to dentition category.
4. The percentage of adult cattle slaughter that is MSA graded increases by two percentage points versus 2020–21 and contributes \$2.9 million in additional farm gate returns.

Product group	Core activities
MSA integrity and compliance	<p>Key activities to ensure robust integrity of the MSA program include:</p> <ul style="list-style-type: none"> <li>■ an ever-enhanced risk-based approach to program integrity</li> <li>■ identifying and utilising new, innovative, and efficient solutions for managing integrity and compliance</li> </ul>
MSA business development	<p>Key business development activities that drive MSA program growth and utilisation include:</p> <ul style="list-style-type: none"> <li>■ driving industry progression through on-farm practice change and building the capability of livestock advisors</li> <li>■ partnering with processors and brand owners to extract maximum value from the MSA program and progressing the industry towards value based marketing payments</li> </ul>
MSA research and development	<p>Key MSA R&amp;D initiatives to generate greater industry value include:</p> <ul style="list-style-type: none"> <li>■ creating new opportunities for livestock supply and ensuring all cattle are eligible for MSA grading</li> <li>■ industry endorsement and continued development and testing towards implementation of a MSA Sheepmeat cut x cook model</li> </ul>

- enhance systems for data supply chain capture and feedback for informed decisions and identification of value capture opportunities
- a reduction in program risk through succession of critical MSA skillsets.
- supporting the further education and confidence of supply chain participants to differentiate MSA brands in all markets, particularly international opportunities
- driving the sheepmeat industry towards the launch of MSA Sheepmeat cut x cook model through producer and processor eating quality focused initiatives.
- accelerating the implementation of objective carcass measurement technology
- as a global eating quality leader, leverage international research that drives positive outcomes for the Australian red meat industry and an increased recognition of our eating quality language.

Table 17: Projected 2021–22 investment by funding source – eating quality (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source															Sum of R	Sum of M	Sum of AIP 2021–22		
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R				Government R	External M
Eating quality			35	54	438	514	574	1,073	234	525	34				172	1,485	331	2,970	2,497	5,467
Total			35	54	438	514	574	1,073	234	525	34				172	1,485	331	2,970	2,497	5,467





# Program

## 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.**

Within the context of MLA's *Strategic Plan 2025*, the innovations are designed to unlock new business models that reward the supply chain for good environmental stewardship and make a demonstrable contribution to the industry's vision for 2030 of doubling the value of Australian red meat sales as the trusted source of the highest quality protein, as well as achieving carbon neutrality by 2030.

Identifying opportunities to capture value and increase producer profitability through new sources of revenue derived from the provision of environmental services.

- Exploring business models around the provision of environmental services and reward mechanisms for good environmental stewardship – including areas such as biodiversity, carbon sequestration, water, soil and waste management.
- Identifying opportunities through supply chain collaborations that unlock new sources of revenue and profit sharing along the supply chain.
- Forming partnerships throughout the supply chain and with other industries to identify opportunities for the conversion of production waste into valuable products.
- The program supports a number of flagship investments including the Carbon Neutral by 2030 (CN30) initiative, the Australian beef and sheep sustainability frameworks, Northern Breeding Business (NB2), and BeefLinks.

The vast majority of investment is sourced through MLA Donor Company (MDC) partnerships, Federal Government programs, and less traditional sources such as corporate venture funds, venture capital and the newly established Agriculture Innovation Australia. Investment is also sourced from producer levies, informed by MLA's industry and regional consultation processes.

### Sub-programs

- Sustainability (off-farm)
- Sustainability (on-farm)

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



## Operating environment

Livestock production relies on natural resources, with forage production dependant on soil/water supply and quality, and biological diversity. Changes in climate, regulations, market requirements and community concerns demand that livestock producers and value chain partners continually adapt to this evolving operating environment.

Because of geological, topographic and climatic factors, less than 8% of Australia’s land is suitable for crop production. This is why Australian livestock enterprises cover over 50% of Australia’s land mass (>4.2 million square kilometres). Much of this consists of extensive rangelands and semi-arid areas. Cattle and sheep farming is the most efficient use of this land for producing highly nutritious protein. Coupled with the proximity of red meat processing facilities to urban communities, the red meat and livestock industry is under continuous scrutiny for its impact on the environment, particularly around vegetation management, greenhouse gas emissions, water and land use and biodiversity loss.

However, the industry has made major inroads on this issue. Red meat producers have reduced net greenhouse gas emissions more than any other sector in the Australian economy. Further opportunities exist to substantively reduce the industry’s net greenhouse gas emissions and generate new revenue streams branded low and zero carbon red meat value chains, through carbon farming and emerging biodiversity credit markets.

Industry’s long-term prosperity depends on continuing to take a proactive approach to environmental sustainability – rather than a reactive one. The industry can continue to demonstrate its environmental credentials through investments that promote the environmental sustainability of its production systems and generate new value capture opportunities in the form of productivity gains and provision of environmental services.

## Sustainability (off-farm)

**This program supports innovation activities beyond the farm gate with economic value propositions for stewardship of environmental resources.**

These innovations are designed to unlock new business models that reward the supply chain for good environmental stewardship. They reflect MLA’s desire to invest in research, development and adoption activities demonstrating leadership in the management of land, water, waste, energy biodiversity, climate variability and biosecurity.

### Key performance indicators in 2021–22

1. Development of technology for industry to achieve a 25% reduction in waste or increase in efficiency relative to 2015 levels.
2. Development of technology for the off-farm sector to achieve a 20% reduction in carbon dioxide equivalent (CO2e) emissions relative to 2015 levels.
3. Development of technology for industry to achieve a 45% reduction in water and fossil fuel-derived energy use intensity relative to 2015 levels.

Product group	Core activities	
Sustainability technology and practices (off-farm)	The ‘sustainability technology and practices (off-farm)’ product group involves the application of sustainability-related technologies and knowledge for practical purposes in industry beyond the farm gate. Activities include: <ul style="list-style-type: none"> <li>■ developing processing</li> </ul>	systems to convert wastes into valuable products – this includes the Rural R&D for Profit project ‘Wastes to Profits’ <ul style="list-style-type: none"> <li>■ supporting the use of the Australian beef and sheep sustainability frameworks as decision-support tools to inform new value chain initiatives.</li> </ul>
Environment (AMPC managed)	The ‘environment (AMPC managed)’ product group includes Australian Meat Processor Company (AMPC) funded and managed initiatives that align with the AMPC and MLA strategic plans.	

# Sustainability (on-farm)

Through this program, MLA places investments in innovations behind the farm gate with economic value propositions for stewardship of environmental resources.

These innovations are designed to unlock new business models that reward the supply chain for good environmental stewardship and reflect MLA's desire to invest in research, development and adoption activities demonstrating leadership in the management of land, water, biodiversity, climate variability and biosecurity.

## Key performance indicators in 2021–22

1. The number of producers deriving revenue from environmental services and/or natural capital trading markets has increased year-on-year based on a producer survey.
2. Increased utilisation of data and evidence to inform production-led environmental outcomes. Measured as productivity improvements and utilisation from MLA's Producer Demonstration Site and Profitable Grazing Systems products. Units of measure include number of producers, rates of adoption, number of animals/kgs/area of land impact.
3. Measurable progress towards CN30 attributable to MLA.

Product group	Core activities
Sustainability knowledge and enablers (on-farm)	<p>The 'sustainability knowledge and enablers (on-farm)' product group involves the generation of knowledge relating to:</p> <ul style="list-style-type: none"> <li>■ managing natural capital (including water, soils and living organisms) mitigating and adapting to climate variability and climate change.</li> </ul>
Sustainability technologies and practices (on-farm)	<p>The 'sustainability technologies and practices (on-farm)' product group involves the development and/or demonstration of:</p> <ul style="list-style-type: none"> <li>■ climate forecast products and extension services</li> <li>■ novel livestock feeds (i.e. pastures/legumes/shrubs) or supplements with the potential to reduce enteric methane emissions and improve productivity</li> <li>■ technologies and practices for measuring and managing natural capital.</li> </ul>
Animal wellbeing sustainability	<p>The 'animal wellbeing sustainability' product group involves adoption of sustainable on-farm practices such as reducing reliance on chemicals e.g. parasite control.</p>



Product group	Core activities	
Beef productivity sustainability	The 'beef productivity sustainability' product group involves: <ul style="list-style-type: none"> <li>■ reporting on sustainability practices and targets to support grazing management for a viable north-south supply chain (via BeefLinks)</li> </ul>	<ul style="list-style-type: none"> <li>■ improving breeder herd efficiency in northern systems through better management of the feedbase</li> <li>■ modelling of the potential for northern grazing systems to deliver environmental services alongside red meat production.</li> </ul>
Feedbase sustainability	The 'feedbase sustainability' product group involves: <ul style="list-style-type: none"> <li>■ establishing a monitoring and evaluation framework across the feedbase sub-program and related initiatives to directly measure the impact of research</li> </ul>	<ul style="list-style-type: none"> <li>■ outputs/tools and change in contributing to long-term goals for sustainability of the feedbase</li> <li>■ greenhouse gas emissions and potential for carbon sequestration calculations for northern beef systems.</li> </ul>
Goat productivity sustainability	The 'goat productivity sustainability' product group involves the development of a least cost supplementation calculator to inform supplementary feeding in rangeland goat enterprises and demonstrate the impact of supplementary feeding on environmental sustainability.	
Sheep productivity sustainability	The 'sheep productivity sustainability' product group involves: <ul style="list-style-type: none"> <li>■ developing management interventions to improve pasture utilisation and minimise patch overgrazing in the rangelands</li> </ul>	<ul style="list-style-type: none"> <li>■ continuing linkage of desirable sustainability traits to the Beef Information Nucleus and Resource Flocks</li> <li>■ promoting the use of edible shelter to improve lamb survival outcomes, improve landscape diversity and reduce erosion.</li> </ul>
Genetics sustainability	The 'genetics sustainability' product group involves building and maintaining reference cattle and/or sheep populations to underpin accurate delivery of genetic tools. Initiatives include:	<ul style="list-style-type: none"> <li>■ continuing novel and hard-to-measure reproductive trait phenotypes to improve the sustainability of breeding enterprises.</li> </ul>
Sustainability technologies and practices (AIA)	This product group involves the development of multi-sectoral strategies that address shared challenges and opportunities to deliver transformative outcomes that drive the sustainable development of Australian agricultural value chains. The scope of the strategies covers the agriculture (including red meat), fisheries and forestry value chains, including input supply, production, processing and export.	

**Table 18: Projected 2021–22 investment by funding source – environmental sustainability (\$ '000)**

\*Total may not add up due to rounding

Sub-program	Funding source																	Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R	External M			
Sustainability (off-farm)					3		7		37		1,677				133	1,858	2,379	3,715	2,379	6,094
Sustainability (on-farm)	12		107		1,141		811		343						12,466	14,881	3,257	29,761	3,257	33,018
<b>Total</b>	<b>12</b>		<b>107</b>		<b>1,145</b>		<b>818</b>		<b>380</b>		<b>1,677</b>				<b>12,599</b>	<b>16,738</b>	<b>5,636</b>	<b>33,477</b>	<b>5,636</b>	<b>39,112</b>



# Program

## 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.

The MLA feedlot program will contribute to transformational change across the following areas:

- Feedlot productivity: the program will deliver world-first technologies in feedlot automation across bunk management, feed delivery and cattle handling. Cattle sorting technologies that support value-based marketing and profitability of cattle feeding will be released.
- Feedlot sustainability: feed additives that suppress greenhouse gas emissions while boosting feedlot productivity will be released.
- Feedlot health: novel vaccine technologies will be released to the industry that prevent bovine respiratory disease.
- Feedlot welfare: MLA will continue to support strategies to promote optimal lairage conditions for feedlot cattle, best practice design shade and shelter systems and practical frameworks to assess feedlot welfare.
- Feedlot capability: MLA will develop and release the feedlot tech portal to the feedlot industry.

### Sub-programs

- Feedlot productivity

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

Lot feeding remains an integral part of the beef industry given the demand for a consistent supply of quality product for an expanding population. Feedlots occupy a pivotal position in the beef supply chain. As such, their ability to operate profitably, and at capacity, is strongly influenced by weather and market conditions.

Improved seasonal conditions in 2020 meant the cattle industry has moved to a herd rebuilding phase, reducing the supply of cattle and increasing competition between restockers, processors and lot feeders. As this competition intensifies and is exacerbated by the difficult trading conditions internationally, the number of cattle on feed is expected to decline from record high levels, with forecast reductions in levy income.

# Feedlot productivity

The priority areas to be addressed during 2021–22, as identified through the consultation process, include:

- Cattle performance value proposition trials for automated bunk scanning and management completed, and if successful, adoption by more than 10 Australian lot feeders by the end of 2021–22.
- First version of feedlot sorting model development completed by end of 2021–22 with a prediction of lean meat yield to support value-based marketing.
- Continued research and development to support adoption of livestock supplements that improve livestock productivity and lower enteric methane emissions of feedlot cattle to support MLA's CN30 initiative. This includes further evaluation of 3-NOP supplements in feedlot and early life.
- Continued investment in commercialisation of IBR-BVD vaccine and establishment of value proposition of next generation autogenous vaccines for bovine respiratory disease prevention.
- Supply chain trial of short duration lairage completed with continued adoption of the strategy by the feedlot and processing industry.
- Continuation of a two-year program of work to determine the value proposition of shade and shelter solutions to southern feedlot operators. Cost-benefit analysis of shade and shelter evaluation distributed to all NFAS (National Feedlot Accreditation Scheme) accredited feedlots at conclusion of research.
- Piloting of a practical framework to assess feedlot animal welfare.
- Launch of the feedlot tech training portal to the feedlot industry.
- Feasibility analysis of a 'Beef Industry Supply Chain Research Partnership' to improve collaborative research between the grazing, feedlot and processing sectors.

These investments will be complemented by producer adoption activities that will create opportunities to achieve impact and practice change.

## Key performance indicators in 2021–22

1. Cattle performance value proposition trials for automated bunk scanning and management completed with adoption by more than 10 Australian lot feeders resulting in 20% feeding efficiency improvements.
2. 500,000 grainfed cattle are processed via short duration lairage resulting in demonstrated efficiency and productivity improvements.
3. Increase in shade or shelter adoption by 15% of remaining feedlot capacity from 2019–20 baseline levels.
4. First version of the Australian Optimal Carcase Endpoint and Sorting model developed, predicting lean meat yield and supporting value-based marketing.



Product group	Core activities	
Feedlot animal health	<p>Initiatives in the ‘feedlot animal health’ product group include:</p> <ul style="list-style-type: none"> <li>■ developing and evaluating vaccines and immunostimulants to prevent feedlot disease and provide alternatives to medically important antimicrobials</li> <li>■ preventative practices during cattle backgrounding to lower disease incidence upon feedlot entry</li> <li>■ antimicrobial resistance surveillance of bovine respiratory disease and food borne pathogens</li> </ul>	<ul style="list-style-type: none"> <li>■ evaluating parasite resistance and drench strategies for feedlot cattle</li> <li>■ developing and evaluating sensor technologies for feedlot disease prediction, detection and diagnosis</li> <li>■ quantifying the subclinical and clinical impact of feedlot disease through abattoir offal audits and veterinary pathology.</li> </ul>
Feedlot animal welfare	<p>Initiatives within the ‘feedlot animal welfare’ product group include:</p> <ul style="list-style-type: none"> <li>■ commissioning feedlot bedding, shelter and pen surface ameliorant projects to mitigate the impact of wet pens on feedlot cattle comfort</li> <li>■ commissioning projects to improve forecasts of heat load events, best practice nutrition, shade, shelter and management strategies to limit the impact of heat load on animal performance and carcass characteristics</li> </ul>	<ul style="list-style-type: none"> <li>■ developing and evaluating technologies to determine objective measures of feedlot animal welfare</li> <li>■ assessing impacts of duration of lairage and feed withdrawal on animal welfare and carcass value.</li> </ul>
Feedlot productivity	<p>Initiatives within the ‘feedlot productivity’ product group include:</p> <ul style="list-style-type: none"> <li>■ conducting feedlot cattle composition of gain research to predict days on feed to a set carcass endpoint (including lean meat yield), and potential integration with DEXA or CT composition analysis</li> <li>■ developing cost-effective strategies for devitalisation of grain at Australian ports</li> <li>■ evaluating cattle sorting systems to maximise profit for a purchased population of cattle</li> </ul>	<ul style="list-style-type: none"> <li>■ developing solutions to address dag formation on feedlot cattle</li> <li>■ evaluating growth promoting strategies (implants and beta-agonists) on feedlot performance, residues and meat quality</li> <li>■ determining the effect of nutritional strategies (grain processing, water quality and feed additives) on feedlot animal, metabolism and carcass characteristics</li> <li>■ developing and evaluating automation technologies to improve feedlot productivity and profitability.</li> </ul>



Product group	Core activities	
Feedlot sustainability	<p>Initiatives within the 'feedlot sustainability' product group include:</p> <ul style="list-style-type: none"> <li>■ commissioning nutrition trials to reduce greenhouse gas emissions (e.g. 3-NOP, asparagopsis, novel compounds)</li> <li>■ conducting long-term benchmarking of greenhouse gas emissions for southern and northern Australian feedlots</li> </ul>	<ul style="list-style-type: none"> <li>■ commissioning research on truck effluent management and its value proposition to renewable energy, carcass characteristics, food safety and animal welfare</li> <li>■ developing and evaluating technologies to mitigate greenhouse gas emissions from feedlots</li> <li>■ developing or evaluating strategies to improve feedlot energy and water use efficiency.</li> </ul>
Feedlot adoption	<p>Initiatives within the 'feedlot adoption' product group include:</p> <ul style="list-style-type: none"> <li>■ enabling automation demonstration sites in commercial feedlots, to encourage adoption of commercialised outputs from the feedlot program (e.g. automated bunk scanning and management)</li> <li>■ facilitating education programs on economically viable pathways to carbon neutrality for Australian lot feeders</li> <li>■ piloting animal health and antimicrobial use reporting surveillance systems for the feedlot industry to give feedback on aggregated industry progress in these areas</li> </ul>	<ul style="list-style-type: none"> <li>■ undertaking communication and workshop activities to disseminate outcomes of research and development</li> <li>■ funding a technical services officer position for the feedlot industry</li> <li>■ funding ALFA-MLA consulting veterinarians and nutritionists to help identify research, development and adoption priorities and accelerate adoption of research and development outcomes.</li> </ul>
Feedlot consultation and capability building	<p>Initiatives within the 'feedlot consultation and capability building' product group include:</p> <ul style="list-style-type: none"> <li>■ consulting with feedlot operators and industry service providers to establish research, development and adoption funding priorities and disseminate outcomes of research activities</li> </ul>	<ul style="list-style-type: none"> <li>■ building capability for the feedlot sector through investment in training for feedlot operators and staff, industry leaders, service providers and researchers, including funding of scholarships for PhDs, and leadership scholarships</li> <li>■ implementing the Feedlot Industry Training and Leadership Development Strategy and launch of the 'Feedlot Tech' training portal.</li> </ul>

**Table 19: Projected 2021–22 investment by funding source – feedlot (\$ '000)**

\*Total may not add up due to rounding

Sub-program	Funding source																	Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R	External M			
Feedlot									1,561	504	28				1,035	2,624		5,247	504	5,751
Total									1,561	504	28				1,035	2,624		5,247	504	5,751



# Program

## 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.

### Sub-programs

- Integrity systems
- Market access science

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

The Australian red meat and livestock industry has a global reputation as a supplier of clean, safe and natural product, underpinned by its disease-free status and advanced food safety and integrity systems. However, the industry faces relentless competition from global suppliers so it must innovate, enhance its operating efficiencies and strengthen its competitive advantages.

The key priorities for investment are outlined in the *Integrity System 2025 and Beyond Strategy* which will see a strong focus on ensuring the current integrity system which includes – Livestock Production Assurance (LPA), National Vendor Declarations (NVD) and the National Livestock Identification System (NLIS) – are strengthened to meet the needs of our industry and continue to meet customer expectations. With consumers increasingly wanting to know about how and where their food has been produced (provenance, safety, welfare, biosecurity and sustainability), the industry needs to be able to demonstrate how our livestock production systems provide assurances that our products are produced and processed to meet consumer and regulatory requirements. Maintaining and increasing the level of trust in our product can also reduce non-tariff (technical) trade barriers and efficiency in the supply chain.

At the same time, digital technology and data science are rapidly advancing. Australia's red meat and livestock industry must capitalise on these innovations to strengthen its integrity and traceability systems, validate Australia's unique provenance and provide a single source of truth from the industry's data platforms.

With this in mind, the integrity systems program will also invest in new technologies to enhance on-farm food safety and traceability across the value chain. Communication and adoption are another focus for investment to ensure that every value chain participant understands their role and responsibilities in maintaining the industry's integrity systems and the value that the systems deliver to individual participants and the industry as a whole.

As key inputs into the food industry, agricultural environmental management and antimicrobial stewardship practices are invested in as part of Market Access Science to contribute 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. The demonstration of food safety and ensuring customer, consumer and community trust in Australian red meat also helps to address key non-tariff trade barriers (contributing to reducing by \$1 billion by 2030 compared to a 2020 baseline).

# Integrity systems

MLA's integrity systems sub-program delivers core services to underpin the red meat industry's on-farm assurance and through-chain traceability systems. The 'integrity system' protects the disease-free status of the Australian red meat industry and underpins the marketing of Australian product as clean, safe and natural.

Product group	Core activities
<p>Product assurance and traceability systems</p>	<p>The key activities and enablers that are included within the 'product assurance and traceability systems' product group are:</p> <ul style="list-style-type: none"> <li>■ maintaining, reviewing and improving the integrity system rules and standards (NLIS Animal Identification Technology Rules and Standards and the Livestock Production Assurance (LPA) program Rules and Standards)</li> <li>■ monitoring and assessing conformance with ISC's program rules and standards through audit and compliance activities, and actioning non-conformances to ensure overall system integrity and performance</li> <li>■ developing and maintaining the technology platforms that underpin the integrity system (including the NLIS database and eNVD system)</li> <li>■ delivering robust and effective communication and extension programs to drive integrity system awareness, understanding and compliance</li> <li>■ providing customer support services and innovative self-service functions</li> <li>■ conducting research and development to collect insights and to identify alternative approaches and technologies for integration within the integrity system.</li> </ul> <p>The product group also has a priority focus on reducing the complexity for the users of ISC's products and services, and setting our services up to meet the needs of tomorrow, by:</p> <ul style="list-style-type: none"> <li>■ delivering a seamless and integrated customer experience</li> <li>■ leveraging improved technologies to replace existing manual tasks</li> <li>■ bringing ISC's core services together under an integrated delivery model.</li> </ul> <p>There are three enabling activities that underpin the product group. They include:</p> <ul style="list-style-type: none"> <li>■ providing robust and secure technology platforms and data governance frameworks</li> <li>■ consulting with industry and government stakeholders on integrity system policy and strategy</li> <li>■ delivering effective communication and extension programs, and excellent customer experience and support.</li> </ul>

## Key performance indicators in 2021–22

1. 80% of the priorities identified to strengthen the current integrity system are delivered.
2. Adoption of digital livestock consignments increases by 20% compared to 2020–21.
3. Integrity system awareness levels increase to 95% or above.
4. Producer recognition of the value of the integrity system increases by 10% compared to 2020–21.
5. Mechanisms for more effectively monitoring and managing integrity system compliance are implemented.



# Market access science

**MLA’s market access science sub-program maintains and increases the level of trust in our product while also reducing non-tariff (technical) trade barriers and efficiency in the supply chain. It addresses issues associated with production, processing and distribution systems that impact on technical acceptability of meat-based product to countries, companies, customers and consumers.**

This sub-program will produce data and information that will provide communities the opportunity to make positive decisions for our product due to industry credentials, and for industry to be able to connect meaningfully with consumers at the product level. Product level credentials may apply not only to meat itself, but also to products containing meat or by-products. The challenges of reducing the environmental footprint (waste, CN30) will be addressed through shelf life and cold chain management. The sub-program provides a significant part of the science-base for defending and maintaining market access and alleviating technical trade barriers. Activities extend through the chain from production to consumption.

The sub-program collaborates with a cross-sector of animal industries antimicrobial stewardship framework steering group, the CSIRO Trusted Agrifood Export Mission, US-based FoodCoVNet (SARS Coronavirus2 in food network), EU RIBMINS (Risk-based Meat Inspection) project.

A joint AMPC-MLA committee arrangement will continue to work on setting strategic direction and projects to be undertaken, funding and management as part of AMPC’s research programs (technical market access and markets, product and process integrity).

## Key performance indicators in 2021–22

1. Three-year frozen beef and lamb shelf life is assessed and reported in major markets (MENA, EU) resulting in market access volume and pricing advantages reported.
2. Antimicrobial stewardship programs are developed for extensive grazing with feedback received and up to five future pilots identified for adoption.
3. At least six national and international supply chains have implemented cold chain data management systems in collaboration with MLA, demonstrating improved market access volume and supply chain trust.

Product group	Core activities
Market access technical research	<p>The ‘market access technical research’ product group includes the following core activities:</p> <ul style="list-style-type: none"> <li>■ maintaining awareness and making assessments of threats and opportunities in markets and technologies, and making plans to address them when necessary</li> <li>■ responding to opportunities to reduce technical barriers to trade</li> <li>■ improve our ability to manage shelf life and cold chain to improve access to markets and reduce waste</li> </ul> <ul style="list-style-type: none"> <li>■ ensure antimicrobial stewardship is practiced and evidenced by industry to demonstrate sustainability and avoid technical trade barriers</li> <li>■ improve efficiency of supply chains, through collecting and utilising supply chain data related to food safety, integrity and authenticity and market access.</li> </ul>
Market access research and development (AMPC managed)	<p>The ‘market access research and development (AMPC managed)’ product group includes AMPC-funded initiatives that align with the AMPC strategic plans. There is a joint governance process in place to ensure that there is no duplication of work with MLA investments.</p>

Table 20: Projected 2021–22 investment by funding source – integrity systems (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22	
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R				External M
Integrity systems	15	26	191	161	1,038	1,101	1,915	1,935	657	572	1,124	1,460	9	28	1,238	6,188	5,915	12,376	11,198	23,574
Market access science	2		32		172		318		109		854		2		645	2,132		4,264		4,264
<b>Total</b>	<b>18</b>	<b>26</b>	<b>223</b>	<b>161</b>	<b>1,210</b>	<b>1,101</b>	<b>2,233</b>	<b>1,935</b>	<b>767</b>	<b>572</b>	<b>1,978</b>	<b>1,460</b>	<b>10</b>	<b>28</b>	<b>1,883</b>	<b>8,320</b>	<b>5,915</b>	<b>16,640</b>	<b>11,198</b>	<b>27,838</b>





# Program

## 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.**

This program also contributes towards the outcomes of strategic focus areas outlined in MLA's *Strategic Plan 2025*:

- **Decisions informed through data and insights:** Developing technologies that allow data capture, sharing and analysis across the value chain supports industry in building a data culture. It provides the foundation for value-based pricing, which would enable producers to have greater access to data and feedback on the performance of their animals to inform production decisions.
- **Targeted investment to address the industry's big, complex challenges:** Providing specific trait measurement feedback data to producers will help them to improve market specification compliance and confidently supply product that aligns with consumer attributes. The development of animal welfare objective measures would also support practice change across the supply chain, including in live export, feedlots and extensive production systems.
- **Developing new, high value products that allow us to maximise the whole carcase:** Objective measurement and automation, underpinned by data and novel technologies, will enable the industry to extract maximum value from the carcase.

- **Beyond today's farm gate:** This program involves leveraging insights and technologies from outside of the food sector as well as strong collaboration with new and current commercial partners to achieve efficiencies and impact. It enables the industry to leverage external funding from partners and commercialisers through the MLA Donor Company.

### Sub-programs

- Objective measurement

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



## Operating environment

To date, livestock and carcase attributes have largely been assessed using manual subjective measurement resulting in unrealised value potential across the red meat supply chain through lower accuracy measurement or appraisal systems. There is significant scope to improve the accuracy of measurements through the adoption of transparent objective measurement technologies and add significant value to the supply chain.

Over recent years MLA has worked with industry, research institutes and technology providers to develop on-farm, feedlot and processing plant solutions, including the application of DEXA (Dual-Energy X-ray Absorptiometry) and focusing on delivering technology that measures carcase eating quality traits for beef and sheep. MLA is now facilitating the ongoing adoption of DEXA technology throughout the red meat industry to deliver an accurate objective measurement of carcase meat, fat and bone (lean meat yield) and the platform to pass this information back to producers. In addition, MLA is commercialising eating quality technology to measure carcase quality traits.

As well as technology development, the objective measurement program includes other key enablers such as the development of value-based pricing and marketing models, calibration of measurements, development of digital data and measurement standards, developing new meat industry language criteria, supporting producer/seedstock extension programs and decision support systems. All of these will need to be successfully delivered in order to achieve the expected benefits from the above objective measurement based value propositions.

This will allow the red meat industry to transition to new business models, underpinned by key objective measurement technologies and related value-based trading.

The objective measurement program is closely linked to other programs such as MSA, productivity (both on- and off-farm), livestock genetics, integrity systems, producer adoption and market access. Additionally, the program incorporates the Rural R&D for Profit supported program, ALMTech II, which features device metrology, links to genetic databases, and adoption support with producers.

While the focus of the objective measurement program is around lean meat yield and eating quality, with strong linkages to MSA, other objective measurements may support productivity gains in such areas as food safety and animal health.

Genetic trait selection for objective measurement based lean meat yield increase while maintaining eating quality and pH, along with opportunities to increase feedlot marbling while optimising turn-off times continues to be key focus areas along with integration in modern processing facilities. Advancements in technologies to enable cut-based MSA sheep along with live animal objective measurement of lean meat yield for on-farm management and selling decisions, remain complex problems and key opportunities to solve.

# Objective measurement

**MLA's objective measurement sub-program develops and supports industry adoption of a range of technologies that measure or estimate key traits such as lean meat yield (LMY) and eating quality at appropriate points in the value chain for both live animals and carcasses. Key activities are focused on transitioning R&D to commercial implementation, and include:**

- measurement of LMY and eating quality attributes to enhance MSA grading, by a range of technologies that support current grading and provide new grading opportunities, including cameras, intra-muscular probes, near infrared (NIR), and CT (computed tomography) scanning adapted from airline systems
- supporting adoption of LMY measurement by continuing to co-fund the rollout of DEXA x-ray systems at processing plants
- development of a range of potential technologies to measure eating quality, with a core focus on intra-muscular fat (IMF) and developing objective measurement of AUS-MEAT and MSA grading criteria
- prototyping and validating the value propositions for both the technology solution and the value propositions that these facilitate.

## Key performance indicators in 2021–22

1. Up to three meat grading cameras are presented for AUS-MEAT accreditation with adoption of at least one technology adopted in six supply chains.
2. Intra-muscular fat and lean meat yield standards presented to the Australian Meat Industry Language and Standards Committee for approval.
3. Six lamb x-ray systems installed, measuring lean meat yield and enabling producer feedback.
4. At least one technology calibrated to measure lamb intra-muscular fat in-plant to enable cuts-based MSA.

Product group	Core activities
Objective measurement technologies	<p>The 'objective measurement technologies' product group supports the development of technologies that can be applied to live animals or carcasses to measure traits describing the value of carcasses. Outcomes from this product group are primarily delivered via the Rural Research and Development for Profit objective measurement program and MLA Donor Company investments. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ Development, proof of concept, and demonstration of:               <ul style="list-style-type: none"> <li>■ spectral technologies to measure or predict characteristics describing carcass value</li> <li>■ airline security-based technologies for carcass scanning, and 3D imaging, for composition and health feedback</li> </ul> </li> <li>■ implementing objective measurement adoption activities through supply chain coordinators and the Rural Research and Development for Profit objective measurement program partner processors</li> <li>■ developing the value proposition of objective measurement across the value chain and tools developed under the Rural Research and Development for Profit objective measurement program and associated objective measurement projects.</li> </ul>

Table 21: Projected 2021–22 investment by funding source – objective measurement (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22	
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R				External M
Objective measurement			26		196		150		37		3,888				2,161	6,459	1,627	12,918	1,627	14,546
Total			26		196		150		37		3,888				2,161	6,459	1,627	12,918	1,627	14,546





# Program

## 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.

MLA’s regional consultation program operates alongside the producer adoption and related on-farm sub-programs as it engages producers directly in MLA on-farm investment decision-making. This works through the setting of R&D priorities as well as making recommendations to MLA on program and project level funding under the regional consultation model.

### Sub-programs

- Producer adoption

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

MLA’s producer adoption program encompasses adoption and regional consultation.

#### Adoption

The MLA adoption program has a well-established and successful three-step adoption pathway that allows producers to move from awareness raising extension activities through to programs that enable producers to achieve lasting practice change. A fourth supporting step to this process is the adoption enablers. In all, this means that the adoption program has a four-category framework (A, B, C and enablers) that account for the differing needs, information and skills of producers. These categories can be further described as:

- Category A activities create awareness of the latest MLA R&D outputs and its adoption programs. These events act as feeder events for category B and C activities. For example, BeefUp and MeatUp events, and marketing and communication activities eg. FutureBeef.
- Category B events provide short-term training opportunities to producers. Examples of category B

events include BredWell FedWell, the EDGE Network workshops, the Feedbase Four soil clubs and Pasture Paramedic training.

- Category C programs aim to achieve long-term practice change with producers in their production systems. The principles of this category are long-term, peer-to-peer (producer groups), supported or experiential/hands-on learning programs. Programs include Profitable Grazing Systems (PGS) and Producer Demonstration Sites (PDS).
- Adoption enablers aim to build the resources and capability of advisors, which enable producers to implement a practice change through trusted advice or decision support tools. This includes programs like the Livestock Advisor Essentials, Future Livestock Consultants and Livestock Advisor Updates. Examples of support tools and calculators are the stocking rate calculator, soil phosphorus tool and Pasture Paramedic tool.

In 2021–22, MLA’s producer adoption program will focus its business activities on three key areas of execution, motivation and impact.

**1. Execution** of the existing adoption pathway, delivering extension and adoption products that address producers' needs and developing products where there are gaps. Throughout 2021–22, the adoption program will improve the progression of producers who participate in awareness activities through to involvement in long-term practice change programs. Success will be monitored through the CRM system to determine what adoption products producers are participating in and their progression through the pathway. Where there is not success, reviews will be conducted, gaps identified, and proposals developed for a suitable product. Further, the program will collaborate with other sub-programs like beef productivity, animal wellbeing and sustainability to work together on a single issue to focus resources and efforts to deliver greatest impact for producers.

**2. Motivation** of producers to get involved in MLA extension and adoption products and build momentum for producers to progress through the adoption pathway. In 2021–22, the adoption program will look to devise and deliver regionally and industry specific campaigns to drive awareness and motivation of

producers to address production issues like pasture dieback, utilisation of vaccines, sheep reproduction management practices and soil testing. Communications to producers about the adoption programs available will also demonstrate the value that producers can gain from being involved.

**3. Impact** of adoption program investments will be scrutinised to ensure that the highest possible increases in production and profitability can be delivered via its products to producers. During 2021–22 a monitoring and evaluation framework will be rolled out across all of the adoption programs to determine the benefits that producers are gaining through their involvement. As a result of implementing this framework an annual report of impact achieved will be conducted and reported in line with the annual KPIs for the program. Any future investments by the adoption program will be scrutinised as to how many producers will be involved and what impact this will have on improving the productivity and profitability of their business. To further leverage the impact that can be achieved for producers, the adoption program will continue to work closely with strategic partnership programs

e.g. Rangelands Living Skin and collaboratively across MLA programs on issues in common e.g. Northern Breeding Business (NB2).

### **Regional consultation**

MLA implemented its regional consultation framework for directing research, development and adoption (RD&A) investment for grassfed cattle and sheepmeat levies in 2015. The aim of the consultation framework is to have a transparent, representative, cost-effective and systematic framework that underpins effective and relevant on-farm RD&A investment.

As the program evolves into 2021–22 and 2022–23, it is focusing on not only having input into the areas of investment (regardless of funding source), but also involving the Research Advisory Councils (RACs) in understanding the outcomes of research and development and how this can lead to better adoption of these outcomes.

Hence the focus will shift from not only priority setting but also to a focus on impact through bi-directional information flow. Utilising this group of engaged producers to understand how to communicate these outcomes more effectively to industry should help speed the rate of adoption of these outcomes.

# Producer adoption

**MLA’s producer adoption sub-program builds the capability of red meat producers and advisors to increase on-farm productivity, profitability and sustainability through the implementation of on-farm research and development.**

## Key performance indicators in 2021–22

1. Delivers annual productivity benefits and cost savings of \$36 million to producers from practice changes influencing up to 37.1 million hectares, 1.9 million cattle, 3.2 million sheep and 10,000 goats.
2. Total producer engagement over two years with 9,500 producers, with 7/10 satisfaction achieved.

Product group	Core activities	
Adoption awareness programs	<p>Initiatives within the 'adoption awareness programs' include:</p> <ul style="list-style-type: none"> <li>■ create awareness for adoption opportunities</li> <li>■ inform producers and delivery partners of the latest practical research and</li> </ul>	<p>development messages, and integrated learning opportunities through campaigns and large-scale forums</p> <ul style="list-style-type: none"> <li>■ provide educational materials to support producer decision-making.</li> </ul>
Short-term training programs and workshops	<p>Initiatives within the 'short-term training programs and workshops' product group include:</p> <ul style="list-style-type: none"> <li>■ engage producers with training and education opportunities to influence and motivate producers for uptake of improved practices and further skill development</li> </ul>	<ul style="list-style-type: none"> <li>■ strategically targeted workshops and seminars to motivate producers into further skills development and inform decision-making</li> <li>■ strategic development of online tools and resources to support producer decision-making.</li> </ul>
Long-term practice change programs	<p>Initiatives within the 'long-term practice change programs' product group include:</p> <ul style="list-style-type: none"> <li>■ involve and partner with producers and service providers in integrated, long-term (&gt;12 months) adoption programs that deliver transformational change to their business performance</li> <li>■ partnering with producers and producer groups to demonstrate, develop and adopt research and development outcomes by validating the commercial value proposition and benefits.</li> </ul>	<p>Adoption programs focused on long-term practice change include Profitable Grazing Systems (PGS) and Producer Demonstration Sites (PDS). MLA is also building customised research, development and adoption programs to address shared regional and interstate priorities, which are expected to have a much larger impact on adoption compared with individual producer groups working in isolation.</p>
Adoption enablers	<p>Initiatives within the 'adoption enablers' product group include:</p> <ul style="list-style-type: none"> <li>■ specialised programs which build public and private service provider capacity and capability, and encourage participation in – and leading of – MLA adoption programs</li> <li>■ program evaluation and producer market research to establish qualitative and quantitative impacts of adoption programs and inform research, development and adoption needs</li> </ul>	<ul style="list-style-type: none"> <li>■ increasing the robustness of MLA’s monitoring and evaluation framework to more accurately evaluate the improvement in profitability, productivity and sustainability of producers participating in MLA adoption programs</li> <li>■ research to inform new and innovative adoption strategies.</li> </ul>
Regional consultation for research, development and adoption	<p>The 'regional consultation for research, development and adoption' product group initiatives include:</p> <ul style="list-style-type: none"> <li>■ engaging grassfed beef and sheepmeat producers, as well as program partners, in two-way communication with MLA on research, development and adoption projects and impacts through regional forums and consultation processes</li> </ul>	<ul style="list-style-type: none"> <li>■ facilitating research advisory councils and associated producers to have confidence in the MLA <i>Strategic Plan 2025</i> and <i>Red Meat 2030</i>, and ensure that there is a link between regional consultation and the objectives of these plans.</li> </ul>

Product group	Core activities
Animal wellbeing adoption	The 'animal wellbeing adoption' product group will focus on increasing the adoption of vaccines by producers based on their on-farm productivity, cost saving or animal wellbeing benefits.
Beef productivity adoption	The 'beef productivity adoption' product group initiatives include: <ul style="list-style-type: none"> <li>■ development and delivery of the Northern Breeding Business (NB2) to deliver extension activities and adoption practices that reduce calf mortality and guides reproductive benefits for northern herds. This will be aligned with developing a similar livestock initiative for southern herds.</li> </ul>
Feedbase adoption	The 'feedbase adoption' product group initiatives include: <ul style="list-style-type: none"> <li>■ delivery of extension and adoption products that allow producers to have targeted grazing management practices to increase productivity and profitability. These activities will allow producers to identify suitable areas for pasture diversification and enhance their skills, knowledge, and confidence to utilise sustainable grazing practices.</li> </ul>
Goat productivity adoption	The 'goat productivity adoption' product group will focus on increasing the number of producers incorporating managed goats as an enterprise within their business.
Sheep productivity adoption	The 'sheep productivity adoption' product group will focus on the uptake of sheep reproduction management practices by producers.

**Table 22: Projected 2021–22 investment by funding source – producer adoption (\$ '000)**

<sup>†</sup>Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22	
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R				External M
Producer adoption	24	21	159	107	1,787	1,035	1,083	1,451							4,823	7,876		15,753	2,613	18,366
<b>Total</b>	<b>24</b>	<b>21</b>	<b>159</b>	<b>107</b>	<b>1,787</b>	<b>1,035</b>	<b>1,083</b>	<b>1,451</b>							<b>4,823</b>	<b>7,876</b>		<b>15,753</b>	<b>2,613</b>	<b>18,366</b>





# Program

## 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.

### Sub-programs

- High value food frontiers

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

Current and emerging global trends around convenience, snacking, personalised nutrition and wellness offer new usages and occasions for red meat beyond the traditional centre-of-plate protein. Other industries, including pharmaceutical, cosmetic, medical and biofuels sectors offer the potential for high premiums for red meat by-products and co-products.

Insights gathered from market and consumer research have identified several emerging global food trends that offer clear opportunities for the Australian red meat industry. Key themes include:

- personalised nutrition – health and wellness
- convenience and ‘snacking’
- targeted demographic needs such as the ageing population
- the future of red meat protein in a rapidly changing global market
- sustainability – reducing food waste and upcycling waste stream ingredients via circular economies, plus reducing plastic pollution and carbon footprint from the ag-food sector.
- To capitalise on these opportunities, new value-added product and service offerings need to be created through new technologies and business models.

Critically, this sub-program will apply learnings from global food trends with

advancements in food and packaging technologies to prototype and scale up new usages, occasions and value for Australian red meat inclusion. Key opportunity spaces will be pursued in collaboration with MLA’s International Markets team and commercial partners, using an iterative approach to designing, testing and delivering concepts in-market with an Australian red meat value proposition.

Producing higher utilisation, more desirable red meat products with different usages and occasions can create more value than the current model, where typically 80% of value is harvested from only 20% of the carcass. A paradigm shift to position red meat and its by-products beyond commodity offerings can help create more points of difference for the industry and potentially improve market access conditions.

Significant work is underway to extract collagen peptides from hides and skins and transform these, as well as other red meat glandules, into freeze-dried powders for snacks and nutraceuticals. Another key theme is identifying novel packaging materials and upcycling meat/food waste streams to drive wider sustainability credentials for the Australian red meat sector.

Finally, the development of alternative proteins to mimic meat such as plant proteins and lab-grown meat is likely to continue and is an area that MLA will be responding to.

## High value food frontiers

**Critically, this sub-program will be informed by global food trends and advancements in food technology for new usages, occasions and value. Key opportunity spaces will be pursued in collaboration with MLA's international markets team and commercial partners, using an iterative approach to designing, testing and delivery concepts in-market with an Australian red meat value proposition.**

A key to achieving impact is to rapidly test concepts and value proposition assumptions so as to deliver insights in changing consumer lifestyles and life-stages in different markets. It will also explore emerging delivery modes, digital kitchens and supermarkets of the future and key sustainability drivers to upcycle 'waste streams'.

A balanced portfolio of activities will include engagement with incumbent red meat producers, processors, value adders, brand owners and their value chains as well as disruptive models and partnerships in adjacent industries to develop and test new solutions and business models.

In 2021–22, the sub-program will focus on three key areas:

- Re-mapping of carcass utilisation to validate and identify key components to target and transform higher value. This includes alternative uses of hides. Presenting this opportunity to industry and secure at least three partnerships to ideate opportunities to drive diversified revenue beyond commodity trading to higher value products. This will specifically consider the 80/20 assumptions whereby 20% of the carcass delivers 80% of the value.

- Commercialise a freeze-drying platform across several key areas with inclusion of Australian red meat and by-products arising from existing activities including collagen, ready meals and nutraceuticals.
- Scan emerging food technology platforms, and food and consumer trends, undertaking preliminary feasibility studies to build a portfolio of future growth options in value-added Australian red meat offerings.

The investment portfolio will use a range of design-led innovation and future scenario thinking methodologies and minimum viable product (MVP) prototyping to assess desirability, viability and feasibility criteria. Investments will be via both levy-based and the MDC co-investment models so as to support higher levels of engagement and adoption by industry partners and commercial technology providers.

The innovation capability building program also includes several MDC funded initiatives that align with, and support delivery of this program. These include MDC Co-Innovation Managers placed in value-adding enterprises.

### Key performance indicators in 2021–22

1. Secure three commercial partnerships to trial opportunities to increase the value of current low value items through new product/process developments where prototypes demonstrate a future opportunity of at least three times value multiplier on input commodity raw meat/by-product.
2. Three new value chain partners secured to commence contracted product development with combined future incremental annual sales value of \$15 million by June 2022.
3. Commercialise freeze-dried meat and co-products, creating \$30 million annual value-adding sales in 2021–22.
4. Complete feasibility of one new food/packaging technology platform that addresses global food trends and/or improves market access for value added red meat, and that demonstrates a future opportunity of at least three times value multiplier on input commodity raw meat.



Product group	Core activities	
Consumer, food technology and market insights	<p>Initiatives within the ‘consumer and market trends and insights’ product group include:</p> <ul style="list-style-type: none"> <li>■ analysing global food trends and food technology platforms for ‘what’s next and what’s possible’ and identify opportunities for waste value chains, clean label and sustainable products</li> <li>■ analysing threats and opportunities (e.g. alternative meat proteins into blended meat-plant products and by-products such as hides into collagen)</li> </ul>	<ul style="list-style-type: none"> <li>■ analysing changing lifestyles (e.g. snacking on the go, ‘internet of things’ connections) and life stages (e.g. multigenerational households, baby boomers) in emerging markets (China, ASEAN and the Middle East) and mature markets and value chain designs that will inform development of new products, processes and packaging solutions with inclusions of Australian red meat.</li> </ul>
Develop new products, processes and business models	<p>Initiatives within the ‘develop new products, processes and business models’ product group include:</p> <ul style="list-style-type: none"> <li>■ engaging with food technology entrepreneurs, producer-led initiatives and brand owners of value-added products for developing or implementing innovative value-adding products or supply chains that deliver significant benefits for the red meat industry</li> <li>■ design sprints to develop and test proof-of-concepts and value propositions for rapid financial modelling and CBAs/business cases to define drivers of change and emerging technology platforms</li> </ul>	<ul style="list-style-type: none"> <li>■ engaging with industry and adjacent food sectors to act on mega trend themes</li> <li>■ developing knowledge portal of insights that validate themes and strategic investment opportunities</li> <li>■ providing future-focused consumer-led input across MLA activities</li> <li>■ commercialise a freeze-drying platform across several key areas with inclusion of Australian red meat and by-products.</li> </ul>

**Table 23: Projected 2021–22 investment by funding source – product and packaging innovation (\$ '000)**

\*Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22	
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R				External M
High value food frontiers			14	15	107	115	30	71	2	6	268				1,219	1,640		3,280	207	3,488
Total			14	15	107	115	30	71	2	6	268				1,219	1,640		3,280	207	3,488



# Program

## 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.

### Sub-programs

- Digital value chain information

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

Agricultural supply chains are being disrupted by new and emerging technologies such as those supporting objective measurement. The technology and data that supports supply chain feedback systems and the verification of our integrity system claims that our product is clean, safe and fully traceable. This is essential in order to support the supply chain to strengthen decision-making and performance, as well as safeguard consumer trust, and maintain and extend market access. These disruptive opportunities are driving the collection, storage and analysis of data at every node of the value chain. This is key to informing and driving decision-making. This means that sharing data, agreeing on data ownership guidelines, rules for data sharing and access are more important than ever.

A key enabler to support the more effective use of data is the continued development of a red meat industry data platform. This will provide mechanisms for agreed industry data to be securely stored, governed, analysed and accessed for the purposes of:

- improving and validating the red meat industry’s performance

- strengthening our integrity systems as an enabler to the *Integrity System 2025 and Beyond Strategic Plan (IS2025)*.

It will require industry capability building and technology adoption to support the collection of data and feedback systems from on-farm right through to consumers. New solution providers will need to be found and supported. This journey will also demand a cultural change that recognises the value of data to support decision-making. Validating industry priorities, data ownership, collaboration models to support data sharing, ethics and access are other critical components that must be developed to meet the needs of commercial businesses.

Through the linking, enrichment, coordination and use of data across the value chain, this program aims to increase returns by driving efficiency, increasing market opportunities through innovative product assurance and traceability, and maintaining the customer’s trust in Australian red meat.

# Digital value chain information

MLA's digital value chain information sub-program provides enablers that support all program groups to probe, identify and leverage opportunities to capture, interrogate and utilise data. It focuses on data governance, the capture/linking and enhancement of data, data culture, adoption and capability, analytic development and the provision of data infrastructure/tools.

## Key performance indicators in 2021–22

1. Secure three commercial partnerships to trial Implement a strategy to align current data feedback systems with key objective measurement technologies to maximise adoption and impact across the supply chain.
2. At least eight processing plants have adopted the animal disease data standards and provide this data as feedback to their suppliers/ producers.

Product group	Core activities
Data driven value chains	<p>Initiatives within the 'data driven value chains' product group include the development of an industry data platform, utilisation of this platform by supply chains and enabling the data sharing and feedback to producers, to enable practice change and increased profitability. Core activities include:</p> <ul style="list-style-type: none"> <li>■ identifying, curating and managing datasets and analytics that provide measurable value to the red meat supply chain</li> <li>■ development of enabling MLA Group program data infrastructure and governance</li> <li>■ supporting industry integrity programs through <i>Integrity System 2025 and Beyond Strategic Plan (IS2025)</i></li> <li>■ upgrading the infrastructure of the current feedback system to enable delivery of future feedback</li> <li>■ working with supply chains to enable feedback to be captured and shared, and provide support in engagement of producers in using data to enhance livestock and business performance</li> <li>■ connecting with supply chains and third-party systems, such as farm management systems, to enable data sharing with the MLA Group's systems. This supports producer use and feedback of this shared data</li> <li>■ coordinating value chain partnerships that drive data and analytic adoption resulting in measurable value</li> <li>■ capturing and collecting animal disease, defect and wellbeing data at processors, and enabling subsequent feedback to producers and lot feeders</li> <li>■ developing a process for identifying, piloting and adopting new and emerging datasets.</li> </ul> <p>Enablers that support the core activities include:</p> <ul style="list-style-type: none"> <li>■ facilitating the development of interoperable industry data providers, tools, architectures, protocols and standards</li> <li>■ the development, support and adoption of an industry data platform</li> <li>■ establish well-defined and reliable mechanisms for ingestion of internal and external data sets into the data platform</li> <li>■ communicating and extending opportunities to raise awareness and increase industry and solution provider uptake of data and analytics</li> <li>■ building data and analytic capability across the MLA Group, the red meat supply chain and collaboration across agricultural sectors</li> <li>■ guiding industry to adopt appropriate data governance to ensure data is well managed and of an appropriate quality</li> <li>■ ensuring mechanisms for the adoption of available data are in place and measurements to evaluate value to industry are consistent across MLA group programs</li> <li>■ design thinking framework established to ensure that all program enablement opportunities are analysed, run to ground and that clear paths to adoption are identified.</li> </ul>

Table 24: Projected 2021–22 investment by funding source – digital value chain information and efficiency (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R			
Digital value chain information	41		110		819		1,154		389		50				1,342	3,905		7,810	7,810
<b>Total</b>	<b>41</b>		<b>110</b>		<b>819</b>		<b>1,154</b>		<b>389</b>		<b>50</b>				<b>1,342</b>	<b>3,905</b>		<b>7,810</b>	<b>7,810</b>



# Program

## 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.

### Sub-programs

- Productivity (off-farm)

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

The Australian red meat and livestock industry’s processing sector operates within a highly competitive international marketplace and an operating environment characterised by high and increasing input costs.

Delivering cost effective, high quality products are drivers for automation, shared data, compliance and efficiency to ensure market access is maintained, changing workforce needs are met and global competitiveness is increased.

Accelerating the rate of innovation and adoption is an important contribution for the Australian meat processing industry to remain globally competitive.

As operating costs continue to rise, especially for energy, transport and labour, there is a potential threat from foreign owned processors relocating their operations offshore to take advantage of cheaper labour. Should this occur, it would limit value chain innovation and value-adding options and opportunities with the Australian industry.

Changing workforce needs and global competitiveness for delivering cost effective, high quality products are drivers for automation, shared data, compliance and efficiency to ensure market access is maintained.

Program outcomes will deliver opportunities for higher food safety protocols, traceability and the ability to cost effectively manufacture what the markets are signalling, not just what is procured and produced, and provide digital frameworks to better optimise buy-make-selling decisions along the value chain.

This program also seeks to help transition the industry to a culture that captures and shares data across every point in the supply chain. This enables the identification of the highest value opportunities and a shared understanding of challenges that needs addressing off-farm that align to producer and brand owner expectations. This program works closely with Australian Meat Processor Corporation processor members.

## Productivity (off-farm)

**MLA’s productivity (off-farm) sub-program works to develop and adopt supply chain technologies that deliver productivity benefits to the off-farm sector. Key focus areas include maximising carcass value, optimising product mix and addressing labour availability and workplace health and safety issues.**

The major focus in the 2021–22 period will be progressing the automation of beef boning, based on a similar successful approach taken for lamb boning (various LEAP systems) and is the key investment priority of the current program given the potential for large productivity gains. This will be based around a series of modules for tasks such as x-ray and CT scanning for bone cutting line features, the automated precise scribing of the carcass side, bone-in primal breakup, removal of the chine bone from striploins and cube rolls, as well as addressing additional tasks such as arduous boning activities with operator assistive technologies (e.g. wearable exo-skeleton supports).

Other key areas for automation investment in 2021–22 include automated container load-out logistics and processor in-plant traceability and integrity systems.

While this program focuses on whole-of-supply chain productivity gains from automation, it strongly links with objective measurement systems such as DEXA x-ray and CT objective measurement of which are being developed to maximise synergies between the two programs.

With the merger of several research providers and commercialisers under Scott Technology, the program is co-funding via the MLA Donor Company (MDC) preliminary R&D with a variety of other national and international providers to broaden the range of suppliers and includes continuous global technology scanning for maintaining and developing a robust innovation pipeline.

Other priorities include support for objective measurement and data exchange up and down the supply chain that will underpin value-based marketing (VBM).

### Key performance indicators in 2021–22

1. Technologies adopted in 2021–22 and previous years deliver \$70 million of increased productivity for the red meat industry.
2. Two in-plant trials of beef automation advanced imaging vision system prototypes underway, along with testing in one R&D boning room site.
3. Automated load-out logistics and shipment integrity container loading solution prototype completed, with prototype trialling on at least two processor sites underway.

Product group	Core activities
Productivity and logistics (off-farm)	<p>Productivity-focused initiatives within the ‘productivity and logistics (off-farm)’ product group include:</p> <ul style="list-style-type: none"> <li>■ further developing the beef and lamb boning automation program, with a focus on the development of beef boning automation modules</li> <li>■ other high-impact activities, including supply chain logistics projects in areas such as pack-out and load-out automation.</li> </ul> <p>Tools and enabler initiatives supporting these include:</p> <ul style="list-style-type: none"> <li>■ conducting ongoing cost-benefit analyses on key technologies and programs</li> <li>■ in-plant traceability systems</li> <li>■ developing and demonstrating innovative CT and other imaging technologies for cutting lines and automation</li> <li>■ engaging with new global solution providers, as well as continuous global technology scanning</li> <li>■ evaluating emerging new operator assistive technologies such as cobotics, augmented vision and exo-suits.</li> </ul>

Table 25: Projected 2021–22 investment by funding source – productivity (off-farm) (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																	Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R	External M			
Productivity (off-farm)											3,318					4,193	7,511		15,021	15,021
Total											3,318					4,193	7,511		15,021	15,021





# Program

## 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.

### Sub-programs

- Beef productivity
- Sheep productivity
- Goat productivity
- Livestock genetics
- Feedbase production
- Digital agriculture

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

On-farm productivity and profitability gains can be achieved through new research, development and adoption that results in production efficiencies, reduced costs and higher returns on investment. In parallel, on-farm productivity must also contribute to a sustainable red meat industry that meets with community expectations on land, water, and environmental management.

**Grassfed beef productivity** relies on pasture-based systems which are influenced by seasonality and quality of an extensive feedbase. The MLA beef productivity sub-program seeks to increase beef productivity and enterprise sustainability by targeting increased reproductive efficiencies for breeder herds, reduced mortality between conception and weaning for northern herds, and an optimised value chain through integration of data to support management decisions on-farm.

Sheepmeat production has remained stable despite the flock declining. On-farm prices remain strong, driven by strong global demand. Production is predominantly pasture-based, exposing it to seasonal fluctuations and competition from crop farming enterprises. A key focus of the **sheep**

**productivity** sub-program is to contribute to a sustainable production system that improves the amount of sheepmeat produced per hectare, increasing lamb weaning rates, reducing ewe mortality, while managing the landscape and biodiversity outcomes and maximising the opportunities for mixed farming systems.

The **goat industry** continues to evolve. Record prices are driven by tight and inconsistent supplies and strong export demand. The challenge is to grow supply by increasing producer and animal numbers. Demonstrating 'proof of profit' to entice producers to 'give goats a go' and the provision of support in adding goats as a long-term enterprise within their business are prerequisites. A whole-of-supply-chain approach and data-based decision-making that considers best practice and total grazing pressure within each business is also necessary to ensure sustainability.

In the area of **livestock genetics**, there has been significant co-investment in the past couple of years to set up the industry for future success in driving improvement in genetic gains and establishing world-leading practice. Through aligning genetic investment

to value chain outcomes, and by better meeting the needs of consumers, there will be the greatest rate of commercial adoption, but this does require a culture change to break through barriers to adoption. The investment in genetics will lead to addressing key drivers of profit including, but not limited to, improving market specification compliance, reducing costs, increasing growth rates, improving fertility and improving livestock production efficiency to improve overall productivity. To accelerate the rate of genetic gains, investments in disruptive and transformational research of new and novel technologies will be important and will ensure Australia is delivering world-leading genetic tools.

The **feedbase production** sub-program the foundation of cost-effective animal production. The required feedbase is to ensure animal supply meets market needs and consumer expectations in the face of variable seasons, changing climates, environmental conditions, regulation and competition from undesirable plants and pest animals. The feedbase sub-program addresses these challenges through research that focuses on new and improved plants and forages, enhanced management of grasses, legumes and shrub-tree combinations to accommodate varied capability and capacity of soils

and regional rainfall, better utilisation (grazing frequency and intensity), and biological and non-biological controls for pest animals and plants.

Advancements in **digital agriculture** such as the internet of things (IoT), sensors and data analytics continue to be evaluated. Working with a cohort of 'early adopters', case studies are being derived for applying technologies that capture and utilise data, including animal health and welfare data, as well as ensuring feedback and mapping processes are in place along the supply chain informed by customer and consumer expectations with key strategic industry partners. These technologies may also enable feedback and feedforward processes within networks and supply chains that are informed by consumer expectations around things such as sustainability credentials. With the introduction of new technologies on-farm comes increased efficiencies, which in turn will increase the amount of land and livestock one producer can manage. Going forward, these technologies will also provide producers with tools and resources to make more informed decisions and improve productivity.

# Beef productivity

**The grassfed beef productivity sub-program has an increasing focus on collaborative MLA Donor Company (MDC) investment and striking a balance between new R&D with extension and adoption opportunities that result in practice change on-farm. Optimising on-farm production and efficiencies under strategic partnership initiatives such as Northern Breeding Business (NB2) will enable addressing producer priorities at scale.**

Key activities in 2021–22 will result in the amalgamation of existing, independent R&D activities into bigger, bolder programs of work. Programs of work to be continued or initiated in 2021–22 include:

- Continue to develop beef production systems to optimally match enterprise mix, market and consumer needs. This program concentrates on the northern WA value chain (WA BeefLinks) with opportunities to extend the program and outcomes to similar supply chains and integrate under a broader northern strategy.
- Northern Breeding Business (NB2). This initiative consolidates current investment in reducing calf mortality, managing parturition through remote

management and intervention strategies that result in increased weaning rates. Program objectives will be driven by an extension/adoption focus that engages with industry through a Pathways to Practice pillar.

- Dairy to beef (dairy2BEEF). This partnership between the beef and dairy industry, universities, and state agencies will deliver higher value options for non-replacement dairy calves. A value chain approach will consolidate previous and current areas of work on- and off-farm to define alternative pathways for traditionally non-beef breeds targeting domestic and export market opportunities.

## Key performance indicators in 2021–22

1. NB2 program successfully established with a minimum of 40 producers engaged in benchmarking and practice changes identified to support improved reproductive business performance setting the baselines for reproductive performance for northern beef businesses.
2. Business case developed with agreed cross-industry funding support to double the value of dairy calves for meat production.
3. BeefSpecs live animal assessment is commercialised and used in at least 10 supply chains creating an additional \$10 million in increased revenue.

Product group	Core activities
Productivity practices and technologies for grassfed cattle	<p>Initiatives within the 'productivity practices and technologies for grassfed cattle' product group include:</p> <ul style="list-style-type: none"> <li>■ improving fertility through targeted heifer management, achieving critical mating weight at genetic potential, and strategic supplementation practices that supports conception, gestation and lactation</li> <li>■ understanding the causes of, and mitigating calf loss through applied research</li> <li>■ generating extension resources in nutritional supplementation and breeder herd performance</li> <li>■ improved supplement use that improves growth paths, compliance to market specification and mitigation of enteric methane on-farm such as feeding leucaena, desmanthus or targeted supplements that reduce emissions intensity</li> </ul> <ul style="list-style-type: none"> <li>■ improving production efficiency through application of near-infrared spectroscopy technology for determining diet quality</li> <li>■ predicting beef carcass composition through on-farm objective measurement technologies</li> <li>■ improving herd management by developing and utilising animal monitoring, control technologies and on-farm sensors to analyse location/grazing behaviours, live weight, calving behaviours, environmental conditions and virtual fencing applications.</li> </ul>

# Sheep productivity

**MLA's sheep productivity sub-program aims to increase on-farm productivity and profitability to underpin the sustainability of lamb and sheepmeat businesses.**

Four major goals need to be achieved in order to increase the productivity of the sheep industry, which are:

1. Increase lamb production through increasing weaning rates and decreasing mortality.
2. Improve industry climate adaptation readiness (the biggest risk to productivity).
3. Contribute to the development of optimised sheepmeat production systems to optimally match enterprise mix, market and consumer needs.

4. Contribute to the sustainability of the sector through initiatives that improve the amount of sheepmeat produced per hectare, the landscape and biodiversity outcomes.

Key long-term challenges for the sector are climate change leading to extreme seasonal fluctuations and feedbase adaptation requirements, barriers to adoption of best practice management and maintenance and development of industry capabilities, capacities and skills.

### Key performance indicators in 2021–22

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1. Through the sheep reproductive strategic partnership 125 producer participatory RD&A sites integrated into sheep productivity projects to demonstrate improved reproductive performance by a minimum of 10%.
2. Whole (sheep) enterprise greenhouse gas accounting complete at a minimum of two NEXUS project sites and reporting of future climate scenarios (2030, 2050) and prospective enterprise adaptation options.

Product group	Core activities
Sheep productivity practices and technologies	<p>Initiatives within the 'sheep productivity practices and technologies' product group include:</p> <ul style="list-style-type: none"> <li>■ developing new knowledge to enable improved reproductive management of flocks producing lamb and sheepmeat delivered for incorporation in adoption programs</li> <li>■ investigating new technologies and developing new tools to support production efficiencies, supply chain integrity and welfare monitoring of sheep to inform future investment priorities</li> <li>■ supporting the value chain through on-farm initiatives that ensure continuity and consistency of supply.</li> </ul>



# Goat productivity

**To grow and prosper, the goatmeat industry must build a sustainable supply base. Adoption of improved business practices, feedbase management and making evidence-based decisions will assist in this, and this is where MLA investment can play a key role.**

MLA's goat investment portfolio will focus on two key themes:

1. Knowledge and capacity building:
  - awareness-raising activities targeting recruitment into programs such as EDGE and Profitable Grazing Systems where adoption and lasting practice change are more likely to occur
  - addressing identified knowledge gaps such as the development of goat specific information which can be incorporated into existing or new adoption programs and ensuring course materials are more relevant to goat producers.
2. Supply-based research:
  - development of a goat genetics research project through an MDC partnership
  - delivering improved off-label chemical data to vets across Australia to improve services to goat producers
  - population modelling and tracking over time
  - supplementation and nutrition research for improved feedbase management and growth rates.

## Key performance indicators in 2021–22

1. Communicate the benefits of supplementary feeding rangeland goats and the least cost supplementary feeding calculator via extension to industry to a minimum of 200 goat producers.
2. 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 day.

Product group	Core activities
Goat productivity improvement	<p>Initiatives within the 'goat productivity improvement' product group include:</p> <ul style="list-style-type: none"> <li>■ delivering projections through the population modelling project and using them to inform strategic messaging back to industry</li> <li>■ delivering improved off-label chemical data to vets across Australia to improve services to goat producers</li> <li>■ identifying efficiencies to be adopted relating to herd management</li> <li>■ investigating opportunities for goat genetic improvement.</li> </ul>



# Livestock genetics

MLA's livestock genetics sub-program targets doubling the rate of genetic improvement and delivering the goal of \$400 million of benefit to the Australian red meat industry in 2021–22. This will be achieved through the investment in genetics addressing key drivers of profit including, but not limited to – improving market specification compliance, reducing costs, increasing growth rates, improving fertility, and improving livestock production efficiency to improve overall productivity.

Product group	Core activities	
Reference populations: productivity and eating quality	Investments in reference populations to build productivity and eating quality animal data to underpin accurate delivery of genetic tools. Initiatives include: <ul style="list-style-type: none"> <li>■ utilisation of resource flocks to enhance sheep genetics data, which includes evaluating new ways to capture and utilise industry data</li> </ul>	<ul style="list-style-type: none"> <li>■ support of current Beef Information Nucleus projects for major cattle breeds while evaluating future models to fund the resource</li> <li>■ strategic utilisation of reference populations to identify and fill critical gaps in data required to accelerate genetic improvements</li> <li>■ novel and hard-to-measure phenotype collection.</li> </ul>
Genetic improvement research and development	Developing technologies that maintain Australia's position as a world leader in genetic improvement science and application, and underpin genetic improvement across the value chain. Initiatives include: <ul style="list-style-type: none"> <li>■ new genomic tools and technology development</li> </ul>	<ul style="list-style-type: none"> <li>■ alignment of new tools and technology developed with the genetic evaluation software (OVIS and BREEDPLAN) pipelines</li> <li>■ developing a National Genetics Data Platform.</li> </ul>
Delivery of genetic tools and technologies	Delivery of breeding value services. Initiatives include: <ul style="list-style-type: none"> <li>■ delivering world-class Sheep Genetics services: LAMBPLAN, MERINOSELECT and KIDPLAN</li> </ul>	<ul style="list-style-type: none"> <li>■ developing analytical engines for BREEDPLAN and OVIS to improve single-step analysis and multi-breed analysis capabilities</li> <li>■ delivering commercial genetic improvement tools: DeSireBull, Rampower and Flock Profile.</li> </ul>
Adoption of genetic tools and technologies	Breaking through the barriers to adoption of genetic improvement technologies through initiatives that include: <ul style="list-style-type: none"> <li>■ implementing the MLA Genetics Adoption Plan aligned with the NLGC Strategic Plan</li> </ul>	<ul style="list-style-type: none"> <li>■ providing support for genetic evaluation 'users' through a new beef extension model and Sheep Genetics</li> <li>■ executing an effective and wide-reaching genetics communications strategy.</li> </ul>

## Key performance indicators in 2021–22

1. The number of commercial producers using breeding values has increased to 36% of beef producers and 32% of sheep producers.
2. Implementation of new beef genetics extension and adoption service to support 3,500 BREEDPLAN users and their clients, including establishing baseline data collection and metrics for improvement to be demonstrated in subsequent years.
3. Minimum 2% increase in annual rate of gain for each of the default Sheep Genetics indexes with an increase of 2% to a total of 300,000 animals submitted for the year.
4. At least one new BREEDPLAN delivery service model developed and agreed with breed associations that demonstrates increased usage of beef genetic delivery services.

# Feedbase production

**The feedbase is the foundation of successful animal production, ensuring supply meets market needs and consumer expectations. Feedbase production is the Achilles heel of the industry, a critical component of addressing productivity, environmental and sustainability issues while accommodating adaptation to climate change and contribute to the industry goal of carbon neutrality.**

The aim of the sub-program is to support on-farm management planning and transition to an improved design by ‘optimising whole property planning’, to address complex and chronic problems that potentially deliver multiple benefits – production, profitability, environmental and sustainability outcomes.

## Key performance indicators in 2021–22

1. 125,000ha of new legume pastures on mixed farms based on estimated seed sales of new cultivars and the increased adoption of existing lines. These new plants will grow twice as much dry matter and double animal productivity.
2. Demonstrated improvement in precision of biomass assessment and pasture quality (palatability) by satellite, for property zonal management decisions over 20 million hectares. Soil indicators developed to inform management actions to remediate soil deficiencies or improve soil condition enabling a productive feedbase to deliver the 10% improvement in productivity.
3. Case studies and sales of newly commercialised Hoggone feral pig bait deliver \$2m industry benefit.

Product group	Core activities
Feedbase productivity R&D	<p>The ‘feedbase productivity R&amp;D’ product group comprises three interactive focal product areas:</p> <ol style="list-style-type: none"> <li>1. Resource base inputs - managing soil, water, climate, capability (human and resource) inventory: <ul style="list-style-type: none"> <li>■ lead indicators for soil health (edaphic and biological), plant production and impacts of extreme events on carbon storage, root health, nutrient and water use efficiency as influenced by disease, invertebrate pests, soil capability and capacity and grazing pressure</li> <li>■ understanding and addressing constraints to productivity of soil capacity and capability especially in areas such as pasture dieback, nitrogen fixation by biocrusts in northern Australia and acid soils in southern Australia</li> <li>■ identification of soil constraints (its capability) and understanding the impact of management actions on productivity with a focal area on pasture dieback, soil fertility and nitrogen fixation through natural systems – such as biocrusts in northern Australia, and acid soils in southern Australia.</li> </ul> </li> <li>2. Transition pastures – to a more responsive state (to the impacts of climate variability): <ul style="list-style-type: none"> <li>■ devise high performance pasture mixes from integrating environment, soil, plant and animal factors (inputs) that increase productivity and contribute to CN30</li> <li>■ understanding and remediating soil-based constraints to productivity, pasture dieback and nitrogen fixation</li> <li>■ evaluation and comparison of forage options of legumes, grasses and mixes (native, sown, summer and winter active) and forage crops (canola, poly-cropping, peanuts), identifying novel mixtures and demonstrate more practical and flexible options to transform feed supply and fill key nutrient gaps</li> </ul> </li> <li>3. Optimising feedbase utilisation – to develop data driven diagnostic and predictive information/tools to support producer’s capacity to make more informed decisions. <ul style="list-style-type: none"> <li>■ researching pasture agronomy (establishment, nutrient, companion species, water use, adaptation zone) for a stable feedbase to meet animal specifications</li> <li>■ develop and deliver actions that increase understanding and provide solutions to producers and advisors for pasture dieback and resulting animal feed supply effects.</li> </ul> </li> </ol> <p>Develop evidence and decision processes that are relevant at the paddock scale to enable sustainable, resilient and profitable production decisions for the management of beef herds/sheep flocks.</p> <p>Initiatives are focused on the building blocks of future production systems, including:</p> <ul style="list-style-type: none"> <li>■ develop data-driven, system approaches to measure landscape, soil cover, forage diversity and animal performance, enabling comparison across paddocks and systems</li> <li>■ informing complex production decisions with an increasing focus on adoption of practices that deliver feedbase improvement and higher value meat production</li> <li>■ synthesising the multiple casual factors of pasture dieback and landscape variability into short- and long-term management actions</li> <li>■ demonstrate animal and pasture performance (legume, fertiliser, pasture mixes) in central to north Queensland to improve weaner production.</li> </ul>

Product group	Core activities	
Plant breeding and evaluation	<p>Initiatives within the 'plant breeding and evaluation' product group focus providing plant options and evaluation of performance to transition the feedbase composition to accommodate future demands, ensuring short and longer-term productivity. They include:</p> <ul style="list-style-type: none"> <li>■ pasture plant breeding and commercialisation of species</li> </ul>	<ul style="list-style-type: none"> <li>■ evaluation in differing regional agro-ecological zone of seasonal performance and development of objectives measures to inform pasture purchase decisions</li> <li>■ partnering to secure an ongoing feedbase development pipeline using world-class science to deliver novel, high quality temperate pasture legumes and grasses that increase productivity, resilience and profitability of the Australian red meat industry.</li> </ul>
Feedbase animal competitors	<p>Initiatives within the 'feedbase animal competitors' product group include actions that support minimising the competitive and damaging impact of pest animals in reducing pasture availability for livestock and resource management:</p> <ul style="list-style-type: none"> <li>■ in paddock management to reduce total grazing pressure, by developing and delivering viral products for rabbits that ensure pathogenicity across regions; and from pigs, by delivery and use to industry of a new toxin and bait</li> </ul>	<ul style="list-style-type: none"> <li>■ total grazing pressure business plan implementation – supporting proactive decisions in managing sheep, cattle, kangaroos and goats</li> <li>■ implementing 'Portfolio 1 - Rabbit biocontrol; Effective behaviours in control programs' with the Centre for Invasive Species Solutions developing materials for a release approval of a rabbit calicivirus (RHDV2).</li> </ul>
Weed controls	<p>Initiatives within the 'weed controls' product group support minimising the competitive impact of weeds in reducing pasture availability for livestock and resource management. They include:</p> <ul style="list-style-type: none"> <li>■ biological and chemical controls on woody weeds in northern and southern Australia</li> </ul>	<ul style="list-style-type: none"> <li>■ assessing feasibility of a new biocontrol agent for blackberry (southern Australia) and parkinsonia (northern Australia)</li> <li>■ implementing a national invasive grasses initiative.</li> </ul>

## Digital agriculture

**MLA's digital agriculture sub-program aims to support feedbase and animal productivity increases as well as provide tools that can support industry credentials via an increased investment focus on digital farm infrastructure, decision support, automation and data platform tools.**

The digital agriculture sub-program will focus on co-funded partnership farm models to accelerate the adoption of more complex digital ag use cases, such as for livestock and pasture management. This will be done through integrating multiple data sources to support decision-making that impacts on-farm profitability, as well as demonstrating the impact of digital technologies on wider value chain transformation.

### Key performance indicators in 2021–22

1. Create an online AgTech savings and benefit calculator and demonstrate to 10 value chains where at least 60% rated the tool as useful for future decision-making.
2. Contract four partnership model projects with AgTech providers and producer groups that demonstrate via commercial case studies at least a 5% improvement in productivity gains or cost savings from the investment achievable within 12 months.

Product group	Core activities	
Digital agriculture tools and technologies	<p>Initiatives within the 'digital agriculture tools and technologies' product group include:</p> <ul style="list-style-type: none"> <li>■ improving connectivity for optimal use of digital technologies in remote locations</li> <li>■ developing digital information products and dashboard decision tools/guidelines to provide informed and predictive management systems</li> <li>■ deploying autonomous ground and aerial vehicles for data collection to improve decisions on-farm</li> </ul>	<ul style="list-style-type: none"> <li>■ establishing an ecosystem for multi-vendors and producers to share data and have third party solution providers' value add to the raw data</li> <li>■ establishing partnerships with enterprises wanting to adopt digital technology solutions on-farm and using these as case studies to drive further awareness and validate value propositions to stakeholders.</li> </ul>

Table 26: Projected 2021–22 investment by funding source – productivity (on-farm) (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																	Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R	External M			
Beef productivity			3		38		985								2,434	3,459		6,918		6,918
Feedbase production			35		461		714								4,614	5,824	9	11,649	9	11,658
Goat productivity	141														210	351		701		701
Sheep productivity			83		894										932	1,909	58	3,818	58	3,876
Livestock genetics					1,054		1,073	98	142						5,237	7,506	1,597	15,013	1,694	16,707
Digital agriculture			2		28		116		23						885	1,053		2,106		2,106
<b>Total</b>	<b>141</b>		<b>123</b>		<b>2,474</b>		<b>2,888</b>	<b>98</b>	<b>165</b>						<b>14,311</b>	<b>20,102</b>	<b>1,664</b>	<b>40,205</b>	<b>1,761</b>	<b>41,966</b>





# Program

## 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.

Building these capabilities will attract, retain and grow a professional and skilled industry workforce that can deliver on the ambitious targets in our industry’s strategic plan.

### Sub-programs

- Innovation capability building
- Industry leadership and capacity building

### Red Meat 2030 priorities



### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

There are currently numerous professional development and training programs within the industry. This program aims to build on these programs to support graduates and potential industry leaders to move into leadership roles within industry organisations and the peak industry councils.

Importantly, capability programs also expose the career opportunities available within the red meat sector, ensuring future security of the industry by attracting, recruiting and retaining the skills required for the future workforce.

This program also develops researcher and advisor capability to support Australian red meat producers to achieve productivity gains and respond to environmental, economic and social challenges.

Close collaboration with the research and start-up community ensures R&D and innovation is focused on strategic areas identified by MLA and the red meat industry.

Through the innovation capability building sub-program, MLA works closely with value chain stakeholders, such as producers, processors and other red meat businesses, to identify and implement innovation as well as fast-track R&D outcomes.

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 enabling practice change and contributing towards increased adoption rates, attracting and retaining a diverse workforce, and developing skilled and capable people.

# Innovation capability building

**MLA's investments in the innovation capability building sub-program engages with producers, young professionals and value chain partners to accelerate innovation adoption, increase the industry's investment in innovation and facilitate cultural change. These investments foster a culture of innovation in the red meat industry from the grassroots up.**

Developing researcher and advisor capability to support Australian red meat producers achieve productivity gains and respond to environmental, economic and social challenges is also vital for the Australian red meat industry to meet the challenges of the future. Close collaboration with the research and start-up community ensures R&D and innovation is focused on strategic areas identified by MLA/industry.

## Key performance indicators in 2021–22

1. 75% of co-funded resources demonstrate evidence of accelerated innovation adoption aligned with MLA *Strategic Plan 2025* strategic focus areas.
2. Evidence that at least 10 supported early career professionals are accelerating the adoption and impacts from key MLA strategic programs such as CN30, NB2 and VBM.
3. Evidence that 10 postgraduate students are contributing to the development of academic expertise aligned to MLA *Strategic Plan 2025* focus areas.

Product group	Core activities
Industry professional development	<p>Initiatives within the 'industry professional development' product group includes the following activities:</p> <ul style="list-style-type: none"> <li>■ the Intercollegiate Meat Judging Competition program</li> <li>■ the Rural Professionals Program (RPP), which recognises that investing in the development of young people is crucial to building and retaining a skilled and capable future workforce. It includes the Livestock Consulting Internship program, which is evolving to provide development of specialist consultants to support the adoption of CN30 and NB2 programs.</li> </ul>
Academic research and leadership	<p>The 'academic research and leadership' product group includes activities such as:</p> <ul style="list-style-type: none"> <li>■ supporting undergraduates/postgraduates working on industry's big complex problems in providing opportunities for postgraduates to enter the red meat industry and support postgraduate innovation capability required to deliver industry strategic innovation priorities</li> <li>■ scholarship stipend top-ups.</li> </ul> <p>Enhancing the industry's leadership capability by developing impactful industry leaders and ambassadors for MLA through:</p> <ul style="list-style-type: none"> <li>■ Horizon Scholarship</li> <li>■ Nuffield Australia program</li> <li>■ Australian Rural Leadership Foundation Program.</li> </ul>
Producer entrepreneurship	<p>Initiatives within the 'producer entrepreneurship' product group include:</p> <ul style="list-style-type: none"> <li>■ producer entrepreneurship development activity, which aims to accelerate producer innovation capability by recognising the importance of producer led innovation and creates new sources of revenue for producers beyond today's farm gate.</li> </ul>
Co-funded innovation resources	<p>Initiatives within the 'co funded innovation resources' product group include:</p> <ul style="list-style-type: none"> <li>■ The Collaborative Co-innovation Program, which supports leading Australian red meat value chains to fast-track their innovation strategies. The program is customised to match the specific business and innovation goals of participating enterprises and their value chains with a deliberate focus on partners who share MLA's strategic innovation focus areas.</li> <li>■ The digital and supply chain officers program accelerates the development of whole-of-value chain digital strategies that leverage the best solutions and ensures industry is competitively positioned for new and evolving digital enablers. The objective of this investment is to fast-track the transitioning to a culture that captures and shares data across every point in the supply chain and increase the industry's capacity to make decisions informed through data and insights.</li> </ul>

# Industry leadership and capacity building

MLA's industry leadership and capacity building sub-program equips industry representatives with the skills, knowledge and confidence to be effective communicators, positive contributors and successful leaders.

## Key performance indicators in 2021–22

- 80% of trained advocates tell their red meat supply chain story through both MLA and non-MLA channels.
- Successful completion of all milestones of the PIC Annual Service Agreements by June 2022.
- A crisis and issues management approach for material whole-of-supply-chain issues in the red meat and livestock sector, agreed by all PICs and documented.
- At least two crisis management simulations complete.

Product group	Core activities
Industry development	<p>The 'industry development' product group consists of a professional development program to equip current and emerging industry leaders and others in key industry and MLA roles. Initiatives include:</p> <ul style="list-style-type: none"> <li>advocacy workshops and tools to encourage industry engagement with the community</li> <li>media, presentation and/or communication training.</li> </ul>
Peak council development	<p>The 'peak council development' product group consists of the following initiatives:</p> <ul style="list-style-type: none"> <li>annual service agreements with the production PICs (CCA, ALFA, SPA, GICA) including activities across consultation, animal health welfare and biosecurity, industry leadership and capability building, and adoption</li> <li><i>State of the Industry</i> annual report and other industry issues research and analysis to assist industry and PICs in policy development</li> <li>provide support to the PICs through the establishment of an Industry Corporate Affairs Unit.</li> </ul>

Table 27: Projected 2021–22 investment by funding source – capability building (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																	Sum of R	Sum of M	Sum of AIP 2021–22
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R	External M			
Industry leadership and capacity building	2	15	6	68	213	1,044	203	1,209	18	508	15	92		2		458		916	2,938	3,854
Innovation capability building	2		4	36	27	92	54	122	12	10	5,623				2,442	8,164		16,328	259	16,587
Total	4	15	11	104	241	1,136	257	1,331	30	518	5,638	92		2	2,442	8,622		17,244	3,197	20,441



# Program 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.

## Sub-programs

- Communication (community)
- Communication (stakeholder)

## Red Meat 2030 priorities



## MLA Strategic Plan 2025 strategic focus areas



## Operating environment

The communication program operates in a complex and diverse environment with stakeholders who have wide-ranging research, development and marketing needs. Understanding these needs is critical for MLA to deliver impact to industry by tailoring its services and communications to ensure stakeholders can access the information they need, when they need it, through the channels they prefer. Improved access to enhanced information empowers stakeholders to make more informed decisions and increase their uptake of business-enhancing marketing, research and development.

MLA's communications program also operates in a highly competitive environment where stakeholders face an abundance of free-flowing information from countless sources on endless topics. Seeking engagement with MLA communications becomes increasingly challenging, requiring the exploration of new delivery platforms and formats.

Understanding our consumers, meeting their expectations and telling our story as an industry helps ensure we maintain the community's support and trust. The community has high expectations around sustainability, animal health and welfare, and the roles of red meat in a healthy balanced diet. The community is also increasingly interested in the provenance of their food. MLA works with industry to maintain and enhance community confidence by engaging the community and demonstrating that the industry is an ethical and responsible custodian of livestock, land and natural resources.

# Communication (community)

**MLA and the broader industry need to urgently get to a position where we are armed and ready to quickly respond to community concerns around the positioning of red meat.**

MLA's communication (community) sub-program under the Australian Good Meat brand works to engage and inform the community about the Australian red meat and livestock industry, with a focus on animal welfare and environmental management, and the role of red meat in a healthy and active lifestyle.

MLA is also supporting producers and the broader industry with resources so they can be armed and ready to quickly respond to community concerns around the positioning of red meat.

Communications to producer levy payers and other supply chain stakeholders through traditional MLA channels on RD&A, and

marketing activities and outcomes remains important and will continue.

However, the urgency to increase the focus on red meat positioning in the wider community is requiring a significant shift in thinking and approach. It also needs ownership and support from the wider industry to be successful.

MLA has accelerated multiple streams of work including producing easy to use resources to enable voices within and outside the industry supply chain to be effective advocates at a local and national level.

## Key performance indicators in 2021–22

- 60% of Australians surveyed agree/strongly agree with the statement 'Australian cattle and lamb are farmed and raised in a humane manner'.
- 60% of Australians surveyed agree/strongly agree with the statement 'the Australian cattle and sheep industry are committed to sustainable production'.
- 15% increase in average monthly Good Meat unique visitors, measured from 2020–21 baseline.
- Overall average 10% increase in community engagement – measured by a range of metrics such as followers, likes, views, and shares for all the Good Meat social media channels, measured from 2020–21 baseline.
- 65% of those surveyed at Good Meat events feel positive about the red meat industry's welfare and sustainability credentials, as well as the role of red meat in a healthy balanced diet.
- Conduct at least 30 virtual classroom sessions.

Product group	Core activities
Community education	<p>The 'community education' product group includes development of engaging, targeted content, collateral and online assets through dedicated communications channels, such as MLA's online platform <a href="http://goodmeat.com.au">goodmeat.com.au</a>, social media and other strategic communication channels. An annual benchmarking survey is also undertaken to understand community sentiment which informs the strategy for the Good Meat communications program. Initiatives include:</p> <ul style="list-style-type: none"> <li>annual benchmarking survey of community sentiment</li> <li><a href="http://goodmeat.com.au">goodmeat.com.au</a> online platform</li> <li>social media channel management: Instagram, Facebook, YouTube and Twitter</li> <li>online content development including producer and influencer content, videos, infographics, editorial</li> <li>community communications stakeholder management.</li> </ul>
Community engagement	<p>The 'community engagement' product group has evolved over the past year to focus on digital engagement to expand the reach and frequency of engaging with the community. Whilst events will form a role within community engagement, the focus will shift towards digital engagement. Initiatives include:</p> <ul style="list-style-type: none"> <li>active social media driven communications to engage the community online</li> <li>digital media/influencer partnerships to promote the industry's credentials</li> <li>events where there is an Australian Good Meat branded exhibition such as the Royal Agricultural Shows (EKKA, Melbourne, Sydney) and experiential activities such as 360° virtual reality 'igloo' and Get Kids Cooking classes</li> <li>editorial and speaker engagements in community forums</li> <li>Good Meat collateral to support community engagement activities.</li> </ul>

Product group	Core activities
School education	<p>The 'school education' product group engages schools and teachers through education partnerships and the development of national curriculum aligned teaching resources focused on animal welfare and environmental management, and the role of red meat in a healthy and active lifestyle. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ memberships with key education and industry organisations such as the Primary Industries Education Foundation (PIEFA)</li> <li>■ teacher consultation, with 'teacher needs' survey to identify preferred teaching methods, resource needs and sentiment towards teaching Australian agriculture in the classroom (via PIEFA)</li> </ul> <ul style="list-style-type: none"> <li>■ virtual classrooms: livestream lessons with a farmer 'from the farm', influencer cooking classes</li> <li>■ update of existing and creation of new teaching resources with current industry information to align to national curriculum and preferred ways of learning</li> <li>■ leveraging other school program initiatives to benefit (or amplify) the Australian Good Meat core program objectives and outcomes.</li> </ul>

## Communication (stakeholder)

**MLA's communication (stakeholder) sub-program engages and communicates with MLA members, levy payers and stakeholders across the value chain about MLA's work in research, development and marketing.**

### Key performance indicators in 2021–22

1. 70% satisfaction with beef sustainability framework approach as measured by the annual member survey.
2. Increase of 0.1/10 points in member satisfaction with printed and digital communications on 2020–21 survey, as measured by the annual member survey.
3. 87% of MLA's media coverage promotes pre-determined 'key messages' in line with MLA's *Strategic Plan 2025*.
4. Increase MLA membership to at least 49,600 members by June 2022.

Product group	Core activities
Sustainability frameworks	<p>The 'sustainability frameworks' product group ensures all relevant internal and external stakeholders are aware of and understand the industry's sustainability commitments and programs.</p> <p>The flagship programs are the beef and sheep industry sustainability frameworks that MLA manages on behalf of the Red Meat Advisory Council, WoolProducers Australia and Sheep Producers Australia (RMAc for ABSF/ WPA &amp; SPA for SSF). The frameworks are directed by industry-appointed sustainability steering groups and cover economic resilience, animal welfare, environmental stewardship, people and the community across the value chain. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ managing ongoing framework progress, engagement and reporting with key stakeholders for the beef and sheep frameworks</li> </ul> <ul style="list-style-type: none"> <li>■ collaborating across on-farm R&amp;D and adoption sub-programs to ensure alignment between framework priorities and MLA investments</li> <li>■ ensuring shifts in framework material issues and priorities identified by the frameworks' steering groups are communicated to MLA and relevant RDA areas, and key RDA sustainability activities are communicated to the frameworks' steering groups</li> <li>■ integration of sustainability key messages in communication and engagement with both industry and community stakeholders to support industry's ongoing social licence</li> <li>■ working across MLA to ensure sustainability information can be used for market advantage.</li> </ul>

Product group	Core activities	
MLA communications content	<p>The 'MLA communications content' product group provides a targeted suite of print and digital communications to engage stakeholders (primarily levy payers) with clear, relevant, engaging and accessible content that empowers decision-making. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ developing and implementing content and digital strategies to coordinate and direct MLA's communications toward the achievement of MLA's mission and the needs of MLA's stakeholders</li> <li>■ providing communications input, support and advice to MLA managers and service providers regarding relevant MLA projects and work programs</li> <li>■ producing and delivering relevant regional and seasonal content through e-newsletters, mla.com.au, social media and printed materials such as MLA's flagship <i>Feedback</i> magazine</li> <li>■ fulfilling MLA's corporate reporting requirements under the <i>Corporations Act 2001</i> and the <i>Australian Meat and Live-stock Industry Act 1997</i> as per MLA's Statutory Funding Agreement with the Australian Government</li> </ul>	<ul style="list-style-type: none"> <li>■ delivering high impact communications campaigns that benefit red meat producers and the Australian red meat and livestock industry</li> <li>■ improving stakeholder accessibility to MLA's R&amp;D through improved search accuracy and the creation of easy-read summaries of completed research available via the MLA website and <i>R&amp;D Round-up</i> e-newsletter</li> <li>■ improving MLA employee engagement through responsive and proactive internal communications</li> <li>■ reviewing, refining and evolving digital platforms, informed by stakeholder and MLA needs</li> <li>■ improving stakeholder engagement through enhanced delivery of digital content</li> <li>■ enhancing stakeholder engagement through podcast platforms.</li> </ul>
Stakeholder collaboration	<p>The 'stakeholder collaboration' product group covers MLA's activities to engage with industry stakeholders. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ MLA member services to support and manage MLA membership</li> <li>■ MLA's customer relationship management (CRM) is fit for purpose and utilised effectively across the business to ensure services and communications are targeted to stakeholder needs</li> <li>■ MLA-hosted industry events communicate and engage with industry stakeholders on MLA's program plans and outcomes</li> </ul>	<ul style="list-style-type: none"> <li>■ targeted industry event sponsorship and MLA speakers at events</li> <li>■ stakeholder engagement and consultation with key industry partners including, but not limited to, peak industry councils, industry organisations and key levy payers and accounts</li> <li>■ implementation of the MLA Levy Payer Register</li> <li>■ annual MLA member survey to track member awareness of MLA roles and responsibilities and perceptions towards MLA programs and activities.</li> </ul>
Media and corporate affairs	<p>MLA's 'media and corporate affairs' product group includes strategic and operational aspects of professional corporate communications, media engagement and issues/crisis management. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ ensure MLA's corporate affairs activities are aligned with MLA's <i>Strategic Plan 2025</i> and directed to the achievement of MLA's purpose</li> <li>■ manage MLA's public relations activities, delivering against a pre-determined message calendar to build a consistent narrative to demonstrate MLA's work and achievements</li> <li>■ manage MLA's key issues briefs and key talking points library and ensure they are used across the business when required</li> <li>■ demonstrate thought leadership to ensure MLA has a prominent voice on strategically important industry issues and sets the news agenda</li> <li>■ proactively identify, develop and manage opportunities for the Managing Director and MLA senior leaders to contribute to industry debate, news commentary and similar forums of influence</li> </ul>	<ul style="list-style-type: none"> <li>■ manage MLA media activities – including proactive and reactive media outreach, media monitoring, reporting on and responding to emerging trends and issues that may have reputational impact for MLA</li> <li>■ carry out media training for MLA staff and industry stakeholders where required</li> <li>■ maintain a close understanding of MLA's operating environment in order to develop responses and mitigate risk</li> <li>■ ensure a close understanding of stakeholder needs and work alongside MLA's stakeholder engagement team to effectively collaborate via MLA's key account management model</li> <li>■ proactively identify relevant issues or trends in the communications environment, develop strategies to address these and ensure MLA's leadership and staff are informed and engaged.</li> </ul>

Table 28: Projected 2021–22 investment by funding source – communication (\$ '000)

\*Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22	
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R				External M
Communication (community)		2		20	12	649	8	982		350						20		41	2,002	2,043
Communication (stakeholder)	6	4	24	72	427	2,145	271	3,237	31	476						758	50	1,516	5,984	7,499
<b>Total</b>	<b>6</b>	<b>6</b>	<b>24</b>	<b>91</b>	<b>439</b>	<b>2,794</b>	<b>279</b>	<b>4,219</b>	<b>31</b>	<b>826</b>						<b>778</b>	<b>50</b>	<b>1,557</b>	<b>7,986</b>	<b>9,542</b>





# Program

## 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.

### Sub-programs

- Corporate services

### MLA Strategic Plan 2025 strategic focus areas



### Operating environment

Levy income receipts were elevated in recent years as a result of prolonged drought-induced herd and flock liquidation. The impact of extreme weather events, including the drought, the north Queensland floods and the bushfires, have led to the lowest cattle numbers in two decades and the lowest sheep flock level in more than a century. The national herd level has entered a rebuild phase and is expected to increase by 2% to 25.5 million head in 2021. Improved seasonal conditions in southern Australia throughout 2020, and above-average summer rain in northern Australia during the 2020–21 wet season, are expected to produce an abundance of pasture in all major cattle producing regions. Producers' intention to retain more breeding stock to rebuild their herds, along with favourable weather conditions, is expected to result in a tightened cattle supply.

Levy income for 2020–21 is expected to be 14.6% below 2019–20, and levy income for 2021–22 is expected to be slightly below 2020–21.

MLA's government-matching cap is calculated as 0.5% of the three-year rolling average of the industry's gross value of production (GVP). ABARES has projected an 18.4% decline in GVP in 2021–22 which, when combined with the two strong preceding years, is expected to result in a 3% decrease in the matching cap in 2021–22.

# Corporate services

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

- effectively managing the levy investments through accounting, contracting, project management, foreign exchange management, evaluation and reporting
- ensuring MLA meets its statutory and legislative requirements through robust frameworks including company secretarial, audit, risk and legal advisors
- providing the frameworks to attract, develop and engage a diverse and talented workforce.

Product group	Core activities	
Board and executive	Initiatives within the 'board and executive' product group include providing strategic guidance for MLA and effective oversight of the management and performance of MLA in delivering its strategic plan.	
Legal and contracts	<p>The 'legal and contracts' product group provides legal advice and contract support to the business. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ transforming from a transaction based to an advisory function</li> </ul>	<ul style="list-style-type: none"> <li>■ streamlining contracting and project approval process</li> <li>■ enabling the business to deliver on its strategic plan and annual investment portfolio through collaboration and delivery of training and education.</li> </ul>
Crisis management	<p>Initiatives within the 'crisis management' product group include:</p> <ul style="list-style-type: none"> <li>■ maintaining the MLA crisis response plan and portal</li> </ul>	<ul style="list-style-type: none"> <li>■ supporting the MLA crisis management training and activities, where required.</li> </ul>
Risk and compliance	<p>The 'risk and compliance' product group includes activities that ensure MLA's risk management and compliance frameworks such as:</p> <ul style="list-style-type: none"> <li>■ regularly reviewing, maintaining and operationalising the Board's risk appetite</li> </ul>	<ul style="list-style-type: none"> <li>■ reflecting the industry's operating environment</li> <li>■ monitoring compliance with statutory and other regulations applicable to the MLA group of companies.</li> </ul>
Finance	<p>The 'finance' product group captures the stewardship role of effectively managing levy and non-levy investments. Initiatives include:</p> <ul style="list-style-type: none"> <li>■ management reporting to internal and external stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>■ financial planning and analysis including the Annual Investment Plan and quarterly rolling forecasts</li> <li>■ treasury, including the management of cash and foreign exchange</li> <li>■ financial accounting services, including Annual Statutory accounts.</li> </ul>
Levy management	The 'levy management' product group contains costs associated with MLA's share of levy administration (including third party verification of voting entitlements).	

## Key performance indicators in 2021–22

### Legal and contracts

1. Complete rationalisation of key contract templates.
2. Update project and contract approval process.
3. Meet SLAs as agreed in projects and contracts approval policy.

### Crisis management

1. Maintain the crisis portal and ensure it reflects the latest Crisis Response Plan and risks identified in the organisational risk register.

### Risk and compliance

1. 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 (AFRC).
2. Deliver the 2021–22 internal audit plan to the AFRC.
3. Regularly report on the compliance management program to the AFRC.

### Finance

1. Clean audit report received.
2. Internal audit program delivered to the satisfaction of the MLA Audit, Finance and Risk Committee.
3. Ensure financial reporting to internal and external stakeholders is timely, accurate and insightful.
4. Develop standardised pipeline management reporting and review process for the group. Embed the output into rolling forecasts.

### Evaluation

1. Implement ongoing portfolio performance-based reporting of the outcomes and dollar impacts of MLA's investment portfolio for the Australian red meat industry.

Product group	Core activities	
Evaluation	The 'evaluation' product group implements and provides oversight of the MLA Evaluation Framework, encompassing the entire suite of MLA's investments.	
Knowledge and IP transfer	The 'knowledge and IP transfer' product group supports and provides advice on intellectual property, licensing and commercialisation of research and development and marketing outputs. A key priority is further streamlining licensing and adoption of outputs from MLA investments, including technologies that require commercial partners to facilitate adoption and where the focus is on high impact products with appropriate IP protection.	
Human resources	The 'human resources' product group supports MLA to attract, develop and engage a diverse and talented workforce through programs of work that aim to enhance performance and culture that will develop our	organisation for the future and drive transformational change for the industry. Initiatives include: <ul style="list-style-type: none"> <li>■ creating solutions that enable a global and agile workforce to succeed, providing a framework to support a safe and compliant work environment.</li> </ul>
Information technology	The 'information technology' product group provides IT advice and support to the greater MLA group and across all facets of the technology platform including infrastructure, intranet, financials, customer relationship management (CRM) tool,	websites, business intelligence, financials and project/contract management. The IT team's core focus is to ensure the technology platform is at all times both robust and scalable and one which the business can leverage off to achieve their objectives.
Project and process improvements	The 'project and process improvements' group provides support and guidance to the greater MLA group on:	<ul style="list-style-type: none"> <li>■ continuous improvements to systems and process</li> <li>■ process mapping</li> <li>■ internal project management.</li> </ul>
Agriculture Innovation Australia (AIA)	The 'Agriculture Innovation Australia (AIA)' product group captures MLA's annual membership contribution to Agricultural Innovation Australia.	
AUS-MEAT	The 'AUS-MEAT' product group contains MLA's investment in the standards division of AUS-MEAT. The costs included by the services division (AUS-QUAL) is met from revenue and from previous industry transition capitalisation.	

## Key performance indicators in 2021–22 *(continued)*

### Knowledge and IP transfer

1. At least 80% of high/medium impact commercial ready products have commercial partners or identified commercialisation pathways.

### Human resources

1. Employee engagement to support talent retention and organisational performance is greater than or equal to the Australian average and adopts a continuous improvement approach.
2. Workplace health and safety framework is reviewed and training implemented to support an internal safety culture.

### Information technology

1. Internal stakeholder satisfaction measures at 80% or more for MLA IT infrastructure and services.
2. Project and process improvements.
3. Deliver internal projects on time and within budget.

### Project and process improvements

1. Deliver internal projects on time and within budget.

**Table 29: Projected 2021–22 investment by funding source – corporate services (\$ '000)**

\*Total may not add up due to rounding

Sub-program	Funding source																Sum of R	Sum of M	Sum of AIP 2021–22	
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	Government R				External M
Corporate services	31	23	126	133	1,204	2,901	1,272	5,483	471	986						3,104	2,334	6,208	11,861	18,069
Total	31	23	126	133	1,204	2,901	1,272	5,483	471	986						3,104	2,334	6,208	11,861	18,069

# Detailed budget tables by funding sources

Table 30: Expenditure by funding source 2021–22, \$ '000

Total may not add up due to rounding

Program	Funding source																								MLA consolidated
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Total sheep R	Total sheep M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	Total cattle R	Total cattle M	Total levies R	Total levies M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	External M	Government R		
Animal wellbeing			50		399		449		154				154		602						2,051		2,653	5,306	
Capability building	4	15	11	104	241	1,136	251	1,239	257	1,331	30	518	287	1,849	542	3,104	5,638	92		2	2,442		8,622	20,441	
Communication	6	6	24	91	439	2,794	463	2,885	279	4,219	31	826	310	5,045	778	7,936						50	778	9,542	
Environmental sustainability	12		107		1,145		1,252		818		380		1,198		2,462		1,677				12,599	5,636	16,738	39,112	
Feedlot											1,561	504	1,561	504	1,561	504	28				1,035		2,624	5,751	
Integrity systems	18	26	223	161	1,210	1,101	1,433	1,262	2,233	1,935	767	572	2,999	2,507	4,449	3,795	1,978	1,460	10	28	1,883	5,915	8,320	27,838	
International markets	1	100	81	473	222	9,860	303	10,333	199	25,915	26	3,729	225	29,644	529	40,077	47	2,504	551	786	350	877	1,477	47,198	
Objective measurement			26		196		222		150		37		188		410		3,888				2,161	1,627	6,459	14,546	
Producer adoption	24	21	159	107	1,787	1,035	1,946	1,142	1,083	1,451			1,083	1,451	3,053	2,613					4,823		7,876	18,366	
Product and packaging innovation			14	15	107	115	121	130	30	71	2	6	32	78	153	207	268				1,219		1,640	3,488	
Productivity (off-farm)																	3,318				4,193		7,511	15,021	
Productivity (on-farm)	141		123		2,474		2,597		2,888	98	165		3,053	98	5,791	98					14,311	1,664	20,102	41,966	
Eating quality			35	54	438	514	473	568	574	1,073	234	525	807	1,598	1,280	2,166	34				172	331	1,485	5,467	
Domestic market	3	29	65	108	352	7,725	418	7,833	654	9,635	224	1,576	878	11,211	1,299	19,072	434	1,944	3	10		527	1,736	25,026	
Value chain information and efficiency	41		110		819		929		1,154		389		1,543		2,513		50				1,342		3,905	7,810	
Corporate services	31	23	126	133	1,204	2,901	1,330	3,034	1,272	5,483	471	986	1,743	6,470	3,104	9,527					2,334	3,104	18,069		
<b>Total</b>	<b>280</b>	<b>220</b>	<b>1,153</b>	<b>1,246</b>	<b>11,032</b>	<b>27,178</b>	<b>12,186</b>	<b>28,424</b>	<b>11,745</b>	<b>51,211</b>	<b>4,317</b>	<b>9,243</b>	<b>16,062</b>	<b>60,453</b>	<b>28,528</b>	<b>89,098</b>	<b>17,359</b>	<b>6,000</b>	<b>565</b>	<b>825</b>	<b>48,580</b>	<b>18,961</b>	<b>95,032</b>	<b>304,949</b>	

**Table 31: Income available by funding source 2021–22, \$ '000**

\*Total may not add up due to rounding

	Funding source																									MLA consolidated
	Goat R	Goat M	Mutton R	Mutton M	Lamb R	Lamb M	Total sheep R	Total sheep M	Grassfed cattle R	Grassfed cattle M	Grainfed cattle R	Grainfed cattle M	Total cattle R	Total cattle M	Total levies R	Total levies M	AMPC R	AMPC M	LiveCorp R	LiveCorp M	External R	External M	Government R			
<b>Levies</b>	307	193	1,048	1,184	9,716	23,633	10,764	24,817	10,383	40,244	3,362	6,904	13,745	47,148	24,816	72,158										<b>96,974</b>
<b>Government</b>																							95,032		<b>95,032</b>	
<b>AMPC</b>																	17,359	6,000							<b>23,359</b>	
<b>LiveCorp</b>																			565	825					<b>1,390</b>	
<b>External R</b>																					48,580				<b>48,580</b>	
<b>External M</b>																						18,961			<b>18,961</b>	
<b>Total income</b>	<b>307</b>	<b>193</b>	<b>1,048</b>	<b>1,184</b>	<b>9,716</b>	<b>23,633</b>	<b>10,764</b>	<b>24,817</b>	<b>10,383</b>	<b>40,244</b>	<b>3,362</b>	<b>6,904</b>	<b>13,745</b>	<b>47,148</b>	<b>24,816</b>	<b>72,158</b>	<b>17,359</b>	<b>6,000</b>	<b>565</b>	<b>825</b>	<b>48,580</b>	<b>18,961</b>	<b>95,032</b>	<b>284,297</b>		
<b>Difference (to/from reserves)</b>	<b>27</b>	<b>-27</b>	<b>-106</b>	<b>-62</b>	<b>-1,316</b>	<b>-3,545</b>	<b>-1,422</b>	<b>-3,607</b>	<b>-1,362</b>	<b>-10,967</b>	<b>-955</b>	<b>-2,339</b>	<b>-2,317</b>	<b>-13,305</b>	<b>-3,712</b>	<b>-16,940</b>									<b>-20,652</b>	
<b>Opening reserves</b>	<b>194</b>	<b>181</b>	<b>565</b>	<b>506</b>	<b>6,722</b>	<b>17,891</b>	<b>7,287</b>	<b>18,397</b>	<b>5,024</b>	<b>29,730</b>	<b>3,170</b>	<b>7,325</b>	<b>8,194</b>	<b>37,055</b>	<b>15,675</b>	<b>55,633</b>										
<b>Closing reserves 2021–2022</b>	<b>221</b>	<b>154</b>	<b>459</b>	<b>444</b>	<b>5,406</b>	<b>14,346</b>	<b>5,865</b>	<b>14,790</b>	<b>3,661</b>	<b>18,764</b>	<b>2,215</b>	<b>4,986</b>	<b>5,877</b>	<b>23,750</b>	<b>11,963</b>	<b>38,694</b>										
<b>% of revenue</b>	<b>72%</b>	<b>80%</b>	<b>44%</b>	<b>37%</b>	<b>56%</b>	<b>61%</b>	<b>54%</b>	<b>60%</b>	<b>35%</b>	<b>47%</b>	<b>66%</b>	<b>72%</b>	<b>43%</b>	<b>50%</b>	<b>48%</b>	<b>54%</b>										

# Acronyms

<b>ABARES</b>	Australian Bureau of Agricultural and Resource Economics	<b>EU</b>	European Union	<b>NLIS</b>	National Livestock Identification System
<b>ABSF</b>	Australian Beef Sustainability Framework	<b>GICA</b>	Goat Industry Council of Australia	<b>NLRS</b>	National Livestock Reporting System
<b>A-EU FTA</b>	Australian-European Union Free Trade Agreement	<b>GVP</b>	Gross value of production	<b>NTB</b>	Non-tariff barriers
<b>AFRC</b>	Audit, Finance and Risk Committee	<b>IP</b>	Intellectual property	<b>NVD</b>	National Vendor Declaration
<b>AIA</b>	Agriculture Innovation Australia	<b>IoT</b>	Internet of Things	<b>PDS</b>	Producer Demonstration Site
<b>ALFA</b>	Australian Lot Feeders' Association	<b>IS2025</b>	<i>Integrity Systems 2025 and Beyond Strategy</i>	<b>PGS</b>	Profitable Grazing Systems
<b>AMPC</b>	Australian Meat Processor Corporation	<b>ISC</b>	Integrity Systems Company	<b>PICs</b>	Peak industry councils
<b>ASEAN</b>	Association of South East Asian Nations	<b>IT</b>	Information technology	<b>PIEFA</b>	Primary Industries Education Foundation
<b>ASEL</b>	Australian Standards for the Export of Livestock	<b>LEP</b>	Live Export Program	<b>R</b>	Research, development and adoption dollars
<b>ASF</b>	African Swine Flu	<b>LERDAC</b>	Live Export Research & Development Advisory Committee	<b>RDEA</b>	Research, development, extension and adoption
<b>A-UK FTA</b>	Australian-United Kingdom Free Trade Agreement	<b>LGAP</b>	Livestock Global Assurance Program	<b>RD&amp;A</b>	Research, development and adoption
<b>BRD</b>	Bovine respiratory disease	<b>LMY</b>	Lean meat yield	<b>RD&amp;E</b>	Research, development and extension
<b>CBA</b>	Cost-benefit analysis	<b>LPA</b>	Livestock Production Assurance	<b>RMAC</b>	Red Meat Advisory Council
<b>CCA</b>	Cattle Council Australia	<b>M</b>	Marketing dollars	<b>SAWS</b>	Shipboard Animal Welfare Surveillance
<b>CN30</b>	Carbon Neutral 2030	<b>MDC</b>	MLA Donor Company	<b>SLAs</b>	Service-level agreements
<b>CRM</b>	Customer relationship management	<b>MENA</b>	Middle East & North Africa	<b>SPA</b>	Sheep Producers Australia
<b>CT</b>	Computed tomography	<b>MSA</b>	Meat Standards Australia	<b>SSF</b>	Sheep Sustainability Framework
<b>DEXA</b>	Dual Energy X-ray Absorptiometry	<b>MVP</b>	Minimum viable product	<b>UNE</b>	University of New England
<b>eNVD</b>	Electronic National Vendor Declaration	<b>NLGC</b>	National Livestock Genetics Consortium	<b>VBM</b>	Value-based marketing
				<b>WPA</b>	WoolProducers Australia





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