2019–20

ANNUAL INVESTMENT PLAN

mla

MEAT & LIVESTOCK AUSTRALIA

Fostering prosperity

CONTENTS

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 2019–20.

MLA is a research, development and marketing service provider to the Australian red meat and livestock industry. Funded by levy payers, the Australian Government and value chain partners, MLA's mission is to increase prosperity, sustainability and global competitiveness within and across the industry's value chain.

AIPs are prepared 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 2016–2020*.

These priorities align with the Australian Government's Science and Research Priorities and its Rural Research, Development and Extension Priorities. They also centre on the six strategic pillars that the Australian red meat and livestock industry has set itself to achieve by the year 2020 through its *Meat Industry Strategic Plan 2020*.

MLA's work plan in 2019–20 has been categorised into:

> 16 programs   >> 32 sub-programs   >>> 100 product groups

This AIP outlines the programs, sub-programs, product groups, key performance indicators and budgets that will guide MLA's activities in 2019–20. Successful delivery of this plan will act as a stepping stone towards achieving *MLA's Strategic Plan 2016–2020*.

This AIP 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 7 and 9 respectively.

Table 1: MLA's strategic pillars, priorities and outcomes

Pillar	Outcome
1. Consumer and community support	The community continues to support and trust the Australian red meat and livestock industry, with industry practices in step with community expectations.
2. Market growth and diversification	Improved access to markets, with marketing programs and value creating innovation driving increased consumer and customer preference and premiums for Australian red meat.
3. Supply chain efficiency and integrity	Increased returns through the value chain, with participants and customers confident in product quality, pricing and integrity systems.
4. Productivity and profitability	Productivity gains through the value chain from the adoption of tools and technologies.
5. Leadership and collaborative culture	Industry participants are confident in industry leadership capability.
6. Stakeholder engagement	Industry participants are confident that the levy investment is delivering value.

Table 2: Alignment of MLA's programs and sub-programs to pillars

Program	Sub-program	1.	2.	3.	4.	5.	6.	Corporate services
Animal health and welfare	Animal health	●						
	Animal welfare	●						
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				●			
	Sheep productivity				●			
	Goat productivity				●			
	Livestock genetics				●			
	Feedbase production	●			●			
	Digital agriculture				●			
Capability building	Innovation capability building			●	●	●		
	Industry leadership and capacity building					●		
Communication	Communication (community)					●		
	Communication (stakeholder)	●				●	●	
Corporate services	Corporate services					●		●

Programs and sub-programs in MLA's AIP 2019–20

MLA's strategic plan 2016–20 pillars

BUDGET SUMMARY

In 2019–20 MLA plans to invest $279.2 million in research, development and marketing activities across six pillars (together with corporate services) and 16 program areas.

Investment by pillar | Total $279.2 million

Projected 2019–20 investment by pillar ($ million)
Total may not add up due to rounding.

1. Consumer and community support
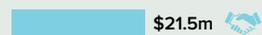$40.0m

2. Market growth and diversification
$74.0m

3. Supply chain efficiency and integrity
$47.0m

4. Productivity and profitability
$70.5m

5. Leadership and collaborative culture
$21.5m

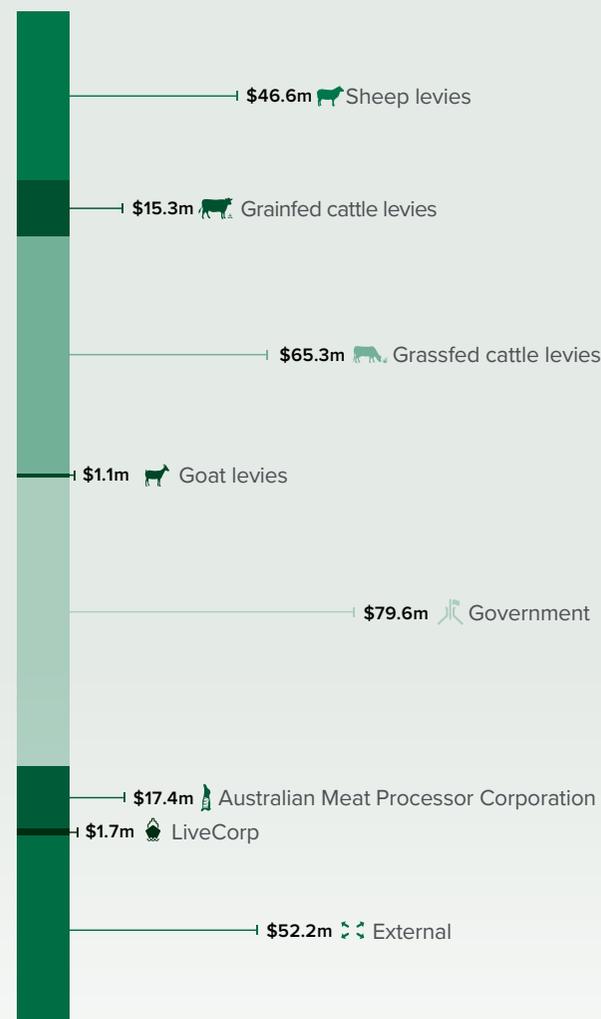6. Stakeholder engagement
$10.3m

Corporate services, levy collection and AUS-MEAT
$15.9m

Investment by funding source | Total $279.2 million

Projected 2019–20 investment by funding source ($ million) Total may not add up due to rounding.

$46.6m Sheep levies

$15.3m Grainfed cattle levies

$65.3m Grassfed cattle levies

$1.1m Goat levies

$79.6m Government

$17.4m Australian Meat Processor Corporation
$1.7m LiveCorp

$52.2m External

Investment by program | Total $279.2 million

Projected 2019–20 investment by program ($ million) Total may not add up due to rounding.

Animal health and welfare
$14.5m

Domestic market
$29.8m

International markets
$50.9m

Eating quality
$10.1m

Environmental sustainability
$12.3m

Feedlot
$9.0m

Integrity systems
$17.1m

Objective measurement
$16.3m

Producer adoption
$10.0m

Product and packaging innovation
$3.7m

Value chain information and efficiency
$4.4m

Productivity (off-farm)
$5.4m

Productivity (on-farm)
$43.7m

Capability building
$24.2m

Communication
$11.6m

Corporate services
$15.9m

OPERATING ENVIRONMENT

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

LIVESTOCK SUPPLY /SEASONAL CONDITIONS

1. Extreme seasonal conditions throughout 2018–19 led to heightened cattle and sheep supply, as well as greater volatility and pressure on lamb and goat markets.
2. Cattle, sheep and goat slaughter is expected to decrease in 2019–20 if seasonal conditions improve.
3. Without any seasonal turnaround, producers are likely to continue destocking; however, this will be from a shrinking pool of supply.

ON-FARM PRODUCTIVITY AND ADOPTION

1. Productivity and adoption of new practices remain challenges within the Australian red meat industry.
2. Government investment in agricultural extension is likely to remain limited.
3. The industry ambition of 'carbon neutral by 2030' is a key priority and focuses on capturing productivity gains while reducing emissions.

RESEARCH, DEVELOPMENT AND INNOVATION

1. New technologies are paving the way for producers and value chain partners to receive and share objective measurement data.
2. Strategic collaboration with commercial companies and research providers is increasing.
3. Several cross-sectoral research partnerships have been established in recent years to accelerate productivity and innovation in the supply chain.

CONSUMER TRENDS AND DEMAND

1. Per capita red meat consumption is closely correlated with household income. With increasing incomes across the globe, demand for safe, high quality meat is likely to increase.
2. An increasing number of consumers are seeking out products with provenance, integrity and sustainability credentials.
3. Consumers prefer meat that is nutritious, convenient and versatile.

COMPETITORS

1. Chicken and pork remain the two major protein competitors for red meat domestically and internationally typically as a more affordable offer.
2. Competition from the US and South America in beef continues to intensify as they seek to improve market access and underlying beef quality.
3. Preserving Australia's freedom from exotic diseases provides a productivity, welfare and competitive advantage.

MARKET ACCESS AND TRADE

1. The global trade environment not only remains challenging (with a plethora of barriers, particularly non-tariff measures, continuing to impact trade flows), but also unpredictable as a result of geopolitical disruption.
2. Access barriers have been removed via entry into force of the Comprehensive and Progressive Trans-Pacific Partnership and will be delivered via the Indonesia-Australia Comprehensive Economic Partnership Agreement.
3. Improved access to both the EU and the UK (post-Brexit) remain industry trade reform priorities.

MLA is working in each of these areas to foster the prosperity of Australian red meat. For a full list of MLA's programs and sub-programs, see Table 2 on page 2.

Drivers affecting MLA's operating environment: SWOT analysis

STRENGTHS

Global demand growth – Globally, real per capita incomes are expected to continue to grow in 2019–20.

Domestic demand – The domestic market remains the single most valuable destination for Australian red meat. The value of sales is expected to remain the same or slightly increase in 2019–20.

Safety and integrity – There continues to be increased consumer focus on country of origin and integrity systems that ensure meat safety and quality.

Disease freedom – Preserving Australia's freedom from exotic diseases will continue to provide a productivity, welfare and competitive advantage.

Eating quality – Continuing commitment to predicting the eating quality and 'fitness for purpose' for a greater proportion of the national cattle and lamb slaughter is creating opportunities to increase returns to the whole supply chain.

WEAKNESSES

Domestic supply – A dry 2018 has led to large stock decreases across Australia's key supply regions limiting future turn-off numbers across all species.

Protein competitors – Growth in chicken and pork production is expected to continue to outpace growth in red meat production both domestically and globally. Plant-based proteins will continue to make distribution gains, particularly in quick service restaurant accounts.

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

Inputs – Red meat processing costs are consistently higher than all of our major competitors and energy prices continue to escalate.

Extension – State government investment in agricultural extension services is likely to remain limited. In general, private sector services are specialised, with only a portion of livestock producers prepared to pay for their services.

OPPORTUNITIES

Consumer interest and preferences – Consumers continue to seek food products based on their perceived value, nutrition, convenience and versatility benefits.

Global population – The world's population is forecast to grow by more than one billion by 2030. In the Asia Pacific region alone, the population is expected to increase by nearly 500 million to 4.6 billion.

Collaboration and private investment – Increased collaboration with commercial companies and also across sectors – including through MLA Donor Company – has the potential to accelerate the rate of innovation across the value chain.

New technologies and systems – The adoption of new technology and objective carcase measurement and assurance systems will see a transition from price-averaging systems to pricing based on defined quality, yield and integrity attributes.

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 demonstrates its commitment to animal welfare by ensuring policies and practices evolve with community expectations.

THREATS

Levy resources – Reduced herd and flock numbers could impact on both levy income and/or the gross value of production (GVP) for the red meat industry. Reductions in GVP mean a reduction in Government matching funds.

Business type – As consolidation of farm businesses occurs, companies may become more vertically integrated. This could have implications for the transaction levies that help fund MLA's work.

International competitors – Competition is expected to intensify from the US and South American countries as they seek to improve their market access and underlying beef quality, which will continue to pressure Australia in a number of beef markets, particularly in Asia. New Zealand is also investing in its country of origin branding across both beef and sheepmeat.

Market access – Barriers, particularly non-tariff measures, continue to impede trade flows, and while Australia's comparatively more favourable international access provides a market entry advantage, competitors are starting to close the gap.

Increased activism – The actions of a minority group invite greater scrutiny of industry practices. Evidence of best practice and commitment to continuous improvement will be required across all parts of the value chain to minimise risk of increased regulation.

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%) through MDC, where eligible projects deliver outcomes that address broader industry and/or government priorities and benefit the entire industry.

The model complements levy investment through voluntary contributions and supports some of the more commercial aspects of R&D, benefiting the whole supply chain.

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), the National Livestock Identification System (NLIS) and National Vendor Declarations (NVD), which together 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).

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

Investment by...

- Australian Government
- Processors
- Value-adders
- Pastoral companies
- Breed societies
- Technology providers
- International collaborators
- State governments
- Universities
- Entrepreneurs and investors

mla MEAT & LIVESTOCK AUSTRALIA DONOR COMPANY

Innovations delivered...

- Automation
- New high value red meat products
- Animal disease test
- Technologies that foster sustainability
- Pain relief products
- New products from co-products
- Health and safety tools
- Digital solutions
- Objective measurement technologies

Figure: The role of MDC

Projected 2019–20 investment by funding source – MDC ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Animal health															2,882	2,882	1,200	5,764	1,200	6,964
Animal welfare															2,118	2,118		4,237		4,237
Innovation capability building			17	10	186	50	201	40			2,189				4,583	7,176		14,352	100	14,452
Sustainability (off-farm)											440				210	650		1,300		1,300
Sustainability (on-farm)															2,501	2,501		5,003		5,003
Feedlot productivity											28				602	629		1,259		1,259
Market access science											5				70	75		150		150
Integrity systems															451	451		901		901
Livestock export (research and development)															546	546		1,093		1,093
Objective measurement											152				4,674	4,826		9,652		9,652
Producer adoption															676	676		1,351		1,351
High Value Food Frontiers											189				872	1,061		2,123		2,123
Productivity (off- farm)											470				1,140	1,610		3,220		3,220
Beef productivity															1,707	1,707		3,414		3,414
Feedbase production															3,266	3,266		6,532		6,532
Digital agriculture															1,890	1,890		3,780		3,780
Sheep productivity															1,267	1,267		2,535		2,535
Livestock genetics															4,819	4,819		9,639		9,639
Eating quality											259				693	951		1,903		1,903
Digital value chain information											269				88	357		714		714
Total			17	10	186	50	201	40			4,000				35,057	39,460	1,200	78,921	1,300	80,221

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, retain customer trust in our product, and enhance our reputation for food safety, sustainability and ethical production.

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

- providing, delivering and administering meat and livestock integrity programs
- integrating, expanding and enhancing meat and livestock integrity programs to improve the quality, efficiency and performance of the programs for the benefit of the 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.

As ISC 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*.

Projected 2019–20 investment by funding source – Integrity Systems Company ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Digital value chain information	27		92		581		727		396							1,823		3,646		3,646
Integrity systems	11	63	58	284	159	781	480	2,247	159	1,046	448	665	20	72		1,335	5,153	2,670	10,310	12,980
Total	39	63	150	284	740	781	1,206	2,247	555	1,046	448	665	20	72		3,158	5,153	6,315	10,310	16,625

PILLARS
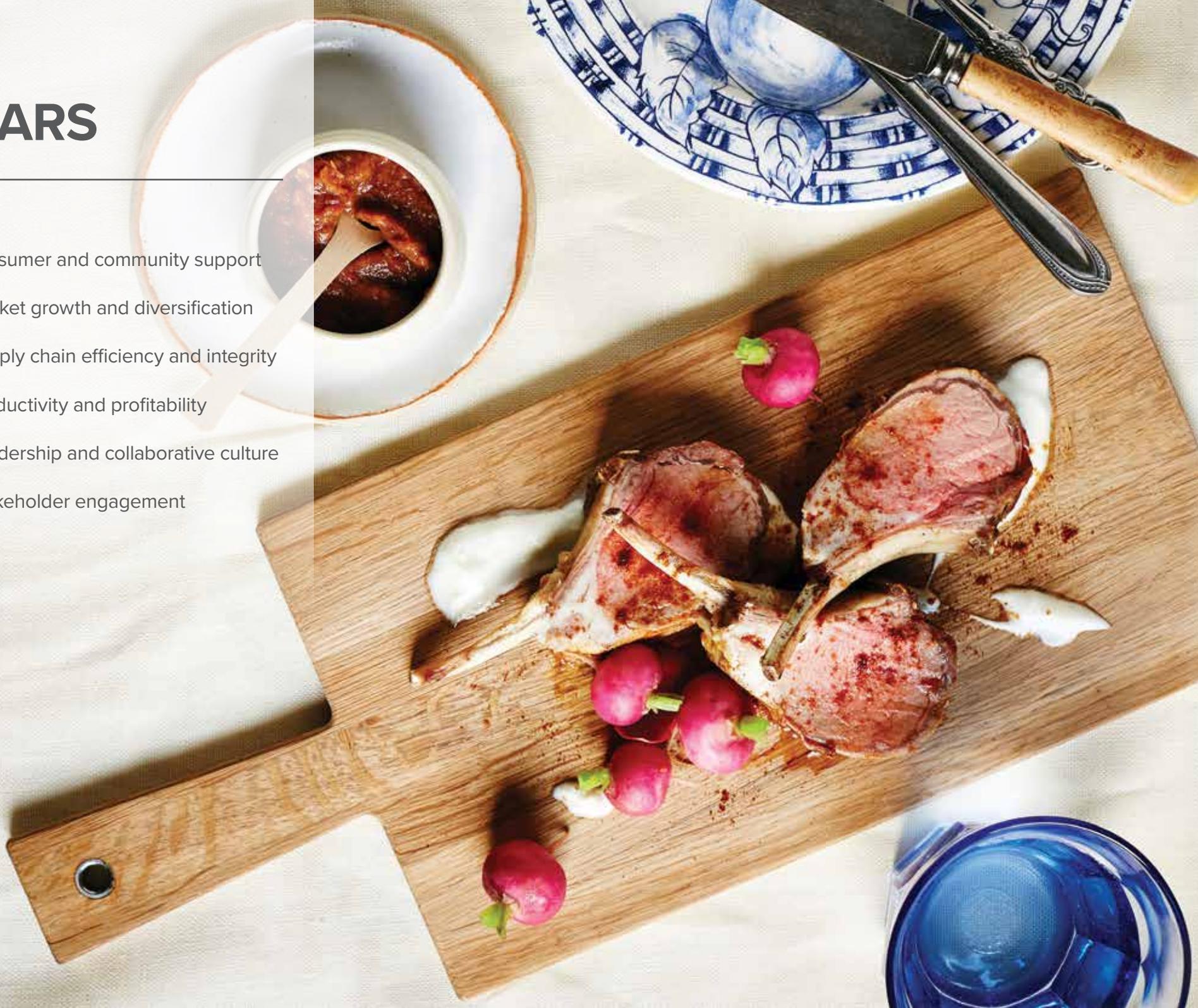
Pillar 1. Consumer and community support

Pillar 2. Market growth and diversification

Pillar 3. Supply chain efficiency and integrity

Pillar 4. Productivity and profitability

Pillar 5. Leadership and collaborative culture

Pillar 6. Stakeholder engagement

PILLAR 1. CONSUMER AND COMMUNITY SUPPORT

The red meat and livestock industry is a responsible and effective custodian of Australia's natural resources and the welfare of the animals in its care.

The community places a high – and growing – expectation on the Australian red meat and livestock industry to look after the environment and the welfare of livestock. Meeting these community expectations is essential for the industry to successfully share its story and remain globally competitive.

Industry must continue to proactively address and promote the welfare standards for livestock, the environmental impact of livestock practices and the role of red meat in a healthy diet. This pillar invests in research into the superior nutritional properties of red meat. It also invests in research and development to enhance the industry's animal welfare, disease control and environmental practices. This includes the communication of these actions and commitments by the industry to the community.

Alignment to industry and government priorities

Meat Industry Strategic Plan priorities

- Continuous improvement of the welfare of animals in our care
- Stewardship of environmental resources
- Role of red meat in a healthy diet

Australian Government priorities

Science and research	Rural research, development and extension
• Food	• Adoption of research and development
• Soil and water	• Soil, water and managing natural resources
• Environmental change	
• Transport	• Advanced technology
• Resources	• Biosecurity
• Health	

Investment | Total $40.0 million

Projected 2019–20 investment by funding source ($ million) Total may not add up due to rounding.

- $2.5m Sheep levies
- $2.7m Grainfed cattle levies
- $2.3m Grassfed cattle levies
- $0.1m Goat levies
- $15.8m Government
- $1.0m Australian Meat Processor Corporation
- $1.0m LiveCorp
- $14.7m External

MLA's 2019–20 programs within this pillar[1] are:

- **p.18** | **Animal health and welfare**
  - › Animal health
  - › Animal welfare
- **p.20** | **Domestic market**
  - › Nutrition
- **p.24** | **International markets**
  - › Livestock export market activities
  - › Livestock export (research and development)
- **p.31** | **Environmental sustainability**
  - › Sustainability (off-farm)
  - › Sustainability (on-farm)
- **p.34** | **Feedlot**
  - › Feedlot productivity
- **p.51** | **Productivity (on-farm)**
  - › Feedbase production
- **p.61** | **Communication**
  - › Communication (stakeholder)

[1] Some of these programs extend across other pillars.

PILLAR 2. MARKET GROWTH AND DIVERSIFICATION

Improving market access and demonstrating Australian red meat and livestock's value proposition to consumers and customers are the primary ways for the industry to grow demand and diversify markets. Australia's desirable product attributes and value chain innovation together enables the industry to expand the number of potential customers, be better positioned to command higher premiums and deliver the best return on investment.

This pillar strives to reduce economic and technical barriers to trade, defend existing gains in trade and proactively identify and develop new business opportunities. It also recognises the quality and integrity systems that underpin marketing efforts to differentiate Australian red meat from other red meat competitors and proteins.

Alignment to industry and government priorities

Meat Industry Strategic Plan priorities

• Efficiency and value in trade and market access

• Marketing and promoting Australian red meat and livestock

Australian Government priorities

Science and research	Rural research, development and extension
• Food	• Adoption of research and development
	• Advanced technology

Investment | Total $74.0 million

Projected 2019–20 investment by funding source ($ million) Total may not add up due to rounding.

$21.2m 🐑 Sheep levies

$5.2m 🐄 Grainfed cattle levies

$36.0m 🐄 Grassfed cattle levies

$0.3m 🐐 Goat levies

$3.2m 🏛 Government

$5.5m Australian Meat Processor Corporation

$0.4m LiveCorp

$2.1m External
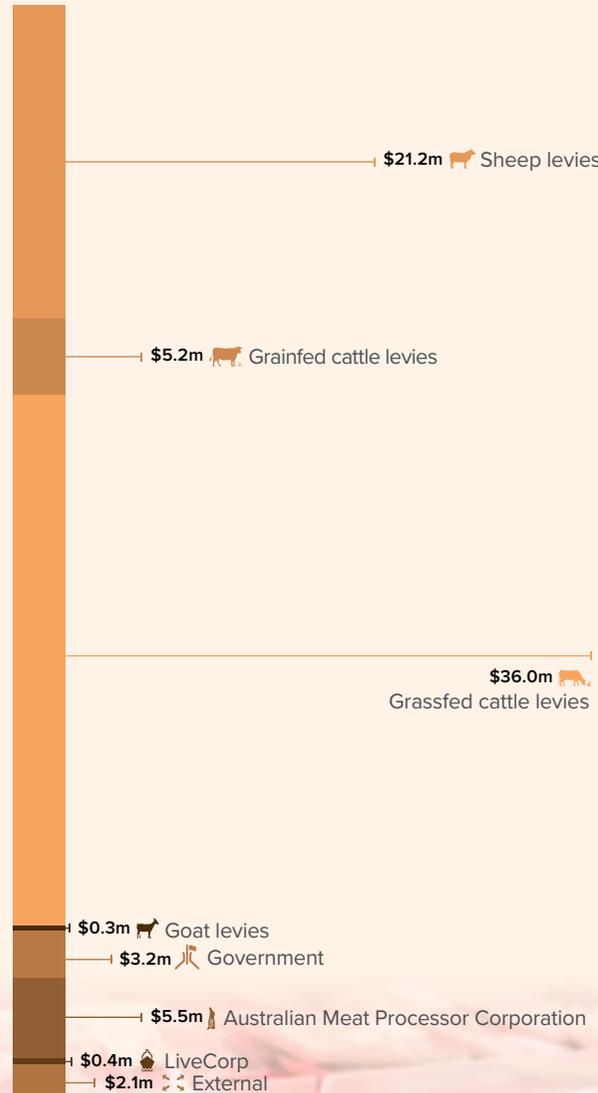
MLA's 2019–20 programs within this pillar[1] are:

p.20 I **Domestic market**
  › Market knowledge (domestic)
  › Marketing and promotion (domestic)

p.24 I **International markets**
  › Market access
  › Market knowledge (international)
  › Marketing and promotion (international)
  › Livestock export market activities

p.37 I **Integrity systems**
  › Market access science

p.45 I **Product and packaging innovation**
  › High Value Food Frontiers

[1] Some of these programs extend across other pillars.

PILLAR 3. SUPPLY CHAIN EFFICIENCY AND INTEGRITY

Satisfied customers and industry partners are signs of a well-functioning value chain. The red meat and livestock industry strives to achieve this through Meat Standards Australia, which underpins consumer eating quality satisfaction in their red meat purchases, and also through integrity systems that underpin clean, safe, natural and traceability claims.

The Australian red meat and livestock industry has an opportunity to enhance this win-win for customers and value chain partners through new measurement technologies, information exchange and value based pricing, where consumers pay the true value of the products they purchase and industry is able to increase the value of each carcase which in turn leads to increased producer returns.

Alignment to industry and government priorities

Meat Industry Strategic Plan priorities

- Optimising product quality and cost efficiency
- Guaranteeing product quality and systems integrity

Australian Government priorities

Science and research	Rural research, development and extension
• Food	• Advanced technology
• Transport	• Adoption of research and development
	• Biosecurity

Investment | Total $47.0 million

Projected 2019–20 investment by funding source ($ million) Total may not add up due to rounding.

- $4.6m Sheep levies
- $2.7m Grainfed cattle levies
- $6.6m Grassfed cattle levies
- $0.1m Goat levies
- $16.4m Government
- $4.6m Australian Meat Processor Corporation
- $0.1m LiveCorp
- $11.9m External
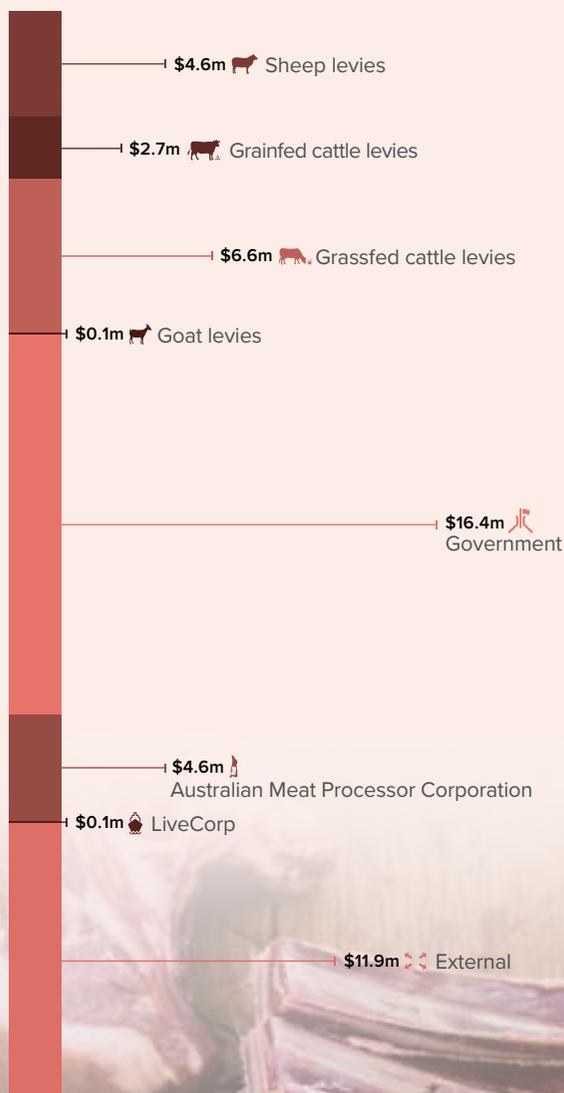
MLA's 2019–20 programs within this pillar[1] are:

- **p.29** | **Eating quality**
  - › Eating quality
- **p.37** | **Integrity systems**
  - › Market access science
  - › Integrity systems
- **p.41** | **Objective measurement**
  - › Objective measurement
- **p.45** | **Product and packaging innovation**
  - › High Value Food Frontiers
- **p.47** | **Value chain information and efficiency**
  - › Digital value chain information
- **p.57** | **Capability building**
  - › Innovation capability building

[1] Some of these programs extend across other pillars.

PILLAR 4. PRODUCTIVITY AND PROFITABILITY

Increasing productivity and profitability across the industry will assist Australian red meat and livestock participants to raise their competitiveness and long-term sustainability and help offset the long running cost-price squeeze. Encouraging the value chain to increase its productivity requires a new approach to adoption.

Providing producers, lot feeders, livestock exporters and processors with compelling commercial benefits to implement research and development is another priority. Also critical is the supply of timely, accurate and relevant tools, technologies and information. In taking a value chain approach to RD&A, the industry can capture greater value in the investments made from genetics through to the consumer.

Alignment to industry and government priorities

Meat Industry Strategic Plan priorities

• Production efficiencies in farms and feedlots
• Processing productivity
• Live export productivity

Australian Government priorities

Science and research	Rural research, development and extension
• Soil and water • Transport • Environmental change • Advanced manufacturing • Energy	• Advanced technology • Adoption of research and development • Soil, water and managing natural resources

Investment | Total $70.5 million

Projected 2019–20 investment by funding source ($ million) Total may not add up due to rounding.

$7.7m 🐑 Sheep levies

$2.0m 🐄 Grainfed cattle levies

$7.3m 🐄 Grassfed cattle levies

$0.5m 🐐 Goat levies

$32.6m 🏛 Government

$2.6m 🏭 Australian Meat Processor Corporation
$0.3m 🐖 LiveCorp

$17.5m ⊃⊂ External

MLA's 2019–20 programs within this pillar[1] are:

p.24 🌏 | **International markets**
  › Livestock export market activities

p.31 🌱 | **Environmental sustainability**
  › Sustainability (off-farm)

p.34 ⚬⚬ | **Feedlot**
  › Feedlot productivity

p.43 🥩 | **Producer adoption**
  › Producer adoption

p.49 📋 | **Productivity (off-farm)**
  › Productivity (off-farm)

p.51 ▦▦ | **Productivity (on-farm)**
  › Beef productivity
  › Sheep productivity
  › Goat productivity
  › Livestock genetics
  › Feedbase production
  › Digital agriculture

p.57 🧠 | **Capability building**
  › Innovation capability building

[1] Some of these programs extend across other pillars.

PILLAR 5. LEADERSHIP AND COLLABORATIVE CULTURE

Securing the potential of the Australian red meat and livestock industry and delivering on the ambitions of the Meat Industry Strategic Plan requires strong industry leadership, a capable workforce and the ability to attract the best and brightest minds to the industry.

For MLA, the delivery of its own Strategic Plan will rely on the strength of our team and the expertise of our people. Our progress will be continually monitored, objectively measured, and transparently communicated to all stakeholders.

Alignment to industry and government priorities

Meat Industry Strategic Plan priorities

• Building leadership capability
• Protecting and promoting our industry

Australian Government priorities

Science and research	Rural research, development and extension
• Food • Environmental change	• Adoption of research and development • Biosecurity

Investment | Total $21.5 million

Projected 2019–20 investment by funding source ($ million) Total may not add up due to rounding.

$3.6m Sheep levies

$1.1m Grainfed cattle levies

$3.9m Grassfed cattle levies

$7.2m Government

$3.6m Australian Meat Processor Corporation

$2.2m External
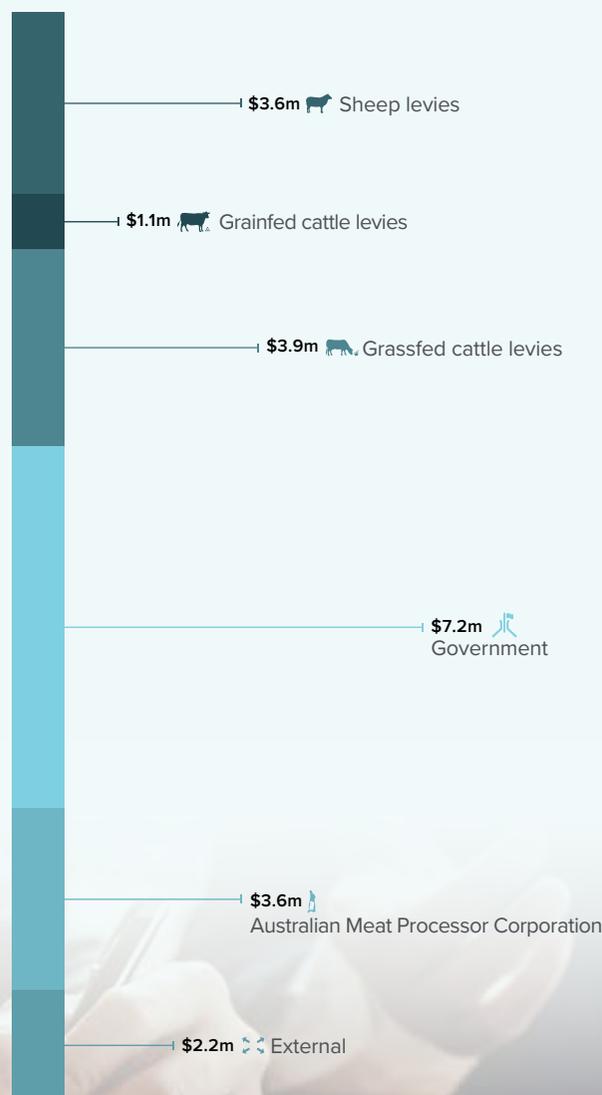
MLA's 2019–20 programs within this pillar[1] are:

p.57 | Capability building
> Innovation capability building
> Industry leadership and capacity building

p.61 | Communication
> Communication (community)
> Communication (stakeholder)

p.65 | Corporate services
> Corporate services

[1] Some of these programs extend across other pillars.

PILLAR 6. STAKEHOLDER ENGAGEMENT

The successful delivery of MLA's Strategic Plan will require an enhanced level of collaboration between MLA and its many stakeholders.

This pillar focuses on extending the breadth and depth of stakeholder engagement across MLA. Genuine two-way consultation and collaboration will provide mutual benefit in the delivery of MLA's marketing, research and development services to industry. This pillar also includes the delivery of MLA's community engagement programs and corporate reporting responsibilities.

Alignment to industry and government priorities

Meat Industry Strategic Plan priorities	
• N/A	
Australian Government priorities	
Science and research	Rural research, development and extension
• Food	• Adoption of research and development

Investment | Total $10.3 million

Projected 2019–20 investment by funding source ($ million) Total may not add up due to rounding.

$3.3m Sheep levies

$0.4m Grainfed cattle levies

$4.0m Grassfed cattle levies

$2.0m Government

$0.1m Australian Meat Processor Corporation

$0.4m External
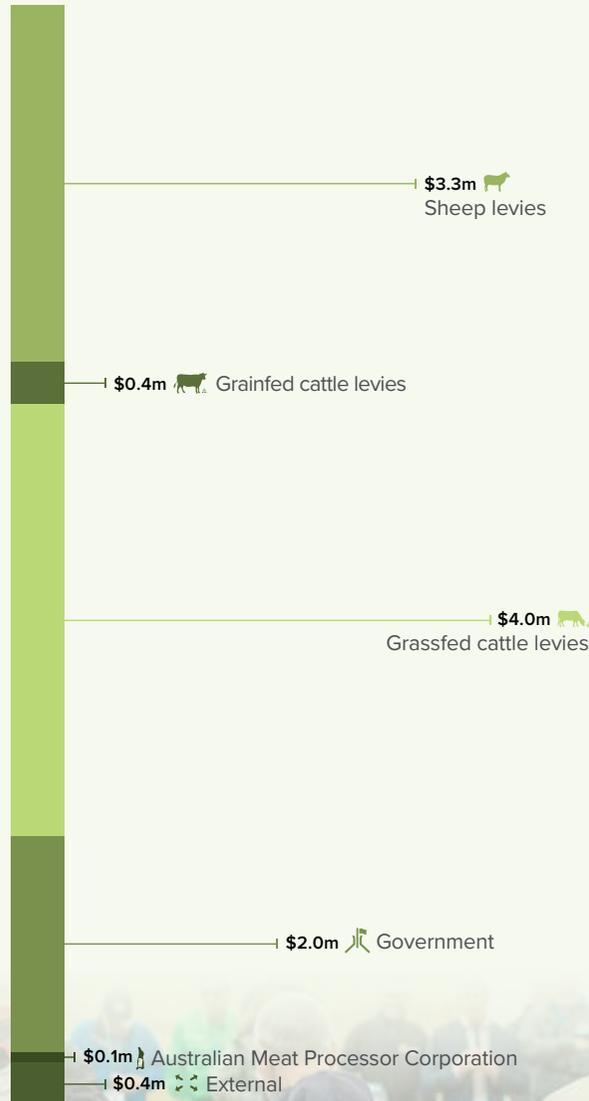
MLA's 2019–20 programs within this pillar[1] are:

p.20 **| Domestic market**
> Market knowledge (domestic)

p.61 **| Communication**
> Communication (stakeholder)

[1] Some of these programs extend across other pillars.

PROGRAMS

Program: 🐑 Animal health and welfare | Budget: $14.5 million

MLA's animal health and welfare program assists MLA to foster the prosperity of the Australian red meat and livestock industry by improving the management of livestock's health and welfare by minimising the impact of endemic and emergency disease and by ensuring the continued support and trust of the community.

Sub-programs
> Animal health
> Animal welfare

Pillars
👥 Consumer and community support

Operating environment

The community has high and increasing expectations about the way livestock are 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.

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

MLA's investments in animal health and welfare research improve the management of the wellbeing of Australia's livestock. Good animal health management amounts to good biosecurity; preventing the incursion of new pathogens and, in the event of a disease occurrence, intervention and containment to prevent spread across boundaries. The term 'biosecurity' has evolved from the days when it was used to signify prevention of the incursion of diseases exotic to Australia, to a recognition today that biosecurity starts at the farm enterprise level.

> Animal health

MLA's animal health sub-program works to reduce the impacts of animal disease through:

• faster, cheaper and more accessible diagnosis

• preventative measures which rely less on chemicals and more on exploiting a host's resilience and immunity

• enhanced treatment options.

Further investments will contribute tools and enablers for reducing the impact of disease including disease surveys, decision support tools and epidemiological investigations.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Animal health diagnostics and enablers	The 'animal health diagnostics and enablers' product group includes initiatives to improve the diagnosis of diseases such as sheep footrot and worm infestation, as well as exotic pathogens such as capripox and foot and mouth disease.
	Other initiatives include:
	• exploring the epidemiology of conditions such as arthritis, sheep measles, toxoplasmosis, sarcosporidiosis, and bovine theileriosis
	• developing decision support tools and prediction models for parasite management and disease interventions
	• encouraging producer participation in disease surveillance.
Animal health prevention and treatment	Initiatives in the 'animal health prevention and treatment' product group include:
	• facilitating the integration of parasite and pest management with the husbandry calendar
	• avoiding plant toxicities
	• identifying animals which are inherently resistant or resilient against cattle tick, internal parasites and infectious diseases
	• investments aimed at developing a single-dose cattle tick vaccine
	• exploring possibilities of vaccines against other parasites
	• enabling producers to make informed decisions on cost-effective interventions for diseases diagnosed at slaughter.

Key performance indicators in 2019–20

1. A commercial partner is identified, and development trials underway for a single injection cattle tick vaccine.

2. Prevalence maps prepared for cryptic apicomplexan parasites – toxoplasma, sarcocystis and theileria.

› Animal welfare

MLA's animal welfare sub-program covers the research, development, adoption, engagement and communication activities that achieve and demonstrate to the community the continuous improvement of the welfare of Australian livestock.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Neonatal mortality and predation	Initiatives within the 'neonatal mortality and predation' product group include: • reduction of neonatal mortality rates, particularly perinatal animals and cull females • control of predatory animals such as wild dogs.
Improve and replace husbandry practices	Initiatives within the 'improve and replace husbandry practices' product group include: • delivery of pain relief products and • replacement of aversive practices.
Animal welfare indicators and enablers	Initiatives within the 'animal welfare, indicators and enablers' product group include: • ensuring currency of existing guides to animal husbandry practices • researching new ways of measuring and recording the wellbeing state • establishing benchmarks for enterprise and industry evaluation of livestock wellbeing management.

Key performance indicators in 2019–20

1. 100,000 lambs treated with Numnuts at lamb marking.

2. Three dog management groups report success in baiting program and dog reduction.

Projected 2019–20 investment by funding sources – animal health and welfare ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Animal health	22		76		654		377								2,882	4,011	1,438	8,022	1,438	9,461
Animal welfare	15		44		194		166								2,118	2,537		5,074		5,074
Total	50		141		1,085		543								5,000	6,548	1,438	13,097	1,438	14,535

Program: 🏴 Domestic market

Budget: $29.8 million

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. This is achieved by promoting the benefits sought by consumers and also by addressing barriers that limit red meat consumption: price (relative to other popular proteins) and negative perceptions around health and production practices.

By addressing these 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)
	› Nutrition
	› Marketing and promotion (domestic)
Pillars	👫 Consumer and community support
	🌐 Market growth and diversification
	💬 Stakeholder engagement

Operating environment

The domestic market remains the single most valuable destination for Australian red meat. It is also the battleground where red meat and other proteins compete for their place on the dinner plate. With tight supply and robust global demand, domestic red meat prices remain high while pork and chicken prices stay low by comparison. Many retail and foodservice customers are experiencing margin pressures and some look to these and other protein alternatives to balance their books.

Despite low interest rates, consumer confidence remains soft and there is a growing trend towards 'savvy shopping' – buying on promotion, switching proteins, using less expensive cuts and minimising waste. Red meat is seen as having strengths when it comes to hearty and gourmet meal occasions, but among budget conscious and time poor consumers, red meat needs to promote its suitability as the perfect protein for the growing number of 'light' and 'easy' meal occasions.

Red meat's nutritional credentials are a question of portion size and balance on the plate. Positioning small and large portions of red meat every other day, as a key component of a healthy diet consistent with the Australian Dietary Guidelines will provide both industry and public health benefits (since average per capita consumption of red meat is below 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 market information and intelligence, producing market and consumer insights. These aim to inform business decisions across the value chain and underpin domestic marketing strategies.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
National Livestock Reporting Service (NLRS) and market Information	The NLRS produces timely, accurate and independent Australian livestock price data through its network of 27 Livestock Market Officers. Initiatives include: • capturing and reporting a minimum of 70% of each sale, in line with the Saleyard strategy • collecting and reporting weekly over-the-hooks and slaughter data, moving to online portal capture • collecting and reporting other data including co-products • driving adoption of online portal with current data providers • developing a plan to facilitate indicator comparisons across sales channels

Product group	Core activities
National Livestock Reporting Service (NLRS) and market Information (continued)	• developing leading edge economic insights, feeding into quarterly projections and news • driving adoption of insights through technology in partnership with relevant MLA cross-functional teams; education tools; industry presentations; indicators, such as the Eastern Young Cattle Indicator (EYCI) and National Trade Lamb Indicator (NTLI).
Domestic market and consumer insights	The 'domestic consumer insights' product group collects, analyses, interprets and disseminates channel and consumer insights. Initiatives include: • shopper/channel tracking (retail and foodservice) • MLA annual member survey, market information satisfaction survey, insights surveys • adoption of insights domestically with internal and external stakeholders; for example: domestic market snapshot, domestic market category plans • quarterly (beef) and triannual (sheep) projections covering supply (provided by National Livestock Reporting Service) and demand • weekly consumer tracking and annual consumer tracking review • reviewing performance of MLA domestic marketing campaigns, providing insights for future campaign development • gathering data to measure domestic KPIs • adoption of insights domestically with internal and external stakeholders; for example: in retailer category review presentations and processor workshops.

Key performance indicators in 2019–20

1. High levels of satisfaction (above 85%) by industry stakeholders with MLA's market information services.
2. National Livestock Reporting Service (NLRS) saleyard reports cover >70% of national sales.
3. High levels of satisfaction (above 85%) by industry stakeholders with MLA's market insights services.

› Nutrition

MLA's nutrition sub-program researches and communicates the health benefits of red meat to health practitioners, policy makers and consumers.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Nutrition research	The 'nutrition research' product group generates data and insights related to the role of Australian red meat in a healthy and sustainable diet. Initiatives include: • monitoring, research and consultation to identify public health priorities • maintaining up-to-date data on Australian red meat consumption habits and its nutritional value as well as its contribution to food and nutrition security. The findings are translated and published on the MLA Healthy Meals website as key messages, product information and practical resources on meal planning.
Nutrition communications	The 'nutrition communications' product group engages and works collaboratively with key stakeholders to produce and disseminate information and resources via channels that are: • easily accessible • important for driving consistent messaging. Initiatives include: • MLA Healthy Meals site • Steak of the Nation Publication • Nutrition Guide • Industry issues briefs.

Key performance indicators in 2019–20

1. At least 60% of stakeholders surveyed believe MLA's nutrition information and practical resources are credible and relevant.

› Marketing and promotion (domestic)

MLA's marketing and promotion (domestic) sub-program delivers a portfolio of marketing initiatives designed to ensure red meat consumers feel good about their choice and are inspired to eat three to four Australian red meat meals per week.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Domestic business development	Initiatives within the 'domestic business development' product group include: • ensuring marketing activities are supported by retailer/trade partners • developing and implementing bespoke key foodservice and retail account management plans • setting appropriate targets for promotional activities and conduct post evaluations.
Domestic brand building	Initiatives within the 'domestic brand building' product group include: • ensuring marketing activities are targeted against consumer purchase drivers • delivering consumer-focused activities along the entire 'path to purchase' to build awareness • evaluating domestic consumers' willingness to pay more for Australian red meat • setting appropriate targets for promotional activities and conducting timely post evaluations • evaluating the impacts of marketing activity, sharing the results and taking corrective action as required.
Domestic CoMarketing program	The 'domestic CoMarketing program' product group provides financial support and capacity building programs to assist brand owners to develop their brand propositions. Initiatives include: • building awareness of key brand attributes • building preference among target customers.

Key performance indicators in 2019–20

1. Year-on-year increase in main grocery buyer endorsement of the statement "Willing to pay more for beef/lamb" to 22% (beef) and 23.5% (lamb) from 19% (beef) and 21% (lamb) in 2015–16.
2. Maintain mean number of serves per week: 1.5–1.7 for beef and 0.7–0.9 for lamb.
3. Restrict the percentage of main grocery buyers limiting red meat for health reasons to 17% (beef) and 21% (lamb).
4. 75% of domestic CoMarketing participants rate their overall outcomes (based on their objectives for the year) as 'successful'.
5. Produce case studies from at least five domestic CoMarketing participants, demonstrating that a branding-related price premium is paid to producers for livestock which meet domestic-branded program specifications.

Projected 2019–20 investment by funding sources – domestic market ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Market knowledge (domestic)	5	5	19	4	528	940	464	1,355	85	179	180					1,282	384	2,564	2,867	5,431
Nutrition					213	211	225	135	105	124	63	27				607		1,213	498	1,712
Marketing and promotion (domestic)		50		120		9,408		10,262		1,531		1,174					68		22,613	22,613
Total	5	55	19	124	742	10,559	689	11,752	191	1,834	243	1,201				1,889	452	3,778	25,978	29,756

Program: 🌐 International markets — Budget: $50.9 million

MLA's international markets program assists MLA to foster the prosperity of the Australian red meat and livestock industry by growing demand for Australian red meat and livestock, by maintaining and improving access to global markets, by providing timely insights about global opportunities and by promoting Australia's superior points of difference.

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

Pillars
👪 Consumer and community support
🌐 Market growth and diversification
📊 Productivity and profitability

Operating environment

Australian red meat and livestock exports face considerable challenges in international markets. These include increased competition from other red meat suppliers, shifting global trade sentiment to more protectionist policies, ongoing restrictions in key markets due to non-tariff technical barriers and supply constraints in Australia.

Australian beef cattle numbers are recovering from the drought-induced decline in the national herd, meaning supplies remain tight at the same time that key competitors are gaining a foothold in some of our important markets. Australian sheepmeat supplies are similarly tight, yet overall global demand remains strong. Livestock prices have been at record or near record levels.

Despite the challenges, there are still significant opportunities for Australian products in global markets. There are growth opportunities in Asia with rising incomes and the emerging middle class. There is increasing demand for Australian natural, pasturefed product and optimism about the potential for improved market access to Europe and Britain.

Australia's high quality product and powerful country of origin reputation remain key differentials to many of our competitors in international markets. The maintenance and enhancement of our products' attributes is critical to our continued success in international markets.

MLA's international markets sub-programs and individual market strategies are developed using a portfolio matrix to segment markets and determine the size of the opportunity and the impact of MLA's investments. This portfolio matrix is used to determine the level of investment in each country and each sub-program. These portfolio segmentations and budget allocations are agreed through an annual consultation process with peak industry councils and industry.

> Market access

MLA's market access sub-program supports industry and government to defend and maintain existing favourable access conditions, position Australia favourably in trade negotiations and assist with the alleviation of non-tariff (technical) trade barriers.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Economic access	Initiatives within the 'economic access' product group include: • supporting industry to defend existing favourable market access conditions • reducing economic barriers to trade through the delivery of targeted advocacy strategies.

Product group	Core activities
Technical access	Initiatives within the 'technical access' product group include: • supporting industry to mitigate access risks through monitoring access conditions • prioritising initiatives to reduce non-tariff barriers to trade.

Key performance indicators in 2019–20

1. Australia-EU free trade agreement: industry position/submissions are acknowledged and acted on by government, supporting delivery of a reformed EU import regime.
2. Non-tariff barriers: priority non-tariff barrier issue alleviation plans (i.e. China) are implemented.

› Market knowledge (international)

MLA's market knowledge (international) sub-program delivers up-to-date market intelligence, consumer insights and analysis that support industry in making informed marketing decisions and develop global marketing strategies.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
International market insights	Initiatives within the 'international market insights' product group include: • monitoring market trends • monitoring competitors.
International consumer insights	Initiatives within the 'international consumer insights' product group include: • tracking retail and foodservice trends within major Australian red meat markets • tracking trade behaviour, preferences and usage trends through annual trade tracker • providing industry with easy-to-interpret valuable market insights and analysis • gathering data to measure international market KPIs as required • providing industry with up-to-date market intelligence • conducting consumer research, including annual global consumer tracker • developing detailed market insights about consumer behaviours, preferences and consumption trends • providing industry with easy-to-interpret, valuable consumer insights and analysis • gathering data to measure international consumer KPIs as required • working with in-market teams to build tools to drive adoption of insights and increase the use of insights to inform strategy, internally and externally.

Key performance indicators in 2019–20

1. High levels of satisfaction (above 85%) by industry stakeholders with MLA's international market insights services.
2. Delivery of a global markets strategic plan.
3. Delivery of adoption tools, including global market snapshots and global competitor snapshots.
4. Completion of category drivers for Southern Asia, US, China, MENA and domestic markets.

› Marketing and promotion (international)

MLA's marketing and promotion (international) sub-program builds customer and consumer awareness of Australia's positive attributes (integrity systems and quality attributes) by supporting a network of strategic partners and delivering promotional activities.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
International business development	Initiatives within the 'international business development' product group include: • building strategic partnerships and increasing Australia's market penetration through trade facilitation and value chain development • building and/or maintaining a network of strategic relationships and key accounts • conducting educational forums and workshops to promote Australia's integrity and safety systems to customers and end users • conducting business-to-business facilitation activities through trade shows and business networking opportunities • working with strategic partners to develop value chain solutions to improve the performance of Australian product through the provision of educational and product knowledge activities.
International brand building	Initiatives within the 'international brand building' product group include: • promoting Australia's positive points of difference and building consumer loyalty through promotional activities • creating and disseminating engaging and impactful consumer communications and education tools • utilising digital and traditional media platforms to engage consumers and communicate about Australia's positive attributes • supporting collaborative promotional activities with key end users and strategic partners (retail and foodservice) to increase trial/sales of Australian product (e.g. seasonal events, sampling campaigns, retail promotions, menu promotions).
International CoMarketing program	The international 'CoMarketing program' product group provides strategic advice and financial support and capacity building programs to assist brand owners to develop their brand proposition(s).

Key performance indicators in 2019–20

1. Build or maintain customer awareness and preference of Australian red meat's positive attributes (safety, quality) 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. 75% of international CoMarketing participants rate their overall outcomes (based on their objectives for the year) as 'successful'.
4. Produce case studies from at least five international CoMarketing participants, demonstrating that a branding-related price premium is paid to producers for livestock which meet international-branded program specifications.

› Livestock export market activities

MLA, together with LiveCorp, jointly invest in the Live Export Program (LEP) which funds research and development to improve animal health, welfare and productivity throughout the livestock export supply chain.

Within the LEP, MLA's livestock export market activities sub-program supports the growth, productivity improvements and sustainability of the livestock export industry through the delivery of risk mitigation strategies and extension and adoption of best practice livestock management.

This sub-program aims to achieve this through the following product groups:

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. A key initiative includes the Exporter Co-Funding program, which supports commercial participants in developing and implementing strategic welfare and productivity improvements.
Livestock export productivity gains	The 'livestock export productivity gains' product group supports the improvement of livestock productivity and supply chain efficiencies to improve competitiveness.

Key performance indicators in 2019–20

1. Positive stakeholder feedback from industry and government stakeholders with MLA's livestock export market access, productivity and adoption initiatives.
2. Minimum of 70% of participants satisfied with the co-funding program.

〉 **Livestock export (research and development)**

Within the LEP, MLA's livestock export (research and development) sub-program provides industry with the tools, technologies, knowledge and capability to improve their productivity, profitability and sustainability at an individual business and industry level.

This sub-program aims to achieve this through the following product groups:

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	Initiatives within the 'livestock export animal welfare research and development' product group include: • supporting ongoing research and data collection, scoping studies and adoption to improve heat load management during shipping and in the Middle East • identifying economic and non-invasive animal welfare measures • developing a monitoring and reporting framework to identify problems and enable corrective actions; this will be facilitated via tools such as Live Ex Collect and the learnings from the Animal Welfare Indicators project • actioning improvements in animal welfare • trialling and developing alternative power loads to operate captive bolt devices • validating acceptable stunning outcomes to comply with ESCAS/LGAP and Halal standards • conducting research on strategic issues to reduce welfare risks • project partnerships developed in bedding management and stocking densities on board livestock vessels and identification of onboard environmental monitoring technologies that support animal welfare indicators.
Livestock export productivity research and development	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: • progressing the Live Export Producer Supply Chain pilot project for sheep and cattle • trialling data collection with Live Ex Collect in two overseas markets.
Livestock export extension and adoption	Initiatives within the 'livestock export extension and adoption' product group include: • supporting industry extension and adoption of best practice systems and procedures to achieve continuous improvements in animal welfare and mitigate risk of trade closure • targeted communications of the Live Ex Collect, UNE Project Partnership and Animal Welfare Indicators projects • communicating research, development and adoption outcomes and program performance to stakeholders via tools such as Live Ex Collect • consulting with industry through live export research and development advisory • implementing the new Live Export Program (LEP RD&E systems and processes, including investment management training of management committee personnel • development and communication of the LEP RD&E Blueprint.

Key performance indicators in 2019–20

1. Complete a review of the required research and development to support implementation of the Livestock Global Assurance Program (LGAP).
2. Complete replacement of .22 blank charges with the newly developed alternative power load and/or device.
3. Implementation of the Live Export Program (LEP) RD&E review recommendations.
4. Winter trials completed for Salmonella vaccine.
5. Research projects implemented to improve and manage heat stress, bedding and stocking densities during shipping and in respective destination markets.
6. Reporting framework adopted and refined to support the Animal Welfare Indicators pilot project and broader ongoing research data collection.

Projected 2019–20 investment by funding sources – international markets program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Market access		42	4	189	39	1,092	56	1,641		273	99	2,788		278		198		395	6,303	6,698
Market knowledge (international)		51		37		660		1,340		531									2,619	2,619
Marketing and promotion (international)		127		267		8,282		21,459		2,683		352					1,126		34,296	34,296
Livestock export market activities		34		171		541		2,364						722					3,833	3,833
Livestock export (research and development)			136		273		192						600		546	1,746		3,493		3,493
Total		254	140	664	312	10,575	248	26,804		3,487	99	3,140	600	1,000	546	1,944	1,126	3,888	47,050	50,938

Program: 🎖 Eating quality   Budget: $10.1 million

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

• creating the opportunity for price premiums to be delivered to beef and lamb supply chain participants

• underpinning Australian red meat brands and providing a point of difference from competitor countries and proteins

• encouraging repeat purchases by guaranteeing consumers a satisfying eating experience.

Sub-programs 〉 Eating quality

Pillars 🔗 Supply chain efficiency and integrity

Operating environment

Brand owners cannot afford to dissatisfy their customers in a market of rising red meat prices and fierce competition from alternative proteins.

The world-leading Meat Standards Australia (MSA) eating quality program provides beef and sheepmeat brand owners with a competitive advantage, allowing them to underpin their brand eating quality offer to customers who are faced with greater choice from lower cost products. By meeting and exceeding customer expectations, price signals flow back through the supply chain incentivising continued improvement.

The success of the MSA program is evidenced by its continued growth and delivery of returns to the farm gate, with more than 3.1 million cattle and 6.1 million sheep presented for MSA grading during 2017–18. The program also delivered an estimated additional $152 million in farm gate revenue thanks to price differentials paid for MSA accredited and compliant cattle, with more than 5,000 additional cattle and sheep producers becoming MSA registered. MSA now underpins more than 172 beef and sheepmeat brands as the independent endorsement of eating quality.

In 2017–18, 43% of the Australian adult cattle slaughter and 25% of the lamb slaughter are presented for MSA grading, highlighting the opportunity to increase adoption of MSA along the supply chain. There is also potential to raise the national eating quality of MSA eligible cattle – as measured by the MSA Index.

Another opportunity to enhance eating quality is through eating quality tools and technology interventions that directly improve red meat eating quality in both MSA and non-MSA based supply chains.

〉 Eating quality

MLA's eating quality sub-program strives to deliver a world-leading, consumer-focused eating quality program that drives demand and improves the eating quality of Australian beef and sheepmeat.

Within this sub-program, MLA also leads global consumer eating quality research and integrity programs through collaboration with domestic and international partners. This area also provides technologies and related tools or enablers that either directly improve eating quality or support this sub-program.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
MSA integrity and compliance	Initiatives within the 'MSA integrity and compliance' product group include: • continually improving the MSA quality management system and standards to ensure robust and effective integrity systems are in place • using MSA to identify eating quality segregation opportunities to reduce product variability between brands • leading the development and, where appropriate, commercialisation of MSA-related technology to position MSA as the global standard for eating quality language • conducting MSA benchmarking analyses to inform supply chains of seasonal and regional statistics • enhancing carcase feedback systems to better facilitate decisions to optimise eating quality and deliver transparent grading outcomes.

Product group	Core activities
MSA business development	Initiatives within the 'MSA business development' product group include: • using MSA science to describe 'fitness for purpose' of all cattle and sheep types and their pathways to processing • supporting adoption of any enhancements to Australian Beef and Sheepmeat Languages • delivering producer education programs to support understanding of customer specifications within supply chains, including how to improve the MSA Index for beef • empowering brand-driven implementation of MSA in domestic and export markets and supporting educational opportunities with customers of MSA brands • increasing the volume of beef and sheepmeat delivered to consumers with eating quality predictions.
MSA research and development	Initiatives within the 'MSA research and development' product group include: • completing research priorities and commercially implementing research outcomes as identified by the MSA pathways and beef and sheepmeat taskforce committees • implementing MSA Model V2.0 for beef • leading the collaboration of international eating quality research and data platforms • developing a cuts-based grading system for lamb and sheepmeat • enhancing grading efficiencies through the potential for objective carcase measurements • identifying on-farm practices and technologies that increase eating quality or reduce non-compliance.

Key performance indicators in 2019–20

1. Price differentials for MSA-compliant cattle demonstrate an annual return to farm gate of more than $130 million in 2019–20.
2. Adoption of MSA grading increases to 50% of national adult cattle slaughter.
3. More than 50% of national lamb slaughter is occurring through MSA-licensed processors.
4. 100% of MSA beef processors utilising MSA Model V2.0.
5. Fifteen processing operators describe MSA beef by consumer outcome represented by Eating Quality Graded cipher, as opposed to dentition category.

Projected 2019–20 investment by funding sources – eating quality program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Eating quality			76	176	775	1,029	1,103	1,685	354	670	259				693	3,260	65	6,520	3,625	10,144
Total			76	176	775	1,029	1,103	1,685	354	670	259				693	3,260	65	6,520	3,625	10,144

Program: 🌱 Environmental sustainability — Budget: $12.3 million

MLA's environmental sustainability program assists MLA to foster the prosperity of the Australian red meat and livestock industry by creating opportunities for it to efficiently and effectively manage soil health, water, methane emissions, biodiversity and climate variability.

This program also addresses the industry's priority to maintain or increase community support for the industry's environmental stewardship.

Sub-programs	› Sustainability (off-farm)
	› Sustainability (on-farm)
Pillars	👥 Consumer and community support
	📊 Productivity and profitability

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.

Given its operation on nearly half the Australian land mass and the proximity of its processing facilities to urban communities, the industry is under continuous scrutiny for its impact on the environment. Then there's the ongoing criticism from some regarding vegetation management, greenhouse gas emissions, water and land use and biodiversity loss.

However, the industry has made major inroads on all these issues. Agriculture is contributing more to reducing greenhouse gas emissions than any other sector in the Australian economy. Red meat producers are the major reason for this through their involvement in the Australian Government's Emissions Reduction Fund. Further opportunities exist to substantively reduce the industry's greenhouse gas footprint, including through biodiversity credits.

Industry's long-term prosperity depends on continuing to take a proactive and preventative approach to environmental sustainability – rather than a reactive one which only deals with the symptoms of resource degradation: poor soil and water quality and lack of biodiversity.

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

› Sustainability (off-farm)

MLA's sustainability (off-farm) sub-program supports enterprises along the supply chain to improve their management of natural resources, greenhouse gas emissions and waste, and contribute to the industry's social licence to operate.

This sub-program aims to achieve this through the following product groups:

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: • developing biological processing systems to reduce impact and convert wastes into valuable products – this includes the Rural R&D for Profit project 'Wastes to Profits' • driving adoption of innovation that improves management of water, energy, waste, greenhouse gas emissions (Carbon Neutral 2030 initiative) through the development of business case studies, cost/benefit analysis models and e-learning modules
Environment (Australian Meat Processor Corporation (AMPC) managed)	The 'environment (AMPC managed)' product group includes AMPC-funded and managed initiatives that align with the AMPC and MLA strategic plans.

Key performance indicators in 2019–20

1. Development of technologies for industry to achieve a 25% reduction in waste or increase in efficiency relative to 2015 levels.
2. One case study evidencing that one carbon neutral red meat supply chain has been established.
3. Development of technologies for industry to achieve a 25% reduction in water and energy use intensity relative to 2015 levels.

〉 Sustainability (on-farm)

MLA's sustainability (on-farm) sub-program addresses on-farm natural resource challenges that impact production and influence community perceptions of the industry.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Sustainability knowledge and enablers (on-farm)	The 'sustainability knowledge and enablers (on-farm)' product group involves activities which generate scientific knowledge relating to:
	• water management, by maintaining participation in the cross sectoral Water RD&E Strategy to inform research and development corporation (RDC) and agency projects, therefore avoiding duplication
	• soils management, by maintaining participation in the cross-sectoral Soils RD&E Strategy to inform RDC and agency projects, therefore avoiding duplication
	• carbon methodologies enabling participation in the domestic carbon market
	• rapid screening techniques for identifying pasture and legumes with methane inhibiting properties and productivity benefits
	• the industry's impact on the environment (including greenhouse gas emissions and natural resource management issues), community, and economy (by investments made through this sub-program) through various impact studies
	• the Red Meat Advisory Council's sustainability framework and an industry approach to reporting sustainability
	• providing technical support for Grazing BMP through MLA research projects
	• updating learning/coaching methodologies (e.g. Profitable Grazing Systems) to enable integration of carbon farming methods into on-farm practices.
Sustainability technologies and practices (on-farm)	The 'sustainability technologies and practices (on-farm)' product group involves the application of outputs generated within the 'sustainability knowledge and enablers (on-farm' product group for practical purposes behind the farm gate. Activities include development and/or demonstration of:
	• climate forecast products and extension services
	• grazing systems that incorporate pastures resilient to hotter and more variable climates
	• novel feeds (i.e. pasture/legume/shrub) or supplements with the potential to reduce enteric methane emissions and improve productivity
	• supplement delivery mechanisms for reducing enteric methane emissions in extensive grazing systems
	• soil carbon measurement technology
	• improved strains of dung beetles.

Key performance indicators in 2019–20

1. 50 producer 'carbon neutral base line evaluations' completed.
2. At least two Bureau of Meteorology extreme event forecast products are available for trialling.
3. Second and third new dung beetle species/strains imported.

Projected 2019–20 investment by funding sources – environmental sustainability program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Sustainability (off-farm)			3		35		13				1,211				210	1,471		2,943		2,943
Sustainability (on-farm)			11		85		88								2,501	2,685	4,016	5,371	4,016	9,387
Total			14		120		101				1,211				2,712	4,157	4,016	8,314	4,016	12,330

Program: ⚛ Feedlot

Budget: $9.0 million

The feedlot program is funded from grainfed levies, with a matching contribution from the Australian Government, and addresses the specific research, development and adoption requirements of the beef feedlot sector.

The key undertaking of the program is implementation of initiatives to transform the program from one focused on 'protective' research and development to one focused on improving productivity and performance across the sector.

While there's ongoing investment to ensure industry maintains its social licence in areas of animal welfare and environmental management, the focus is moving more towards development and implementation of tools and technologies that reduce feedlots' operational inputs and costs while also increasing efficiency and productivity.

Sub-programs ⟩ Feedlot productivity

Pillars 👪 Consumer and community support

📈 Productivity and profitability

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. Priorities include the development of tools to increase productivity and reduce costs, such as the introduction of automation and remote monitoring technologies to routine feedlot processes. Integrating technologies such as DEXA to develop carcase end point specifications, based on yield and eating quality attributes together with customised management systems, will allow individual animals to achieve optimum profitability.

⟩ Feedlot productivity

MLA's feedlot productivity sub-program aims to increase productivity and profitability to underpin the sustainability of feedlot businesses and the sector through research, development and adoption activities to:

• reduce the impacts of animal disease

• achieve and demonstrate to the community the continuous improvement of the welfare of feedlot animals

• increase animal productivity and enterprise profitability through development and implementation of technologies that reduce feedlot operational inputs and costs and increase efficiency and productivity

• address natural resource challenges that impact feedlot production and influence community perceptions of the industry

• build the capability of producers and advisors to increase feedlot productivity.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Feedlot animal health	Initiatives within the 'feedlot animal health' product group include: • developing and evaluating vaccines and immunostimulants to reduce feedlot disease and provide alternatives to medically important antimicrobials • antimicrobial resistance surveillance of bovine respiratory disease and food borne pathogens • evaluating parasite resistance and drench strategies for feedlot cattle • developing and evaluating sensor technologies for feedlot disease prediction, detection and diagnosis • quantifying the subclinical and clinical impact of feedlot disease through abattoir offal audits and veterinary pathology.

Product group	Core activities
Feedlot animal welfare	Initiatives within the 'feedlot animal welfare' product group include: • commissioning feedlot bedding and pen surface ameliorant projects to mitigate the impact of wet pens on feedlot cattle comfort • commissioning projects to improve forecasts of heat load events, best practice nutrition and management strategies to limit the impact of heat load on animal performance and carcase characteristics • developing and evaluating technologies to determine objective measures of feedlot animal welfare • assessing impacts of duration of lairage on animal welfare and carcase value.
Feedlot productivity	Initiatives within the 'feedlot productivity' product group include: • establishing a Centre of Excellence for feedlot research and development • conducting feedlot cattle composition of gain research to predict days on feed to a set carcase endpoint (including lean meat yield), and potential integration with DEXA or CT composition analysis • evaluating cattle sorting systems to maximise profit for a purchased population of cattle • developing solutions to address dag formation on feedlot cattle • determining the effect of nutritional strategies (grain processing, water quality and feed additives) on feedlot animal, metabolism and carcase characteristics • developing and evaluating automation technologies to improve feedlot productivity and profitability.
Feedlot sustainability	Initiatives within the 'feedlot sustainability' product group include: • commissioning asparagopsis feedlot feeding trials to reduce enteric methane emissions • conducting long-term benchmarking of greenhouse gas emissions for southern and northern Australian feedlots • developing and evaluating technologies to mitigate greenhouse gas emissions from feedlots • developing or evaluating strategies to improve feedlot energy and water use efficiency.
Feedlot adoption	Initiatives within the 'feedlot adoption' product group include: • undertaking communication and workshop activities to disseminate outcomes of research and development • distributing the Quarterly Feed research and development e-newsletter to all MLA grainfed members and feedlots • funding a technical services officer position for the feedlot industry • aligning the animal health and productivity benchmarking with the Meat Industry Strategic Plan framework • funding ALFA-MLA consulting veterinarians and nutritionists to help identify research, development and adoption priorities and accelerate adoption of research and development outcomes • undertaking a survey of feedlot operators to ascertain adoption levels of all MLA feedlot relevant products.
Feedlot consultation and capability building	Initiatives within the 'feedlot consultation and capability building' product group include: • consulting with feedlot operators and industry service providers to establish research, development and adoption funding priorities and disseminate outcomes of research activities • 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, the Australian Rural Leadership Program and the Trail Program • implementing the Feedlot Industry Training and Leadership Development Strategy.

Key performance indicators in 2019–20

1. Feedlots representing 50% of the industry capacity have adopted at least five MLA-funded products between 2015 and 2020, including the following:
   - number of feedlots adopting use of woodchips as a wet pen management practice increases 25% from 2015 baseline levels
   - ten bunk scanners sold in 2019–20
   - commercialisation of feed truck auto-delivery proto-type commenced and sale of at least one unit.
2. Decision made by ALFA and MLA on commitment to fund Centre of Excellence for feedlot research.
3. Refinement of bovine respiratory disease 2-in-1 vaccine finalised and field trials implemented.
4. 200 participants complete the antimicrobial stewardship e-learning modules.
5. Targeted program developed to demonstrate the value of shade installation to the feedlot sector.
6. Baseline established for number of feedlot animals that have access to shade.
7. Development of enzyme dag solution progressing satisfactorily against milestones and regulatory dossier submitted for APVMA approval.
8. Baseline greenhouse gas emission data utilised in submission to the National Greenhouse Gas Inventory for revision of feedlot specific emission factors.
9. 2020 survey by veterinarians, nutritionists and technical services officers successfully completed, with adoption rates and impact of feedlot products quantified and data input to MLA evaluation.

Projected 2019–20 investment by fundingsources – feedlot program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Feedlot productivity									3,668	437	28				602	4,297		8,594	437	9,031
Total									3,668	437	28				602	4,297		8,594	437	9,031

Program: ⊜ Integrity systems　　　　　　　　　　　　　　　　　　　　　Budget: $17.1 million

MLA's integrity systems program assists MLA to foster the prosperity of the Australian red meat and livestock industry by protecting 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 　❯ Market access science

　　　　　　　　❯ Integrity systems

Pillars 　　　🌐 Market growth and diversification

　　　　　　　　🔗 Supply chain efficiency and integrity

Operating environment

The Australian red meat and livestock industry faces relentless competition from global suppliers so it must innovate, enhance its operating efficiencies and strengthen its competitive advantages.

A key response is the transformation of the industry's integrity systems – Livestock Production Assurance (LPA), National Vendor Declarations (NVD) and National Livestock Identification System (NLIS) – to ensure Australia maintains its global leadership in red meat product assurance and traceability. This follows the 2015 SAFEMEAT Initiatives Review, Towards an Integrated Integrity System, which recommended the establishment of a single entity to streamline their delivery.

MLA's Integrity Systems Company has the task of improving the integration between each of the integrity programs, driving efficiencies and implementing enhancements to achieve a more responsive and sustainable red meat integrity system into the future.

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.

The Integrity Systems Company is investing 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.

❯ Market access science

MLA's market access science sub-program delivers assurance of product safety to customers and reduces non-tariff (technical) barriers to trade by applying science and technology to the supply chain.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Market access technical research	Initiatives within the 'market access technical research' product group include: • assessing and addressing market-specific product risks • demonstrating low E. coli and Salmonella risk in beef • ensuring maximum residue limits are appropriate • estimating toxoplasma risk in sheep • developing market confidence in low antimicrobial resistance in beef and sheep • improving management of the shelf life of vacuum-packed meat • determining the shelf life of frozen products • implementing appropriate post-mortem inspection procedures • investigating new technology for safe products • improving process control in meat processing • developing and implementing systems to enhance customer confidence in product.

Product group	Core activities
Market access research and development (Australian Meat Processor Corporation (AMPC) managed)	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 core investments.

Key performance indicators in 2019–20

1. Processes for cold chain analysis are implemented and common issues are identified.
2. Risks due to antimicrobial resistance in beef are qualitatively assessed, reported and used to define further surveillance activities.
3. Equivalence cases for post-mortem inspection changes are prepared for North American and European markets.
4. A cost-benefit model for common integrity protection approaches is developed.

› Integrity systems

MLA's integrity systems sub-program delivers the industry's on-farm assurance and through-chain traceability systems (NLIS, LPA and NVDs). These integrity systems protect the disease-free status of the Australian red meat industry and underpin the marketing of Australian product as clean, safe and natural.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Product integrity and traceability systems	Initiatives within the 'product assurance and traceability systems' product group include: • maintaining, reviewing and improving the integrity program's rules and standards (LPA, NLIS, device accreditation) • developing and maintaining the integrity system databases (NLIS, LPA, eNVD) • delivering integrity system communication and adoption • providing customer support • supporting tag-testing processes • producing and managing NVDs • adopting and supporting through-chain integrity technologies (e.g. via MLA Donor Company) • Integrity Systems Company committee maintenance and support • funding the administration of the National Feedlot Accreditation Scheme (feedlot only) • evaluating and aligning integrity systems developments with the 2025 strategic plan.
Livestock Production Assurance (LPA)	Initiatives within the 'Livestock Production Assurance (LPA)' product group include: • maintaining LPA on-farm random and targeted audit program and associated compliance activities • providing customer support • implementing the integrity system communication and adoption strategy • developing reporting dashboards to increase compliance transparency with industry • managing the LPA accreditation process • maintenance and support of the Integrity Systems Taskforce.

Product group	Core activities
SAFEMEAT	Initiatives within the 'SAFEMEAT' product group include: • supporting the SAFEMEAT Secretariat • supporting the Chairs of SAFEMEAT Partners and the SAFEMEAT Policy Group • providing strategic research support for a range of SAFEMEAT activities • providing support for SAFEMEAT communication activities including manage the development of the SAFEMEAT Annual Report and the SAFEMEAT website • providing ongoing assistance for industry responses to the SheepCatcherII and CowCatcherIII exercises including the activities of the Sheep Traceability Working Group.
Integrity System 2025 Strategy	Initiatives within the 'Integrity System 2025 Strategy' product group include: **Real-time traceability** • development of permanent, whole-of-life livestock identification methods to enable tracking from birth to processing • integration of permanent livestock identification methods with technologies that enable real-time tracking of livestock • development of national standards to enable farm-to-fork traceability. **Automated integrity** • development of technologies to enable the automatic sensing of hormone growth promotants, residues and animal health issues in live animals • integration of automated product verification technologies into supply chain compliance and export certification programs • implementation of new technologies and new approaches to compliance to support real-time compliance monitoring. **IS2025 enablers** • quantification of the value of the integrity system through an impact assessment aligned with the IS2025 Strategy • development of a Monitoring, Evaluation and Reporting framework to underpin the measurement of KPIs and overall impact of the IS2025 Strategy • development of a risk framework with industry and government to underpin the implementation of the IS2025 Strategy and the ongoing delivery of the system • development of a communication and adoption strategy, culture and leadership plan and transition plan to drive technology adoption and system uptake • implementation of a governance framework to oversee the implementation of the Strategy.

Key performance indicators in 2019–20

1. National Livestock Identification System (NLIS) movement recording compliance increased to 96%.
2. 35% of livestock consignments accompanied by an electronic National Vendor Declaration (eNVD).
3. Livestock Production Assurance (LPA) awareness levels maintained at 93% or above.
4. 25% reduction in state-based compliance reporting effort through the development of a compliance monitoring and traceability dashboard.
5. Refreshed Standards and Rules for NLIS livestock identification devices implemented

Projected 2019–20 investment by funding sources – integrity systems program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Market access science			30		232		229		64		991				70	1,616		3,232		3,232
Integrity systems	11	63	58	284	159	781	480	2,247	159	1,046	448	665	20	72	451	1,785	5,153	3,571	10,310	13,881
Total	11	63	88	284	392	781	708	2,247	223	1,046	1,439	665	20	72	520	3,401	5,153	6,803	10,310	17,113

Program: ✕ Objective measurement — Budget: $16.3 million

MLA's objective measurement program assists MLA to foster the prosperity of the Australian red meat and livestock industry by facilitating the adoption of objective measurement tools across the value chain. Objective measurement of livestock and carcase attributes is an essential enabler for industry to improve productivity and profitability, improve price transparency and develop value-based pricing. The three key areas of focus for 2019–20 are: eating quality, yield and animal wellbeing.

This program also addresses the industry's priority to maintain or increase community support for the industry's environmental stewardship.

Sub-programs 〉 Objective measurement

Pillars 🔗 Supply chain efficiency and integrity

Operating environment

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

Over recent years MLA has worked with industry, research institutes and technology providers to develop the application of DEXA (Dual-Energy X-ray Absorptiometry) and other objective measurement tools. MLA now proposes to accelerate the adoption of DEXA technology throughout the red meat industry to create a single scientific measurement of carcase meat, fat and bone (lean meat yield) and the platform to pass this information back to producers.

Sharing the data along the value chain to complement other industry systems will allow all sectors to make more informed business decisions, improve on-farm and processing efficiency and deliver a product which is preferred by consumers.

An independent report has found a $420 million/year potential benefit to the Australian red meat industry from full adoption of objective measurement by 2040.

Unless the roll out of the technology is fast-tracked, the report found only $222 million/year of actual benefit is likely to be realised by 2040 on current rates of adoption.

〉 Objective measurement

MLA's objective measurement sub-program develops – and then extends to industry – a range of technologies that measure or estimate lean meat yield, eating quality and animal health traits at appropriate points in the value chain for both live animals and carcases.

A key initiative within this sub-program is to fast-track the adoption of DEXA technology as an objective measure of lean meat yield in meat processing plants, in addition to continuing R&D on yield and animal health solutions.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities

Objective measurement technologies	The 'objective measurement technologies' product group supports the development of technologies that can be applied to live animals or carcases to measure traits describing the value of carcases.
	
	Outcomes from this product group are primarily delivered via the Rural Research and Development for Profit objective measurement program, as well as MLA Donor Company investments.
	
	Initiatives include:
	• development, proof of concept, and demonstration of:
	  • spectral technologies to measure or predict characteristics describing carcase value
	  • airline security based technologies for carcase scanning, and 3D imaging, for composition and health feedback
	  • equine based cone beam x-ray technologies for live and carcase scanning, and 3D imaging, for composition and health feedback
	• implementing objective measurement adoption activities through supply chain coordinators and the Rural Research and Development for Profit objective measurement program partner processors
	• 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.

Key performance indicators in 2019–20

1. Feedback of lean meat yield results provided to producers in five supply chains.
2. Technical evaluation and calibration completed of near-infrared probe for lamb intramuscular fat.
3. Demonstration of cone beam robotic x-ray system in live animals completed.
4. Commercial trials conducted at one processor of through-plant data systems, chiller sortation and tracking system against boning room schedules and requirements.
5. Six DEXA installations commenced and four completed under the industry-accelerated roll-out program.
6. Beef DEXA lean meat yield algorithm calibrated by medical CT (computerised tomography) scanner.
7. Successful differentiation of tissues using MEXA technology.
8. Develop a prototype for an animal health viscera inspection system.
9. Conduct an in-plant evaluation of aviation CT system for yield, eating quality and animal health.

Projected 2019–20 investment by fundingsources – objective measurement program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Objective measurement			100		302		244		85		2,638				4,718	8,087	147	16,174	147	16,321
Total			100		302		244		85		2,638				4,718	8,087	147	16,174	147	16,321

Program: 🍵 Producer adoption
Budget: $10.0 million

MLA's producer adoption program assists MLA to foster the prosperity of the Australian red meat and livestock industry by building the capability of producers and advisors to increase on-farm productivity and profitability from research and development.

Sub-programs 〉 Producer adoption

Pillars 📊 Productivity and profitability

Operating environment

MLA developed a regional consultation framework in 2015 following an independent review of MLA's levy investment systems for on-farm research and development. Regional consultation is a transparent, representative and systematic framework to deliver research, development and adoption that meets the priorities identified by producers during the consultation. Now in its fifth year, the framework has proven to be effective in enhancing transparency and generating genuine two-way engagement between MLA and producers in setting R&D priorities.

Withdrawal of state governments from extension or adoption services in most Australian jurisdictions has dramatically changed the way research and development is delivered to producers. Today's environment demands the evolution of new commercial business models to deliver adoption services and support red meat producers' decision making. This requires developing private sector capacity and capability to support the continued delivery of high quality adoption services.

These new delivery models need to enable the private sector and transition industry to a user pays approach for adoption services.

Disruptive platforms, technologies and programs such as Livestock Data Link, digital agriculture, objective measurement and MSA enable data sharing throughout the value chain and provide opportunity for new and more sophisticated business models. Data sharing, analytics and reporting create new insights for value chain stakeholders, enabling measurement, monitoring and management opportunities.

To assist producers to capitalise on disruptive opportunities, whole of value chain extension and adoption programs will be necessary to link market requirements to on-farm producer and resource capability.

〉 Producer adoption

MLA's producer adoption sub-program aims to build producer capability and service provider capacity and capability to increase on-farm productivity and profitability impact from MLA's investment in research and development.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Create awareness for adoption	Initiatives include: • inform producers and delivery partners of the latest and practical research and development messages, and integrated learning opportunities through campaigns and large-scale forums • educational materials to support producer decision making.
Influence and motivate for adoption	Initiatives include: • engage producers with training and education opportunities to influence uptake of improved practices and further skill development • strategically targeted workshops and seminars to motivate producers into further skills development and inform decision making • strategic development of development of online tools and support resources to support producer decision making.

Product group	Core activities
Involve and partner to achieve adoption	Initiatives include: • involve and partner with producers and service providers in integrated, long-term (>12 months) adoption programs that deliver transformational change to their business performance • partner with producers and producer groups to demonstrate, develop and adopt research and development outcomes by validating the commercial value proposition and benefits • two adoption programs: Profitable Gazing Systems (PGS) and Producer Demonstration Sites (PDS).
Adoption tools and enablers	Initiatives include: • program evaluation and producer market research to establish qualitative and quantitative impacts of adoption programs and inform R&D and adoption needs • initiate a monitoring system to evaluate the improvement in profitability of producers participating in Profitable Grazing Systems (PGS) at a farm level and gain insight into industry level performance issues • private service provider capacity and capability building • adoption research to inform innovative adoption models for strategic issues.
Regional consultation for research, development and adoption	Initiatives include: • engaging grassfed beef and sheepmeat producers and research, development and adoption partners in two-way communication with MLA on priority industry research, development and adoption and impacts through regional forums and consultation processes • providing evidence-based advice to the MLA Board on priority research, development and adoption and portfolio balance for sheepmeat and grassfed beef investments.

Key performance indicators in 2019–20

1. 3,300 producers involved in MLA awareness activities, and rate their satisfaction >7/10.
2. 2,300 producers involved in 'influence and motivate' activities, and increase their knowledge and skills by 20% after participation.
3. Fifteen new Producer Demonstration Site (PDS) projects contracted under the pilot phase for the 2020-25 PDS strategy; of those finishing, 75% of core producers adopt the learnt practices.
4. 528 producers participate in Profitable Grazing Systems and those finishing achieve knowledge and skills improvement of 75%.

Projected 2019–20 investment by funding sources – producer adoption program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Producer adoption			279	200	1,830	800	1,171	1,000							676	3,956	125	7,912	2,125	10,037
Total			279	200	1,830	800	1,171	1,000							676	3,956	125	7,912	2,125	10,037

Program: 💡 Product and packaging innovation   Budget: $3.7 million

MLA's product and packaging innovation program assists MLA to foster the prosperity of the Australian red meat and livestock industry by informing value chains and the wider industry about new products, processes, packaging and business models, leading to increased demand and higher value red meat.

Sub-programs   〉 High Value Food Frontiers

Pillars   🌐 Market growth and diversification

                   🔗 Supply chain efficiency and integrity

Operating environment

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

• health and wellness

• convenience and 'snacking'

• high protein diets

• targeted demographic needs such as the ageing population and infants.

To capitalise on these opportunities, new value-added product and service offerings need to be created through new technologies and business models.

Producing higher value, more desirable red meat products also responds to declining per capita consumption in the domestic market and provides emerging markets with more choice beyond commodity offerings

〉 High Value Food Frontiers

MLA's High Value Food Frontiers* sub-program aims to drive new high valued usages/occasions (aligned to global food and market trend insights) that grow demand and deliver diversification for Australia's red meat industry.

Novel technologies and value chains that can disrupt and provide an alternate highly-valued solution to the current paradigm of commodity meat trading will unlock higher premiums for, and increase customer preference of, Australian red meat products and services across key markets.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Consumer and market trends and insights	Initiatives within the 'consumer and market trends and insights' product group include: • analysing global food trends for "what's next and what's possible" • analysing alternate meat proteins threats and opportunities • 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.
Develop new products, processes and business models	Initiatives within the 'develop new products, processes and business models' product group include: • 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 • developing and testing proof of concepts and value propositions for rapid financial modelling and cost-benefit analyses/business cases to define "size of the prize" and drivers of change • evaluating new science and technology platforms for red meat inclusion that can grow demand, improve productivity • engaging with industry and adjacent food sectors to act on mega trend themes • develop knowledge portal of insights that validate themes and strategic investment opportunities • providing future-focused consumer-led input across MLA activities.

* High Value Food Frontiers is MDC's key mechanism for delivering innovations in support of MLA's market growth and diversification strategic pillar.

Key performance indicators in 2019–20

1. At least two new value adding products, packaging technologies and/or innovative supply chains commence commercial operation and deliver significant producer and/or value added premiums to the Australian red meat industry.

2. High Value Food Frontiers market and consumer insights successfully communicated, including five local and national conferences and 13 presentations to current and potential partners.

3. MLA is partnered with an additional five companies in developing value added domestic and export strategies and new business models.

4. For snacking, a series of six focus groups, as well as a planned pop-up event in Singapore to test value propositions is completed.

Projected 2019–20 investment by funding sources – product and packaging innovation program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
High Value Food Frontiers	10		55		405		153				338				872	1,833		3,667		3,667
Total	10		55		405		153				338				872	1,833		3,667		3,667

Program: 📊 Value chain information and efficiency　　　　Budget: $4.4 million

MLA's value chain information and efficiency program assists MLA to foster the prosperity of the Australian red meat and livestock industry by enabling increased productivity and product value across the value chain. This will occur through capturing, integrating and interpreting the vast and increasing range of data that is being generated through existing and new technologies.

Sub-programs 〉Digital value chain information

Pillars 🔗 Supply chain efficiency and integrity

Operating environment

Advances in technology are disrupting the way value chains operate and will continue to do so.

MLA's investment in the red meat industry's Digital Value Chain Strategy will enable the seamless capture, integration and interpretation of the vast and increasing range and volume of data that is being generated through existing and new technologies. This will, in turn, enable the industry to capture improvements in productivity and product value across the entire value chain.

A key enabler to underpin more effective use of data will be the establishment of a red meat value chain data system. This will provide mechanisms for agreed industry data to be securely stored, governed, analysed and accessed, for the primary purpose of improving and validating the performance of the red meat value chain and strengthening our integrity systems.

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. This journey will also demand a cultural change that recognises the power of data in informing and driving decision making. Data ownership, rules for data sharing, ethics and access are other critical components in developing a collaborative industry strategy that meets the needs of commercial businesses.

Through the consolidation, coordination and use of information 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 aims to develop a wide range of digital solutions that will support:

• data collection and analytics to improve decision-making at all/any point(s) along the value chain

• benchmarking between enterprises

• greater efficiencies along the value chain.

The sub-program will focus on the scoping and initiation of an industry data platform for industry which will provide infrastructure to:

• enable multiple sources of industry data to be stored, linked and analysed

• further validate industry integrity systems

• assist in improving value chain collaboration and performance.

This will be complemented by the identification and implementation of tools and technologies to support adoption of digital solutions as a part of the open data system aimed at:

• enabling the exchange of information between different parts of the value chain (e.g. Livestock Data Link)

• supporting improved data exchange and engagement with end customers and trading partners

• identifying and addressing key capability and cultural change issues.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Data system development, delivery, communication and adoption	Initiatives within the 'data system development, delivery, communication and adoption' product group include: • identifying, curating and managing datasets and analytics that provide measurable value to the red meat value chain • coordinating value chain partnerships that drive data and analytic adoption resulting in measurable value • coordinating MLA Donor Company-based initiatives that capture emerging opportunities arising from the use of data and analytic insights • animal health data collection at processors and subsequent feedback to producers via non LDL mechanisms • animal wellbeing data collection on-farm and at processors, with subsequent feedback to producers via non Livestock Data Link mechanisms. Enablers that support the above include: • funding industry and solution provider consultation through taskforces, networks and co-development programs • facilitating the development of interoperable industry data, platforms, architectures, protocols and standards • developing and delivering industry data enablers including data platform, single sign-on • communicating and extending opportunities to raise awareness and increase industry uptake of data and analytics • building data and analytic capability across MLA, the red meat value chain and agricultural sectors.
Livestock Data Link	The key initiative in this product group is the continued enhancement of feedback mechanisms to producers, breeders and other relevant value chain participants, including the feedback of animal health data from processors.

Key performance indicators in 2019–20

1. Processor animal health feedback provided to producers on a trial basis for 250,000 cattle and 500,000 sheep via Livestock Data Link or other feedback mechanisms.
2. Single sign-on enhanced to become an industry standard identity provider for all MLA and solution provider products.
3. Development of an industry-endorsed business case for future investment into Livestock Data Link.
4. At least five case studies delivered that evaluate and/or demonstrate the value of data and emerging supply chain and associated enabling technologies.

Projected 2019–20 investment by funding sources – value chain information and efficiency program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Digital value chain information	27		92		581		727		396		269				88	2,180		4,360		4,360
Total	27		92		581		727		396		269				88	2,180		4,360		4,360

Value chain information and efficiency

Program: 📄 Productivity (off-farm)　　　　　　　　　　　　　　　　Budget: $5.4 million

MLA's productivity (off-farm) program assists MLA to foster the prosperity of the Australian red meat and livestock industry by working with processors to increase their efficiency and minimise production costs and, in doing so, to help the industry lift its global competitiveness.

Sub-programs　❯ Productivity (off-farm)

Pillars　　　　📊 Productivity and profitability

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.

The processing sector operates on tight margins to remain competitive in the face of intense price competition from other red meat suppliers and proteins, limiting the ability of many operators to fund innovations, especially over medium and long-term horizons. Small and medium-sized plants face particular challenges in funding new systems and approaches to innovation.

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.

Despite these challenges, accelerating the rate of innovation adoption is an important solution for the Australian meat processing industry to remain globally competitive. Considerable technologies include collaborative and conventional robotics, advanced sensing platforms, internet connectivity and data and information flows.

❯ 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, with benefits flowing back to the farm. Key focus areas include maximising meat yield, optimising product mix, and addressing labour availability and workplace health and safety issues.

Other priorities include broader efficiencies relating to data exchange up and down the value chain, and the efficient use and reduced cost of services. Automation technologies and advanced sensing are the key enabling technologies to achieve this.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Productivity and logistics (off-farm)	Productivity-focused initiatives within the 'productivity and logistics (off-farm)' product group include: • further developing the beef and lamb boning automation program, with a focus on the development of beef (bone-in) and lamb (boneless) boning automation modules • other high-impact activities, including supply chain logistics projects in areas such as pack-out and load-out automation. Tool and enabler initiatives supporting the development of the above include: • conducting ongoing cost-benefit analyses on key technologies and programs • in-plant traceability systems • developing and demonstrating innovative CT and other imaging technologies for cutting lines and automation • engaging with new global solution providers, as well as continuous global technology scanning.
Processing efficiency (Australian Meat Processor Corporation (AMPC) managed)	The 'processing efficiency (AMPC managed)' product group includes AMPC-funded and managed initiatives that align with the AMPC and MLA strategic plans.

Key performance indicators in 2019–20

1. Productivity benefit of technologies adopted in 2019–20 and previous years deliver productivity impact of $50 million a year.
2. Successful development of one beef automation module prototype.
3. Finalise location and funding of the R&D and demonstration beef boning facility.

Projected 2019–20 investment by funding sources – productivity (off-farm) program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Productivity off-farm)											1,574				1,140	2,715		5,429		5,429
Total											1,574				1,140	2,715		5,429		5,429

Program: ⊞⊞ Productivity (on-farm)   Budget: $43.7 million

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

Pillars
👪 Consumer and community support
📊 Productivity and profitability

Operating environment

On-farm productivity and profitability gains can be achieved through new research that results in production efficiencies, reduced costs and higher returns on investment.

Grassfed **beef productivity** relies on pasture-based systems which are influenced by seasonality and the feedbase. The priorities for the northern beef industry remain live weight gains and increased breeder herd fertility. In the south, where enterprise sizes are smaller and more intensively managed, the priorities are reducing reproductive wastage and the impact of disease carried by pest animals that affect the mortality and fertility of livestock.

Sheepmeat production has remained stable despite the significant flock decline. On-farm prices remain strong, driven by the demand of a changing market in which exports now consume more than 50% of a limited supply. Production is predominantly pasture-based, exposing it to seasonal fluctuations that also impact the supply-demand equation. There is an opportunity to develop better integrated livestock-cropping systems to increase sheepmeat production in mixed farming regions. Lamb survival remains a significant economic cost and another high priority.

The **goat industry** remains in its infancy. 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 is an opportunity to double the annual the rate of genetic gain and improve commercial profitability by aligning genetic investment to value chain outcomes that meet consumer needs. Through this new approach, MLA's investment in genetics will aim to improve overall productivity by addressing key profit drivers such as market specification compliance, costs, growth rates, fertility and livestock production efficiency.

Future increases in animal production depend on efficiently managing the **feedbase** to ensure a stable supply of forage in the face of variable seasons and competition from undesirable plants and pest animals. This will be addressed by new plants and varieties with improved genetic gain, enhanced management of grasses, legumes and shrub-tree combinations, better utilisation (grazing frequency and intensity), and biological controls for pest animal and plants.

One of the trending topics in the red meat industry at the moment is **digital agriculture**. 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 better decisions and improve productivity.

> Beef productivity

MLA's beef productivity sub-program seeks to increase beef productivity and enterprise profitability through improved and targeted nutrition and supplementation including manipulation of rumen function, enhanced breeder herd fertility, reduced calf loss and optimising the compliance of grass finished cattle to market specifications.

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

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Market compliance technologies for grassfed cattle	Initiatives within the 'market compliance technologies for grassfed cattle' product group aim to achieve a greater rate of market compliance resulting in high value beef. They include: • predicting beef carcase composition through on-farm objective measurement technologies • improving meat quality and compliance through targeted supplementation strategies and revision and application of feeding standards for ruminants.
Productivity practices and technologies for grassfed cattle	Initiatives within the 'productivity practices and technologies for grassfed cattle' product group include: • improving fertility through animal breeding research and advancements in artificial breeding (e.g. AI and IVF) • understanding the causes of, and mitigating calf loss through farm-based research • research and adoption tools in nutritional supplementation • improving animal growth rates and reducing greenhouse gas emission intensity through adoption of leucaena and other perennial legumes • improving ruminant production efficiency through research and development, including refining near-infrared spectroscopy technology. • improving herd management by developing and utilising animal monitoring and control technologies to analyse location, bodyweight, calving and behaviours and virtual fencing and herding. Engagement and adoption activities include: • engaging with producers, northern pastoral industry groups and corporate entities to develop priorities and share plans and ideas on research directions and extension/adoption challenges • benchmarking enterprise input and output costs • advancing participatory research and development through multi-farm networks.

Key performance indicators in 2019–20

1. Complete a business case analysis on the benefits of phosphorus and non-protein nitrogen use and deployment in lick blocks.
2. Establish a calf survival partnership and support the use of economically-modelled interventions that reduce calf loss.
3. Develop a matrix of reproductive technologies and identify those that maximise genetic gain.
4. Enhanced leucaena integration into productive beef grazing systems.
5. Prove the capacity of feeding and grazing systems to help abate greenhouse gas production and benefit productivity.

› 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.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Sheep productivity practices and technologies	Initiatives within the 'sheep productivity practices and technologies' product group include: • developing new knowledge to enable improved reproductive management of flocks producing lamb and sheepmeat delivered for incorporation in adoption programs • investigating new technologies and developing new tools to support production efficiencies, supply chain integrity and welfare monitoring of sheep to inform future investment priorities • supporting the value chain through on farm initiatives that ensure continuity and consistency of supply.

Key performance indicators in 2019–20

1. Completion of the revised maternal feeding standards.
2. More than 50 participatory research sites established.
3. At least 30,000 additional lambs weaned from 2017 to 2020 (via the oestrogenic clovers project work).
4. Lamb survivability strategy delivered.

› Goat productivity

MLA's goat productivity sub-program aims to increase on-farm productivity and profitability to underpin the sustainability of goat businesses through research, development and adoption activities.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Goat adoption	Initiatives within the 'goat adoption' product group include: • conducting program evaluation and levy payer market research to establish qualitative and quantitative impact of adoption programs and inform research, development and adoption needs • monitoring and managing regional business and enterprise performance • delivering educational materials to support producer decision making, including development of category B (influence and motivation) activities and delivery of category A (awareness) activities to motivate producers into further skill development and informed decision making.
Goat productivity improvement	Initiatives within the 'goat productivity improvement' product group include: • undertaking trials on goat growth rates and supplementation for the development of a least cost supplementation calculator • delivering projections through the population modelling project and using them to inform strategic messaging back to industry • generating baseline data regarding gross margins and overall performance of the industry • delivering improved off-label chemical data to vets across Australia to improve services to goat producers • developing eating quality standards for processors and producers • documenting the impact of kid loss and developing mitigation plans • identifying efficiencies to be adopted relating to herd management • reviewing and upgrading KIDPLAN.

Key performance indicators in 2019–20

1. Three years' worth of historical profitability/productivity data collected and analysed for 60 goat producers across Australia to infer/project industry performance and impact from levy spend.
2. At least eight regional producer updates/feeder activities held.
3. Six Feeding Fundamentals and Bred Well Fed Well workshops for goats successfully trialled.

› Livestock genetics

MLA's livestock genetics sub-program targets improving the rate of genetic progress in the beef cattle and sheep industries.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Genetic improvement delivery technologies	The 'genetic improvement delivery technologies' product group involves delivering Sheep Genetics services: LAMBPLAN, MERINOSELECT and KIDPLAN.

Product group	Core activities
Genetic improvement research and development	Initiatives within the 'genetic improvement research and development' product group include: • developing technologies that maintain Australia's position as a world leader in genetic improvement science and application and which underpin genetic improvement across the value chain • developing analytical engines for BREEDPLAN and OVIS to help improve single-step analysis and multi-breed analysis capabilities.
Genetic improvement utilisation and adoption	Initiatives within the 'genetic improvement utilisation and adoption' product group include: • implementing the National Livestock Genetics Consortium adoption and extension strategy to address barriers to adoption of genetic improvement technologies • providing support for genetic evaluation 'users' through Southern Beef Technology Services, Tropical Beef Technology Services and Sheep Genetics • implementing a genetics communications strategy.
New phenotypes and infrastructure for genetic improvement	Initiatives within the 'new phenotypes and infrastructure for genetic improvement' product group include: • continuing the Beef Information Nucleus and Resource Flock projects • continuing novel and hard-to-measure phenotype collection • developing a database/open data platform.

Key performance indicators in 2019–20

1. Minimum 2% increase in annual rate of gain for each of the default Sheep Genetics indexes for Terminal, Maternal and Merino analyses.
2. Three major Sheep Genetics analyses indicate that terminal animal numbers were maintained at 2018–19 levels, maternal numbers increased by 1% and Merino numbers increased by 3%.
3. Sheep Genetics customers rated their satisfaction level as 4 out of 5, as described by the annual client survey.
4. Model for the delivery of multi-breed BREEDPLAN evaluations developed and tested.

〉 Feedbase production

MLA's feedbase production sub-program underpins multiple MLA livestock productivity projects involving beef, sheep and goat enterprises.

The sub-program supports the development of better plants, better management and better utilisation of forages, while reducing the impact on the feedbase by pest animals and pest plants.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Plant breeding and evaluation	Initiatives are focused on breeding and evaluation of 'better plants'. They include: • delivering tools and new partnerships to breed 'better plants', including support for the Australian Pasture Genebank (conserve, regenerate, distribute germplasm) • commercialising species for targeted production systems • promoting and gaining seed company use of genomic tools and markers for difficult traits in annual legumes and phalaris • field evaluation of legumes and grasses in the sown pasture zone of Australia via the Pasture Trial Network (partnership with >10 seed companies), and related projects • supporting breeding and pasture purchase decisions from objective pasture performance information.
Feedbase productivity research and development	Initiatives are focused on 'better management' and 'better utilisation' of pastures and forage, ensuring short and longer-term productivity by accommodating changing climates improving production efficiency and so reducing cost of the production. They include: • soil biology – investigating 'soil health indicators' • plant health – initiating and continuing work on nutrient and water use efficiency

Product group	Core activities
Feedbase productivity research and development (continued)	• assessing nitrogen dynamics of annual and perennial pastures, particularly in relation to legume content, rhizobia effectiveness and pasture quality • researching pasture agronomy to support stable and persistent pastures (establishment, nutrient, companion species, water use, adaptation zone) • delivery to next/end users – resourcing and active demonstration, communication and delivery of feedbase outputs • 'better utilisation' – matching pasture production, grazing approach and animals needs to achieve market specifications while accommodating variable seasons • exploring whole-farm implications of novel pasture legumes, targeting low/medium rainfall zones of southern Australia, alongside GRDC, AWI and farming system groups • investigating grazing and stocking approach for pasture persistence (long-term) and animal productivity via the Wambiana Long Term Grazing trial in Great Barrier Reef catchments, with a greater focus on driving adoption and value adding activities • commission initiatives to support whole-farm integration decision making (crops, pastures, shrubs, livestock) towards increased resource use efficiency • adaptation and potential contribution of C4 (tropical) species to temperate pasture-livestock-crop systems to ensure animal production target specifications.
Weed controls	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: • developing and resourcing the national weed investment plan in the Centre for Invasive Species Solutions to address industry priorities, developing past successes with a focus on bio-controls, new approaches, surveillance and biosecurity and adoption • completing and reporting on low cost/low chemical approaches to reduce costs of weed control by 20% and reduce contributions to herbicide resistance • developing and commercialising chemical and non-chemical approaches for weed management, with investment partners.
Feedbase animal competitors	Initiatives within the 'feedbase animal competitors' product group support minimising the competitive and damaging impact of pest animals in reducing pasture availability for livestock and resource management. They include: • total grazing pressure business plan implementation – supporting proactive decisions in managing sheep, cattle, kangaroos and goats • implementing the Centre for Invasive Species Solutions portfolio – rabbits, effective control programs (rabbits and pigs) • developing, commercialising and promoting a wild dog alert system.

Key performance indicators in 2019–20

1. Commercialisation plan outlined for prospective legumes (stylos) in northern Australia.
2. Seed sales of commercialised forages (tedera, cocksfoot, panics, leucaena) 10% higher than 2018.
3. Guidelines developed for 'low phosphorus' pasture systems in southern medium-to-high rainfall zones.
4. Rabbit calcivirus monitoring and modelling reports industry impact via improvements to production and biodiversity outcomes from rabbit control.
5. Ten pasture evaluation sites established along the eastern seaboard, informing future pasture production and animal productivity.

› Digital agriculture

The digital agriculture sub-program underpins multiple MLA on-farm productivity sub-programs. It also complements MLA's value chain information and efficiency program.

Digital agriculture focuses on whole-farm digital infrastructure technologies such internet connectivity, drones and unmanned vehicles, as well as remote monitoring and management of key infrastructure such as watering points and fencing.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Digital agriculture tools and technologies	Initiatives within the 'digital agriculture tools and technologies' product group include: • improving connectivity for optimal use of digital technologies in remote locations

Product group	Core activities
Digital agriculture tools and technologies (continued)	• developing digital information products and decision tools/guidelines to provide informed and predictive management systems • deploying autonomous ground and aerial vehicles for data collection to improve decisions on-farm • establishing an ecosystem for multi-venders and producers to share data and have third party solution providers' value add to the raw data • establishing digital farm sites to demonstrate digital agriculture technologies and their associated value proposition to stakeholders.

Key performance indicators in 2019–20

1. Demonstrate connectivity and Internet of Things (IoT) devices operating on eight properties.

2. Digital agriculture technologies implemented on three commercial demonstration farms.

3. MLA Annual General Meeting integrated with Digital Forum at one demonstration farm, with at least 200 producers attending.

4. Advancement of 'actor' unmanned aerial vehicles/unmanned ground vehicles on three properties assessed through a network of users linked to pre-sales (commercialisation).

Projected 2019–20 investment by funding sources – productivity (on-farm) program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Beef productivity			15		89		954								1,707	2,766		5,532		5,532
Sheep productivity			52		1,043										1,267	2,362		4,725		4,725
Goat productivity	500															500		1,000		1,000
Livestock genetics					2,393		1,799		117						4,819	9,128	139	18,256	139	18,395
Feedbase production	2		22		335		677						34		3,266	4,336	984	8,671	984	9,656
Digital agriculture			4		40		226		50						1,890	2,210		4,420		4,420
Total	502		93		3,900		3,656		167				34		12,950	21,302	1,124	42,604	1,124	43,727

Program: 🧠 **Capability building**   **Budget: $24.2 million**

MLA's capability building program assists MLA to foster the prosperity of the Australian red meat and livestock industry by investing in current and emerging industry leaders, innovators and scientists to enhance professional and business skills and build a performance culture.

Sub-programs   ❯ Innovation capability building

                   ❯ Industry leadership and capacity building

Pillars   🔗 Supply chain efficiency and integrity

               📊 Productivity and profitability

               🤝 Leadership and collaborative culture

Operating environment

A skilled and capable workforce is critical to the red meat industry delivering on the ambitious targets set out in its strategic plans – and to building a more profitable and resilient industry.

Innovators and entrepreneurs are needed right across the value chain to fast-track innovation and identify and implement commercially viable solutions. The significant shortfall of early and mid-career scientists and farm advisors with the skills and experience to serve the industry also needs to be addressed. Meanwhile the demands on the peak industry councils continue to increase, in turn demanding the examination of current industry structures and their value proposition to members and non-members.

A plethora of professional development and training programs exist within the industry. However, these are often fragmented and can lack the coordination necessary to convert graduates of these programs to leadership roles within industry bodies, the peak industry councils and other organisations.

The opportunity remains to renew capability building within the industry and develop a coordinated, holistic approach that will improve the return on our stakeholders' investment in this area.

❯ Innovation capability building

MLA's innovation capability building sub-program engages with scientists, researchers, value chain partners and innovators in a range of capability building initiatives to accelerate innovation adoption and increase the industry's investment in innovation.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Capability building (industry)	Initiatives within the 'capability building (industry)' product group include: • the Intercollegiate Meat Judging Competition program • investment in digital value or supply chain officers to assist companies to develop a whole-of-value chain digital strategy that leverages the best solutions and ensures they are well positioned for new and evolving digital enablers • developing general industry partner capability • maintaining memberships to innovation institutes to stay abreast with latest trends and innovations and network with innovators and entrepreneurs • investigating or designing innovation and business models, feasibility studies, innovation scouting, as well as other activities that are enablers for the capability building program.

Product group	Core activities
Capability building (Farmers2Founders and Rural Professionals Program)	Initiatives within the 'capability building (Farmers2Founders and Rural Professionals Program)' product group include: • the Farmers2Founders (previously Producer Innovation Fast Track) program accelerates producer innovation capability by recognising the importance of producer-led innovation and provides participants with customised support models • the Rural Professionals Program recognises that investing in the development of young people is crucial to building and retaining a skilled and capable future workforce.
Collaborative co-innovation program	The 'collaborative co-innovation program' product group supports Australian red meat value chains to fast-track their innovation and growth strategies. The program offers an integrated suite of modules that can be customised to match specific business goals.
Capability building (education)	Initiatives within the 'capability building (education)' product group include training and supporting PhD level and post-doctoral scientists to provide an enduring career path in red meat research, development and adoption.
Capability building (Australian Meat Processor Corporation (AMPC) managed)	The 'capability building (AMPC managed)' product group includes AMPC-funded and managed initiatives that align with the AMPC and MLA strategic plans.

Key performance indicators in 2019–20

1. Delivery of an industry development education program for 20 Intercollegiate Meat Judging (ICMJ) finalists.
2. 50% of participants (pre- accelerator/accelerator) report Farmers2Founders program has catalysed or fast-tracked innovation progress, evidenced by qualitative interviews.
3. 90% of Livestock Consulting Internship employers and interns express satisfaction with the value and benefits of the program.
4. Co-innovation program partners achieve 80% of their documented innovation objectives.
5. At least 10 early career scientists employed in MLA-funded research and development.

❯ 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.

While developing the skills base of the current generation, this sub-program also exists to develop emerging talent for succession planning and strategic contributions to industry and the community into the future. The development of capable leaders with a whole-of-value-chain and global perspective will ensure there are highly skilled producers who can represent industry and contribute effectively.

This sub-program also works to build capability within MLA, driving a customer-centric culture and recruiting leading scientists, marketers, entrepreneurial innovators and other professions to further enhance the company's capacity to effectively service levy payers and the industry.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Industry leadership scholarships	The 'industry leadership scholarships' product group consists of an annual scholarship program to build expertise and professional capability within the red meat and livestock industry. Initiatives include: • maintaining a scholarship program tailored to the leadership and advocacy needs of the red meat and livestock industry • ensuring the most efficient and effective promotion of scholarship opportunities throughout the industry to ensure the widest awareness and to attract the best applicants • managing a selection system that ensures scholarships are awarded to the best applicant with projects aligned to the achievement of the *Meat Industry Strategic Plan 2020*

Product group	Core activities
Industry leadership scholarships	• ensuring that MLA and industry receive maximum return on the industry's investment in scholarship recipients through their production of timely and quality reports that are shared to maximise industry learning • where appropriate, participating in the management of industry-aligned scholarship programs • past MLA-sponsored scholars engaged in advocacy work for the industry through MLA's Communications (community) sub-program and other avenues.
Industry development	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: • delivering media, presentation and communication training • facilitating advocacy and community engagement workshops • conducting professional development, training and briefings for state farm organisations and other red meat and livestock production groups.
Peak council development	The 'peak council development' product area consists of a tailored suite of programs to build skills, leadership capacity and performance within the peak industry councils (PICs). Initiatives include: • conducting professional development for current and emerging industry leaders • conducting media, presentation and advocacy training • delivering mentor programs to provide exposure to learnings and best practice within and outside the industry • Cattle Council of Australia's 'building capacity in the grassfed beef industry' project • new leadership and capacity building projects to be delivered by Sheep Producers Australia, Australian Lot Feeders' Association and Goat Industry Council of Australia • ensuring effective consultative processes with PICs for key MLA programs and activities • commissioning the third annual State of the Industry report and other industry issues research and analysis to assist industry and PICs in policy development • strengthening the industry's ability to manage reputational threats and promote industry benefits to stakeholders via development of an Industry Issues Steering Group and supporting the development of an Industry Corporate Affairs function.

Key performance indicators in 2019–20

1. Grant a minimum of two scholarships a year to ensure ongoing investment in industry leadership capability.
2. Engage a minimum of six past MLA-sponsored scholars in advocacy work for the industry.
3. 50 industry people identified and trained as industry advocates.
4. Industry representatives complete director, policy, governance, media and/or communications training as appropriate and required.
5. Execution of tactics measured with the objective to improve year-on-year perceptions of the Australian cattle and sheepmeat industry.
6. Cattle Council of Australia governance review complete and recommendation implemented.

Projected 2019–20 investment by funding sources – capability building program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Innovation capability building	9		54	10	353	50	312	40	41		4,307				4,583	9,659		19,318	100	19,418
Industry leadership and capacity building			10	65	398	1,261	376	1,353	30	465						814		1,628	3,144	4,772
Total	9		64	75	751	1,311	688	1,393	71	465	4,307				4,583	10,473		20,946	3,244	24,190

Program: 💬 Communication   Budget: $11.6 million

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 and development services are known and accessible to levy payers and stakeholders. It also seeks to build confidence in the industry, ensuring the community understands the contribution the industry makes and supports its operation.

Sub-programs   › Communication (community)

› Communication (stakeholder)

Pillars   👥 Consumer and community support

🤝 Leadership and collaborative culture

💬 Stakeholder engagement

Operating environment

The communication program operates in a complex and diverse environment with many stakeholders who have wide-ranging research, development and marketing needs. Understanding these needs is critical for MLA to tailor 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.

Understanding our consumers, meeting their expectations and telling our story as an industry helps ensure we maintain the community's confidence – and consumer support. The community has high expectations about animal health and welfare and how the industry manages the natural resources it relies on.

Domestic and international consumers are also increasingly interested in the provenance of their food. MLA assists industry to maintain and enhance community confidence and red meat consumption by engaging with consumers to demonstrate the industry is an ethical and responsible custodian of livestock, land and natural resources.

› Communication (community)

MLA's communication (community) sub-program works to engage and inform the community about the Australian red meat and livestock industry, with a particular focus on animal welfare and environmental management.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Consumer education	The 'consumer education' product group provides trusted information and targeted communications to inform consumers about the production of red meat and livestock in Australia. Initiatives include: • promoting the new Good Meat online platform for community engagement • implementing a targeted communications strategy to share the story of red meat production with 'curious consumers' – the strategy will see the ongoing development of existing platforms such as Good Meat and utilise new communication channels to reach the intended audience • an annual benchmarking survey of consumer sentiment to identify current issues and trends • four-year research project with the Animal Welfare Science Centre at University of Melbourne to identify public and producer attitudes to sheep and cattle animal welfare to inform education strategies • developing and using engaging social media tools and online content to communicate with consumers, stakeholders and producers • using search engine optimisation to ensure ready availability of relevant and factual information about the industry.

Product group	Core activities
Consumer engagement	The 'consumer engagement' product group is a series of strategic partnerships with major community events to inform consumers about the provenance of Australian red meat, enhance community confidence in the industry and promote red meat consumption. Initiatives include: • sponsoring and participating in food festivals in Sydney, Melbourne, Perth, Brisbane and Tasmania • partnering with producers at events and in other forums to inform consumers about the sustainable production methods used by the industry • using paddock-to-plate style demonstrations to inform consumers and promote red meat consumption • taking MLA's 'Paddock to Plate 360^0 Beef and Lamb Experiences' on the road, to Royal Agricultural Shows in capital cities, LambEx 2020 and other industry events • implementing a targeted communications strategy to share the story of red meat production with 'curious consumers' – the strategy will see the ongoing development of existing platforms such as Good Meat and utilise new communication channels to reach the intended audience • engaging 'key opinion leaders' to represent and promote the Good Meat message and the positive attributes of the Australian red meat industry.
School education	The 'school education' product group engages with schools and teachers through the development of teaching resources on red meat and livestock production that are aligned with the national curriculum. Initiatives include: • maintaining an active membership with the Primary Industries Education Foundation Australia • representing the industry at educational conferences and events with MLA materials distributed for use by participants • encouraging the use of MLA educational materials taught directly into schools using video conferencing and 'real life' livestock producers • enhancing teachers' uptake of MLA's educational materials in their lesson planning and delivery • involving children in cooking classes at community events to normalise and familiarise them with red meat preparation, consumption and production.

Key performance indicators in 2019–20

1. Maintain the percentage of consumers who feel good or very good about the Australian cattle industry (65%) and sheepmeat industry (60%).

2. Year-on-year increase in community engagement via digital and social media.

3. Community sentiment tracked, including the percentage of consumers surveyed limiting red meat consumption due to animal welfare or environmental management concerns (KPI: 10%).

4. At least 10,000 consumers engaged and informed about the production of red meat and livestock in Australia.

5. Utilise at least 20 producer advocates in community events.

6. MLA's 'Paddock to Plate 360^0 Beef and Lamb Experiences' presented at four Royal Agricultural Show events, with at least 80% of viewers responding that they have:
   • a better understanding of the industry
   • improved perceptions of Australian beef/sheepmeat production.

7. A minimum of 70 schools engaging with MLA education materials.

› 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 its research, development and marketing. This includes activities funded by producer levies and MLA's subsidiary companies.

This sub-program aims to achieve this through the following product groups:

Product group	Core activities
Beef and Sheep Industry Sustainability Framework	The 'sustainability stakeholder engagement' product group ensures all relevant internal and external stakeholders are aware of and understand the industry's sustainability commitments and programs. The flagship programs are the Beef and Sheep Industry Sustainability Frameworks that MLA manages on behalf of the Red Meat Advisory Council (RMAC). 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.

Product group	Core activities
Beef and Sheep Industry Sustainability Framework	Initiatives include: • managing ongoing framework reporting and stakeholder engagement for the beef and sheep frameworks • ensuring strategies are in place and driving the coordination for the six key priorities of the beef framework across research, adoption and communications, both within industry and working with relevant external partners • Implementing a communications strategy to connect industry with changing customer and other stakeholder expectations to maintain social licence • working with global markets to ensure sustainability information can be used for market advantage.
MLA communications	The 'MLA communications' product group provides a targeted suite of print, digital and media communications to inform members and empower on-farm decision makers, meet stakeholder needs, promote the industry and the role and value of MLA. This product group also provides communications support across MLA and its subsidiaries. Initiatives include: • implementing a corporate communications strategy to coordinate and direct MLA's communications toward the achievement of MLA's mission and the needs of MLA's stakeholders • conducting media engagement, monitoring, evaluation and training • enhancing myMLA and other MLA online services as secure, reliable, informative and user-friendly digital platforms for the red meat industry • producing and delivering relevant regional and seasonal content through e-newsletters, mla.com.au, social media and printed materials such as MLA's flagship *Feedback magazine* and *Feedback Extra* • delivery of MLA's corporate social media strategy as a key channel of MLA's corporate communications strategy, including implementing recommendations from MLA's social media governance review • delivery of high-impact communications campaigns that benefit red meat producers and the Australian red meat and livestock industry.
MLA corporate reporting	The 'MLA corporate reporting' product group fulfils MLA's reporting requirements under the *Corporations Act 2001 and the Australian Meat and Live-stock Industry Act 1997* as per MLA's Funding Agreement with the Australian Government. Initiatives include: • producing the *Annual Report 2018–19* • producing the *Annual Investment Plan 2019–20* • producing the *MLA Strategic Plan 2020–25* • conducting the MLA 2016–2020 Performance Review and Impact Assessment.
MLA stakeholder engagement	The 'MLA stakeholder engagement' product group covers MLA's activities to engage with stakeholders. Initiatives include: • providing MLA's membership services • ensuring MLA's Customer Relationship Management tool is fit for purpose and utilised effectively across the business to ensure services and communications targeted to stakeholder needs • gathering and using the views and needs of stakeholders to inform MLA's decision making, strategy and organisational behaviour • delivering events such as the MLA Annual General Meeting and Red Meat 2019 • coordinating MLA's involvement in key industry events • coordinating MLA's sponsorship program for industry events that increase awareness and adoption of business-enhancing research, development and marketing • ensuring professional and timely engagement with key industry partners, including but not limited to peak industry councils, state farm organisations and the Federal Government.

Key performance indicators in 2019–20

1. High levels of member satisfaction (above 70%) with MLA printed and digital communications.

2. High levels of stakeholder satisfaction (above 70%) with MLA's communications campaigns.

3. High levels of member awareness (above 70%) of MLA's role.

4. Increase in media volume against the 2018–19 benchmark and ongoing promotion of key messages through the media.

5. Completed registrations to myMLA (MLA members and non-members) to exceed 50,000.

6. E-newsletter subscription database growth of 5%.

7. Year-on-year increase in producer engagement through social media.

8. Completion of mla.com.au upgrade and relaunch.

Projected 2019–20 investment by funding sources – capability building program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Communication (community)		5		38	20	885	14	1,236		432						33		66	2,596	2,662
Communication (stakeholder)	23	10	43	115	610	2,542	385	3,595	62	475						1,122		2,245	6,737	8,982
Total	23	15	43	153	629	3,426	398	4,832	62	907						1,156		2,311	9,332	11,644

Program: 📜 Corporate services   Budget: $15.9 million

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 a robust corporate governance framework including audit, risk and legal services

• attracting and retaining a diverse and talented workforce.

Sub-programs ❯ Corporate services

Pillars 🤝 Leadership and collaborative culture

📜 Corporate services

Operating environment

Overall, levy income is expected to increase moderately in 2018–19. According to ABARES, Australian beef production and export volumes are projected to stabilise and slaughter volumes are projected to increase by 3%. In relation to sheepmeat, strong income growth in major export markets is expected to sustain strong demand, with slaughter volumes projected to increase by 0.5%.

ABARES predicts that the gross value of production for red meat will remain steady in 2018–19. This projection would translate into 1.6% less Government matched funds available to MLA this financial year.

❯ Corporate services

Encompassing the Board, executive, finance, legal, human resources, information technology and other MLA-funded initiatives, corporate services provides support services, risk management, governance, budget and planning and reporting functions to MLA management and stakeholders as well as ensuring compliance with statutory and other corporate obligations.

MLA's corporate services sub-program ensures levy dollars are invested wisely by the company and strict governance processes are followed.

This sub-program aims to achieve this through the following product groups:

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 governance	The 'legal and governance' product group provides legal advice and support to the Board and management. Initiatives include: • monitoring compliance with statutory and other regulations applicable to the MLA Group of companies • promoting and defending MLA by minimising legal risk and ensuring good governance processes • interacting with stakeholders • maintaining the member registry.
Crisis management	Initiatives within the 'crisis management' product group include: • maintaining the crisis portal • conducting internal crisis simulations • supporting industry crisis simulation.

Product group	Core activities
Risk management	The 'risk management' product group includes activities that ensure MLA's risk management framework is: • regularly reviewed, maintained and operationalised to reflect the Board's risk appetite • reflects the industry's operating environment • adopted and reflected in the operations of MLA in the delivery of its Strategic Plan.
Finance	The 'finance' product group captures the stewardship role of effectively managing of levy investments and non-levy investments. Initiatives include: • management reporting to internal and external stakeholders • financial planning and analysis including the Annual Investment Plan and quarterly rolling forecasts • treasury, including the management of cash and foreign exchange • financial accounting services, including Annual Statutory accounts.
Levy management	The 'levy management' product group contains costs associated with MLA's share of levy administration (including third party verification of voting entitlements).
Evaluation	The 'evaluation' product group implements and provides oversight of the MLA Evaluation Framework, encompassing the entire suite of MLA's investments.
Commercialisation	The 'commercialisation' product group delivers adoption through the commercialisation of products derived from MLA-funded research and development (R&D). It focuses on the commercialisation of high impact R&D outputs (products), while ensuring that the intellectual property developed from R&D investments is appropriately protected.
Human resources	The 'human resources' product group supports MLA to attract, develop and engage exceptional people to deliver outcomes that make a difference. Initiatives include: • creating solutions that enable a global and agile workforce to succeed • providing a framework to ensure a safe and compliant work environment.
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 governance and management	The 'project governance and management' group provides a central service point for project approval, contracting, milestone management and reporting.
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 revenues and from previous industry transition capitalisation.

Key performance indicators in 2019–20

Board and executive

1. Reduce time taken for MLA approval of projects > $1 million by at least 30% via new delegation levels.

Legal and governance

2. MLA governance is assessed in 2020 Performance Review as demonstrating a high level of compliance with the best practice principles of the ASX Corporate Governance Council and the Funding Agreement with the Commonwealth.

Crisis management

3. Crisis portal maintained and reflects the latest Risk Management Plan.

Risk management

4. Regular identification and assessment of risks to MLA (operational) and industry, including action plans to address risks.

Finance

5. Clean audit report received.

6. Internal audit program delivered to the satisfaction of the MLA Audit and Risk Committee.

7. Ensure financial reporting to internal and external stakeholders is timely, accurate and insightful.

Evaluation

8. 2016–20 return on investment and triple bottom line impact assessment successfully delivered on time and to the satisfaction of the performance review consultants.

Commercialisation

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

Human Resources

10. Employee engagement to support talent retention and organisational performance is greater than or equal to the Australian average.

Information Technology

11. Internal stakeholder satisfaction measured at 80% or more for MLA IT infrastructure.

Project governance and management

12. Reduction of initial and variation project approval times by five days.

Projected 2019–20 investment by funding sources – Corporate services program ($ '000)

Sub-program	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	Sum of R	Sum of M	Sum of AIP 2019–20
Corporate services	51	34	96	146	942	2,476	848	4,322	424	769						2,361	3,468	4,723	11,214	15,937
Total	51	34	96	146	942	2,476	848	4,322	424	769						2,361	3,468	4,723	11,214	15,937

FUNDING SOURCES

Expenditure by funding source

Income available by funding source

Expenditure by funding source, 2019–20 ($ '000)

Program	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	MLA consolidated
Animal health and welfare	37		121		848		969		543				543		1,548						5,000	1,438	6,548	14,535
Domestic market	5	55	19	124	742	10,559	761	10,684	689	11,752	191	1,834	880	13,587	1,646	24,325	243	1,201				452	1,889	29,756
International markets		254	140	664	312	10,575	451	11,239	248	26,804		3,487	248	30,291	699	41,784	99	3,140	600	1,000	546	1,126	1,944	50,938
Eating quality			76	176	775	1,029	851	1,205	1,103	1,685	354	670	1,458	2,355	2,308	3,560	259				693	65	3,260	10,144
Environmental sustainability			14		120		133		101				101		234		1,211				2,712	4,016	4,157	12,330
Feedlot											3,668	437	3,668	437	3,668	437	28				602		4,297	9,031
Integrity systems	11	63	88	284	392	781	479	1,065	708	2,247	223	1,046	932	3,293	1,422	4,421	1,439	665	20	72	520	5,153	3,401	17,113
Objective measurement			100		302		402		244		85		329		731		2,638				4,718	147	8,087	16,321
Producer adoption			279	200	1,830	800	2,110	1,000	1,171	1,000			1,171	1,000	3,280	2,000					676	125	3,956	10,037
Product and packaging innovation	10		55		405		460		153				153		623		338				872		1,833	3,667
Value chain information and efficiency	27		92		581		672		727		396		1,123		1,823		269				88		2,180	4,360
Productivity (off-farm)																	1,574				1,140		2,715	5,429
Productivity (on-farm)	502		93		3,900		3,993		3,656		167		3,823		8,318					34	12,950	1,124	21,302	43,727
Capability buidling	9		64	75	751	1,311	815	1,386	688	1,393	71	465	759	1,858	1,583	3,244	4,307				4,583		10,473	24,190
Communication	23	15	43	153	629	3,426	672	3,579	398	4,832	62	907	460	5,739	1,156	9,332							1,156	11,644
Corporate services	51	34	96	146	942	2,476	1,038	2,622	848	4,322	424	769	1,272	5,091	2,361	7,746						3,468	2,361	15,937
Total	675	420	1,278	1,822	12,529	30,958	13,807	32,780	11,276	54,034	5,641	9,615	16,917	63,650	31,399	96,850	12,405	5,006	654	1,072	35,100	17,114	79,559	279,159

Income available by funding source, 2019–20 ($ '000)

Program	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	MLA consolidated
Levies	514	323	1,039	1,174	11,176	27,185	12,215	28,359	10,810	41,944	3,656	7,507	14,466	49,451	27,196	78,133								105,329
Government																							79,559	79,559
AMPC																	12,405	5,006						17,411
LiveCorp																			654	1,072				1,726
External R																					35,100			35,100
External M																						18,014		18,014
Total	514	323	1,039	1,174	11,176	27,185	12,215	28,359	10,810	41,944	3,656	7,507	14,466	49,451	27,196	78,133	12,405	5,006	654	1,072	35,100	18,014	79,559	257,139
Difference (to/from reserves)	-161	-97	-239	-647	-1,353	-3,773	-1,592	-4,420	-466	-12,091	-1,985	-2,108	-2,451	-14,199	-4,203	-18,717						900		-22,020

Program	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
Opening reserves	429	392	722	1,111	7,548	27,099	8,271	28,210	4,803	34,144	4,159	9,496	8,962	43,641	17,662	72,243
Closing reserves 2019/20	269	295	483	463	6,195	23,326	6,679	23,789	4,337	22,053	2,174	7,388	6,511	29,441	13,459	53,526
% of revenue	52%	91%	46%	39%	55%	86%	55%	84%	40%	53%	59%	98%	45%	60%	49%	69%

ACRONYMS

ALFA	Australian Lot Feeders' Association
AMPC	Australian Meat Processor Corporation
APVMA	Australian Pesticides and Veterinary Medicines Authority
ASEAN	Association of South East Asian Nations
CT	Computed tomography
DEXA	Dual Energy X-ray Absorptiometry
eNVD	Electronic National Vendor Declaration
ESCAS	Exporter Supply Chain Assurance System
GVP	Gross value of production
ICMJ	Intercollegiate Meat Judging
IoT	Internet of Things
ISC	Integrity Systems Company
LEP	Live Export Program
LGAP	Livestock Global Assurance Program
LPA	Livestock Production Assurance
M	Marketing dollars
MDC	MLA Donor Company
MENA	Middle East & North Africa
MEXA	Multiple Energy X-ray Absorptiometry
MSA	Meat Standards Australia
NLIS	National Livestock Identification System
PICs	Peak industry councils
PDS	Producer Demonstration Site
R	Research, development and adoption dollars
RD&A	Research, development and adoption
RD&E	Research, development and extension
RDCs	Research and Development Corporations
RMAC	Red Meat Advisory Council