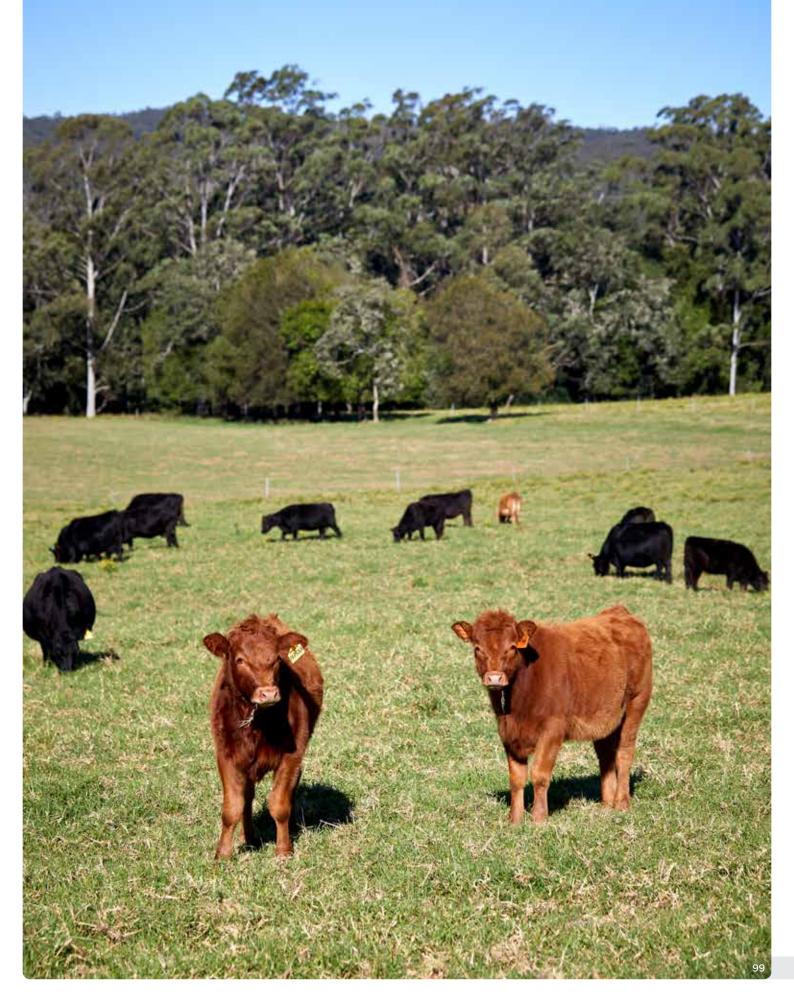
Supporting information



APPENDIX A:

STATUS OF MLA'S 2018–19 KEY PERFORMANCE

INDICATORS as at 30 June 2019

Status	Symbol	2018–19 KPIs in MLA's Strategic Plan 2016–2020	KPIs from MLA's Annual Investment Plan 2018–19	Total result	Percentage
Achieved		9	154	163	68.2
Partly achieved	•		11	11	4.6
Not achieved or not on track	•	3	45	48	20.1
Not available	•	1	6	7	2.9
On track to being achieved by 2020		10		10	4.2
Total		23	216	239	100.0

2018–19 KPI	Status	Commentary
PROGRAM: Animal health and welfare		
SUB-PROGRAM: Animal health		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT		
Strategic plan KPI: Four new products including vaccines, diagnostic tests and tools to reduce the cost and welfare impact of endemic and emergency disease in Australia	٠	Diagnostic tests include faecal worm egg count and a footrot diagnostic test. A cattle parasite Theileria vaccine, as well as a single-shot cattle tick vaccine, are some of the products under development.
Increased reporting of disease status from abattoir inspection back to producers	•	Increased reporting on animal disease has occurred in one beef supply chain, as well as via the enhanced abattoir surveillance project. A further eight animal disease feedback pilots are underway.
Foot and mouth disease animal vaccine test laboratory results available and tested for next generation sequencing. Farm- to-farm dispersal tool (beta version) released for end user consultation	•	Animal vaccine test lab results are available and were tested for next generation sequencing. The beta version of the dispersion tool is due for release in December 2019.
One project underway to include cattle in ParaBoss end-user consultation	•	One project is underway and proceeding on schedule, with content written on ticks, worms, flies and lice.
Improved diagnostic test for sheep footrot and serogroup determination made available to footrot vaccine program via diagnostic service providers	٠	The diagnostic test has been made available to service providers.
New tick vaccine research underway: protective effect of novel antigens and innovative delivery methods for sustained release	•	A sustained-release formulation of the Bm86 antigen elicited an antibody response for up to 12 months. The ideal combination of immunogenic antigens from the Beef CRC research is being tested.
Surveillance program for antimicrobial resistance of bovine respiratory disease and food-borne pathogens implemented	•	Two surveillance programs are in place with the University of Adelaide to examine antimicrobial resistance of bovine respiratory disease and food-borne pathogens isolated from feedlot cattle. Both projects are currently in sample collection phase.
Internal parasite resistance and drench strategies for feedlot cattle evaluated and results made available to industry	•	Project was delayed due to an inability to source suitable feedlot cattle. A trial is now underway, with results available in 2019–20.
SUB-PROGRAM: Animal welfare		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT		
Strategic plan KPI: Restrict % consumers limiting red meat consumption due to animal welfare concerns to 8%	•	A 2018–19 survey indicated 'animal welfare' as the reason for 1.9% of the overall community population reducing their red meat consumption.
Less than 7% of the community limiting red meat consumption due to animal welfare concerns	•	A 2018–19 survey indicated 'animal welfare' as the reason for 1.9% of the overall community population reducing their red meat consumption.
Welfare strategic partnership launched and at least 20 blue-sky programs soundly established	•	Welfare strategic partnership launched, but only developed eight projects. Additional 18 projects developed under the MLA animal welfare program.
Finalise NumNuts product and prepare for commercial release	•	The Numnuts system was commercially released to producers at the MerinoLink event in Armidale in June 2019. A large-scale field validation study is in the planning stage.
Wild dog control program established and three wild dog management groups identify benefits of coordinated dog management	•	A program of work was established under the Centre for Invasive Species Solutions, co-funded by MLA. Three regional wild dog coordinators for northern Australia management groups have been co-funded with AgForce.
Project implemented to evaluate alternative truck crate design and its effect on feedlot animal health and carcase characteristics	•	This project did not proceed as researcher was unable to find industry participants.

2018–19 KPI	Status	Commentary
PROGRAM: Domestic market		
SUB-PROGRAM: Market knowledge (domestic)		
PILLAR 2: MARKET GROWTH AND DIVERSIFICATION PILLAR 6: STAKEHOLDER ENGAGEMENT		
Strategic Plan KPI: Improve proportion of users who find MLA market information 'extremely or highly valuable' to 61%	•	The proportion of users rating market information highly or extremely valuable was 76%, an increase of 11% from 2017–18.
High levels of satisfaction (above 85%) by industry stakeholders with MLA's market information services	•	The market information subscriber survey found 82% of respondents were satisfied with MLA's market information services, an increase of 11% from 2017–18.
Move to ISO 9001:2015 standard		The move to ISO 9001:2015 was completed with accreditation being successful.
High levels of satisfaction (above 85%) by industry stakeholders with MLA's market insights services	•	According to survey results post-market consultation, all respondents were satisfied with market insights, with a satisfaction rating of 89%.
SUB-PROGRAM: Nutrition		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT		
Strategic Plan KPI: Restrict % of main grocery buyers limiting beef consumption for health reasons to 15%	•	The number of main grocery buyers limiting beef consumption for health reasons is 22%.
Strategic Plan KPI: Restrict % of main grocery buyers limiting lamb consumption for health reasons to 19%	•	The number of main grocery buyers limiting lamb consumption for health reasons is 17%.
Red meat consumption amounts consistent with the Australian Dietary Guidelines are recommended by 75–80% of GPs and dietitians	•	72% of GPs and dietitians recommend red meat in amounts consistent with the Australian Dietary Guidelines based on a June 2019 survey.
Balanced media coverage of red meat and health issues (above 75% positive and neutral coverage)	•	82% of red meat and health issues media coverage was positive and/ or neutral.
Uptake of information and resources from the 'MLAhealthymeals' website increases by 10% $$		On average, there was a 10% increase in uptake from MLA Healthy Meals website each month in comparison to 2017–18.
SUB-PROGRAM: Marketing and promotion (domestic)		
PILLAR 2: MARKET GROWTH AND DIVERSIFICATION		
Strategic Plan KPI: Increase % of domestic main grocery buyers willing to pay a premium for Australian beef to 21%	•	24% of domestic main grocery buyers are willing to pay a premium for Australian beef.
Strategic Plan KPI: Increase % of domestic main grocery buyers willing to pay a premium for Australian lamb to 23%	•	23% of domestic main grocery buyers are willing to pay a premium for Australian lamb.
Year-on-year increase in main grocery buyer endorsement of the statement "Willing to pay more for beef/lamb" to 20% (beef) and 22.5% (lamb) from 19% in 2015–16 (beef) and 21% in 2015–16 (lamb)	•	 Main grocery buyers willing to pay more for beef/lamb: Beef – 24% Lamb – 23%
Maintain mean number of serves per week: 1.5–1.7 for beef and 0.7–0.9 for lamb	•	Mean number of serves per week: • Beef – 1.7 • Lamb – 0.7
Restrict the percentage of main grocery buyers limiting red meat for health reasons to 15% (beef) and 19% (lamb)	•	Main grocery buyers limiting red meat for health reasons was restricted to 22% for beef and 16% for lamb.
70% of participants satisfied with CoMarketing Program		82% of CoMarketing participants are satisfied that their marketing program was effective.
73% of CoMarketing participants believe their marketing activities raised awareness among target customers	٠	82% of CoMarketing participants are satisfied that their marketing activities raised awareness among target consumers.

2018–19 KPI	Status	Commentary
PROGRAM: International markets		
SUB-PROGRAM: Market access PILLAR 2: MARKET GROWTH AND DIVERSIFICATION		
Strategic Plan KPI: Achieve \$15m in new market opportunities by 2019–20	•	Access improvements have been realised in Japan, Canada and Mexico via the Comprehensive and Progressive Trans- Pacific Partnership agreement. Other free trade agreements are underway.
Strategic Plan KPI: Deliver \$150m in new export market opportunities	•	Non-tariff barriers (NTB) have been alleviated in Indonesia and the Middle East. The China trade relationship strategy (led by AMIC) is currently in progress, with a focus on access for chilled product and tripe. MLA is a participant on AMPC's Non-Tariff Measures Advisory committee, guiding additional priority NTB alleviation projects.
Persuasive and well-researched submissions, correspondence and advocacy strategies prepared/implemented by MLA are endorsed by peak industry councils, acknowledged and acted on by government, and support delivery of favourable trade outcomes	•	Five key submissions and associated correspondence prepared by MLA – and subsequently endorsed by industry/peak councils – were acknowledged and acted on by the Department of Foreign Affairs and Trade/Department of Agriculture.
High level of satisfaction (above 85%) by industry and government stakeholders with MLA's contribution to implementing agreed industry strategies aimed at reducing impact of non-tariff (technical) barriers	٠	The next survey is due in 2020. However, the 2018 survey outcomes are currently guiding MLA's contribution to non-tariff barrier alleviation and targeted in-market activities.
SUB-PROGRAM: Market knowledge (international)		
PILLAR 2: MARKET GROWTH AND DIVERSIFICATION		
High levels of satisfaction (above 85%) by industry stakeholders with MLA's international market information	•	According to survey results post-market consultation, all respondents were satisfied with market insights, with a satisfaction rating of 89%.
SUB-PROGRAM: Marketing and promotion (international)		
PILLAR 2: MARKET GROWTH AND DIVERSIFICATION		
Strategic Plan KPI: Increase percentage of global consumers who prefer Australian beef to 22.8%	•	Increased consumer preference for beef rated at 24.6%.
Strategic Plan KPI: Increase percentage of global consumers who prefer Australian lamb to 21.2%	•	Increased consumer preference for lamb rated at 27.2%.
Build or maintain customer awareness and preference of Australia's positive attributes (safety, quality) within target range per market	•	Awareness of Australian imported beef and lamb was measured at 99%, with preference for Australian imported beef and lamb at 82.1%.
Increase consumer preference for Australian red meat in key international markets to be above 22.8% for beef and 21.2% for lamb	•	Increased consumer preference for beef rated at 24.6% and 27.2% for lamb.
Minimum 70% of participants satisfied with CoMarketing program		82% of CoMarketing participants are satisfied that their marketing program was effective.
SUB-PROGRAM: Livestock export market activities		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT PILLAR 2: MARKET GROWTH AND DIVERSIFICATION PILLAR 4: PRODUCTIVITY AND PROFITABILITY		
Strategic Plan KPI: Live Export Global Index complete and cost of delivery reduced by 1% by 2019–20	•	The global index project was terminated but data collection is ongoing for an alternative approach.
Minimum 70% of government and industry stakeholders satisfied with MLA's livestock export market access, productivity and adoption initiatives	•	A live export-related survey indicated 63% of government and industry stakeholders were satisfied with MLA's livestock export market access, productivity and adoption initiatives.
Minimum 70% of participants satisfied with co-funding program		The survey results report is due in September 2019.

2018–19 KPI	Status	Commentary		
SUB-PROGRAM: Livestock export research and development				
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT PILLAR 2: MARKET GROWTH AND DIVERSIFICATION PILLAR 4: PRODUCTIVITY AND PROFITABILITY				
Support supplied to allow industry to implement Livestock Global Assurance Program (LGAP) and ongoing refinement of the control and traceability framework to support LGAP where required	•	Implementation of LGAP and the associated control and framework was delayed by industry.		
Ongoing data collection from industry to identify inefficiencies and address them through the live export supply chain, which will contribute data to develop a global index to monitor improvements in efficiency through the live export supply chain	•	The global index project was terminated but data collection is ongoing for an alternative approach.		
Annual survey of industry and government stakeholders indicates a high level of satisfaction (above 70%) with the conduct of the livestock export program	•	A July 2018 independent survey showed satisfaction with MLA's 12-month market access and live export program contribution rated at 63%.		
Research projects implemented to improve and manage heat stress and mortality during summer in hot/dry or hot/humid Middle East environments	•	Further heat research is on hold, pending recommendations from the Heat Stress Risk Assessment technical panel.		
Reporting framework adopted and refined to support the animal welfare indicators pilot project and broader ongoing research data collection	•	A framework is in place and data is being collected.		
Research implemented to support and refine stocking densities and best practice bedding management on board livestock vessels	•	Three research projects are underway with the University of New England.		
Research, development and extension projects that support ongoing improvements to existing regulation are commissioned		University of New England has been engaged to address the March 2019 recommendations from the ASEL review.		

PROGRAM: Eating quality

(i.e. ASEL Review)

SUB-PROGRAM: Eating quality Strategic Plan KPI: With an increase in volume and variation of cattle being MSA Improve the MSA beef eating quality index to 59.11 graded, the national average MSA Index has been maintained but not improved. Improve compliance to MSA requirements to 94.7% for beef and MSA compliance reached 93.8% for beef and 96% for sheepmeat. 95% for sheepmeat Successfully pass audit requirements to maintain USDA Process MSA successfully maintained USDA Process verified approval and verified approval and ISO certification to 9001:2015 Standard ISO 9001:2015 accreditation. Engagement with 3,000 producers in MSA information sessions Over 3,100 producers were involved in 47 MSA workshops or or workshops, including delivery of 30 value chain-focused information sessions, with 32 of these associated with a value chain. producer engagement activities Improvement of average national beef herd eating quality (MSA In 2018–19, the national average MSA Index decreased to 57.48, Index) to 58.00 and increase in bottom 1% of herd by 0.4 points down slightly from 57.78 in 2017-18. Increase producer use of myMSA for feedback by 30% in number 4,300 producers used myMSA 16,140 times, with usage similar to of visits and 10% in number of producers 2017-18 43% of national adult cattle slaughtered were MSA graded (same Adoption of MSA grading for beef increased from 43% to 46% of adult cattle slaughter as 2017–18), however this represented a record high of 3.5 million cattle. 30% of national lamb slaughter following MSA pathways with 21% 19% of national lamb slaughter followed MSA pathways. 76% of these of national lamb slaughter being MSA trademarked went on to be included in MSA trademarked brands. MSA Beef model V1.8 released for commercial implementation The MSA model upgrade was approved by the MSA Taskforce and development is in progress. It is expected to be released in August 2019. Global eating quality research database established with The International Eating Quality Foundation has been established Australian participation with Australian participation. Specifications for a global research database have been developed in preparation for build.

2018–19 KPI	Status	Commentary
PROGRAM: Environmental sustainability		
SUB-PROGRAM: Sustainability (off-farm)		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT		
Form one global partnership to increase environmental performance through supply chain optimisation enabled by enhanced information systems		A partnership with Hitachi is developing a management dashboard for red meat businesses to measure environmental performance along their supply chain.
Engage two supply chains in a strategy towards a carbon neutral red meat supply	•	Four supply chains co-funded by MLA are participating in carbon neutral-related projects. MLA is assisting three other supply chains in establishing carbon accounts and evaluating emissions reduction and carbon storage options.
Provide the tools and resources for industry to achieve a 15% reduction in water and energy use intensity relative to 2015 levels	•	MLA is co-funding a project with NH Foods' Oakey abattoir investigating waste use reduction, recycling and reuse options. In addition, an MLA co-funding project with energy consulting business, All Energy, resulted in the launch of an energy management tool for industry.
Provide the tools and resources for industry to achieve a 15% reduction in waste or increase in efficiency relative to 2015 levels	•	'Wastes to Profits' Rural R&D for Profit project has identified numerous waste-related technology opportunities. In addition, MLA co-funded projects with processors testing novel phosphorous- removal technology for processing wastewater, as well as investigating nitrogen-removal technologies.
SUB-PROGRAM: Sustainability (on-farm)		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT		
Strategic Plan KPI: Restrict % consumers limiting red meat consumption due to environmental concerns to 8%	•	A 2018–19 survey indicated sustainability as the reason for 2.6% of the overall community population reducing their red meat consumption.
At least two new products on drought forecasting and decision support tools available for producers and advisors	•	The Northern Australia Climate Project has delivered a start and end of wet season/monsoon forecast product, as well as the Madden- Julian Oscillation (MJO) forecast product.
At least three seasonal Bureau of Meteorology products available for trialling	•	The 'Forewarned is forearmed' Rural R&D for Profit project has delivered two seasonal products for trialling. The third product was delayed until 2019–20.
Initiate a study with input from producer groups to evaluate profitable grazing systems for pastures in hotter and more variable climates	•	Three feedbase-related projects are underway, including a partnership with Western Sydney University to evaluate pastures in hotter and more variable climates.
'Carbon Neutral by 2030' implementation plan completed, based on CSIRO study		An implementation plan for the Carbon Neutral by 2030 (CN30) Initiative has been completed.
Investigation underway on sequestration of carbon under managed savannah burning in northern Australia, so as to assess a potential new Emissions Reduction Fund method	•	Investigation is underway via an MLA co-funded project with Indigenous Land Corporation.
Update the 2012 30-year study on the impact of beef on the environment to be 35 years (to 2017)	•	The completed and summarised study is available on MLA's website.
Support and contract continuation of the 'Wambiana' grazing study, including impacts on environment and profitability of grazing operations in the Burdekin catchment (subject to Red Meat Panel endorsement and budget availability).	•	A new program is underway on the 'Wambiana' site, with three demonstration sites supported by the Department of Environment and Energy.
Commercialisation arrangements agreed with CSIRO for the production and supply of Asparagopsis to the Australian feedlot industry	٠	An agreement has been executed between CSIRO, James Cook University and MLA for the commercialisation of the Asparagopsis algae for reducing rumen methane emissions.
Results from long-term benchmarking of greenhouse gas emissions in northern and southern Australian feedlots reported to industry and incorporated into the National Greenhouse Gas Inventory	•	Long-term greenhouse gas emissions from two feedlots, in northern and southern Australia respectively, have been completed and the results reported to industry. Incorporation of these into the National Greenhouse Gas Inventory will be delayed until 2020.
Contribute to: restrict the percentage of consumers limiting red meat consumption due to environmental concerns to 10%	٠	A 2018–19 survey indicated sustainability as the reason for 2.6% of the overall community population reducing their red meat consumption.

2018–19 KPI	Status	Commentary
PROGRAM: Integrity systems		
SUB-PROGRAM: Market access science		
PILLAR 2: MARKET GROWTH AND DIVERSIFICATION PILLAR 3: SUPPLY CHAIN EFFICIENCY AND INTEGRITY		
Adoption of the shelf life model in domestic supply chain	•	Adoption of the shelf life model has been used to demonstrate opportunities to redesign some domestic retail supply chains for chilled, vacuum-packed beef and lamb products.
Antimicrobial resistance in sheep is known		Research shows that antimicrobial-resistant bacteria in sheep/lamb faeces at the time of slaughter is extremely low.
Changes to post-mortem inspection practices are implemented in domestic meat processing to manage risk and reduce costs	•	The first set of changes to post-mortem inspection practices have been implemented, with further changes being progressed that are anticipated to provide a substantial return to the red meat sector.
Qualitative assessment of the risk of toxoplasmosis in sheep for humans	•	A project is underway, but only 10% of the sample collection has been completed.
Approaches to protecting the integrity (identity) of product in supply chains are piloted	•	An MLA co-funded project to develop Australian authenticity markers has commenced, together with pilot trials with two export supply chains.
SUB-PROGRAM: Integrity systems		
PILLAR 3: SUPPLY CHAIN EFFICIENCY AND INTEGRITY	_	
Strategic Plan KPI: Increase producer awareness and compliance of integrity systems to 86%	•	The 2018–19 annual integrity survey revealed that integrity program awareness levels are 98% for NLIS, 96% for NVDs and 87% for LPA in 2018–19. NLIS compliance was ahead of the target at 96.04%.
NLIS movement recording compliance increase to 95.75%		NLIS movement recording compliance was 96.04% for 2018–19.
25% of livestock consignments to be accompanied by an eNVD during 2018–19	•	eNVD usage grew steadily throughout the year to 21.6% (an increase of 9.8% on 2017–18).
Integrity Systems communication and adoption strategy workplan activities for 2018–19 implemented		Integrity System Communication and Adoption Strategy activities were implemented in line with the 2018–19 workplan.
Implementation of Integrity Systems 2025 Strategy commenced	•	The Integrity Systems 2025 and beyond strategy was endorsed by SAFEMEAT and an implementation plan to support investment in the Strategy from 2019–20 onwards was developed in consultation with industry.
Implementation of improved LPA compliance monitoring system and non-conformance management system	•	A framework and implementation pathway for an improved compliance monitoring system was developed in consultation with industry.
LPA awareness levels increase to 86%		LPA awareness levels were 87% in 2018–19.
SAFEMEAT governance and reporting structures are supported and remain effective	•	A review of the SAFEMEAT Terms of Reference was conducted in 2018–19 with key recommendations endorsed by SAFEMEAT. SAFEMEAT governance and reporting structures worked effectively throughout the year.

PROGRAM: Objective measurement

SUB-PROGRAM: Objective measurement		
PILLAR 3: SUPPLY CHAIN EFFICIENCY AND INTEGRITY		
Strategic Plan KPI: Improve beef compliance through optimising efficiency across the value chain to 95%	•	The Advanced Livestock Measurement Technologies (ALMTech) program has developed beef carcase value optimisation tools as well as related objective measurement technologies for lean meat yield and eating quality.
Rural Research and Development for Profit ALMTech program successfully delivered and reporting accepted by the Department of Agriculture	•	The Advanced Livestock Measurement Technologies (ALMTech) research program is on track with year 3 reporting accepted by the Department of Agriculture.
DEXA output of carcase lean meat yield delivered in producer feedback from four lamb abattoirs and one beef abattoir	•	Two high-volume smallstock abattoirs have DEXA installed and an additional three have DEXA installations underway. One beef abattoir has installed DEXA. All of the above are anticipated to be providing producer feedback in 2020.
CT system installed for beef DEXA calibration and research and development data collection	•	Development of a CT system was delayed due to funding only becoming available later in the financial year. The build has commenced for completion in early 2020.

Supporting information

2018–19 KPI	Status	Commentary
Two spectral imaging devices trialled for objective assessment of traits contributing to eating quality		Four spectral imaging devices are under development and validation to measure eating quality traits with an aim of achieving AUS-MEAT accreditation.
Create tools to enable industry to implement value-based pricing models	•	Both lamb and beef carcase value calculators have been developed and are being adopted by industry. The lamb carcase cut-to-market end-point optimisation model is being evaluated by industry.
Beef carcase value calculator prototype commenced and trialled by one beef supply chain to develop an improved understanding of variation in carcase value and providing opportunities to improve value chain profit	•	The Advanced Livestock Measurement Technologies (ALMTech) program has developed a beef carcase value calculator which is being evaluated by industry.
DEXA adoption plan developed by Objective Measurement, Adoption and Commercialisation Committee (OMAC)	•	Wide-scale facilitated adoption of DEXA via an Objective Measurement Adoption and Commercialisation (OMAC) committee plan hasn't progressed, owing to not achieving an agreed funding model. OMAC has supported the DEXA roll-out via individual processors being supported by MLA Donor Company funding.

PROGRAM: Producer adoption

SUB-PROGRAM: Producer adoption				
PILLAR 4: PRODUCTIVITY AND PROFITABILITY				
Strategic Plan KPI: Engage ≥2,000 producers in decision support programs who will improve business performance by ≥5% by 2020	•	1,134 beef and lamb producers engaged in MLA 'involve and partner' programs. Furthermore, more than 3,500 attendees participated in MLA awareness activities. More than 50% of participants have indicated they intend to change practices, with this rising to over 80% in some programs such as Profitable Integration of Cropping and Livestock.		
Strategic Plan KPI: By 2020, improvement in total factor productivity of: 1.75% (southern beef); 0.5% (northern beef); 0.5% (sheepmeat); 1.5% (feedlot); 0.5% (goat)		MLA's new evaluation framework is now based on measured productivity and cost impacts at an enterprise level rather than measuring total factor productivity		
Engage at least 3,000 producers in program initiatives		Over 3,500 attendees participated in MLA awareness activities including BeefUp, Pasture Updates and It's Ewe Time forums.		
On average, participant satisfaction and value scores are greater than 7/10 for 'awareness' activities		Attendees of the MLA awareness activities rated the events on average as over 8/10.		
50% of participants indicate an intent to change practice	•	More than 50% of participants in MLA adoption programs have indicated they intend to change practices, with this rising to over 80% in some programs such as Profitable Integration of Cropping and Livestock.		
MLA member satisfaction survey rates awareness of extension and adoption programs above 4.5/10	•	An overall metric is not available, but awareness of individual programs ranges from 7.2/10 for Profitable Grazing Systems, 4.4 for It's Ewe Time, to EDGE at 3.9.		
Engage at least 2,500 commercial sheep and cattle producers in 'influence and motivate' activities	٠	1,540 participants engaged in MLA 'influence and motivate' programs.		
On average, participant satisfaction and value scores are greater than 7/10 for 'influence' activities		Participants in MLA 'influence and motivate' programs rated their experience as greater than 8/10.		
On average, participating producers achieve a 50% knowledge and skills improvement score	•	More than 78% of the survey respondents who participated in MLA's 'influence and motivate' programs improved their skills and knowledge.		
750 producers participate in Profitable Grazing Systems (PGS) 'feeder' activities	•	104 producers participated in PGS 'feeder' activities.		
412 producers involved in PGS groups (cumulative total 732)	٠	365 producers participated across 20 PGS training packages in 2018–19.		
75% of producers involved in PGS groups increase their skills and knowledge above a skills audit score of 75% (competent)	•	62% of PGS participants scored skills and knowledge above 75% at the end of a training package.		
800 businesses engaged in 'involve and partner' activities		1,134 producers engaged in MLA 'involve and partner' programs such as Profitable Grazing Systems and Producer Demonstration Sites.		
Demonstration sites finishing in 2018–19 achieve a 75% adoption rate	٠	Of the Producer Demonstration Sites projects that were completed in 2018–19, over 75% of the core producers adopted the new practice.		
On average, participant satisfaction scores are greater than 8/10 and value score greater than 8/10	•	Of the Producer Demonstration Sites projects that were completed in 2018–19, participant satisfaction scores were greater than 8.75/10, and 8.8/10 for 'producer value'.		

2018–19 KPI	Status	Commentary
Grassfed beef and sheepmeat producers and research, development and adoption partners have a satisfaction rate with MLA's Regional Consultation Framework of 4/5, measured via an annual satisfaction survey distributed by the regional councils	•	The annual satisfaction survey returned a result of 3.7/5.
5% increase in high quality, fundable proposals endorsed by the Red Meat Panel		The increase in endorsed, fundable proposals was 5.7%.
Feedlot productivity baseline data established to align with <i>Meat</i> <i>Industry Strategic Plan</i> (MISP) reporting requirements	•	Meat Industry Strategic Plan-aligned baseline data has been established for feedlot productivity measures, and ongoing data collection is in place.
Animal health monitoring baseline data established to align with MISP reporting requirements	٠	Meat Industry Strategic Plan-aligned baseline data has been established for feedlot animal health measures, and ongoing data collection is in place.
Development of initial suite of training packages identified in the Feedlot Industry Training and Leadership Development Strategy initiated	•	A project manager has been appointed by the Australian Lot Feeders' Association, and a project initiated to develop an initial suite of training packages for the feedlot sector.
PROGRAM: Product and packaging innovation	ו	
SUB-PROGRAM: High Value Food Frontiers		
PILLAR 2: MARKET GROWTH AND DIVERSIFICATION PILLAR 3: SUPPLY CHAIN EFFICIENCY AND INTEGRITY		
	-	F:

Defined portfolio of growth opportunities (minimum 10) that will enable achievement of 3–5 value multiplier during 2020–25 on input raw commodity meat

Develop '2Morrow's Food Knowledge Portal' comprising foresights and insights to inform MLA decision making

At least five new red meat-based value-added products, processes or services (for new usages and occasions) developed and tested

At least two process improvement initiatives completed that positively impact on product quality and yield performance in value-added red meat products

Three new red meat value-adding technology or packaging solutions identified and undergoing research and development

Five partners contracted and 12 key opportunity spaces under development.

Portal development underway and continuing to be updated.

Six partners contracted in projects to explore high-value growth opportunities aligned to key themes identified, with products developed and tested ready for launch during 2019.

- Four key process protocols have been developed and tested, then applied to value-added red meat products.
- Several packaging projects are underway, including reduced plastic for retail-ready trays and soaker pads, as well as use of interactive Internet of Things (IoT) smart pack designs.

PROGRAM: Value chain information and efficiency

SUB-PROGRAM: Digital value chain information		
PILLAR 3: SUPPLY CHAIN EFFICIENCY AND INTEGRITY		
Data sharing and security principles established and executed	٠	Data sharing principles have been developed and made available to industry. The 'Growing Digital' collaborative project has also delivered a data governance framework and toolkit for producers.
Data platform strategy implementation plan executed	•	The data platform strategy plan has been executed, with a number of projects completed and others underway or planned in 2019–20.
More than 15,000 Integrity Systems Company (NLIS and LPA) linked accounts	•	A total of 19,335 NLIS and LPA accounts have been linked to myMLA, enabling the provision of a unified user experience to myMLA users.
Eight co-funded supply chain officer positions implemented	•	Eight positions were co-funded and a waitlist is in place to fill further positions as funding becomes available.
Increased uptake and adoption of Integrity Systems Company digital opportunities facilitated through implementation of the Communication and Adoption Strategy	•	The ISC Communications and Adoption Strategy was developed and implemented.
15% of industry throughput is available through Livestock Data Link	•	Livestock Data Link throughput is increasing month-on-month, accounting for 9% of industry throughput.

2018–19 KPI	Status	Commentary
PROGRAM: Productivity (off-farm)		
SUB-PROGRAM: Productivity (off-farm)		
PILLAR 4: PRODUCTIVITY AND PROFITABILITY		
Strategic Plan KPI: Leverage co-investment through the MLA Donor Company (MDC) in the processing automation R&D portfolio by \$10m/year		The total planned expenditure from MLA Donor Company (MDC) projects either approved, underway or completed since June 2015 has exceeded the \$50 million target.
Productivity benefit of technologies adopted in 2018–19 and previous years deliver impact of \$40 million/year	٠	The annual productivity benefit of installed technologies was \$57.5 million in 2018–19, primarily from lamb boning room automation and the BladeStop safety device.
80% of the expected outcomes from productivity and logistics investments are achieved, including:		85% of outcomes from the 2018–19 detailed investment plan were achieved:
contract with two beef boning automation providers to develop concepts for industry review		 two global automation providers delivered concepts for review by the industry beef automation steering group
• evaluation of innovation X-ray systems as automation enablers		three alternative X-ray technologies are currently being trialled
sensing systems and beef automation module design progress		the first two sensing and beef automation modules have been
 additional lamb processing modules trialled 		designed, with the first prototype module under development
identify plant partners for beef automation program		 lamb tenderloin removal, lamb short ribs, and fat cap removal modules trialled
 investigate adoption barriers, and finance/risk mitigation innovation. 		 plant partners identified, with strategic plant partner Teys having contracted a beef automation development room

report received from external consultant.

PROGRAM: Productivity (on-farm)

SUB-PROGRAM: Beef productivity		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT PILLAR 4: PRODUCTIVITY AND PROFITABILITY		
Rumen manipulation practices that contribute to an improved rangeland productivity of 0.5% by 2020		Three rumen manipulation projects underway (management of plant toxins, use of biochar and managing leucaena).
Leverage production systems such as use of Redlands leucaena for northern bioregions that increases turn-off by 0.5%/year	•	Redlands leucaena was launched in May 2019. Ongoing work across two sites to determine productivity levels/turn-off is underway.
Contribute to improved breeder herd fertility and reductions in calf loss, resulting in 0.5% increase in weaning rates by 2020	•	Four Tips & Tools documents were revised and released in March 2019, targeting breeder herd management and improved reproduction efficiency. However, initiation of calf loss consortium was delayed until August 2019. A project underway to survey calf mortality for southern systems in 2020.
Technologies and practices for live animal measurements available for online sales	•	Live animal objective measurement technologies are still under development. MLA is also initiating one additional project to progress 'BeefSpecs' measurement applications for <i>Bos taurus</i> cattle.
Project implemented to conduct 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	•	The project was implemented in 2018–19 and is currently underway.
Decision made by MLA and Australian Lot Feeders' Association (ALFA) on the future of the research feedlot concept and, if positive, development initiated	•	The decision by MLA and the Australian Lot Feeders' Association on future investment in a research feedlot facility has been delayed. A selection committee has been developed to facilitate the tender process, which will now be undertaken in 2019–20.
Commercialisation arrangements agreed with CSIRO for the production and supply of Asparagopsis to the Australian feedlot industry	•	An agreement has been executed between CSIRO, James Cook University and MLA for the commercialisation of the Asparagopsis algae for reducing rumen methane emissions.
Project initiated to examine mechanisms for increasing the reactive surface area of black coal, as a mechanism for capturing nitrogen losses from manure	•	Proposal was assessed but not developed further due to other funding priorities.

2018–19 KPI	Status	Commentary
SUB-PROGRAM: Feedbase production and utilisation		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT PILLAR 4: PRODUCTIVITY AND PROFITABILITY		
Strategic Plan KPI: Reduce cost of feral animals and weeds by \$30 million	•	A 2015–20 impact assessment indicated that productivity increases and cost savings from products such as the HOG-GONE® baiting system for pigs, parthenium biological control and the strengthened RHDV strains for rabbit calicivirus will exceed this target.
Obtain preliminary results for phosphorus-efficient pasture studies; ensure glasshouse studies are underway on plant traits and phosphorus efficiency	•	Characteristics of pasture plant roots that assist nutrient foraging were identified.
Feedbase investment delivery initiatives underway for developed phosphorus nutrition with establishment of 20 'soil clubs' in NSW and Victoria	•	Ten 'soil clubs' were established in 2018–19, with an additional 10 planned by January 2020.
Commence five projects across NSW and southern Queensland which focus on increasing feedbase options	٠	Five projects commenced, including grass and legume evaluation, brassica utilisation, improved legume adaptation, phosphorus management of tropical species and dual-purpose perennial cereals.
Hand-held biomass sensor and mobile device app available	•	Biomass app and algorithms available, but there has been no commercial interest in a hand-held biomass sensor.
Terrestrial unmanned aerial vehicle (UAV) and long-range unmanned ground vehicle (UGV) evaluated for multiple applications such as fence line inspection, counting livestock, locating pest animals and taking soil samples	•	Multiple projects are underway for the use of long-range unmanned ground vehicles and aerial vehicles in a variety of applications, but evaluation not yet complete and not all applications trialled.
Farm Map Australia commercially available with more than 1,000 subscribers accessing farm mapping tools	•	Farm Map not funded further by MLA, as other competing mapping services are available.
Confirm UAV's ability to map pasture, weeds and animals at three locations in northern Australia	•	Successful trials of unmanned aerial vehicle locating animals, but weeds and pasture assessment is still being trialled.
Genomic tools for annual legumes used by one seed company in breeding decisions	•	Markers for traits in legumes, medics and phalaris identified by genomics provider, with a sub-contract to a seed company.
Tedera species commercially available in WA	•	Tedera was successfully launched in WA in October 2018 and all available seed has been sold.
Pasture variety and forage value index website accessed by more than 1,000 producers	•	There have been over 4,000 visits to the site by 2,547 unique users.
Leucaena seed sold to enable 8,000ha to be sown	•	Approximately 2,000ha has been sown and all available seed sold. Delayed availability of parent seed material for bulk up, coupled with drought, has compromised commercial seed production.
Biocontrol web portal reports more than 100 new entries by users of the Biocontrol app	•	490 new user entries on the biocontrol app/hub added and 100+ Android versions of the app installed.
APVMA submission for prickly acacia completed by June 2019		Submission completed and APVMA review underway.
Red witchweed monitoring reports success in containment in Queensland	•	Targeted land has been intensively treated to deplete the witchweed soil seed bank, supporting success towards eradication.
K5 calicivirus reduces rabbit populations at more than 250 detailed monitoring sites by 30%	•	RHD-K5 virus was released at 323 'community sites', and 38 state- run sites. 218 of the community release sites showed an average reduction in rabbit numbers of 34%.
Report on the R&D outputs which are passed along and included in the 'producer adoption' sub-program	•	Information products are being progressed from past R&D output, including the development of Pasture Paramedic, phosphorus efficiency soil clubs and feedbase plan R&D outputs being presented at 'Awareness' events.
SUB-PROGRAM: Goat productivity		
PILLAR 4: PRODUCTIVITY AND PROFITABILITY		
National supply estimates, scenario modelling and key messages generated, leading to informed advice back to industry regarding herd expansion needs	•	Forecasting committee meeting as planned and generating forecasts. Extremely useful data is coming through from the project, which is being communicated to the wider industry.
Kid loss issue quantified, leading to the provision of informed advice back to industry regarding management	•	Some management advice being provided to industry from project results so far. Kid loss will be quantified in 2019–20, based on completion of on-farm scanning.
At least 400 goat producers engaged in awareness activities; at least 240 engaged in 'influence and motivate' activities with on average a 75% knowledge and skills improvement score; at least 35 goat producers enrolled in category B and C activities like Profitable Grazing Systems and EDGE, with on average 75% making at least one practice change	•	Approximately 400 producers have engaged in awareness activities. However, only 100 producers were engaged in 'influence and motivate' activities. Overall, 68% of attending producers stated they intended to make changes to their businesses. MLA's benchmarking project has engaged 26 producers with a mix of Category B and C activities. While there is no goat-focused Profitable Grazing Systems activity as yet, three Supported Learning Programs are in development.

2018–19 KPI	Status	Commentary
SUB-PROGRAM: Livestock genetics		
PILLAR 4: PRODUCTIVITY AND PROFITABILITY		
Minimum 2% increase in annual rate of gain for each of the default Sheep Genetics indexes for Terminal, Maternal and Merino analyses	٠	Default indexes increased by 2, 6 and 3 index points for the Merino, Terminal and Maternal analyses respectively.
Three major Sheep Genetics analyses indicate that terminal animal numbers maintained at current levels, maternal numbers increased by 1% and Merino numbers increased by 3%	•	Animal Terminal, Maternals and Merino number targets exceeded with increases of 6%, 8% and 8% respectively.
Sheep Genetics customer satisfaction level of 4/5 as described by annual client survey		Customer satisfaction was rated at 4.2 for MERINOSELECT and 4.1 for LAMBPLAN.
Automated breed percentage tool available	•	A genomic test-based percentage tool is feasible and commercialisation terms have been developed for breed society use, though the tool is not yet available.
Diagnostics for single-step developed and implemented		Diagnostics developed for beef and sheep, with availability via AGBU.
Pipeline for flock benchmarking developed and implemented		Flock profile reports are available via AGBU.
Pipeline to automate construction of Genomic Relationship matrix implemented for all BREEDPLAN analyses	•	Genomic relationship matrices developed and operational, and will be handed over to ABRI in 2019–20.
raceMule solver implemented in BREEDPLAN		raceMule solver being used in BREEDPLAN and Sheep Genetics evaluations.
New BREEDPLAN reproduction model developed and new Sheep Genetics reproduction model implemented	•	A new reproduction analysis was implemented in the maternal LAMBPLAN analysis in April 2019. A new BREEDPLAN model is under development.
Sheep Genetics database redevelopment project initiated		The database development project tender has closed and applications are being reviewed. Interface project is underway.
Development of genetics 'National Data Platform' initiated		The 'Phenobank' project is in progress as a pilot for redevelopment.
Management of genomics information management transitioned from Sheep CRC to MLA	•	Wind-up agreement signed by all participants. Service agreements with genotyping companies developed.
Genetics campaign launched		The genetics campaign was launched in June 2019.
Establishment of at least one genetics demonstration site	•	Genetics Producer Demonstration Site applications were received and will commence in 2019–20.
Genetics network development initiated		'Beef champions' network started with meeting in Armidale.
At least one project to simplify EBVs/ASBVs initiated		Simplified web interface projects are underway for DeSireBull and Sheep Genetics.
At least three new BIN herds and one new sheep resource flock established		Three new BIN herds and one new sheep resource flock established.
SUB-PROGRAM: Sheep productivity		
PILLAR 4: PRODUCTIVITY AND PROFITABILITY		
Develop new knowledge to enable producers to increase marking rates by 5% and reduce ewe mortality rates by 1% by 2020	•	Various ewe and lamb mortality projects were funded, including causes of maternal/composite ewe mortality, reducing foetal losses in young ewes and commencement of a cross-industry review of sheep reproduction investments.

PROGRAM: Capability building

SUB-PROGRAM: Innovation capability building		
PILLAR 4: PRODUCTIVITY AND PROFITABILITY PILLAR 5: LEADERSHIP AND COLLABORATIVE CULTURE		
Implement a program for a Digital Value Chain Officer with three additional partners (total of six)		Eight positions were co-funded and a waitlist is in place to fill further positions as funding becomes available.
80% of Producer Innovation Fast-Track participants express satisfaction with the program	•	Evaluation of the program indicated that 93% of participants fast- tracked innovation development and 94% achieved a change in innovation thinking.
Delivery of three capability programs (new ventures, new food products/value chain, on-farm) to Producer Innovation Fast-Track program participants	•	Three capability programs delivered and ongoing technical assistance available to participating producers.
Livestock Consulting Internship program completed, with employers and interns expressing 80% satisfaction with the program	•	Ten interns graduated from the Future Livestock Consulting program and participating employers expressed 95% satisfaction with the program.

2018–19 KPI	Status	Commentary
Delivery of an industry development education program for 20 Intercollegiate Meat Judging finalists	٠	20 students completed the Intercollegiate Meat Judging industry development program.
Co-innovation program partners achieve 80% of documented innovation objectives and five new partners are engaged	•	The co-innovation program partners achieved >80% of innovation objectives. Ten companies were contracted, with a further six engaged in developing strategic plans to underpin potential co-innovation activities.
Appoint at least five new PhD students		MLA awarded eight PhD scholarships in 2018–19.
At least 10 early career scientists employed in MLA-funded research and development	•	More than 10 early career scientists were engaged in research programs across MLA business units.
A minimum of 20 high quality I+E CONNECT new ventures are supported		An active portfolio of more than 20 new ventures are being supported through I+E Connect.
Strategic partnerships in place with all global-aligned ag-tech, food-tech and food innovation programs supporting red meat entrepreneurs	•	Strategic participation with all relevant partners established.
The I+E CONNECT program attracts at least \$5 million venture capital to enable \$10.5 million new venture project investment, with at least two Australian red meat businesses supported to develop corporate venturing capability and models	•	The I+E Connect program attracted \$14 million in new venture capital. Corporate venture activity was achieved with two Australian red meat businesses.
SUB-PROGRAM: Industry leadership and capacity building		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT PILLAR 5: LEADERSHIP AND COLLABORATIVE CULTURE PILLAR 6: STAKEHOLDER ENGAGEMENT		
Grant a minimum of two scholarships a year to ensure ongoing investment in industry leadership capability		MLA continues to support young researchers through the PhD top-up scholarship program. Eight scholarships were awarded in 2018–19.
Engage a minimum of six past MLA-sponsored scholars in advocacy work for the industry	٠	Thirty-two past MLA-sponsored scholars were engaged in events such as Regional Flavours, Taste of Sydney, Taste of Tasmania, Gourmet Escapes and Melbourne Food and Wine Festival.
40 industry people identified and trained as industry advocates		52 industry people were identified and trained as industry advocates.
Advocates used to support MLA's 'Paddock to Plate 360 Beef and Lamb Experiences' at community events		Six advocates were engaged in MLA's 'Paddock to Plate 360 Beef and Lamb Experiences'.
At least seven industry representatives provided media and/or communications training		Nine industry representatives were provided with media or communications training in 2018–19.
40% of current and within six months of appointment, all future Cattle Council of Australia (CCA) directors will have completed the AICD Company Directors Course and assessment	•	80% of current directors completed the AICD Company Directors Course. New directors will complete the course in 2019–20.
CCA governance reviewed and recommendations implemented	•	CCA governance has been reviewed and recommendations are being implemented.
15 producers will have completed 'governance in action' training		This project did not proceed.
15 Sheep Producers Australia (SPA) board and/or committee members will have completed media and communications training	٠	This project did not proceed.
Two Australian Lot Feeders' Association (ALFA) representatives provided governance training	٠	One representative was trained in 2018–19, with a second to be selected for training in 2019–20.
Two Goat Industry Council of Australia (GICA) representatives provided governance training		GICA representatives were provided facilitation support through a review of their constitution.
Publication of second annual State of the Industry report	•	The second annual report was completed by MLA and launched by RMAC in September 2018.

PROGRAM: Communication

SUB-PROGRAM: Communication (community)		
PILLAR 1: CONSUMER AND COMMUNITY SUPPORT		
Promotion of the Good Meat online community engagement platform within MLA's Domestic Market Strategy		Good Meat was promoted at a number of leading food and wine events in 2018–19.
Year-on-year increase in producer engagement via digital and social media	•	Results for 'producer' engagement specifically are not available, however overall engagement for the Good Meat digital and social channels has increased 95% from the previous year.
Community sentiment tracked, including percentage limiting red meat consumption due to animal welfare or environmental management concerns (KPI: 8%)	٠	A 2018–19 survey indicated animal welfare and sustainability as the reason for 1.9% and 2.6% (respectively) of the overall community population reducing their red meat consumption.

2018–19 KPI Status Commentary Participate in a minimum of four events to engage and inform key consumer segments "Passionate Foodies" and "Constrained Aspirers" – about the provenance of Australian red meat to enhance community confidence in the industry and promote red meat consumption as part of a healthy balanced diet More than four events were attended in 2018–1 including Regional Flavours, Gourmet Escapes, Taste of Tasmania. At least 6,000 consumers engaged and informed about the More than 6,500 consumers engaged through	
At least 6 000 consumers opgaged and informed about the More than 6 500 consumers opgaged through	
production of red meat and livestock in Australia Flavours activation, Gourmet Escapes and Taste 40,000 participants experienced the MLA Padd reality story.	e festivals. More than
Utilise at least 20 producer advocates in community events activation and the Paddock to Plate virtual reality Australia.	
 MLA's 'Paddock to Plate 360 Beef and Lamb Experiences' presented at four Royal Agricultural Show events with 80% of viewers responding that they have: a better understanding of the industry 	
improved perceptions of Australian beef/sheepmeat production At least two teacher-focused events feature MLA educational Four teacher-focused events were attended.	
resources	
A minimum of 70 schools engaging with MLA education materials More than 9,000 students in 150 schools have Virtual Classroom program.	participated in MLA's
A minimum 1,000 education resource downloads Measure unavailable from current web platform	1.
SUB-PROGRAM: Communication (stakeholder)	
PILLAR 5: LEADERSHIP AND COLLABORATIVE CULTURE PILLAR 6: STAKEHOLDER ENGAGEMENT	
Strategic Plan KPI: Importance of being an MLA member average past three years.	ed at 3.7/5 during the
Strategic Plan KPI: Improved industry crisis and issues management capability – one simulation with PICs MLA has assisted the red meat and livestock i a new industry corporate affairs function. Sup provided to the PICs in relation to media train to key issues such as drought, flooding and ver	port has been ing and responding
Strategic Plan KPI: Overall satisfaction with MLA averaged 3.4/5 years.	during the past three
Strategic Plan KPI: Improve stakeholder endorsement of the value of MLA products and services – methodology, benchmarks and targets set	
Delivery of the annual report for the Beef Industry Sustainability Framework The second Annual Update report for the Austr Sustainability Framework was launched on 5 Ju	
An agreed approach for reporting on sheepmeat industry sustainability Sheep Producers Australia, Wool Producers, Australia, Aust	epmeat and wool
High levels of member satisfaction (above 70%) with MLA printed communications Satisfaction with MLA printed communications i 75%, based on MLA's annual member survey.	increased from 72% to
Delivery of three high-impact communication campaigns The three high-impact campaigns launched in 2 'Genetics – accelerating productivity', changes model and upgrades to Meat Standards Austral	to the lamb definition
High levels of member awareness (above 70%) of MLA's role Awareness of MLA's role has increased 10% in 2 based on MLA's annual member survey.	2018–19, lifting to 75%,
Increase in media volume against the 2017–18 benchmark MLA's media volume decreased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourability increased by 4% against the benchmark. However, media favourable benchmark. However, media favourable benchmark. However, media favourable benchmark. However, media favourable benchmark. However, media fa	ased as more at reach red meat
Completed registrations to myMLA (MLA members and non-members) to exceed 35,000 myMLA registrations exceeded 40,000 as at Ju	ine 2019.
High levels of MLA member user satisfaction (above 70%) with Satisfaction with MLA digital communications w MLA digital communications MLA's annual member survey.	vas 72%, based on
E-newsletter subscription database growth of 5% MLA has seen a 14% increase in subscribers to services and has introduced new e-news platfo relevant information to red meat producers, such the Grade newsletter.	orms to provide more

2018–19 KPI	Status	Commentary
Year-on-year increase in producer engagement through social media	•	MLA has seen followers increase by 20% across social media channels including Facebook, Twitter and LinkedIn.
Interactive electronic version of Annual Report published on MLA website	•	MLA launched a new online version of its Annual Report in 2018–19.
High levels of satisfaction (above 70%) recorded by attendees at MLA events	•	MLA is unable to track satisfaction across all events, however for MLA's key event, Red Meat 2018, a 90% satisfaction score was achieved.

PROGRAM: Corporate services

r Rookam: corporate services	_	
SUB-PROGRAM: Corporate services		
PILLAR 5: LEADERSHIP AND COLLABORATIVE CULTURE CORPORATE SERVICES		
Detailed 2017–20 sub-program business plans completed and approved by MLA Board, resulting in increased delegation levels for project approval		Business plans were approved by the MLA Board in May 2019, resulting in increased delegation levels.
 Compliance management and oversight to ensure MLA Group operating in accordance with requirements of: Commonwealth Funding Agreement Corporate Governance framework – finance, legal and risk systems and processes maintenance of member registry 	•	Funding Agreement Compliance report for 2018–19 completed by management, noting compliance on all matters.
Implement smart contract system to streamline MLA contracting process	•	New systems under development, for completion in 2019–20. Electronic signatures implemented in 2018–19.
Crisis Portal maintained and reflects the latest Risk Management Plan	•	The Crisis Portal is regularly maintained and the Risk Management Plan is updated to reflect learnings.
Risk Management Plan is maintained in accordance with the Board's risk appetite and reflects industry context		The Risk Management Plan is maintained and regularly updated.
Clean audit report received		2017–18 accounts were audited by MLA's auditors in accordance with the annual plan and a clean audit received.
Internal audit program delivered to the satisfaction of the MLA Audit and Risk Committee	•	Internal audits were successfully delivered in accordance with the MLA Audit and Risk Committee work program.
Implement quarterly rolling forecasts from October 2017	•	Quarterly rolling forecasts for income and reserve management were fully implemented.
Ensure reporting to internal and external stakeholders is timely, accurate and insightful		Accurate quarterly reporting to peak industry councils and MLA Board was distributed on time.
Implement sub-program level evaluation system to track return on MLA investments against MLA <i>Strategic Plan 2016–2020</i>		Detailed evaluation framework implemented, tracking the return on MLA's 32 sub-programs via 18 economic models.
Commercialisation is focused on high-impact project outputs (products) and is integrated with program strategy and project approval activities	•	Twenty-four commercialisation agreements completed for high-impact products. High-impact products integrated into project approval and business planning processes.
Internal stakeholder satisfaction measured at >80% for MLA IT infrastructure Project Governance and Management	•	Internal stakeholder satisfaction measured at 94% for MLA IT Systems and Support.
Reduce project approval and contracting times by 30%, while maintaining or improving governance levels	•	New systems under development, for completion in 2019–20.
Simplify and fast-track current contract variation process, resulting in a 25% reduction in process times	•	Variation governance and audit enhanced, but process times not reduced.

APPENDIX B COMARKETING PROGRAM PARTICIPANTS 2018–19

Beef CoMarketing	\$
AACo	135,740
Andrews Meat Industries	17,947
Arcadian Organic Meat	207,180
Argyle Prestige Meats	96,373
Australian Country Choice	16,392
Australian Meat Group	31,520
Australian Organic Meats	39,020
Beefcorp	11,525
Biggenden Meatworks	12,521
Bindaree Beef Group	98,432
China Marketing Solutions	4,675
Coral Coast Beef	6,075
Dardanup Butchering Co	46,566
Elanor Enterprises	20,492
Elders International	7,542
G&K O'Connor	5,779
Greenham Tasmania	167,914
Hancock Beef Marketing	1,174
Hardwick Meatworks	3,520
Harvey Industries Group	238,643
Irongate Nominees	1,358
JBS Australia	235,869
John Dee	4,247
KC Natural	1,139
Kilcoy Pastoral Company	72,529
Latitude 28	35,000
Lotte International	50,000
Margaret River Premium Meats	22,498
Matrad	35,000
McMahon Brothers	2,800
McPhee Bros (Export)	13,415
Meat Tender	1,000
Mort & Co	49,712
Mulwarra	30,235
Murray Greys	800
New England Exports	16,483
New World Foods	9,833
NH Foods	119,253
Nolan Meats	16,257
Northern Co-operative Meat Co	85,745
OBE Organic	30,997
Outback Beef	6,682
Providore Global	8,716
Rangeland Quality Meats	4,316
Rangers Valley	39,275
Richard Gunner Fine Meats	8,499
S Kidman & Co	4,438
Signature Beef	3,426
South Australian Cattle Co	25,000

Beef CoMarketing (continued)	\$
Speckle Park Group	15,995
Stanbroke Beef	46,699
Stockyard Pty Ltd	55,215
Stone Axe Pastoral	17,500
Tabuan Pty Ltd	10,042
Tasmania Feedlot	80,000
Teys Australia	187,870
The North Australian Pastoral Co	54,362
Thomas Foods International	94,298
Top Cut Foods	10,374
Warmoll Foods	45,167
Western Meat Packers	11,401
White Stripe	38,617
Yearn Nutrition	3,955
Total	2,775,047

Lamb CoMarketing	\$
Andrews Meat Industries	2,533
China Marketing Solutions	4,419
Dardanup Butchering Co	33,247
Dorper Lamb	20,882
Fletcher International	1,407
Flinders Island Meat	6,500
JBS Australia	97,890
Junee Lamb	16,106
KC Natural	6,337
McMahon Brothers	2,800
McPhee Bros (Export)	803
Meat Tender	1,834
Mikoni Park	88
Mulwarra	24,550
Outback Lamb	3,501
Thomas Foods International	162,769
Top Cut Foods	9,426
V&V Walsh	13,599
WAMMCO	126,398
Western Meat Packers	2,399
White Stripe Foods	18,228
Total	555,716

Goat CoMarketing	\$
Gourmet Goat Lady	1,083
McPhee Bros (Export)	3,683
Thomas Foods International	11,199
Total	15,965

APPENDIX C RURAL R&D FOR PROFIT PROJECTS

The Australian Government's Rural R&D for Profit program boosts funding to the rural Research and Development Corporations (RDCs) – of which MLA is one – for nationally coordinated, strategic research that delivers outcomes for Australian producers. Four rounds of funding have been announced to date. Below are the projects which have been awarded funding where MLA is either the lead or a partner organisation. For more information go to agriculture.gov.au and search 'R&D for profit'.

Project	Lead organisation	Round	Contributors	Total budget	Expected finish date
Developing and commercialising advanced measurement technologies and feedback systems into globally competitive Australian meat value chains	MLA	4	Australian Meat Processor Corporation; Murdoch University; Australian Pork Limited; PorkScan Pty Ltd; University of Adelaide; Woolworths; JBS Australia; Teys Australia; Fletcher International Exports; Gundagai Meat Processors; Stockyard; WAMMCO; Primary Industries and Regions South Australia; Department of Primary Industries NSW; Department of Economic Development, Jobs, Transport & Resources Victoria; Department of Primary Industries and Regional Development WA; University of New England; University of Melbourne; University of Technology Sydney; Frontmatec Group; Angus Australia; Scott Automation and Robotics; Thomas Foods International; Coles	\$19,043,427	5/4/22
Underpinning agricultural productivity and biosecurity by weed biological control	AgriFutures Australia	4	Grains Research & Development Corporation; Meat & Livestock Australia; Cotton Research & Development Corporation; CSIRO; Department of Primary Industries NSW; Queensland Department of Agriculture and Fisheries; Department of Economic Development, Jobs, Transport & Resources Victoria; AgForce; Bundaberg Regional Council; Castlereagh Macquarie County Council; Cramond Clan Environmental Consultants; Far North Queensland Regional Organisation of Councils; Gympie Regional Council; Hancock Queensland Plantations Pty Ltd; Hudson Pear Taskforce; Landcare Research; Malanda Beef Plan Group Inc; Mareeba Shire Council; Noosa & District Landcare Group Inc; NSW Environmental Trust; NSW Weed Biocontrol Taskforce; Primary Industries and Regions South Australia; South East Queensland Water; South East Local Land Services NSW; SunWater; Tablelands Regional Council; TasWeed Biocontrol; University of Queensland; University of Southern Queensland; US Department of Agriculture	\$15,842,570	2022
Forewarned is forearmed: equipping farmers and agricultural value chains to proactively manage the impacts of extreme climate events	MLA	3	Grains Research & Development Corporation; AgriFutures Australia; Cotton Research & Development Corporation; Sugar Research Australia; Wine Australia; Dairy Australia; Australian Pork Limited; Australian Bureau of Meteorology; University of Melbourne; University of Southern Queensland; Queensland Department of Agriculture and Fisheries; Suncorp; Monash University; South Australian Research & Development Institute; Department of Economic Development, Jobs, Transport & Resources Victoria	\$14,662,435	28/2/22
Wastes to profits: Technologies and business models for the management of wastes in the animal industries	MLA	3	Australian Meat Processor Corporation; Dairy Australia Limited; Australian Pork Limited; Queensland University of Technology; University of Queensland; University of Southern Queensland; Murdoch University; Pacific Northwest National Laboratory; JBS Australia; Teys Australia; Australian Country Choice; Australian Lamb Company; Harvey Beef; Ridley Corporation Ltd; Aduro Biopolymers; Zeolite Australia Pty Ltd; Barwon Water; Queensland Urban Utilities	\$14,373,729	24/1/22
Soil engineers – community-based realisation and augmentation of soil ecosystem services from Dung beetles	MLA	3	CSIRO; Invetus Pty Ltd; University of Western Australia; Landcare Research New Zealand; Mingenew Irwin Group; University of New England; Charles Sturt University; WA Department of Agriculture and Food; Dung Beetles for Landcare Farming; Dung Beetle Solutions Australia; Warren Catchment Council; Leschenault Catchment Council	\$22,693,536	31/3/22
Boosting profit and reducing risk of mixed farms in low and medium rainfall areas with newly discovered legume pastures enabled by innovative management methods	Grains Research & Development Corporation	3	Australian Wool Innovation; Meat & Livestock Australia; Murdoch University; South Australian Research & Development Institute; WA Department Agriculture and Food; Charles Sturt University; CSIRO	\$16,558,866	28/4/22
Accelerating precision agriculture to decision agriculture	Cotton Research & Development Corporation	2	Meat & Livestock Australia; Dairy Australia; Grains Research & Development Corporation; Sugar Research Australia; AgriFutures Australia; Australian Wool Innovation; Horticulture Innovation Australia; Australian Pork Limited; Wine Australia; Forest and Wood Products Australia; Fisheries Research and Development Corporation; Australian Meat Processing Corporation; Australian Livestock Export Corporation Limited (LiveCorp); Australian Egg Corporation; Australian Farm Institute; Data to Decisions Cooperative Research Centre; University of New England; Griffith University; University of the Sunshine Coast; CSIRO	\$3,557,976	Completed 2018 - report available

Project	Lead organisation	Round	Contributors	Total budget	Expected finish date
Globally competitive Australian meat value chains enabled by advanced measurement technologies and integrated flock feedback systems	MLA	2	Australian Pork Limited; Scott Technology Ltd; Murdoch University; University of Technology Sydney; WA Department of Agriculture and Food; VIC Department of Economic Development, Jobs, Transport and Resources; NSW Department of Primary Industries; South Australian Research and Development Institute; JBS Australia; Australian Cattle and Beef Holdings; Australian Country Choice Pty Ltd; Teys Australia Management Pty Ltd; Harvey Beed; Carometec; PorkScan Private; University of Melbourne; Australian Meat Processor Corporation	\$11,947,000	1/8/19
Phosphorus efficient pastures – delivering high nitrogen and water use efficiently and reducing of production across southern Australia	MLA	2	Dairy Australia; Australian Wool Innovation; CSIRO; Department of Primary Industries NSW; University of Western Australia; Murdoch University; Bookham Agricultural Bureau; Tablelands Farming Systems; Central Ranges Grassland Society; Monaro Farming Systems; Association for Sheep Husbandry, Excellence, Evaluation and Production (ASHEEP); Southern Dirt; Boggabri grazing group; Purlewaugh NSW Farmers	\$8,437,829	1/5/20
Improved surveillance, preparedness and return to trade for emergency animal disease incursions using FMD as a model.	MLA	2	CSIRO; Animal Health Australia; Charles Sturt University; Bureau of Meteorology; Australian Bureau of Agricultural and Resource Economics and Sciences; Australian Government Department of Agriculture – Animal Health Policy Branch	\$11,739,936	30/6/20
Enhancing supply chain profitability through reporting and utilisation of peri-mortem information by livestock producers	Australian Pork Limited	2	Meat & Livestock Australia; Australian Meat Processor Association; South Australian Research & Development Institute; Department of Economic Development, Jobs, Transport & Resources Victoria	\$1,725,594	30/6/20
Enhancing the profitability and productivity of livestock farming through virtual herding technology	Dairy Australia	2	Meat & Livestock Australia; Australian Wool Innovation; Australian Pork Limited; CSIRO; Tasmanian Institute of Agriculture at University of Tasmania; University of Sydney; University of New England; University of Melbourne; Agersens Pty Ltd	\$3,965,000	1/5/20
Improved use of seasonal forecasting to increase farmer profitability	AgriFutures Australia	1	Cotton Research & Development Corporation; Grains Research & Development Corporation; Meat & Livestock Australia; Sugar Research Australia; Horticulture Innovation Australia; South Australian Research & Development Institute; WA Department of Agriculture and Food; Australian Bureau of Meteorology; University of Southern Queensland; Birchip Cropping Group; Department of Economic Development, Jobs, Transport & Resources Victoria; Department of Primary Industries NSW; Monash University	\$5,388,698	Completed 2018
Stimulating private sector extension in Australian agriculture to increase returns from R&D	Dairy Australia	1	Meat & Livestock Australia; University of Melbourne; Cotton Research & Development Corporation; Australian Pork Limited; Sugar Research Australia; Horticulture Innovation Australia; Department of Economic Development, Jobs, Transport & Resources; Victoria Department of Primary Industries NSW	\$3,190,000	Completed 2018
Waste to revenue: novel fertilisers and feeds	Australian Pork Limited	1	Dairy Australia; Sugar Research Australia; AgriFutures Australia; Meat & Livestock Australia; University of Queensland; University of Western Australia	\$2,084,069	Completed 2018
Fast-tracking and maximising the long-lasting benefits of weed biological control for farm productivity	MLA	1	CSIRO; Department of Primary Industries NSW; Department of Primary Industries and Regions SA; Department of Agriculture and Fisheries Queensland; Department of Economic Development, Jobs, Transport & Resources Victoria; TasWeed Biocontrol; Murdoch University; NSW Local Land Service – Murray; Victoria Gorse Taskforce and Landcare Groups; Pilbara Mesquite Management Committee; South Australian Grains Industry Trust Fund; SA Government Adelaide and Mount Loft Ranges Natural Resources Management Board	\$2,846,877	Completed 2018
Market and consumer insights to drive food value chain innovation and growth	MLA	1	Department of Economic Development, Jobs, Transport & Resources Victoria; Horticulture Innovation Australia; CSIRO; Australian Seafood Cooperative Research Centre; Fisheries Research & Development Corporation	\$8,846,005	Completed 2018

ACRONYMS, GLOSSARY AND INDEX

Acronyms

AGM	Annual General Meeting
CSIRO	Commonwealth Scientific and Industrial Research
	Organisation
DEXA	dual-energy X-ray absorptiometry
EBV	estimated breeding value
EU	European Union
FTA	free trade agreement
KPI	key performance indicator
LDL	Livestock Data Link
LEP	Livestock Export Program
LPA	Livestock Production Assurance
MDC	MLA Donor Company
MLA	Meat & Livestock Australia
MSA	Meat Standards Australia
NLIS	National Livestock Identification System
NVD	National Vendor Declaration
OTH	Over-the-hooks
R&D	research and development
RMAC	Red Meat Advisory Council
TPP	Trans-Pacific Partnership
UAE	United Arab Emirates
US	United States

Glossary

Dual-energy X-ray absorptiometry (DEXA)

An objective measurement tool which measures meat, fat and bone in a carcase.

Livestock Data Link (LDL)

LDL is an online application that facilitates improved information sharing across the supply chain, enabling feedback to be received, analysed and compared in an efficient way.

Livestock Production Assurance (LPA)

The LPA program is the Australian livestock industry's on-farm assurance program covering food safety, animal welfare and biosecurity.

Meat Standards Australia (MSA)

MSA is Australia's eating quality grading system which predicts the eating quality of cuts within a carcase.

National Livestock Identification System (NLIS)

NLIS is Australia's system for the identification and traceability of cattle, sheep and goats. It ensures lifetime movements of these species can be identified and recorded within Australia.

National Vendor Declaration (NVD)

Producers use the NVD to declare information about the food safety status of their livestock being sold. It is a key tool underpinning Australia's food safety reputation for livestock.

Index

The index is arranged by key area and then alphabetically word by word. References below indicate the primary reference/s.

About MLA

Alignment with Australian Government priorities	53
At a glance	2
Board committees	57
Board Directors' biographies	63–65
Collaboration	55
CoMarketing Program	
Consultation	55
Corporate governance	57–62
Decision making processes	54–55
Funding	56
History	2
Human resources	69
Locations	3
Members	55
MLA Leadership Team biographies	66
Organisational chart	67
Stakeholders	54
Strategic framework	54
Subsidiary companies	68
Financials	
Directors' report	74
Financial report	
•	
Financial summary	
Financial summary	71
Financial summary	71
Financial summary Operations Animal health and welfare Automation	71
Financial summary Operations Animal health and welfare	71
Financial summary Operations Animal health and welfare Automation Building capability Community engagement	
Financial summary Operations Animal health and welfare Automation Building capability Community engagement Crisis planning	
Financial summary Operations Animal health and welfare Automation Building capability Community engagement Crisis planning Events	
Financial summary Operations Animal health and welfare Automation Building capability Community engagement Crisis planning Events Genetics and genomics	
Financial summary Operations Animal health and welfare Automation Building capability Community engagement Crisis planning Events Genetics and genomics Highlights	
Financial summary	