

**Sustainability  
update  
2021**



**“Our industry is driven to be  
productive and profitable,  
inter-generationally  
sustainable and leaving the  
environment in better shape”**

*Jason Strong  
MLA Managing Director*



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# Message from MLA Managing Director

**I am pleased to present MLA's Sustainability Update 2021. As a service provider to the Australian red meat and livestock industry, we are regularly asked about our sustainability investments and how they support global and industry's strategic objectives. This document outlines these objectives and captures in one place the significant level of MLA's investments in sustainability across the red meat supply chain.**

The Australian red meat and livestock industry is renowned for its resilience. Resilience is the strength most associated with our Australian beef cattle, sheep and goat producers. For generations we have overcome environmental and economic hardships such as drought, fire and flood and crippling troughs in trade. But in 2020–2021, COVID-19 tested us like never before.

Our resilience must continue to evolve to meet new challenges and looking forward it will require us all to be agile and ambitious, to see adversity as opportunity, to be innovators, sustainable and globally competitive leaders of quality produce and products.

The challenges of the last 12 months have brought home to us just how important considerations like food security, safety and sustainability are to our customers and our community, both at-home and abroad, and how important our customers and our communities are to us.

Sustainability includes the production of livestock in a way that is environmentally, socially and financially responsible, with respect for our people, our animals and our natural resources, today and for future generations.

It presents exciting opportunities for our industry, created by the growing global demand for food that is sustainably produced, underpinned by evidence through traceability that our integrity systems guarantee. This enables our industry to stand by our red meat safety and quality claims, providing our customers and community with the assurances they need that we are delivering clean and safe, ethical and responsibly produced food.

For the red meat and livestock industry, sustainability represents our best business case for success. Our research and development (R&D) investments are focused on clearly demonstrating that sustainability goes hand in hand with profitability.

The industry has set some ambitious aspirations:

- to double the value of Australian red meat sales
- be the trusted source of highest quality protein by 2030
- be recognised as world leaders in animal health, welfare and production practices
- world leaders in agricultural environmental management and stewardship practices
- for the red meat and livestock industry to be carbon neutral by 2030.

This report demonstrates our investments in sustainability, our commitment to transparency of our production systems, and our unwavering focus on continuous improvement through proactive adoption and practice change.

Jason Strong  
MLA Managing Director





# Sustainability – Australian red meat and livestock industry alignment with global goals

## Global – United Nation’s Sustainable Development Goals

The United Nation’s Sustainable Development Goals (UN SDGs) were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The SDGs have become the standard for measuring and reporting country, industry and business level sustainability credentials.

The Australian Government has signed onto the 2030 agenda for sustainable development. Australian agriculture and the red meat and livestock industry support Australia’s contribution to the UN SDGs and recognise that aligning our practices to globally recognised sustainability benchmarks will become increasingly important to continued market access and sustainable food production.

Figure 1: The United Nations Sustainable Development Goals



## Global – United Nation’s Framework Convention on Climate Change

The United Nation’s Framework Convention on Climate Change (UNFCCC), the international environmental treaty addressing climate change, seeks to stabilise greenhouse gas concentrations at a level to prevent dangerous human induced climate system interference within a time-frame sufficient to allow ecosystems to adapt naturally to climate change.

The Paris Agreement, the legally binding international treaty on climate change, was adopted by 196 Parties including Australia and entered into force in 2016. The Paris Agreement seeks to limit global warming to well below 2, preferably 1.5 degrees Celsius, compared to pre-industrial levels.

## Australian Agriculture

The National Farmers Federation (NFF) 2030 Roadmap for Industry Growth has a strong sustainability focus, with the aspiration that farmers continue to embrace sustainable farming methods as part of a coordinated national approach that drives productivity and profitability, while recognising and rewarding environmental stewardship.

The NFF has set a target for Australia to cut its greenhouse gas emissions to net zero by 2050. The Federation’s Climate Change Policy lays out a set of principles reaffirming Australian agriculture’s place in the global economy by positioning the sector to take advantage of the social, environmental and economic opportunities presented by a low emissions future.

## Australian red meat industry

The Australian red meat and livestock industry seeks to go one step further with its ambitious target to be Carbon Neutral by 2030 (CN30). This target is ambitious but achievable and will reinforce industry’s position as a global and national leader in sustainable food production.

*Red Meat 2030* provides the industry with a 10-year shared vision, to double the value of Australian red meat sales as the trusted source of the highest quality protein and sets out the six industry priorities and success indicators to guide activities to improve for whole of industry benefit and progress (see Figure 2).

Figure 2: Red Meat 2030 six industry priorities

<p><b>Our people</b></p> <p>People see being part of the Australian red meat and livestock industry as attractive now and into the future.</p>	<p><b>Our customers, consumers and communities</b></p> <p>People feel good about eating Australian red meat. Our customers, consumers and communities recognise the vital role our industry plays in food production and food security, and trust us to deliver high value, high quality products.</p>	<p><b>Our livestock</b></p> <p>We set the standard for world-class animal health, welfare, biosecurity and production practices.</p>	<p><b>Our environment</b></p> <p>We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity.</p>	<p><b>Our markets</b></p> <p>We improve economic resilience for our industry by increasing access to and the performance of new and existing markets.</p>	<p><b>Our systems</b></p> <p>We are a trusted brand because of our integrity systems, built on trust and respect that supports strong partnerships and sharing of information, reducing unnecessary industry and government regulation.</p>
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## MLA’s investment in sustainability

MLA’s *Strategic Plan 2025* aligns with industry’s *Red Meat 2030* plan and commits MLA to continuing to invest to achieve a socially, environmentally and economically sustainable Australian red meat and livestock industry. MLA’s investments focus on fewer, bigger and bolder programs of work that will better equip producers to be more productive and adaptive to climate variability, delivering world-leading animal health and welfare outcomes, while adopting carbon neutral pathways.

This document cannot do justice to the breadth and depth of sustainability investments across the organisation’s programs, sub-programs and priorities. Rather it seeks to highlight those programs and initiatives that are currently having the most significant impact on sustainability (see Figure 3).

Figure 3 also captures industry’s major compliance requirements as required by relevant federal and state government legislation and regulations, and our alignment to critical international benchmarks and best practice.

# MLA's sustainability portfolio investments

**Red Meat 2030 vision – together we will double the value of Australian red meat sales as the trusted source of the highest quality protein.**

Figure 3: MLA's sustainability portfolio investments and industry priorities and progress

Red Meat 2030 six industry priorities	<b>Our people</b>  People see being part of the Australian red meat and livestock industry as attractive now and into the future	<b>Our consumers, customers and community</b>  People feel good about eating Australian red meat. Our customers, consumers and communities recognise the vital role our industry plays in food production and food security, and trust us to deliver high value, high quality products	<b>Our livestock</b>  We set the standard for world class animal health, welfare, biosecurity and production practices	<b>Our environment</b>  We demonstrate leadership in sustainability, delivering on community expectations in the areas of land, water, biodiversity, climate variability and biosecurity	<b>Our markets</b>  We improve the economic resilience for our industry by increasing access to and the performance of new and existing markets	<b>Our systems</b>  We are a trusted brand because of our integrity systems, built on trust and respect that supports strong partnerships and sharing of information, reducing unnecessary industry and government regulation
MLA key program areas	<b>Producer adoption</b> Producer adoption <b>Capability building</b> Innovation capability building Industry leadership and capacity building	<b>Animal welfare</b> Animal welfare <b>Domestic market</b> Market knowledge Marketing and promotion Nutrition <b>International markets</b> Market knowledge Marketing and promotion Livestock export R&D <b>Eating quality</b> Eating quality <b>Environmental sustainability</b> On and off-farm sustainability <b>Product and packaging innovation</b> High value food frontiers <b>Communication</b> Community and stakeholder	<b>Animal health and welfare</b> Animal health and animal welfare <b>International markets</b> Livestock export R&D <b>Eating quality</b> Eating quality <b>Environmental sustainability</b> Sustainability off-farm <b>Feedlot</b> Feedlot productivity <b>Objective measurement</b> Objective measurement <b>Producer adoption</b> Producer adoption <b>Value chain information and efficiency</b> Digital value chain information <b>Productivity off-farm</b> <b>Productivity on-farm</b> Beef, sheep and goat productivity Feedbase production Livestock genetics Digital agriculture	<b>Environmental sustainability</b> Sustainability on and off-farm <b>Feedlot</b> Feedlot productivity <b>Productivity on-farm</b> Beef and sheep productivity Feedbase production Livestock genetics Digital agriculture	<b>International markets</b> Market access Market knowledge Livestock export market activities Livestock export R&D <b>Eating quality</b> Eating quality <b>Integrity systems</b> Market access science <b>Product and packaging innovation</b> High value food frontiers	<b>International markets</b> Livestock export market activities <b>Eating quality</b> Eating quality <b>Integrity systems</b> Integrity systems Market access science <b>Value chain information and efficiency</b> Digital value chain information
MLA's sustainability investments	<ul style="list-style-type: none"> <li>Profitable Grazing Systems</li> <li>Producer Demonstration Sites</li> <li>BredWell and FedWell</li> <li>EDGENetwork</li> <li>Livestock Advisor Updates</li> <li>BeefUp Forums</li> <li>MeatUp Forums</li> <li>Northern Breeding Business (NB2)</li> <li>Sheep Reproduction Strategic Partnership</li> <li>MLA Leadership sponsorships</li> </ul>	<ul style="list-style-type: none"> <li>MLA's Australian red meat nutrition program</li> <li>Australian Beef Sustainability Framework</li> <li>Antibiotic stewardship plan</li> <li>Packaging and product innovation</li> </ul>	<ul style="list-style-type: none"> <li>Animal health and welfare</li> <li>Livestock genetics</li> <li>Livestock pain mitigation</li> <li>Livestock wellbeing</li> <li>Feedbase production</li> </ul>	<ul style="list-style-type: none"> <li>CN30</li> <li>Australian Beef Sustainability Framework</li> <li>Sheep Sustainability Framework</li> <li>Smart farms</li> <li>Wastes to profits</li> </ul>	<ul style="list-style-type: none"> <li>International market presence</li> <li>Economic and technical market access reform initiatives</li> <li>Livestock Production Assurance (LPA)</li> <li>National Livestock Identification Scheme (NLIS)</li> <li>National Vendor Declaration (NVDs)</li> </ul>	<ul style="list-style-type: none"> <li>Livestock Production Assurance (LPA)</li> <li>National Livestock Identification System (NLIS)</li> <li>National Vendor Declaration (NVDs)</li> </ul>
Compliance requirements		<ul style="list-style-type: none"> <li>Food Standards Australia New Zealand (FSANZ) Code is the legislated standards. FSANZ develops standards that regulate the use of ingredients, food composition technologies and labelling.</li> <li>FSANZ Primary Production and Processing (PPP) standards regulate food safety and traceability throughout the entire red meat supply chain</li> <li>All processors/wholesalers/retailers require State Food Regulators approval and CODEX HACCP food safety compliance</li> </ul>	<ul style="list-style-type: none"> <li>Animal welfare is a legal requirement and animal cruelty is a criminal offence</li> <li>State and territory governments set and enforce animal welfare standards through administration of state legislation for animal welfare and the prevention of animal cruelty.</li> <li>Animal welfare standards and guidelines for cattle, sheep and goats regulated into law by state governments</li> <li>State government has the legislative power to mandate pain relief and enforce strict penalties</li> <li>Five Domains of Animal Welfare frameworks recognises the four physical and one mental state necessary for positive welfare and wellbeing</li> <li>All pain relief treatments must be registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA)</li> </ul>	<ul style="list-style-type: none"> <li>CN30 aligned to Australian Greenhouse Gas Emissions Information System and National GHG Inventory</li> <li>Australian Beef Sustainability Framework and Sheep Sustainability Framework currently aligning and mapping to the UN Sustainable Development Goals</li> <li>Australian Government – Environmental Protection and Biodiversity Conservation Act 1999 covers the environmental assessment and approvals, protects significant biodiversity, and integrates the management of important natural resources</li> <li>State Government Environment Protection and Vegetation Management legislation prescribe strict vegetation clearing and management requirements</li> <li>State Environment Protection Authorities (EPAs) regulate the disposal of effluent at feedlots</li> <li>Australian Pesticide and Veterinary Medicines Authority (APVMA) require mandatory registration of agricultural and veterinary chemicals</li> </ul>	<ul style="list-style-type: none"> <li>Australian Government – Department of Agriculture, Water and the Environment – Biosecurity Act 2015 manages biosecurity risks in Australia, protecting Australia from pests and diseases and maintaining our ability to trade internationally. Export Control Rules 2021 sets out the operational requirements that must be met to export specific goods from Australia.</li> </ul>	<ul style="list-style-type: none"> <li>National Livestock Identification System (NLIS) mandatory for all livestock producers</li> <li>Livestock Production Assurance (LPA), National Feedlot Accreditation Scheme (NFAS) and Meat Standards Australia (MSA) are voluntary systems but mandated by key markets</li> <li>LPA is a requirement for all export markets, NFAS accredited feedlots, MSA and majority of domestic market channels</li> <li>NFAS accreditation is a prerequisite for all feedlot beef with grain fed market claims</li> <li>NFAS is owned and operated by AUS-MEAT Ltd on behalf of the Australian feedlot industry. Federal government regulates export accreditation. AUS-MEAT language supports meat export orders</li> <li>Australian Livestock Processing Industry Animal Welfare Certification System (AAWCS) independently AUS-MEAT audited</li> <li>Australian Standards for Export of Livestock (ASEL) and Exporters Supply Chain Assurance Scheme (ESCAS) mandatory for feeder and slaughter livestock</li> </ul>
Industry's progress	<ul style="list-style-type: none"> <li>Australia's red meat and livestock industry turnover, as defined by income generated by businesses from sale of goods and services rose 42% from 2013–14 to 2018–19<sup>1</sup></li> <li>Australia's red meat and livestock industry value add, as defined by overall value of goods and services produced by businesses in the industry rose 89% from 2013–14 to 2018–19 (2020)<sup>1</sup></li> <li>5.3% (average) and 9.3% (top 25%) rate of return to total capital for beef farms (five year rolling average) (2019/20)<sup>2</sup></li> <li>Sheep to be reported from (FY20/21)</li> <li>2015–2020 Impact assessment NPV \$663M from MLA on-farm R&amp;D &amp; extension investments (2020)<sup>3</sup></li> </ul>	<ul style="list-style-type: none"> <li>51% of Australians surveyed agree/strongly agree with the statement 'the Australian cattle and sheep industry are committed to sustainable production' (2020)<sup>4</sup></li> <li>95% of Australian households are regularly eating beef and 76% regularly eating lamb (2019)<sup>5</sup></li> <li>60% of general practitioners and dietitians agree 'MLA is a credible and relevant source of material on healthy eating' (2019–20)<sup>6</sup></li> <li>Major investors, retailers and food service groups aligning to Australian Beef Sustainability Framework (2021)<sup>7</sup></li> <li>62.5% of Australian feedlots covered by antibiotic stewardship plans (2020)<sup>7</sup></li> </ul>	<ul style="list-style-type: none"> <li>70% of cattle producers breeding livestock to be naturally polled (2020)<sup>7</sup></li> <li>30% of cattle producers regularly using pain relief during animal husbandry practices (2020)<sup>7</sup></li> <li>70% of Merino ewe lambs and 63% of Merino wether lambs reported as mulesed (2019)<sup>8</sup></li> <li>86% of Merino ewe lambs and 87% of Merino wether lambs given pain relief during mulesing (2019)<sup>8</sup></li> </ul>	<ul style="list-style-type: none"> <li>The red meat sector has reduced CO<sub>2</sub>e emissions by 53.22% since 2005 baseline. This represents a reduction from 22% in 2005 to 11.8% in 2018 of industry's proportion of national GHG emissions. (2020)<sup>9</sup></li> <li>57.4% of regions nationally achieving healthy ground cover thresholds (2020)<sup>7</sup></li> <li>Australian Beef Sustainability Framework's fifth operational year and reporting on over 80% of indicators (2021)<sup>7</sup></li> <li>Sheep Sustainability Framework launched in April 2021<sup>8</sup></li> </ul>	<ul style="list-style-type: none"> <li>15 preferential trade agreements in force, reducing barriers to trade and covering an MLA estimated 86% of Australian red meat exports in 2020<sup>10</sup></li> <li>Continued access to over 100 markets (2020)<sup>2</sup></li> <li>100% declared freedom from all exotic diseases by World Health Organisation for Animal Health (2019–2020)<sup>11</sup></li> <li>90% of Australian cattle properties covered by documented biosecurity plans (2019–20)<sup>12</sup></li> </ul>	<ul style="list-style-type: none"> <li>National Livestock Identification Scheme (NLIS) movement recording compliance was 96.01% (2019–20)<sup>12</sup></li> <li>192,744 producers estimated to represent 95% of all producers nationally are LPA accredited (2019–2020)<sup>12</sup></li> <li>94.7% Australian beef feedlots NFAS compliant (2020)<sup>13</sup></li> <li>97.3% compliance with Exporter Supply Chain Assurance System (ESCAS) (2019)<sup>14</sup></li> <li>99.91% compliance by Australian cattle and 99.78% compliance by Australian sheep industry to Australian standards for chemical residues (2019–20)<sup>15</sup></li> <li>65 of Australia's meat processing establishments covering approximately 80% of Australian red meat production are accredited under the Australian Livestock Industry Animal Welfare Certification System (AAWCS)<sup>16</sup></li> <li>MSA delivered \$172M in additional farm gate (2020)<sup>12</sup></li> </ul>

# Our people



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

### Sustainability program areas

Producer adoption

Capability building

### Sustainability investments



### Producer Demonstration Sites

### Major industry progress in the people priority include:

- Australia's red meat and livestock industry turnover, as defined by income generated by businesses from sale of goods and services rose 42% from 2013–14 to 2018–19<sup>1</sup>
- Australia's red meat and livestock industry value add, as defined by overall value of goods and services produced by businesses in the industry rose 89% from 2013–14 to 2018–19 (2020)<sup>1</sup>
- 5.3% (average) and 9.3% (top 25%) rate of return to total capital for beef farms (five year rolling average) (2019/20)<sup>2</sup>  
Sheep to be reported from (FY20/21)
- 2015–2020 Impact assessment NPV \$663M from MLA on-farm R&D & extension investments (2020)<sup>3</sup>

Our people are our industry's greatest asset and significant MLA investments are focused on adoption and extension to better understand our producers and their barriers to practice change and R&D adoption. Going forward, all MLA research programs will have clear adoption and extension pathways from inception, so producers can successfully implement practical R&D solutions into their farm businesses. Investments will target regional and customised adoption packages that focus on localised problems and priorities and capability building programs that provide our people with the confidence and skills to understand and implement R&D outcomes.

MLA programs closely aligned to sustainability within the people priority include:

- Producer adoption
- Capability building – Innovation capability building, and industry leadership and capacity building.

### Producer adoption

MLA's Producer adoption program works to build the capability of producers to increase on-farm productivity and profitability from R&D adoption, enabling best practice management across all areas of on-farm management. Major investment areas include:

- Profitable Grazing Systems
- Producer Demonstration Sites
- BredWell and FedWell
- EDGENetwork
- Livestock Advisor Updates
- BeefUp Forums and MeatUp Forums.

There are currently more than 50 Producer Demonstration Site (PDS) projects spanning nearly 300 properties, involving hundreds of producers directly and engaging thousands through observing these demonstrations.

Profitable Grazing Systems (PGS) is the umbrella program for delivering customised, long-term training packages, supported by a network of regionally based coaches and advisors. Over 500 producers are currently committed to over 30 groups, each utilising some of the 25 training packages available. The aim of the PDS and PGS programs are to deliver tangible, measurable productivity improvements through the adoption of R&D outcomes.

The recently launched Northern Breeding Business (NB2) aims to deliver at least an additional \$20 million annually in net benefits to northern beef enterprises by 2027. NB2 aims to achieve this by:

- improving reproductive rates
- decreasing mortality
- increasing turn-off weight
- improving genetic potential in northern herds.

The Sheep Reproduction Strategic Partnership is a long-term commitment to improving sheep reproductive performance and longevity, through:

- optimising management of pregnant ewes
- increasing weaning rates
- decreasing ewe and lamb mortality rates.

### Capacity building – Innovation capability building, and industry leadership and capacity building

MLA's Capability building program works across two specific investments.

Innovation capability building engages with scientists, researchers, value chain partners, rural professionals, producers, start-ups and innovators in a range of capability building initiatives to accelerate innovation and adoption.

Industry leadership and capacity building equips industry representatives with the skills, knowledge and confidence to be effective communicators, positive contributors and successful leaders.

Beyond the livestock industry, MLA proactively supports broader industry leadership, including the:

- Australian Rural Leadership Program
- Horizon's Agricultural Undergraduate Scholarship Program
- Nuffield Australian Farming Scholarships
- TRAIL program.



# Our customers, consumers and communities



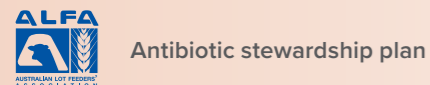
**People feel good about eating Australian red meat. Our customers, consumers and communities recognise the vital role our industry plays in food production and food security, and trust us to deliver high value, high quality products**

## Sustainability program areas

- Animal health and welfare
- Domestic market
- International markets
- Eating quality
- Environmental sustainability – on and off-farm
- Product and packaging innovation

## Sustainability investments

### Red meat nutrition program



### Packaging and product innovation

### Major industry progress in the customer, consumer and community priority include:

- 51% of Australians surveyed agree/strongly agree with the statement ‘the Australian cattle and sheep industry are committed to sustainable production’ (2020)<sup>4</sup>
- 95% of Australian households are regularly eating beef and 76% regularly eating lamb (2019)<sup>5</sup>
- 60% of general practitioners and dietitians agree ‘MLA is a credible and relevant source of material on healthy eating’ (2019–20)<sup>6</sup>
- Major investors, retailers and food service groups aligning to Australian Beef Sustainability Framework (2021)<sup>7</sup>
- 62.5% of Australian feedlots covered by antibiotic stewardship plans (2020)<sup>7</sup>

Our customers want to be confident the food that they purchase is safe and clean, and has been ethically and responsibly produced. Our domestic and international customers are increasingly interested in the sustainability and provenance of their food.

MLA supports community trust by committing to practice-change and demonstrating transparency in our animal husbandry and welfare practices and natural resource management. Community confidence builds preference and loyalty to Australian red meat and adds value to the industry.

MLA works with scientific experts and invests in research and communications about product attributes that informs choices, gives consumers confidence and enables enjoyment of Australian red meat in a healthy, balanced diet.

### Australian red meat nutrition program

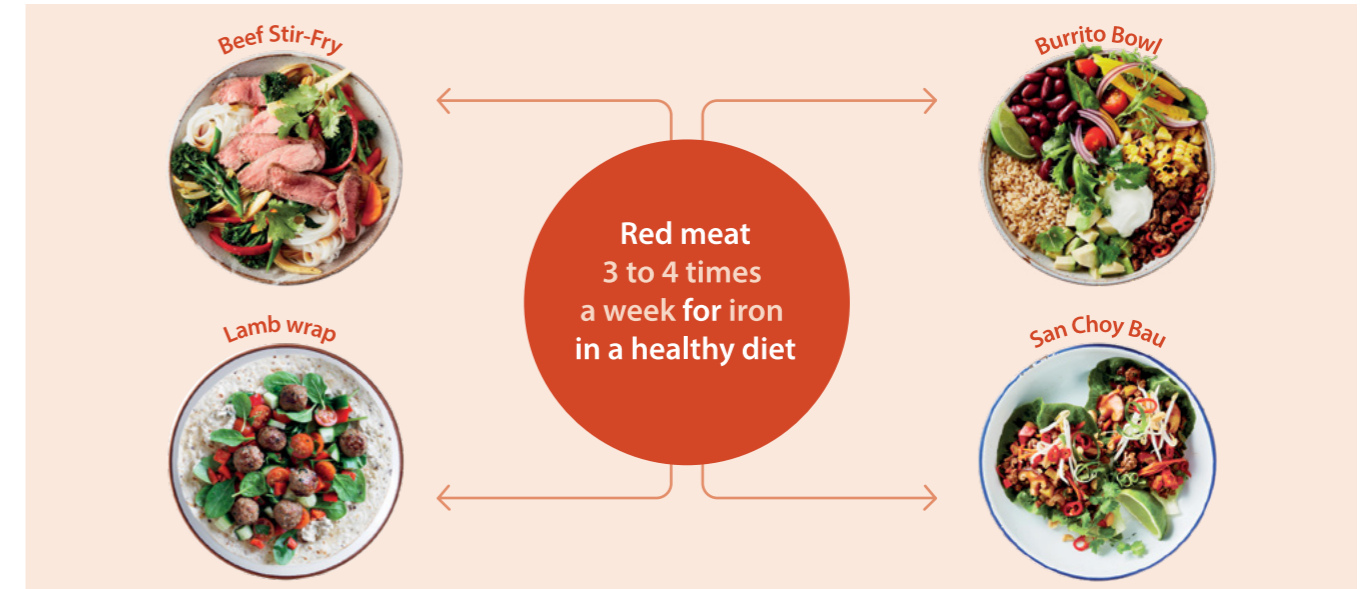
Australian red meat is popular and an important and accessible source of protein, iron and zinc. The Australian Dietary Guidelines (ADGs) published by the National Health and Medical Research Council (NHMRC), an Australian Government agency responsible for medical and public health research, recommends Australians eat 455g of lean, cooked red meat per week as part of a healthy diet. This amount is equivalent to approximately 650g raw weight and typically consumed across 3–4 meals a week (see Figure 4). Australian red meat is naturally nutritious, providing 12 essential nutrients, including protein, iron, zinc, long chain omega 3 fatty acids and B vitamins.

MLA’s investment in nutrition and consumer research generates robust information about the nutritional value of Australian red meat in a healthy diet, and the nutrition information needs of consumers. More recent research, in partnership with the CSIRO, is providing data and insights that will inform ways to consume Australian red meat in a healthy diet and within planetary boundaries. Practical resources provide credible guidance on the consumption of Australian red meat in healthy, balanced meals.

Policy makers use MLA’s product information to understand the role of Australian red meat in a healthy diet. Data about the nutrient composition of Australian red meat is available from the Food Standards and New Zealand Australian Food Composition reference database. The database provides information required for labelling, national nutritional surveys and dietary analysis. Health professionals use MLA’s resources to provide guidance on healthy eating in line with the Australian Dietary Guidelines.

MLA has a reputation for high quality nutritional educational resources that are well received by consumers and health professionals. MLA brand marketing and communications programs provide consumers with inspiration and confidence to enjoy the wide range of Australian red meat products in a variety of healthy, balanced meal occasions.

Figure 4: Red meat as part of a healthy diet



### Australian Beef Sustainability Framework (see environmental priority)

The Australian Beef Sustainability Framework (ABSF) was developed by the industry to meet the changing expectations of consumers, customers, investors and others, and to advise industry investments for continued progress. The framework defines sustainable beef production and tracks performance against a series of critical indicators for animal welfare, environmental stewardship, economic resilience and people and community.

Major supermarkets, foodservice and investment groups are utilising the ABSF and aligning their own sustainability processes to it because it is tailored to the beef industry, and articulates what the supply chain, from producer to consumer wants addressed.

For example, Woolworths uses the framework to inform their own sustainability activities. The company believes that the ABSF sets the blueprint for what ‘good’ looks like for the key sustainability issues in beef production to enable practice change and better sustainability outcomes.

Rabobank Australia uses the framework to inform their own sustainability activities. Rabobank has a significant portfolio of beef producing clients, and they see it as vital that they contribute to an industry-led framework that drives long-term sustainability for their beef clients and the value chain.

### Antibiotic stewardship program

MLA is committed to sustaining the effectiveness of antibiotics for humans and animals, by investigating industry best practice adoption to ensure industry is complying with prescribed guidelines and stewardship programs.

The Australian Lot Feeders Association (ALFA) and MLA have developed the Antimicrobial Stewardship Guidelines, to support and promote responsible antimicrobial use in

feedlots. The guidelines are embedded in the AUS-MEAT audited National Feedlot Accreditation Scheme (NFAS) quality assurance scheme for the grain-fed beef industry. The guidelines outline five stewardship principles that guide lot feeders towards best practice management of antimicrobials and prevention of overuse.

**The principles:** responsibility, review, reduce, refine and replace and are collectively termed the ‘5Rs’. The scheme supports correct antimicrobial use through:

- documented procedures for livestock identification
- biosecurity storage
- inventory management
- labelling
- administration to animals
- export slaughter interval
- withholding period compliance.

### Packaging and product innovation

MLA’s high value food frontiers program is investigating new high value red meat uses and occasions, informed by global food and market trend insights, to grow demand and diversification for Australian red meat.





Novel technologies and value chains are being scoped that offer higher-valued solutions as compared to generic commodity meat trading to:

- unlock premiums
- add value to a greater proportion of the carcass
- deliver higher value uses for low value items
- increase customer preference of Australian red meat products and services across key markets.



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

### Sustainability program areas

-  Animal health and welfare
-  Environmental sustainability
-  Productivity on-farm – beef, sheep and goat productivity, feedbase production and livestock genetics
-  Producer adoption

### Sustainability investments

- Animal health and welfare
- Livestock genetics
- Livestock pain mitigation
- Livestock wellbeing
- Feedbase production

### Major industry progress in the livestock priority include:

- 70% of cattle producers breeding livestock to be naturally polled (2020)<sup>7</sup>
- 30% of cattle producers regularly using pain relief during animal husbandry practices (2020)<sup>7</sup>
- 70% of Merino ewe lambs and 63% of Merino wether lambs reported as mulesed (2017)<sup>8</sup>
- 86% of Merino ewe lambs and 87% of Merino wether lambs given pain relief during mulesing (2019)<sup>8</sup>

The diverse nature of the environment and climatic conditions across Australia dictates the livestock production systems, the livestock breeds and the available pastures and legumes. This means implementation of best practice in utilising breeds, pastures, disease and parasite controls and husbandry practices is critical to continued sustainability and profitability.

Animal welfare is a legal requirement and animal cruelty is a criminal offence. Industry and MLA recognises and commits to the ‘five domains of animal welfare’ (see Figure 5), the internationally recognised standard to optimal animal health and welfare as endorsed by the World Organisation for Animal Health.

The welfare of ‘our livestock’ is underpinned by the Animal Welfare Standards and Guidelines for cattle, sheep and goats, as regulated by state and territory governments. These standards and guidelines are the legal requirements for the welfare of livestock. They apply to all who are responsible for the care and management of livestock, and are based on current scientific knowledge, recommended industry practice and community expectations.

The Australian Animal Welfare Standards and Guidelines cover producers’ responsibilities and sets out animals needs in relation to:

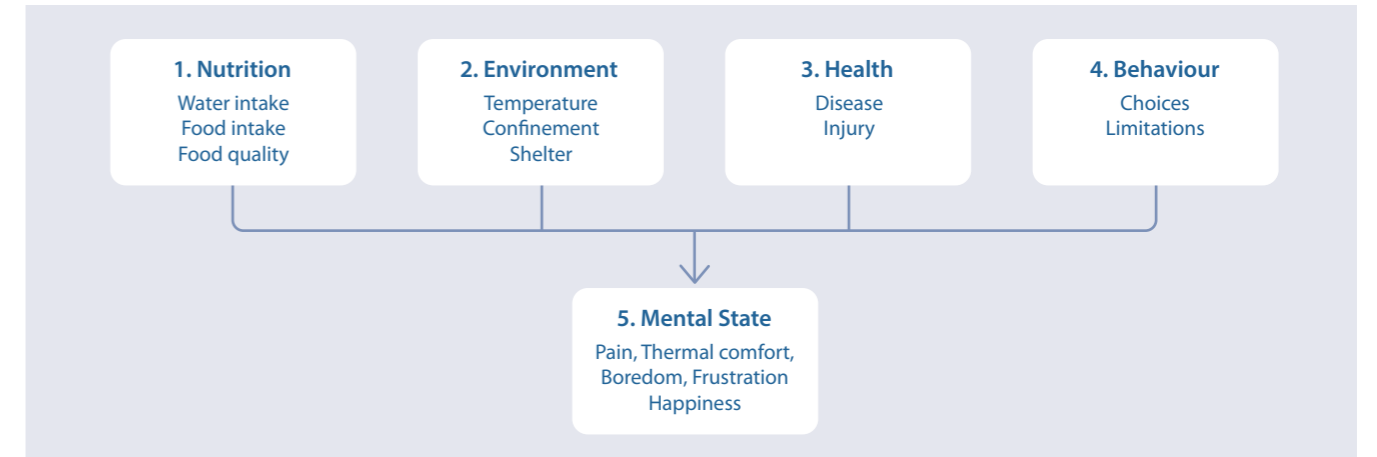
- feed and water
- risk management in extreme weather
- natural diseases, disease, injury and predation
- facilities and equipment, handling, husbandry and management
- breeding management
- humane processing.

MLA’s livestock investments focus on reducing costs, improving adoption of R&D solutions, and increasing integrity and quality assurance compliance and uptake across the value chain. Optimising livestock production systems will enable industry to become more resilient to climate variability and more invested in animal health and welfare, delivering both community trust and better returns. Strong community trust presents potentially big market opportunities for the livestock industry.

MLA has unique capacity and capabilities, with connections across the value chain; the best science and technology, people and insights and proven pathways to adoption and practice change.

MLA is a member of the National Animal Welfare Research, Development and Extension Strategy, working closely with federal and state government bodies including Animal Health Australia, to ensure legislative and regulatory compliance. Both MLA and its fully owned subsidiary, MLA Donor Company (MDC) collaborate with Australia’s leading science agencies and technology companies to undertake projects that support animal husbandry and welfare best practice.

Figure 5: Five domains of animal welfare



### Animal health and welfare

MLA’s investments in animal health and welfare aim to:

- reduce the impacts of animal disease, illness, injury and pain through faster diagnoses and preventative measures
- improve genetic investigation and husbandry practices
- provide more effective pain relief

Investments focus on enabling practice change by producers when raising and breeding livestock; removing or replacing aversive husbandry practices and promoting pain relief. Improved husbandry practices and pain relief support animal wellbeing and performance and reduce livestock mortality.

#### Current projects include:

- Replacing aversive husbandry practices, through genetic testing to breed out horns from beef production systems and breed out heavily wrinkled body types from sheep production systems.
- Providing analgesia for painful livestock procedures where replacement husbandry practices are currently not available.
- Developing vaccines for single-dose vaccine and topical vaccines for cattle ticks, pink-eye and Johne’s disease, and vaccines against gastrointestinal nematodes of small ruminant.
- Research into the primary cause of pneumonia in Australian sheep, drench resistance and movement of Barbers Pole worm.
- Finding new ways of measuring and recording the wellbeing state of livestock and benchmarking these.

### Livestock genetics

MLA’s investment in livestock genetics is focused on accelerating the rate of genetic progress to eliminate negative animal husbandry practices in the livestock industry. The National Livestock Genetics Consortium developed in partnership with MLA is working to double the annual rate of genetic gain in the commercial livestock sector by 2022.

MLA oversees a number of important livestock genetic evaluation services, including:

- BREEDPLAN for the beef industry
- LAMBPLAN and MERINOSELECT for the sheep industry
- KIDPLAN for the goat industry.

Producers submit phenotypic performance data on their animals to the service, which then analyses this performance information, along with relevant pedigree information to generate breeding values across specific traits such as reproduction, growth weights, carcass traits, health and welfare traits. The service radically accelerates the evolution of positive genetic gain on herd productivity and performance.

The Australian Poll Gene Marker’s optimised poll test (OPT) has improved the accuracy of poll prediction to 99%, enabling producers to accurately breed out horns from their beef production systems. The recent development of a single nucleotide polymorphism (SNP) based poll test that is compatible with other genomic products, allows more rapid adoption of the test.

Significant progress has been made in the movement away from horned animals with 73% of the national seedstock cattle herd in the recorded database now genetically polled.





MERINOSELECT has made positive progress in the move to plainer breech animals that reduces the need to mules. Mulesing is the practice of cutting skin from around the breech of a sheep to prevent parasitic infection by flystrike. Breech wrinkle is an indicator trait for flystrike resistance and is used to select plainer breech animals of lower fly susceptibility. There has been a five-fold increase in the number of MERINOSELECT flocks recording for breech wrinkle (EBWR) since 2015, and records are demonstrating that flocks are increasingly doing better in managing against the unfavourable correlation between plainer animals and wool clip yield.

### Livestock pain mitigation

Where husbandry practices are still required, the provision of pain relief for routine husbandry is an expectation. Pain relief is now legislated and enforced through penalties in several states and is a requirement of all industry quality assurance programs.

The development of effective and practical treatments has been a major advance in alleviating the pain animals experience associated with husbandry practices including castration, dehorning, mulesing and tail docking and their application is becoming common place practice.

There are currently three products on the market which MLA support that have pain relief claims for cattle, sheep and goats with an additional product available for sheep. These products are segregated into fast-acting but short-lasting local anaesthetics including NumOcaine and Tri-Solfen, and slow-acting but longer lasting analgesics including Buccalgesic and Metacam. For cattle there are also a range of additional injectable Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) that can be obtained from veterinarians.

The four key products are:

- **NumOcaine** is the pre-operative, local anaesthetic marketed together with the MLA invested NumNuts ring application system. Currently it is only registered for use in sheep with cattle trial work currently underway. NumNuts is now commercially available to the sheep industry within Australia.
- **Tri-Solfen** is a topically applied post-operative local anaesthetic combination agent. It was initially registered for treatment for sheep undergoing surgical mulesing. Its treatment has been extended to cattle and other husbandry practices.
- **Buccalgesic** is a meloxicam (NSAID) gel that is administered by oral application in the buccal (cheek) pouch for application to both lambs and calves.
- **Metacam 20** is a meloxicam (NSAID) injection under the skin and for application to both lambs and calves.

MLA supports the recommendation that using a combination of products will provide greater pain relief, with local anaesthetics providing immediate pain relief and analgesics and NSAIDs providing slower-acting but longer duration pain relief.

### Livestock wellbeing

MLA is investigating new ways of measuring and recording the wellbeing state of livestock and benchmarks for individual enterprises. Objective assessment of livestock wellbeing takes into account behaviour and condition, and the environment.

Research to date has investigated the areas of animal behaviour, physiological and pathological biomarkers, and stock handler attitudes and behaviour. If technology can quantify animals' exposure to adverse impacts from birth to humane processing, wellbeing parameters could be applied to a welfare benchmarking system to support an accreditation scheme and specialist training for animal handling and interaction.

### Feedbase production

MLA's investment aims to increase on-farm productivity and profitability through improved nutrition and supplementation, to promote good rumen function and feed conversion, reproductive efficiency, fertility and animal survival.

Livestock production depends on efficiently managing the feedbase to ensure a stable supply of forage to mitigate variable seasons and competition from undesirable plants and pest animals. Feedbase production supports producers to navigate changing circumstances in production and natural resource management.

The feedbase program focuses on:

- new plants and varieties with improved genetic gain
- better management of grasses, legumes and shrub-tree combinations
- better utilisation and better biological controls for pest animals and plants

This investment supports productivity by improving animal health, improving feed conversion and weight gain efficiency.

## INDUSTRY PRIORITY

# Our environment



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

### Sustainability program areas

- Environmental sustainability**  
Sustainability on and off-farm
- Feedlot**  
Feedlot productivity
- Productivity on-farm** – Beef, sheep and goat productivity, feedbase production and livestock genetics

### Sustainability investments

- Red Asparagopsis**
- 3-NOP**
- Smart farms**
- Wastes to profits**

### Major industry progress in the environment priority include:

- The red meat sector has reduced CO<sub>2</sub>e emissions by 53.22% since 2005 baseline. This represents a reduction from 22% in 2005 to 11.8% in 2018 of industry's proportion of national GHG emissions (2020)<sup>9</sup>
- 57.4% of regions nationally achieving healthy ground cover thresholds (2020)<sup>7</sup>
- Australian Beef Sustainability Framework's fifth operational year and reporting on over 80% of indicators (2021)<sup>7</sup>
- Sheep Sustainability Framework launched in April 2021<sup>8</sup>

Climate is the biggest individual driver of production variability in the livestock industry. Industry is adapting management practices to reflect our changing climatic conditions, and the critical role and capabilities producers hold as custodians of half Australia's landmass. Much of this landmass realistically cannot support other food production systems and is capable of sequestering significant amounts of carbon into soils and vegetation, and in turn offsetting national greenhouse gas (GHG) emissions.

Industry's close relationship with its natural resources uniquely positions us to capture more value by providing environmental and ecosystem services, such as carbon sequestration, biodiversity and resource management alongside and complementing red meat production. Greater adoption of on-farm and off-farm practices that are beneficial to the environment builds community trust and gives us an important environmental competitive advantage.

The Australian red meat and livestock industry has already made significant progress, with Australian agriculture achieving the biggest reductions in GHG emissions of any sector nationally, and the livestock industry is leading the way and making the biggest contribution to agriculture through its proactive involvement in emission reduction and carbon storage projects.

### Carbon Neutral 2030

Industry has set an ambitious target to be Carbon Neutral by 2030 (CN30) in recognition that it must become more environmentally and economically resilient to manage the impacts of climate change. The target demonstrates industry's commitment to addressing emissions and to building our reputation as a global leader in sustainable food production. MLA's investment in CN30 is a critical piece of work for our industry and country.

CSIRO modelling has demonstrated CN30 is achievable within current livestock numbers and is compatible with industry's target of doubling the value of red meat sales by 2030, with much of the science and practice change under investigation or already available for adoption.

CN30 is an aspirational target for the livestock industry to net zero greenhouse gas emissions by 2030, this means the Australian red meat and livestock industry will make no net release of greenhouse gas (GHG) emissions into the atmosphere, as measured by the Australian Government's National Greenhouse Gas Inventory (NGHGI) by 2030.

The NGHGI reports Australia's emissions annually, from 1990 to present, in keeping with Australia's international GHG emissions reduction commitments, with 2005 set as the baseline year.

The NGHGI reports GHG emissions as total carbon dioxide equivalent (CO<sub>2</sub>e) and the amount of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) for each sector. Our industry's major GHG emissions are enteric methane (CH<sub>4</sub>) a by-product of ruminant livestock digestion, carbon dioxide (CO<sub>2</sub>) from soil and vegetation change and nitrous oxide (N<sub>2</sub>O) from soils.





The Australian red meat and livestock industry's vegetation and regrowth management is tightly regulated by federal and state government legislation. The industry has reduced emissions by 53.22% since the baseline year of 2005, largely through significantly improved productivity as well as changes to vegetation management practices that reflect the changed regulatory environment. This equates to a reduction in industry's proportion of national GHG emissions from 22% in 2005 to 11.8% in 2018.

The Global Warming Potential is the most commonly used and internationally accepted metric to report GHG emissions and is a measure of how much energy a greenhouse gas traps in the atmosphere in a given time period. The GWP of other gases, including methane, is converted to equivalent amounts of carbon dioxide (CO<sub>2-e</sub>) for accounting and reporting purposes.

Methane (CH<sub>4</sub>) is the primary source of GHG emissions from livestock, the gas is a high contributor to global warming but also has the shortest lifespan of all emissions. A new metric GWP\* is currently under investigation, which also factors in the atmospheric lifespan of emissions and MLA is currently exploring using both GWP100 (GWP over a 100 year period) and GWP\* in future reporting on emissions from the Red Meat Industry.

MLA recently launched the *CN30 Roadmap* that provides industry with enterprise-level pathways and practices that reduce carbon emissions, improve carbon storage and sequestration and provide tools to calculate enterprise level GHG emissions. CN30 activities are grouped into four key areas of work, representing the most important issues to pursue to achieve CN30. These are emissions reduction; carbon storage; integrated management systems; and leadership building.

Figure 6: Options for avoiding GHG emissions from farms, feedlots and processing facilities

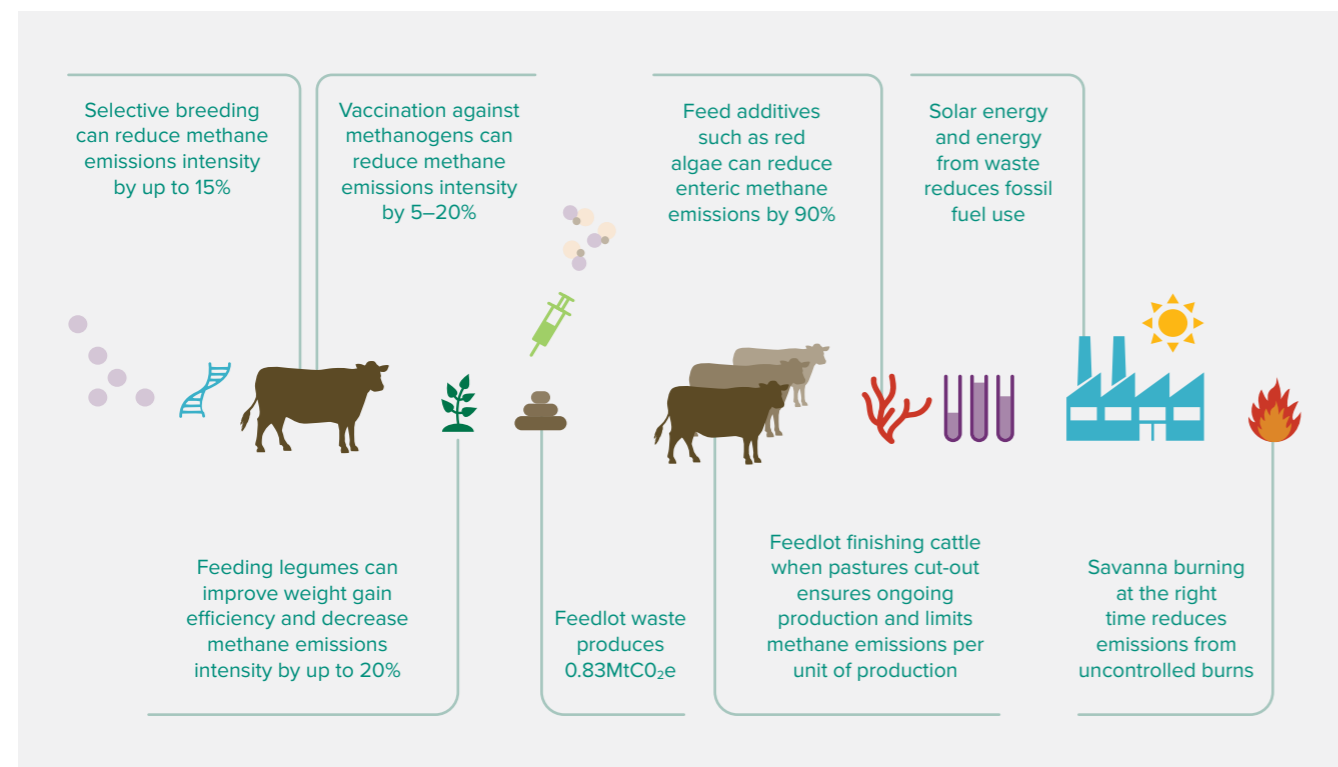
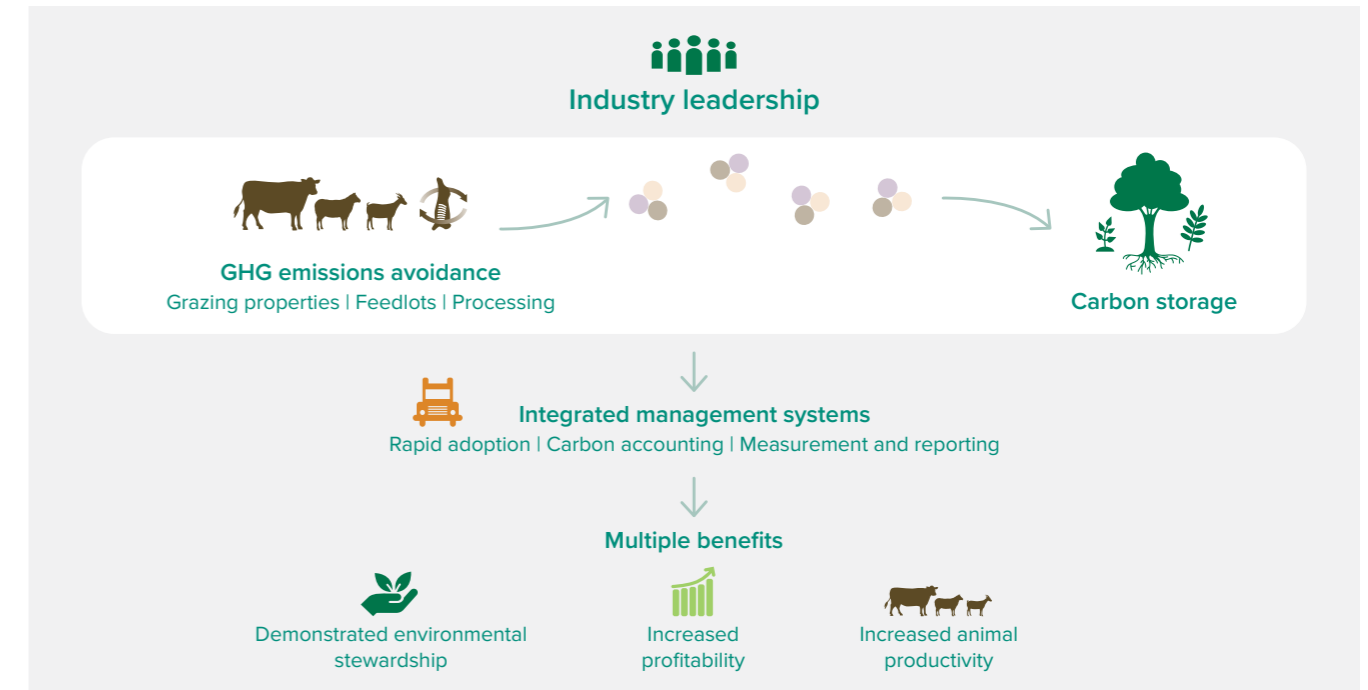


Figure 7: Work areas under the CN30 initiative



CN30 Roadmap sets out four specific work areas and captures the key technologies that industry and enterprises can use:

CN30 Roadmap	
Work areas	Key activities and technologies
<b>Leadership building</b>	<ul style="list-style-type: none"> <li>nurturing existing and developing stakeholder relationships to develop industry leaders</li> <li>aligning relevant industry strategies and frameworks including Red Meat 2030 and Australian Beef Sustainability Framework and Sheep Sustainability Framework</li> <li>working with Peak Industry Councils and government to set clear and stable policy mechanisms</li> <li>developing science communication initiatives for all stakeholders to ensure shared understanding of knowledge and technology</li> <li>developing capability building initiatives for industry.</li> </ul>
<b>GHG emissions avoidance</b>	<ul style="list-style-type: none"> <li>animal genetics and husbandry practices to increase production efficiency and reduce methane emissions intensity</li> <li>livestock supplements that improve livestock productivity and lower enteric methane emissions</li> <li>pasture shrubs and legumes that improve livestock productivity and lower enteric methane emissions</li> <li>equipment to capture and reuse methane from processing waste treatment</li> <li>energy efficiency and renewable energy technology to reduce carbon dioxide emissions from use of fossil fuels</li> <li>equipment to reduce nitrous oxide and methane emissions from manure management in lot feeding</li> <li>savannah burning management methods to avoid emissions of nitrous oxide and methane resulting from 'hot' burns.</li> </ul>
<b>Carbon storage</b>	<ul style="list-style-type: none"> <li>legumes, pastures and shrubs that build feedbase and carbon stocks above and within soils</li> <li>trees and shrubs that improve carbon storage, animal health and biodiversity</li> <li>methods to optimise carbon storage in dead woody biomass in grazing lands</li> <li>methods to improve accounting of woody thickening in grazing lands</li> <li>dung beetles to improve carbon storage, feedbase production and livestock productivity.</li> </ul>
<b>Integrated management systems</b>	<ul style="list-style-type: none"> <li>technical and economic analysis of farming systems to determine appropriate combinations of emissions avoidance, carbon storage technologies and practices</li> <li>incorporating emissions avoidance and carbon storage practices into existing extension and adoption programs</li> <li>developing resources and tools to support adoption of emissions avoidance and carbon storage practices</li> <li>linking outcomes from carbon farming projects into National GHG Inventory (NGHG)</li> <li>developing new scientific methodologies to generate carbon credits</li> <li>developing new measurement and reporting mechanisms to improve carbon accounting</li> <li>investigating new accounting metrics for GHG's from livestock.</li> </ul>



### Red Asparagopsis

Feed additives to reduce ruminant enteric methane emissions is an opportunity being actively progressed through MLA's R&D efforts. *Red Asparagopsis* is one of the most promising technologies targeting reduced livestock methane emissions to become available for the livestock industry this century.

The development of *Red Asparagopsis*, a collaboration between MLA Donor Company, CSIRO and James Cook University, promises the livestock industry the single most important intervention into climate change, by reducing and potentially eliminating enteric methane emissions.

The indigenous red seaweed, by reducing livestock emissions will enable the energy expended from methane to be converted to animal growth and weight gains therefore offering multiple benefits. Seaweed technology developer, CH<sub>4</sub> Global is now trialling ocean farming of the seaweed for commercial production.

Commercial partner, FutureFeed recently issued CH<sub>4</sub> Global with the first licence to sell and distribute the product once commercially available. The product is anticipated to be available to the livestock industry within Australia and globally by 2023.

### 3-NOP

3-NOP is another feed additive offering promising ruminant enteric emissions reduction capacity. 3-NOP is a synthetic product that can be added as a feed supplement for cattle. It is known to inhibit the enzyme, methyl coenzyme M reductase (MCR) which is required in the last step of methane production.

### Australian Beef Sustainability Framework

The Australian Beef Sustainability Framework (ABSF) is an industry led initiative that commits the Australian beef industry to a sustainability pathway of best practice and tracks performance through independent evidence against a series of critical indicators against four theme:

1. Animal welfare
2. Environmental stewardship
3. Economic resilience
4. People and community.

Within these four themes, the framework has identified 10 priority areas, 23 priority issues of which six are considered key and 49 indicators to track progress against defined standards and metrics. The ABSF is managed by MLA on industry's behalf.

The ABSF is aligned to international and national standards and best practice guidelines, it utilises the best science and technology available through MLA and its partnerships, it tracks industry performance and reports on progress against key metrics. The framework is currently aligning and mapping to nine of the 16 United Nations (UN) Sustainable Development Goals (SDGs).

The ABSF continuously investigates the relevance of its priorities through regular reviews of key material risks and deep dives into specific priorities. This integrity is critical to demonstrating progress and continuous improvement. The material assessments are guided by the global standards of reporting on sustainability impacts and are independently investigated and audited.

The ABSF continues to make positive progress against all its 23 priorities, tracking and reporting on 84% of its indicators. A continuing challenge is the lack of or rudimentary nature of specific metrics and data. The framework is increasing the number of indicators it reports on and improving data and metrics as part of its commitment to improved sustainability practices. The next *ABSF Annual Update* will be presented in May 2021.

Major producer, processing and value chain businesses are utilising ABSF and aligning their own sustainability processes to it, because it is tailored to the beef industry and articulates what the supply chain wants addressed.

For example, the North Australian Pastoral Company (NAPCO) uses the framework to inform their own sustainability activities and to define the specific areas of sustainability relevant to them. A focus on animal welfare, environmental management and the health and safety of their people, enables NAPCO to produce consistent, high quality cattle.

Teys Australia uses the ABSF to inform their sustainability activities. This includes setting targets around carbon intensity, water efficiency and renewable energy, as well as projects like their Low Emissions Energy Hub at Wagga Wagga.

The Greenham Tasmania – Cape Grim Beef Brand has developed their sustainability framework based on the ABSF. The project represents an important milestone as the first project where the framework has been applied at a value-chain level. The ABSF has enabled the Greenham Tasmania – Cape Grim Brand to design their business specific, sustainable value-chain framework, with specific key priorities, measures and indicators across the four sustainability pillars.

Figure 8: Australian Beef Sustainability Framework themes and priorities



\*Six key priorities selected by the Consultative Committee and Steering Group.





### Balance of Grass and Tree Cover Dashboard

The *Balance of Grass and Tree Cover Dashboard* is a new digital tool that will enable industry, producers and stakeholders to analyse trends in woody vegetation and ground cover. The dashboard is the work of Cibo Labs and involves the integration of an exhaustive 30 years of satellite data identifying annual trends in woody vegetation and seasonal trends in grass cover.

Advances in satellite technologies enables every property in Australia to be imaged on a weekly basis. The ABSF has capitalised on these developments and aims to ensure every producer has equal access to the latest publicly available satellite data and the tools to bring this information together to support on-ground and strategic management decisions for individual producers and the broader industry.

### Sheep Sustainability Framework

A world first for the sheep and wool industry, the Sheep Sustainability Framework (SSF) was officially launched in April 2021.

The SSF is led by the Australian sheep meat and wool industry, in recognition of the changing expectations of our customers, investors and stakeholders, and is managed by MLA on industry's behalf.

The framework recognises and outlines the sheep industry's sustainability commitments through the four themes:

1. Caring for our sheep
2. Enhancing the environment and climate
3. Caring for our people, customers and communities
4. Ensuring financial sustainable industry.

Within those four themes, the framework has identified 9 focus areas, 21 priority indicators and 58 metrics to track performance and progress (see Figure 9).

### Sustainable Beef Program

MLA is leading the Australian Government funded Sustainable Beef Program. The project's aim is to develop a national online platform for grass-fed beef producers to enable them to access emerging markets by demonstrating their sustainability credentials.

The project will ensure that industry has the right verification measurements to support producers understanding of how on-farm practices can be used to demonstrated environmental credentials to markets and supply chains looking to access red meat with verified sustainability credentials. The project will focus on the five sustainability themes of tree cover, biodiversity, grass cover, carbon and drought. The project to be aligned to the ABSF will work with a number of consortium partners and will provide the scientific rigour and oversight.

### Wastes to profits

MLA is leading the Australian government funded Wastes to profits project. The project focuses on creating new business models and services from waste streams. The project is specifically looking into the better utilisation and value capture from water waste and waste from livestock production, creating new feeds and fertilisers and new sources of energy.

The project has set some ambitious targets to achieve by 2021 in terms of reduction in waste, reduction in carbon dioxide equivalent (CO<sub>2</sub>e) emissions and reduction in water and fossil fuel-derived energy use intensity. In addition to emissions impact, the project has defined some potentially lucrative new market opportunities:

- the conversion of collagen from hides and skins into powerful anti-aging cosmetic and beauty products
- moisture rich creams from goat's tallow
- new grass-fed nutrient capsules and supplements from animal thyroids and glands.

Figure 9: Sheep Sustainability Framework themes and priorities

Theme	Focus area	Priority
<b>Caring for our sheep</b>		
	<b>1 Animal care and handling</b>	1.1 Reduce, refine and replace painful husbandry practices 1.2 Implement best practice sheep management 1.3 Ensure humane processing and on-farm euthanasia
	<b>2 Animal health</b>	2.1 Prevent and manage disease
<b>Enhance the environment and climate</b>		
	<b>3 Environment</b>	3.1 Improve natural resource management 3.2 Responsible environmental practices 3.3 Encourage biodiversity
	<b>4 Climate change</b>	4.1 Reduce net greenhouse gas emissions 4.2 Adapt to a changing climate, including extreme weather events
<b>Looking after our people, our customers and the community</b>		
	<b>5 Health and safety</b>	5.1 Improve industry safety culture 5.2 Improve our people's health
	<b>6 Capacity building</b>	6.1 Support and grow workforce 6.2 Encourage workforce diversity
	<b>7 Contribution to community</b>	7.1 Enhance community trust 7.2 Deliver products that customers demand
	<b>Ensuring a financially resilient industry</b>	
	<b>8 Profitability, productivity and investment</b>	8.1 Maintain or increase industry profitability 8.2 Maintain or increase contribution to the Australian economy 8.3 Increase productivity 8.4 Encourage innovation
	<b>9 Market access</b>	9.1 Ensure positive market positioning and areas 9.2 Guarantee product integrity and safety

# Our markets



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

### Sustainability program areas

- International Market Presence
- Economic and technical market access reform
- Livestock Production Assurance (LPA)
- National Livestock Identification System (NLIS)
- National Vendor Declarations (NVDs).

### Major industry progress the market priority include:

- 15 preferential trade agreements in force, reducing barriers to trade and covering an MLA estimated 86% of Australian red meat exports in 2020<sup>10</sup>
- Continued access to over 100 markets (2020)<sup>2</sup>
- 100% declared freedom from all exotic diseases by World Health Organisation for Animal Health (2019–20)<sup>11</sup>
- 90% of Australian cattle properties covered by documented biosecurity plans (2019–20)<sup>12</sup>

Australian red meat has a strong international reputation for excellence in food safety, product integrity and high quality. MLA's investments are focused in markets that will enable the industry to grow the value of Australian red meat and livestock exports today and into the future. Defending and improving market access is key for industry in responding to growing demand, diversifying markets and increasing the value of red meat and livestock exports.

Australian red meat and livestock products enjoy continued access to over 100 export markets, thanks to robust integrity systems that underpin the traceability, safety and quality of our products, an unrivalled exotic disease-free status, and a track record by the Australian industry in partnership with Government in pursuing preferential trade reform.

MLA investments deliver on market access and market performance through:

- Maintaining an international market presence
- Economic and technical market access reform initiatives
- Integrity systems which underpin Australia's exotic disease-free status

MLA's global presence and market access initiatives work to build and maintain relationships, support industry and government to defend existing favourable access, and assist in the alleviation of economic and technical trade barriers.

Many of Australia's overseas markets remain subject to some form of entry barrier. Australian exports have greatly benefited from the reduction of tariffs and quotas over the last three decades – initially via the World Trade Organisation and multilateral trade reform, and more recently via a suite of preferential trade agreements. However, non-tariff barriers and technical imposts continue to cause major issues, restrict trade, and prohibit industry from fully realising gains from the reduction in tariffs and quotas.

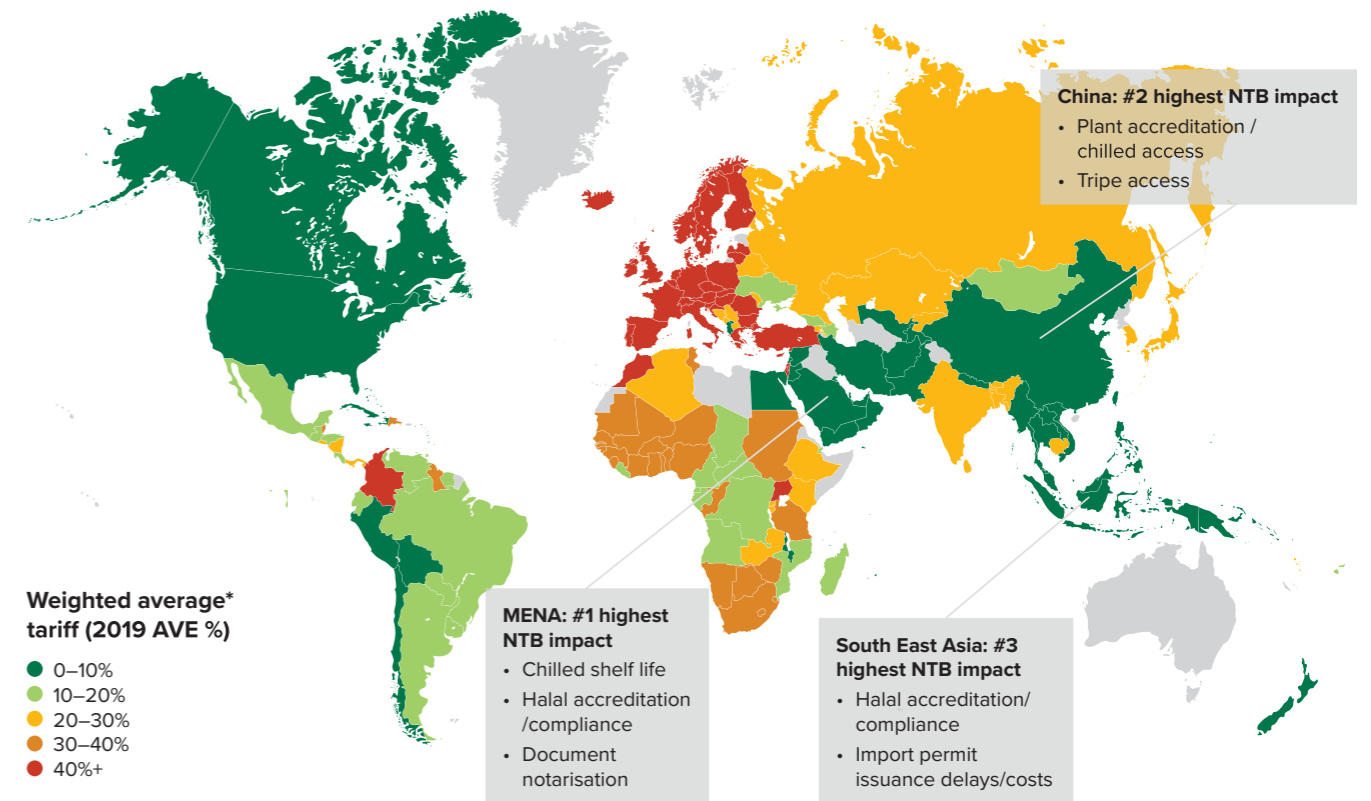
### Global trade operating environment

The current operating environment contains a range of challenges, the most significant being the uncertain economic impact from COVID-19, heightened trade tension, supply chain disruptions and increasing competition in global markets.

Despite the significant impact from COVID-19, the demand outlook remains positive, underpinned by an emerging middle class in developing markets, particularly in Asia, with a growing appetite for red meat. More recently, demand for imported meat has been compounded by the impact of African Swine Fever on Asia pork production, most notably in China. In addition, consumers around the world increasingly recognise the quality, safety and sustainability credentials of Australian red meat, driving demand and underpinning a value proposition to compete in global markets.

The Australian red meat industry, in collaboration with government, has achieved some significant advances in market access of late. These include the signing of the Regional Comprehensive Economic Partnership trade agreement, progression in Australian trade negotiations with both the EU and UK, and the alleviation of some non-tariff barriers in the Middle East and elsewhere. That said, the global trading environment remains challenging and industry must continue to position itself to defend market access gains and address emerging barriers.

Figure 10: Tariff and non-tariff barriers (NTB) applied to Australian red meat exports



Source: ITC Trade Map, MLA  
\*average ad valorem equivalent (AVE) tariff weighted on beef, sheepmeat and goatmeat trade



# Our systems



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

### Sustainability program areas

- Livestock Production Assurance (LPA)
- National Livestock Identification System (NLIS)
- National Vendor Declarations (NVDs).

### Major industry progress in the systems priority include:

- National Livestock Identification Scheme (NLIS) movement recording compliance was 96.01% (2019–20)<sup>12</sup>
- 192,744 producers estimated to represent 95% of all producers nationally are LPA accredited (2019–2020)<sup>12</sup>
- 94.7% Australian beef feedlots NFAS compliant (2020)<sup>13</sup>
- 97.3% compliance with Exporter Supply Chain Assurance System (ESCAS) (2019)<sup>14</sup>
- 99.91% compliance by Australian cattle and 99.78% compliance by Australian sheep industry to Australian standards for chemical residues (2019–20)<sup>15</sup>
- 65 of Australia's meat processing establishments covering approximately 80% of Australian red meat production are accredited under the Australian Livestock Industry Animal Welfare Certification System (AAWCS)<sup>16</sup>
- MSA delivered \$172M in additional farm gate (2020)<sup>12</sup>

Our Integrity Systems, is one of industry's most important investments in underpinning market access for Australian red meat around the globe. Strengthening our integrity systems will increase in importance, to support increasing scrutiny of biosecurity, food safety and traceability.

Integrity Systems Company (ISC) is responsible for Australia's world-leading red meat integrity system that guarantees the integrity of Australia's \$18.4 billion red meat and livestock industry to our customers. Australia's red meat integrity system is the overarching system of food safety measures, quality assurance and traceability across the value chain from paddock to plate, and protects the disease-free status of Australian red meat.

### Integrity Systems

MLA's integrity systems continue to be crucial to guaranteeing biosecurity, food safety and traceability of our products. Integrity systems are one of industry's most important investments and underpin all market access for red meat around the globe, by providing the guarantee of food safety, product assurance and traceability across the value chain from paddock to plate. Integrity systems enable producers to capture and report their relevant management and quality assurance practices.

MLA's integrity systems deliver industry's on-farm assurance and supply-chain traceability systems through:

- Livestock Production Assurance (LPA)
- National Livestock Identification System (NLIS)
- National Vendor Declarations (NVDs).

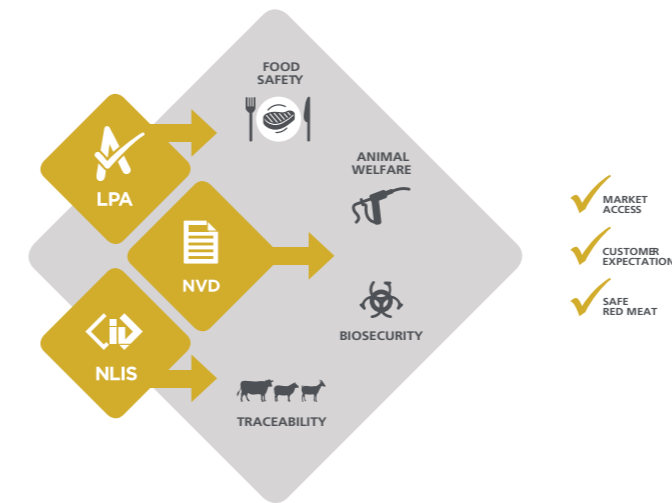
Livestock Production Assurance Program (LPA) is industry's self-regulatory, independently audited on-farm quality assurance program. LPA is underpinned by seven key elements covering food safety, animal welfare and biosecurity. Producers commit to the safe and responsible treatment of animals and all specific treatments, actions and accountabilities are recorded. LPA is voluntary but a requirement for all export markets, National Feedlot Accreditation Scheme (NFAS) accredited feedlots, MSA and the majority of domestic market channels.

Central to Australia's red meat integrity system is the LPA National Vendor Declaration (NVD) that communicates the food safety status of every animal at every movement along the supply-chain, between properties, to saleyards and to processors.

The National Livestock Identification System (NLIS) is Australia's system for the identification and traceability of cattle, sheep and goats. NLIS combines three elements to enable lifetime livestock traceability:

1. a visual or electronic ear-tag
2. a property identification code (PIC) for physical location identification
3. an online database to store and correlate the data.

**Figure 11:** Australian red meat and livestock industry's integrity system



Together these three elements ensure the food safety and animal welfare, biosecurity and traceability of Australian red meat for our domestic and international customers and guarantees access to over 100 export markets.

NFAS is the feedlot industry's self-regulatory, quality assurance scheme initiated by the Australian Lot Feeders Association, owned and operated by AUS-MEAT and managed by the Feedlot Industry Accreditation Committee. NFAS accreditation is a prerequisite for all feedlot beef with grain-fed market claims. The program ensures the management of cattle complies with the requirements of the Australian Animal Welfare Standards and Guidelines. These standards and guidelines are the legal requirements for the welfare of livestock. NFAS feedlots must comply with industry standards, must maintain records on all facilities and all procedures and must be audited by an independent third-party. NFAS is co-regulated by linkages to State Government feedlot approval and licensing legislation and Department of Agriculture, Water and Environment (DAWE) administered export regulations.

MLA investment in integrity systems is complemented by a number of additional red meat and livestock industry quality assurance programs.

The National Saleyard Quality Assurance Program (NSQA) ensures saleyards meet recognised national standards in the handling of livestock through all stages of the red meat market. NSQA is independently audited by AUS-MEAT who is responsible for ensuring the quality assurance systems developed by each saleyard and its facilities meet the requirements of the National Standard for the Construction and Operation of Australian Saleyards.

The Australian Livestock Processing Industry Animal Welfare Accreditation System (AAWCS) is the self-regulatory AUS-MEAT audited certification program used by livestock processors to demonstrate compliance with industry best-practice animal welfare standards from receipt of livestock to point of humane processing.

The Australian live export industry's Livestock Global Assurance Program (LGAP) certifies export facilities that import Australian livestock against standards that specify the strict management and welfare of the animals within their custody.

The complimentary Exporter Supply Chain Assurance System (ESCAS) is mandatory for all exporters of Australian feeder and slaughter livestock. It specifies strict animal welfare, control measures, traceability and auditing requirements:

- **Animal welfare:** Animal handling and slaughter in the importing country conforms to World Organisation for Animal Health (OIE), animal welfare recommendations and requiring mandatory Livestock Production Assurance Program and National Feedlot Accreditation Scheme accreditation.
- **Supply chain control:** Exporter has control of all supply chain arrangements for livestock transport, management and slaughter. All livestock remain in the supply chain.
- **Supply chain traceability:** The exporter can trace all livestock through the supply chain.
- **Independent audit:** The supply chain in the importing country is independently audited.

MLA's investment in the integrity systems program and its ongoing development is recognised as an essential service to guaranteeing the integrity of our red meat and livestock industry to our customers across the globe. With consumers increasingly wanting to know the provenance, welfare and sustainability of our livestock and their food, MLA and the Integrity Systems Company will continue to demonstrate how our livestock production systems meet changing consumer expectations.



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