



The South Australian Beef Industry Blueprint – 2018 to 2028

The SA Beef Industry Blueprint is an industry initiative of Livestock SA with funding support from the University of Adelaide through the Davies Research Centre, Primary Industries and Regions SA and the Australian Government through the Building Better Regions Fund.



Foreword



The South Australian Beef Industry Blueprint seeks to position the industry to capture the benefits that exist in growing demand for premium beef.

For cattle producers and the wider value chain to fully benefit from increasing global demand our industry must be able to sustain consistent supply of highly credentialed product year-round. The Blueprint has been developed with input from across the value chain. It contains ambitious productivity and revenue targets. Moreover, the Blueprint details actions required over the next decade to ensure the SA beef value chain can sustainably increase revenue.

The SA beef industry makes a crucial contribution to the state and underpins substantial economic activity in our regions. Recent seasons and prices have been broadly favourable. In 2016-17 farm-gate cash incomes were the highest in 20 years supported by high prices. More than 1-in-5 farms recorded a rate of return on assets under management of greater than 5%. Despite record farmgate returns the SA beef industry faces several significant challenges. Firstly, there are nearly 240,000 fewer beef cattle in SA than five years ago and some 140,000 fewer breeding stock. As an industry we need to re-build our breeding herd and improve productivity. This will enable sufficient supply of stock year-round to allow for efficient processing of cattle and marketing of premium beef products.

The development of the Blueprint has been led by industry, with support from a dedicated 24-person Working Group with experience spanning the value chain. The directions and strategy detailed in the Blueprint have been informed through extensive regional and small group content. More than 120 producers and industry stakeholders have directly contributed ideas and priorities to the Blueprint.

The strategies and actions detailed in the Blueprint recognise the critical importance of the consumer and consistently meeting their requirements. This requires

understanding consumer and community expectations for product quality, integrity, value, environmental stewardship and ethical production. Most importantly, we must have production systems and value chains that meet the expectations and effectively communicate total value chain integrity.

It is apparent that increasing production of premium beef is not without challenges. The predicted impacts of climate change on feedbase, enterprise productivity and gross margins are significant. As an industry, productivity improvements are essential to stay ahead of the cost-price squeeze and the effects of a variable climate. Improved feedbase, finishing systems and cost-effective management strategies will be crucial to ensuring ongoing supply of high quality beef.

I would like to acknowledge the major contributors to the Blueprint. Livestock SA initiated the development of the Blueprint. Core funding for the development and initial implementation of the Blueprint has been provided by University of Adelaide's Davies Research Centre and Primary Industries and Regions SA. Funding from the Building Better Regions Fund has enabled highly informative analysis of the SA beef industry productivity and performance which has informed Blueprint targets and actions.

Implementation of the Blueprint will only be successful with a collaborative effort from all stakeholders. I invite you to familiarise yourself with the strategy and participate in pursuing sustainable industry growth. On behalf of the Blueprint Working Group, I look forward to working with you to achieve our Blueprint targets.

Bruce Creek

SA Beef Blueprint Working Group Chairman





Minister's foreword

South Australian Beef Industry Blueprint



South Australia's beef cattle industry and its related red meat value chain produces some of the finest beef in the world.

The beef industry makes an important contribution to the South Australian economy with farm gate production exceeding \$600 million in 2016–17, and the gross revenue for South Australia's beef industry exceeding \$1.3 billion.

By supporting the development of the South Australian Beef Industry Blueprint the State Government is investing in the growth, innovation, employment and development of this industry into the future.

Through its ten-year strategy, the Blueprint is helping boost the sector's value, innovation and training opportunities. It will position the industry so it can maximise benefit from premium markets and increase economic activity, particularly in rural and regional South Australia.

This Beef Industry Blueprint provides the framework for sustainable growth for the beef industry over the next decade, focussing on resilient and profitable production systems, efficient value chains that optimise total returns, building community and consumer support and developing industry capability and capacity.

Importantly, the development of the Blueprint, which has been led by Livestock SA, has been a collaborative whole-of-value chain effort with input from a dedicated working group including the State Government.

Through the Blueprint's framework, the South Australian industry has the opportunity to work with partners across the beef value chain to develop and implement projects that will further increase the value of the South Australian beef industry.

The South Australian beef industry has demonstrated tremendous initiative in developing the Blueprint and the subsequent actions required to increase productivity and a consistent supply of premium quality beef.

I congratulate the South Australian beef industry and the industry working group, through Livestock SA with the support of Primary Industries and Regions SA (PIRSA), the Davies Research Centre, and The University of Adelaide, on its development.

By working together, we can take advantage of our rural and regional assets, the state's production base and our globally recognised status as a producer of premium beef and continue to drive production and processing as well as market access and demand.

Hon Tim Whetstone MP

Minister for Primary Industries and Regional Development





Executive Summary

The Beef Blueprint outlines a 10-year plan to ensure the SA beef industry remains a major economic contributor to the state economy. The Blueprint has a major focus on increasing consistency of supply of premium beef based on key credentials including product integrity, animal welfare, natural resource stewardship, product quality and nutritional value.

There is predicted significant increase in global demand for premium beef. Market development requires consistent supply of product. Production and processing to achieve this must be cost effective. The Blueprint's primary target is to increase the supply of SA bred stock by 60,000 per year. This will be achieved by increasing the breeder herd by 15% over 10 years, coupled with increasing the number of calves weaned in SA per year by 20%. Moreover, the focus will be in implementation of key infrastructure and production systems to allow greater supply of premium cattle year-round.

When achieved this is expected to result in an estimated increase in farmgate returns by more than \$100 million per year with total SA beef value chain revenue increasing by more than \$200M/year.

The Blueprint's primary target is to
**'increase the supply of SA
bred stock by 60,000 per year'**

Major opportunities for the SA beef industry

- 1 Consistent** supply of highly credentialed premium product to high-value markets
- 2 Product differentiation** based on product quality and integrity attributes
- 3 Equipping producers** with the knowledge and skills to cost effectively increase productivity and return on farm assets managed
- 4 Capitalise** on new data recording and technology platforms both on-farm and through the value chain for enhanced decision making and management
- 5 Unlocking** the increased production potential in key regions
- 6 Expansion** of finishing opportunities for stock bred in the pastoral zone





OUR VISION

The SA beef industry is innovative, progressive and delivering profit and sustainability to all in the value chain.



Development of the SA Beef Industry Blueprint

In August 2017 Livestock SA commenced the formal development of the SA Beef Industry Blueprint. This followed preliminary engagement with members and broader industry representatives throughout 2017.

- a) August 2017: Establishment of a 24-member value chain wide SA Beef Industry Blueprint Working Group. The Working Group has beef producer representatives with operations in all major beef producing regions of SA. In addition, the Working Group has expertise in livestock and agribusiness consultancy, biosecurity, processing, feedlots, live export, retail, consumer values, natural resource management and research.
- b) Extensive consultation on SA beef industry development priorities in open-forums and one-on-one or small group meetings with producers and stakeholders across the SA beef value chain.
- c) Engagement of key industry stakeholders, including Meat and Livestock Australia (MLA) and the Southern Australian Meat Research Council (SAMRC).
- d) Commissioning of Macrologic to utilise NLIS data and commercial datasets to quantify productivity and value of production at a regional level

Data behind the SA Beef Industry Blueprint

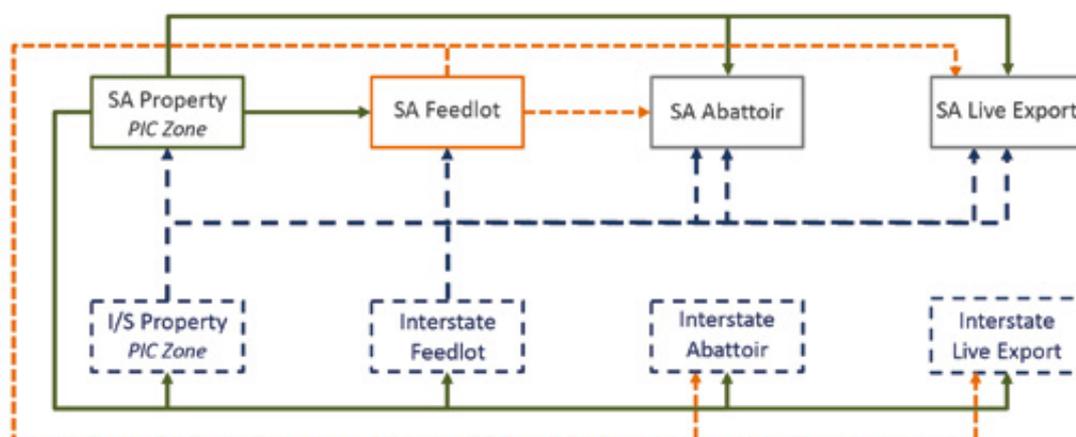
Livestock SA commissioned Dennis Wignall of Macrologic to undertake an analysis of the SA beef industry to accurately quantify stock flows and the financial value linked with transactions.

The analysis approach used National Livestock Identification System (NLIS) movement data, as depicted below. When coupled with commercial pricing data, insights on output and value of production at any point in time can be tracked. Importantly, stock flows have been mapped at a detailed level of the 57 Property Identification Code (PIC) Zones in SA on a weekly time step for multiple years. This has enabled insights into industry dynamics at a level of detail without parallel in any other state or territory in Australia. The work commissioned provides a robust assessment framework which can track cattle turnoff and value, and in-turn progress against Beef Blueprint targets overtime.

Movement data used in the analysis of SA beef industry

NLIS records every movement of livestock between PICs, whether property, feedlot, abattoir or export yards. Macrologic was granted access to NLIS data for use in informing the SA Beef Industry Blueprint for January 2010 to December 2017. The data set comprised every movement of cattle within, into or out of SA at a weekly time step. Property related movements were identified at a Zone level with Feedlot, Abattoir and Export Yard movements identified at a state level. This information was combined with third party pricing data in addition to MLA data for Store, Feeder Steer, Grainfed and Grassfed Slaughter cattle for the period January 2014 to December 2017.

FLOWS OF CATTLE FROM PROPERTY, FEEDLOT, ABATTOIR, LIVE EXPORT HAVE BEEN QUANTIFIED





SA Beef Industry Value Chain Summary

The SA beef industry is an important contributor to the agricultural output of the state and the economy at large.

Overall, for the 2016-17 financial year the beef industry generated \$606M of farm gate value with total gross value chain revenue of \$1315M. There are more than 2700 beef cattle producing businesses in SA, with thousands more people employed across the beef supply chain. The SA beef industry has much potential for growth through sustainable gains in on-farm productivity and adding value across the supply chain but this is not without considerable challenge.

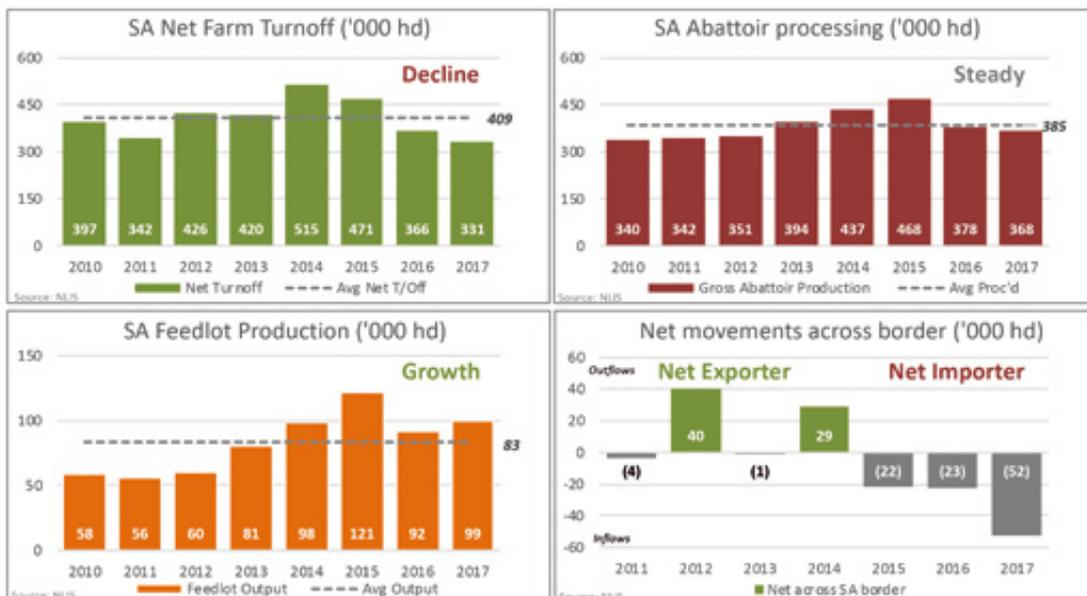
The global population is forecast to continue growing with the Asia Pacific region population expected to reach 4.6 billion by 2030, an increase of nearly 700 million people. In addition, global real per capita incomes are predicted to increase by 60% to 2030. With red meat consumption and per capita income being closely related, this translates to an increase in demand of 25% over that period, as well as an increase in demand from markets specifically seeking high quality livestock products. These forecasts present an enormous opportunity for SA's beef industry

as a recognized supplier of safe, nutritious and ethically produced products. Consistent year-round supply of preferred specification product is critical to reaping the benefit from high value markets. Therefore, the overarching focus of the Blueprint is in achieving cost-effective consistent supply of premium product.

SA feedlot and processing capacity is leading the beef herd dynamics

As at June 30 2017, SA has some 464,000 breeding stock and over 950,000 beef cattle in total. Feedlot production has more than doubled since 2010 to 100,000 head per year. Overall, total cattle processed in SA has consistently exceeded 365,000 cattle per year since 2013 but there is much greater anticipated capacity for increased processing. In part, the higher processing capacity has been met through greater interstate transfer of stock in SA for finishing and processing such that SA is now a net importer of cattle. This indicates the cattle bred in SA are not sufficient to fill the current processing volume.

SA HAS MOVED FROM BEING A NET EXPORTER OF CATTLE TO A NET IMPORTER FROM INTERSTATE



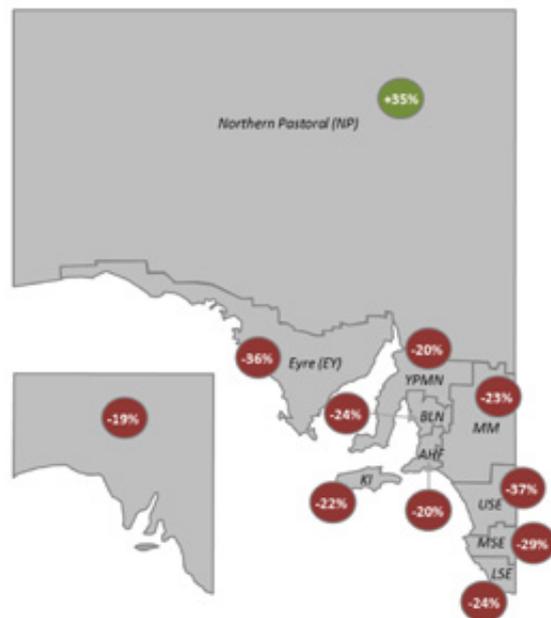


The SA herd needs to rebuild and improve productivity

The beef industry in SA also faces a significant challenge. In the eight years to the end of the 2016-17 financial year the net turn-off of beef cattle in SA dropped by 19% below average, with the South East region having the sharpest declines. This was partially offset by growth in the Northern Pastoral region with just two PIC Zones (of 57) in the Strzelecki Track accounting for an average 48,000 cattle being turned off each year.

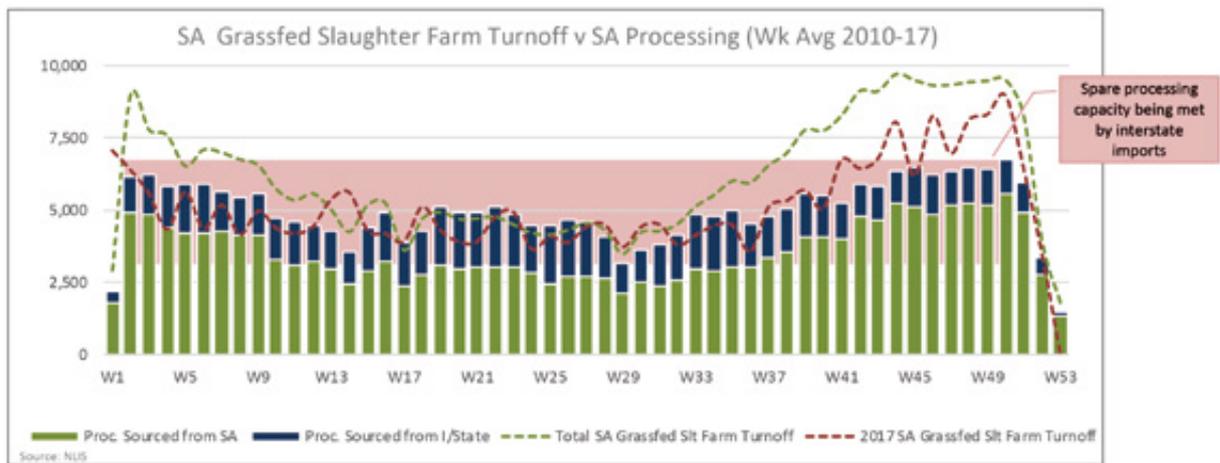
The decline was also greatest for heifers and cows with a 23% reduction to 464,000 from a recent peak of >603,000 in 2012-13 financial year. These reductions were proportionally higher than any other state or territory in Australia during the same period but do show some evidence of recovery in 2016-17. In contrast to beef, during the five years to 2016-17 the total number of sheep in SA increased 6% and land under crop by 10%. While the SA beef industry has significant potential for growth in turnoff and revenue, the decline in the breeder herd has significant ramifications for SA's collective ability to maintain supply of premium cattle for efficient processing and marketing.

CHANGE IN NET CATTLE TURNED OFF: 2017 v AVERAGE (2010 TO 2017)





Due to the declining herd and available local production SA has changed from being a net exporter of stock to a net importer with more than 250,000 cattle entering SA each year. Interstate imports now account for 23% of gross turnover, with the Northern Territory being the largest contributor of cattle into SA. Overall, the change from net exporter to net importer allows processors to better fill capacity. However, this position also presents a risk to throughput and industry revenue in SA if cattle bred interstate remain interstate for finishing and processing.





Average returns on farm assets under management need to increase

Farmgate returns as a percentage of assets under management provides a useful indicator of relative industry profitability. Across Australia, average farmgate returns for beef production are lower than for other potential agricultural land uses including cropping and sheep. However, there is a very substantial range in farmgate returns within beef enterprises. The best performing 25% of businesses are highly profitable and achieving more than three times the returns of the next best 25% of businesses (rank 26-50%). Scale is also important, with larger business achieving higher average returns than smaller businesses. A major opportunity is to cost effectively increase productivity and in-turn farmgate returns and supply.

SEGMENTING THE ABARES ANALYSIS BY SCALE AND MANAGEMENT QUARTILE IDENTIFIES THE OPPORTUNITIES FOR IMPROVEMENT...

Australia: Beef Enterprises – Ungeared % return on form assets managed. 1989 to 2016 (average)

Segmenting the ABARES Survey data by scale and performance quartiles identifies the opportunity for improvement	Scale / Quartile	Q4	Q3	Q2	Q1	All
	> 1m	-0.4	3.6	5.8	12.9	3.8
	500k – 1m	-1.0	2.2	4.2	8.2	2.0
	200k – 500k	-3.3	0.1	1.9	4.3	0.5
	< 200k	-8.0	-3.6	-1.6	0.8	-2.3
	All	-2.8	-0.2	1.1	3.9	0.3

Management →

↑ Scale



Enhance community and consumer support

The consumer is central to the strategies and actions detailed in the Blueprint. It is essential to understand and meet consumer and community expectations. This includes product integrity, stewardship of the natural resource base, welfare of cattle, product quality and nutritional value.

Key targets

- Maintain global recognition for SA as a producer and supplier of beef with outstanding integrity and credentials for food safety, quality, environmental stewardship and animal welfare
- Demonstrate continuous improvement of welfare of beef cattle
- Reduced environmental footprint of SA beef industry including development of pathways to achieve a carbon neutral status

Project areas

- Support of the Australian beef integrity systems that lead the world in food safety measures, quality assurance and traceability from paddock to plate
- Continued proactive antibiotic monitoring program with SA as a key contributor
- Objective measures for welfare developed and implemented across lifetime
- Reduction in painful procedures, provision of effective pain relief and animal management to enhance recovery
- Pathways for the SA red meat industry to achieve carbon neutral status by 2030
- Production approaches to enhance environmental stewardship and productivity



Resilient and profitable production systems

Through productivity gains and improved return on assets under management it is possible to increase farm gate revenue from beef production in SA by \$100M/year to over \$700M. To achieve this will require cost-effective productivity improvements focused on ensuring production of high quality beef. Successful implementation will increase return on assets under management for beef producers.

Targets

- Increase average return on assets under management for beef from 1.6% to 2.5% adding \$75M to the industry's bottom line
- Cost effectively increase the proportion of calves to heifers and cows over one year of age 62% to 65%
- Double the rate of genetic gain in traits affecting value chain profitability by 2022

Key project areas

- SA grazing systems feedbase plan developed and implemented with a focus on extending the growing season, increasing pasture utilisation, optimising fertiliser use and reducing cost of production
- Unlocking the potential in the Limestone Coast for specialist on-farm finishing systems
- Growth paths for optimising steer carcass value and heifer development to first mating
- Improved reliability and increased use of reproductive technologies to increase rate of genetic gain for traits linked to profit across the beef value chain
- Reduce endemic disease incidence through best practice biosecurity
- Focus on achieving effective adoption of research outcomes to on-farm benefits with involvement of consultants, producer groups and beef value chain partners



Efficient value chains that optimise total returns

The beef produced in SA is of the very highest quality on a global basis. However, cost of production and cost of processing are high. To ensure the value chain remains profitable requires year-round supply of superior beef.

Targets

- Increase the number of beef calves weaned in SA by 60,000/year
- Consistent supply of prime stock from SA to underpin branded product expansion
- Increase in average carcass weight by 6% to 294kg
- Reduction in peak to trough supply ratio (i.e. towards year-round supply)
- An increase in average MSA Index of 2 points

Key project areas

- Focus on increasing cow and heifer productivity
- Expansion in finishing systems that reduce seasonal constraints in supply of high quality product, particularly for grass-fed product
- Infrastructure to underpin consistent supply including improved transport options for intra- and interstate stock flows from pastoral SA and central Australia
- Continued development and implementation of objective carcass measurement including for meat yield, eating quality and animal health implemented with feedback provided to producers
- Capacity building for producers to interpret and act on objective carcass feedback
- Continued development and implementation of value-based marketing systems
- Cross sector efforts to reduce cost of processing and inputs to processing such as energy



Build industry capability and capacity

At each stage of the value chain from production to retail there are benefits from building industry capability and capacity. At a farm level the Blueprint is focused on increasing business acumen and system management skills to lift average returns on assets under management. Greater use of skilled advisors to assist in improved decision making and implementation of enterprise management is critical to increase farm productivity and profitability.

Targets

- Increase average return on assets under management for beef from 1.6% to 2.5%
- Increase in use of skilled consultants and advisors by 20%

Indicative project areas

- Improved human resource capabilities and development of innovative strategies to attract and retain labour.
- Improved access to education, training and skills development opportunities
- Promoting and supporting best practices business skills and financial management to underpin resilient businesses
- Further strengthened links between beef industry businesses and research establishments resulting in more direct enterprise benefit
- Successful succession planning and implementation across industry

Glossary

- ABARES: Australian Bureau of Agricultural and Resource Economics
- ALEC 2016-2020: Australian Livestock Export Corporation Limited Strategic Plan 2016-2020
- EID: Electronic Identification
- EQ: Eating quality
- Invasive Animals CRC: Invasive Animals Cooperative Research Centre
- LMY: Lean meat yield
- MISP: Meat Industry Strategic Plan
- MLA: Meat & Livestock Australia
- MSA: Meat Standards Australia
- NLIS: National Livestock Identification System
- OCM: Objective carcase measurement
- PIC: Property Identification Code
- PIRSA: Primary Industries and Regions SA
- PPSA: Primary Producers SA
- SAMRC: Southern Australian Meat Research Council
- RA&HS: The Royal Agricultural & Horticultural Society of SA

**For further comments
and feedback please
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Courtesy of Superior Selections, Meat & Livestock Australia, AgCommunicators and Iranda Beef

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Keep up-to-date with Blueprint developments at
www.livestocksa.org.au/blueprint