

### ANNUAL REPORT 2025



Source: Australian Wool Innovation







This report covers the activities of the Sheep Sustainability Framework (SSF), which was established by Sheep Producers Australia (SPA) and WoolProducers Australia (WPA) and is supported by Meat & Livestock Australia (MLA) and Australian Wool Innovation (AWI).

Unless otherwise stated, data in this report covers the year commencing 1 July 2024 – 30 June 2025 (or 2024-25).

The SSF Board has reviewed and approved the report for publication on November 2025.

This is the fifth annual report for the SSF (the first was published in 2021). This report and others can be found on the SSF website.

This report has been prepared with reference to the Global Reporting Initiative (GRI) Standards 2021. An alignment of this report's disclosures with selected indicators of the GRI, Sustainability Accounting Standards Board and Taskforce on Nature-related Financial Disclosures can be found on page 25.

External assurance has not been sought for this report and a position on external assurance has not yet been developed by the SSF Board. However, some information in the report is the subject of third-party assurance and auditing regimes.

For questions about this report or its contents, please contact:

### Alister Hawksford

PROGRAM MANAGER – SUSTAINABILITY CREDENTIALS

Meat & Livestock Australia
ahawksford@mla.com.au



# Highlights



The proportion of producers using appropriate pain management for key husbandry procedures continues to grow, improving animal welfare outcomes.



More lambs and sheep are being processed through establishments accredited by the Australian Animal Welfare Certification System (AAWCS), strengthening supply chain trust.



Greenhouse gas emission intensity in sheepmeat processing declined by 15% and water use per tonne by 7% in the past two years, reflecting improved resource efficiency.



Investment in sheepmeat research, development and adoption rose by 6%, demonstrating strong engagement with innovation.



62% of consumers indicate that when looking to purchase apparel, they would consider buying products made from wool. This positions wool as the third most considered fibre for apparel, demonstrating significant global market opportunity for Australian wool.



New SSF metrics now track lamb survival, conservation practices, and community connectedness, broadening transparency and accountability.

# **Challenges**



The gross value of agricultural production declined by 6.6% for sheepmeat and 10.3% for wool, underscoring difficult trading conditions.



Wool research, development and adoption investment fell by 13%, reflecting lower production volumes and subdued prices.



Very dry seasonal conditions in southeast Australia contributed to an increase in net greenhouse gas emissions, highlighting climaterelated risks.



Solid waste produced per tonne of sheepmeat increased, indicating opportunities for stronger waste reduction and circular economy solutions.



Lost time injury frequency rates rose in both farming and processing, highlighting occupational health and safety risks.



Comprehensive reporting on sheep transport welfare and processing workforce availability remains incomplete, although work to address these gaps continues.

### **SECTION 1: INTRODUCTION**

# Letter from the Board Chair

The 2024-25 year threw up its fair share of challenges. The poor seasonal conditions had a huge impact on Australia's sheep-producing regions and with global economic conditions and geopolitics drawing more of the attention, sustainability – although still important – dropped off the front page of the news.

This allowed us an opportunity for a bit of reflection on the role and purpose of the SSF and it was timely for us to be working through the next materiality assessment and a new five-year strategic plan for the SSF.

Through the update of the materiality assessment and strategic plan there are a number of things that remain priorities – stakeholder engagement, data collection, animal welfare, and greenhouse gas emissions and carbon management – but we also recognise that as greater awareness of sustainability evolves and regulations and rules change, we must be responsive to the things going on around us.

We also saw some movement within the SSF, with new faces on the Steering Group and Board. I would like to extend my deep appreciation to all those who volunteer their time and skills to these important roles. I would like to acknowledge the tireless efforts of Courtney Nelson who has moved to a new role within MLA. Alister Hawksford now leads a revamped Sustainability Credentials team at MLA covering the sustainability frameworks and he has helped us through this transition process. Finally, I would also like to thank Scott Williams and the Steering Group for the amazing technical work they put in to ensuring the SSF remains current, relevant and accurate.

But while I started with challenges, there are also opportunities and there remain some very exciting things happening in the sheep sustainability space.

With the implementation of the first phase of mandatory sustainability reporting rolled out for Australian companies in January this year, the SSF needs to ensure we complement this process.

We also have the evolution of data collection and reporting through various programs and channels. The SSF needs to be across these developments to ensure we are reporting the most current and accurate metrics and continue to support or complement these programs where possible to minimise impacts on producers.

To that end I congratulate the SSF team on putting together the 2025 annual report. While some metrics have not seen data updates since 2023, others show movement, and I encourage the peak bodies (Sheep Producers Australia and Wool Producers Australia) to consider these results and identify what areas need industry attention.



A Cirlly-Passal

**Angus Gidley-Baird** 

CHAIR SSF Board

SENIOR ANIMAL PROTEIN ANALYST
Rabobank

## The Board



Bonnie Skinner CEO Sheep Producers Australia



Jo Hall CEO WoolProducers Australia



Angus Hobson DIRECTOR WoolProducers Australia Joined January 2025



Steven Harrison PRESIDENT WoolProducers Australia



Elizabeth Jackson DIRECTOR Sheep Producers Australia Joined March 2025



Ben Thomas DIRECTOR Sheep Producers Australia



Brett Smith DIRECTOR WoolProducers Australia Retired January 2025



Jamie Heinrich
DIRECTOR
Sheep Producers Australia
Retired March 2025

## The Steering Group



Emma Foster-Geering RM Williams Joined March 2025



Jane Kellock
Kellock Farming



Lachlan Monsbourgh



Maria Crawford
Coles Group



Molly Greentree
Gundagai Meat Processors
Joined April 2025



Belinda Dexter
Minerva Foods
Retired January 2025

# Letter from the Steering Group Chair

It has been a difficult year for many in the industry, especially those producers affected by drought. Poor prices for wool have contributed to a reduction in the national sheep flock, to the point where many in the post-farmgate sector of the wool industry are becoming very concerned about future supply.

Meat processors in Australia have also warned that the boom-bust cycle in lamb supply and prices is not good for growers or processors. The Steering Group and Board of the Framework are very conscious that sustainability starts with an industry being profitable and secure for all participants.

The last financial year was another busy one for the Framework. A major piece of work was the revision of the materiality matrix on which the Framework is based. Whilst most issues retained more or less the same priority in the revised matrix, there were some shifts, and the Steering Group has spent some time examining the implications of these shifts for the Framework. We are progressively making adjustments to accommodate these.

We are also trying to plug the remaining gaps in our portfolio of metrics. We made some progress in this area over the last year, and you will see several new metrics in this report.

During the year, we farewelled Ed Dunn and Belinda Dexter from the Steering Group, both of whom were highly valued contributors. We also welcomed Emma Foster-Geering of RM Williams and Molly Greentree of Gundagai Meat Processors. I'm grateful to all the members of the Steering Group for their contributions throughout the year. Thanks too to Courtney Nelson from MLA for doing all the real work on the Framework throughout the year. Courtney has recently been replaced by Alister Hawksford who has quickly adapted to his new role.



Stheet

**Dr Scott Williams** 

CHAIR

SSF Steering Group

**DIRECTOR**Forest Hill Consulting

# The Committees

The SSF is led by a Board that oversees its governance and strategic direction. The Sustainability Steering Group (SSG) is a panel of experts that supports the Board to continuously strengthen the Framework and its reporting.

### **THE BOARD**

The SSF is owned, designed, and developed by the Australian sheepmeat and wool industries through the peak national policy and advocacy bodies Sheep Producers Australia (SPA) and WoolProducers Australia (WPA).

The SSF Board is responsible for overseeing the governance of the Framework and setting its strategic direction.

### THE STEERING GROUP

The Sustainability Steering Group (SSG) comprises representatives from various sheep-producing regions and stakeholder groups throughout the wool and meat value chains in Australia.

The SSG is responsible for advising the Board on ways to integrate the SSF across the Australian value chains, and how to continuously strengthen the impact and relevance of the SSF through material issue examination and robust annual reporting.

### **SUPPORT**

The sheep industry Research and Development Corporations (RDCs), Australian Wool Innovation (AWI) and Meat & Livestock Australia (MLA), provide resources in support of the SSF.



Source: Meat & Livestock Australia

# **Data Summary**

### STATUS OF DATA COLLECTION

 $The following table summarises the trends of sustainability metrics, based on data collected for this {\tt 2024-25} financial year report.$ 

FREND DESCRIPTION		# OF METRICS I THIS REPORT		
Directional improvement		22	27%	
Holding steady	•	20	24%	
Directional decline	0	15	18%	
Baseline data point*	*	23	28%	
Indicator, metric or data to be identified	Q	2	3%	
	TOTAL	82		

<sup>\*</sup>Only one year of data available so trends have not yet been calculated.



### **CARING FOR OUR SHEEP**

		RE	REPORTING YEAR		
		2023	2024	2025	
Incidence of mulesing in the Australian flock					
1.1.1a Percentage of producers who mules their flock	Merino	52%	57.7%	-	•
	Non-Merino	8%	3.9%	-	•
1.1.1b Percentage of wool declared as non-mulesed/ ceased mulesing	Merino	15.8%	17.9%	18.6%	•
•	Non-Merino	40.1%	43.7%	47.1%	•
Use of appropriate pain management associated with mulesing, castration, and tail docking					
1.1.2a Percentage of producers who use appropriate pain management at mulesing	Merino	88%	89.7%	-	0
	Non-Merino	83%	96.2%	-	•
1.1.2b Percentage of producers who use appropriate pain management at castration	Merino	12%	22.3%	-	
F	Non-Merino	11%	14.7%	-	•
1.1.2c Percentage of producers who use appropriate pain management at tail docking	Merino - Hot knife	78%	78.8%	-	•
	Merino - Rings	11%	24.2%	-	•
	Non-Merino - Hot knife	39%	32.3%	-	0
	Non-Merino - Rings	10%	14.4%	-	•





		RE	PORTING YE	EAR	TREND
		2023	2024	2025	
Lamb survival					
1.2.1a Percentage of pr	oducers pregnancy scanning ewes for litter size	29%	31.4%	-	•
1.2.1b Change in Australian Sheep Breeding Value (ASBV) for weaning rate (WR)		-	-	0.03	*
Adoption of best pr	actice management				
1.2.2a Percentage of producers who have completed Lifetime Ewe Management (LTEM) training		9.4%	11.4%	12.3%	•
Shearing welfare					
1.2.3a Total number of nationally	days per year spent by shearing trainers in woolsheds	1,112	925	840	0
Wild predator mana	agement				
1.2.4a Percentage of postrategy	roducers with a documented wild predator management	-	18.5%	-	*
Transport of sheep within Australia to ensure welfare of sheep					
1.2.5a Percentage of sh (fit to load)	neep transported in line with animal welfare standards	Q	Q	Q	
Sheep welfare in sa	leyards				
1.2.6a Percentage of sh Assurance (NSQA) pro	neep transacted through National Saleyard Quality gram saleyards	50%	35.6%	38.2%	•
Wellbeing of live sh	eep during export		,	·	
1.2.7a Percentage of m	ortality on ships	0.14%	0.17%	0.17%	•
Humane on-farm e	uthanasia		1	\ -	
	oducers aware of humane killing requirements in the are Standards & Guidelines (AAWSG) for sheep.	78%	76.8%	-	•
Humane processing			1	\ -	
_	mbs and sheep slaughtered through an establishment ralian Animal Welfare Certification System (AAWCS).	81.5%	88.3%	92.0%	
Australia maintaini	ng freedom from disease			1	
2.1.1a Australia continu	ues to be declared free from 12 major diseases	YES	YES	YES	•
On-farm activity to	prevent and treat disease				
2.1.2a Percentage of pi	roducers who vaccinate for clostridial diseases	-	87.6%	-	*
2.1.2b Change in Australian Sheep	Change in Worm Egg Count Breeding Value	-	-	-1.73	*
Breeding Values (ASBV)	Change in Early Breech Wrinkle Breeding Value	-	-	-0.02	*
Producers adhering	to biosecurity requirements				
2.1.3a Percentage of sh Assurance (LPA) biose	neep producers compliant with Livestock Production curity requirements	80.1%	78.1%	76.7%	•



## **ENHANCING THE ENVIRONMENT AND CLIMATE**

	RE	PORTING Y	EAR	TREND
	2023	2024	2025	
Protecting soil resource				
3.1.1a Percentage of natural resource management regions achieving healthy ground cover thresholds	-	64.1%	51.3%	0
Conservation practices				
3.1.2a Extent of primary forest ('000 ha)	-	-	19,570	*
3.1.2b Extent of secondary forest ('000 ha)	-	-	7,712	*
3.1.2c Extent of primary woodland ('000 ha)	-	-	3,337	*
3.1.2d Extent of secondary woodland ('000 ha)	-	-	6,957	*
Responsible chemical stewardship				
3.2.1a Percentage of producers who have attended a ChemCert course or similar	82%	81.1%	-	•
Efficient water use in processing				
3.2.2a Kilolitres water used per tonne hot standard carcase weight (HSCW) when processing sheepmeat	7.2kL	-	6.7kL	
Minimise waste in processing				
3.2.3a Kilograms of solid waste per tonne hot standard carcase weight (HSCW) when processing sheepmeat	29.8kg	-	68.1kg	0
Maintaining and increasing biodiversity				
3.3.1a Percentage of producers undertaking deliberate activities to maintain or enhance biodiversity	-	72.6%	-	*
Contribution of sheep production to GHG emissions				
4.1.1a Net emissions: Mt of CO₂e generated by sheep industry (farm and sheepmeat processing)	7.03Mt	9.54Mt	11.51Mt	0
4.1.1b Emission intensity: kg of CO₂e emitted per kg liveweight (LW) when raising sheep	7.3kg	-	6.8kg	•
4.1.1c Emission intensity: kg of CO₂e emitted per kg greasy wool shorn	26.3kg	-	24.5kg	•
4.1.1d Emission intensity: kg of CO₂e emitted per tonne hot standard carcase weight (HSCW) when processing sheepmeat	364kg	-	308kg	•
4.1.1e Percentage of sheep producers who have measured GHG emissions for their enterprise using carbon accounting or another process	3%	9.9%	-	•
Renewable energy				
4.1.2a Percentage of sheep producers who generate and use renewable energy	50%	46.9%	-	0
Response to a changing and variable climate				
4.2.1a Climate-adjusted Total Factor Productivity growth	0.0%	-0.1%	-0.2%	0



## LOOKING AFTER OUR PEOPLE, OUR CUSTOMERS AND THE COMMUNITY

		RE	PORTING YE	REPORTING YEAR	
		2023	2024	2025	-
Health and safety prevention and training					
5.1.1a Percentage of producers who have undertaken a Workplace Health and Safety risk assessment		-	54.6%	-	*
Number of deaths and serious injuries					
5.1.2a Number of fatalities in the sheep industry		34	26	23	
5.1.2b Lost time injury frequency rate (number of claims per million hours worked)	Farming	-	10.9	12.6	0
	Processing	-	19.7	23.1	0
Status of physical and mental health					
5.2.1a Global Life Satisfaction Index score of Australian sheep graziers		-	76.1	70.2	0
Connectedness to community					
5.2.1b Getting Involved in the Community Index of Au (out of a potential perfect score of 7)	ustralian sheep graziers	-	-	3.6	*
Capacity of workforce					
6.1.1a Percentage of on-farm industry participants wh further education	no have completed	45%	-	-	*
Appropriate working conditions					
6.1.2a Federal award rate ratio		1.23:1	1.14:1	1.20:1	•
Availability of workforce					
6.1.3a Percentage of producers who find labour availability to be a major issue in their operation	General labour	35%	42.0%	-	0
	Shearing labour	38%	35.3%	-	•
6.1.3b Level of availability of workforce among processors		-	Q	Q	
Extent of succession planning in the industry					
Extent of succession planning in the industry  6.1.4a Percentage of producers with a formal succession plan in place		21%			



## LOOKING AFTER OUR PEOPLE, OUR CUSTOMERS AND THE COMMUNITY

		RE	PORTING YE	AR	TREND
		2023	2024	2025	
Extent of workforce diversity					
6.2.1a Age distribution of those who are employed in sheep farming and shearing services	15-34	-	20%	-	*
	35-54	-	32%	-	*
	55-74	-	40%	-	*
	75-100	-	7%	-	*
6.2.1b Gender breakdown of those who are employed in sheep farming and shearing services	Men	-	72%	-	*
employed maneep lamming and antesting services	Women	-	28%	-	*
6.2.1c Percentage of Indigenous and Torres Strait Islanders who are employed in sheep farming and shearing services		-	1.5%	-	*
6.2.1d Percentage who speak a Language Other Than who are employed in sheep farming and shearing ser		-	2%	-	*
Community perceptions of the sheep industry					
7.1.1a Percentage of Australians who believe that Austand raised in a humane manner	tralian lambs are farmed	55%	54%	55%	•
7.1.1b Percentage of respondents who believe wool is more environmentally friendly than other fibres		-	-	40%	*
Consumer perceptions of product quality					
7.2.1a Percentage of Australians who believe that Auspaying a bit more for	tralian lamb is worth	25%	27%	27%	•
7.2.1b Willingness to consider wool for apparel		-	-	62%	*



## ENSURING A FINANCIALLY RESILIENT INDUSTRY

	REPORTING YEAR		AR	TREND	
		2023	2024	2025	
Rate of return					
8.1.1a Rate of return on capital, including and excluding capital appreciation, using a 5-year	Including	-	9.7%	8.1%	•
rolling average	Excluding	-	0.8%	0.5%	•
Maintain or increase contribution to the Austra	lian economy				
8.2.1a Gross value (AUD) of agricultural production for sheepmeat		\$4.425b	\$4.553b	\$4.250b	0
8.2.1b Gross value (AUD) of agricultural production for wool		\$2.645b	\$3.145b	\$2.822b	0
Productivity					
8.3.1a Total factor productivity average annual growth rate		0.1%	-0.1%	0.0%	•
8.3.1b Change in the Sustainable Merino (SM) index		-	132.4	135.23	•
Investment in research, development and adoption (RDA)					
8.4.1a AUD invested in Research, Development and Adoption (RDA) per annum	Sheepmeat	\$21.8m	\$20.5m	\$23.7m	•
	Wool	\$32.7m	\$33.2m	\$28.8m	0
Value of product					
9.1.1a Australian value share (%) of sheepmeat export	S	45.0%	46.0%	48.2%	
9.1.1b Australian value share (%) of greasy wool expor	rts	81.7%	79.0%	76.9%	0
Access to markets					
9.1.2a Cumulative alleviation (from 2020) of red meat	non-tariff barriers	-	\$474m	\$535m	•
9.1.2b Percentage value share of Australian sheepmed sheep exports covered by one or more preferential tr		75.5%	71.7%	66.0%	0
9.1.2c Percentage value share of Australian greasy wool exports covered by one or more preferential trade agreements (PTA)		83.1%	90.0%	91.7%	•
Compliance with product integrity and safety s	tandards				
9.2.1a Proportion of the wool clip that is produced wit integrity scheme	h a voluntary product	13.9%	14.7%	14.9%	•
9.2.1b Compliance rates (%) for chemical residues in s	heepmeat	99.45%	99.91%	99.81%	0

# About the Framework

The SSF is in the fifth year of reporting data on industry progress against key sustainability priorities across the Australian sheep industry's domestic value chain. This reporting improves transparency and provides evidence to our customers that the food and fibre they purchase have been produced responsibly, to build trust and confidence.

The role of the SSF is to monitor, measure, and report industry performance against sustainability priorities.

Data and trends gathered through the SSF will identify opportunities on-farm, in transport, processing, and at the customer interface in Australia, where practices can be improved by both the industry and individuals.

In doing so, the SSF can be used by industry to help protect and grow access to investment, finance, customers, and markets by providing credible evidence of performance and improvement. Further, individual enterprises may use the SSF to understand the industry's material issues and consider these in their forward planning.

### The SSF aims to:

- · promote industry transparency with trading partners, customers, and the community
- better inform investment in improvement in focus areas
- protect and grow access to financial capital
- foster constructive relationships with external stakeholders to work collaboratively with the industry.

### The SSF does not:

- · establish or endorse measurement systems at an individual business level
- · provide an accreditation or certification system
- · endorse prescriptive management practices
- · create additional work for individual businesses.

### **REPORTING SCOPE**

Farms and

feedlots



**Transport** 



Saleyards

Live export



Wool transport & auctions



**Domestic** processors (meat & wool)



**Domestic** customers





Overseas processors



Overseas customers

Due to the complexity and multiple participants in the value chain, and limited data availability, the SSF Board and SSG have determined that limiting the Framework's reporting to Australian domestic production was most appropriate. The SSG and Board continue to periodically re-evaluate this position.

# Industry at a glance

Australia is the leading exporter of sheepmeat worldwide, with its competitors including New Zealand, the United Kingdom and Uruguay [1]. The United States, the United Arab Emirates and China are the primary destinations for lamb exports, while China, Malaysia and the United States remain the largest export destinations for mutton.

Australia exports the majority of its wool clip, with approximately 97% by weight exported in its greasy (unprocessed) state for offshore processing. China is the primary destination for Australian wool, importing around 87% of Australia's greasy wool by weight [2]. Australia supplied:



**25%** of the world's clean wool (IWTO Market Information Edition 19) **70%** of the world's apparel wool

**54%** of the world's sheepmeat exports (Trade Data Monitor, DAFF, MLA)

Sheep production regions across southern Australia faced challenging weather conditions, with areas in southwestern Western Australia, southern South Australia, and Victoria experiencing very dry conditions. Wool and lamb production across these areas was, therefore, restricted and is expected to result in a smaller breeding ewe flock going into the following year.



FLOCK SIZE 73.2 million

head of sheep



### ENTERPRISES

20,147

businesses involved in the sheep and lamb industry



### BREEDING EWES

### 48 million 🙍



breeding ewes on hand 61% Merino, 39% non-Merino



### SHEEPMEAT A\$5.0 billion 🔼

gross value of sheepmeat and live sheep production forecast for 2025-26



849,249 tonnes cwt 🗷 in sheepmeat (lamb and mutton) produced



lamb and mutton exported in 2023

### 45,500 people

employed in the sheep production and shearing sector



WOOL

### A\$2.6 billion 🔼

value of greasy wool production forecast for 2024-25

## 280.1 million kg

greasy wool production forecast for 2023/24 season

### \$11.70

the average price per kilogram of wool in 2024

### 200,000 people

employed across wool industry production, farm services, research, and marketing

Trust in Australian Wool 2024



SHEEPMEAT PROCESSING

## 26.2 million head lamb

slaughter forecast for 2025

## 9.8 million head sheep 🛭 🗗

slaughter forecast for 2025

### 24 kg 🔼

average national lamb carcase weight forecast for 2025

### 39,500 people

employed by red meat processors

Red Meat Processing Socio-Economic Impact Study 2024



## LIVE EXPORT

424,913 sheep 🕜

exported from Australia in 2024

## A\$43 million

value of live sheep exports in 2024

# Our operating environment

Sheep producers manage an estimated 65.8 million hectares of land (15.4% of Australia's agricultural land), where they work to preserve, protect and improve the natural resources and biodiversity on their farms.

Australia's sheep industry is predominantly an extensive pasture-based industry, with an average flock size of 2,000 sheep [8]. Sheep are produced in a wide range of climates — from the arid and semi-arid parts of the inland region to the medium- to high-rainfall areas of New South Wales, Victoria, South Australia, Tasmania, Queensland, and southern Western Australia. Sheep are grazed on pastures year-round, with supplementary feeding occurring when there are pasture shortages.

Wool is a 100% natural, renewable, and biodegradable fibre [9]. Wool-producing sheep are shorn at least once a year, and sheep are often retained by the same producer over their lifetime, maintaining genetics and bloodlines over many generations. Australia is the largest exporter of non-mulesed Merino wool in the world.

The Australian sheep sector began with a strong focus on Merino wool production. In more recent times, this has evolved into a robust dual-purpose wool and sheepmeat industry. As a result, the composition of the national flock has shifted from predominantly wool breeds to a growing emphasis on meat breeds. Shedding breeds (which naturally shed their wool and do not require shearing) have emerged as a popular and important part of this transition, playing a key role in the evolving dynamics of the flock.

Biosecurity incursions in countries near Australia, particularly of diseases like foot and mouth disease (FMD), are heightening the vigilance of Australian livestock industries. The industry is responding by advocating for stricter traceability, enhanced surveillance, and more robust quarantine protocols to safeguard Australia's disease-free status, which is critical to maintaining export market access and consumer confidence.

## INVESTMENT IN INNOVATION AND RESEARCH

The nature of Australia's unique landscape presents numerous challenges for farming, which have led to innovative methods of production. Investment in research, development and innovation, achieved through the levy system, partnering with industry and government, ensures that our farming practices remain competitive and fit-for-purpose for Australia's unique production, geographic, and climatic environments.

The sheep industry has four Research and Development Corporations (RDCs) — AWI, MLA, LiveCorp and the Australian Meat Processor Corporation (AMPC). The RDCs invest producer levies and co-contributions from the Australian Government in research, development, innovation and marketing.

### **INTEGRITY SYSTEMS**

The sheep industry takes quality standards seriously, from establishing and anticipating customer specifications to demonstrating and reporting specific metrics. Our sophisticated traceability systems guarantee the integrity of Australia's sheepmeat and wool products to our customers.

The National Livestock Identification System (NLIS) provides identification and lifetime traceability of sheep. From 1 January 2025, all sheep born on or after this date must be fitted with an approved NLIS electronic identification (eID) ear tag before leaving their property of birth. This will allow Australia to trace livestock more efficiently through the supply chain and respond effectively in the event of a biosecurity or food safety incident.

Livestock Production Assurance (LPA) is an on-farm assurance program covering food safety, animal welfare, traceability, and biosecurity. It provides evidence of livestock history and on-farm practices when transferring animals through the value chain. This integrity system protects the disease-free status of Australian sheep and underpins the reputation of our products as clean, safe, and natural.

The Australian National Wool Declaration (NWD) and Classer's Specification are the standardised mechanisms by which woolgrowers declare specific on-farm practices, wool quality, and traceability. They assist Australia's wool clip to meet evolving customer requirements. Australian wool is bought and sold with an International Wool Textile Organisation (IWTO) test certificate that characterises all critical features of each bale of wool.

Increasingly, Australian wool producers have become involved in various sustainability certification schemes that provide more in-depth information regarding on-farm activities and attributes which are increasingly required by our customers. The *Responsible Wool Standard*, *Authentico*, *ZQ*, *NATIVA*, and the *Australian Wool Sustainability Scheme* are examples of such certification schemes in use.

The Australian Animal Welfare Standards and Guidelines for Sheep apply to all those responsible for the care and management of sheep. They are based on current scientific knowledge, recommended industry practice, and community expectations.



### Live exports

The Australian Government has announced the phase-out of live sheep exports by sea by 1 May 2028. This decision presents challenges for exporters, producers and supply chain businesses, particularly in Western Australia. The RDCs have been working closely with Western Australian stakeholders to support a sustainable future for the sheep industry by investing in new market opportunities, supporting supply chain diversification and providing adoption and extension programs to guide producers through the transition.

Australia's live sheep export industry continues to face significant challenges and uncertainty. In Western Australia, local conditions, combined with the impending trade ban, have resulted in sheep moving out of Western Australia and into eastern states [10]. Historically, mixed farming operations in the west maintained a balance between cropping and sheep, but as the trade ban nears, the focus has shifted more heavily toward grain production.

## MANDATORY CLIMATE-RELATED FINANCIAL DISCLOSURES

Mandatory climate-related financial disclosures, effective from 1 January 2025, are beginning to reshape Australian livestock industries by increasing transparency around climate risks and sustainability practices. Large agribusinesses, including major sheep producers, are now obliged to report on their exposure to climate-related risks, emissions profiles, and transition strategies [11]. This regulatory shift is prompting livestock agribusinesses to invest in more advanced data collection, governance frameworks, and sustainability reporting systems. While the initial compliance burden may be significant especially for producers unfamiliar with financial disclosure standards—it also presents an opportunity to demonstrate climate resilience and attract environmentally conscious investors. Moreover, the disclosures are expected to influence capital allocation, with financiers and insurers increasingly factoring climate risk into their decisions. For the sheep industry, these disclosures could accelerate the adoption of lowemission technologies, helping align the sector with Australia's broader net-zero goals.

### **GREENWASHING**

The risk of greenwashing is increasingly influencing Australian agricultural industries, as sustainability claims come under greater scrutiny from regulators, investors, and consumers. With rising demand for environmentally responsible products, producers and retailers are expected to substantiate claims about emissions, land use, and animal welfare. Vague or misleading statements carry reputational and legal risks, especially as global standards tighten and third-party certifications become more prominent. This shift is prompting companies to invest in traceability systems, transparent reporting, and verified sustainability frameworks to maintain market access and consumer trust [12].

### SUSTAINABILITY REGULATIONS

Brands are being forced to comply with what has been labelled a "tsunami" of sustainability regulations that replace once-voluntary standards or initiatives that demand transparency around product origin, material composition and environmental impact. This is driving Australian wool growers and processors to adopt advanced traceability systems, life cycle assessment tools, and certifications like the Responsible Wool Standard (RWS). These requirements are having a significant impact on the Australian wool industry as producers are both being incentivised to provide data and penalised by initiatives such as the Product Environmental Footprint (PEF) framework. PEF currently favours synthetic fibres in its Life Cycle Analysis (LCA) method, which does not fully account for wool's natural biodegradability, renewability, and longevity in use.

# The SSF's Strategic Plan

In 2025, the Board and SSG revised the SSF's Strategic Plan to ensure that it is a living, working industry instrument and it is used as part of 'business as usual' in the sheep and wool industry.

Three strategies, each with supporting activities, were identified to move the SSF forward and propel it towards its objectives.



### STAKEHOLDER ENGAGEMENT

To maximise its impact, the SSF must connect and consult appropriately with the breadth of sheepmeat and wool value chain stakeholders in Australia who influence, drive, and implement industry actions.

### The SSF aims to:

- · Raise awareness and improve understanding of the SSF through promotion to both producers and the entire value chain.
- · Host regular engagement opportunities for industry stakeholders via authentic, accountable consultation.
- · Support the development of mechanisms to enable the SSF to be used in influencing practice change / industry investment.
- · Maintain, foster and build trust in the SSF and build on our existing strong relationships with industry.

### **Key performance indicators**



The SSF is utilised to inform investment in research, development and adoption activities by MLA and AWI.



The percentage of sheep producers that are aware of the SSF and its activities increases year on year\*.



Industry stakeholders agree that the SSF is a trusted industry reference.

<sup>\*</sup>From a base of 41% in 2024, measured through the annual MLA Member's Survey.





### **DATA COLLECTION AND REPORTING**

The purpose of the SSF is to monitor, measure, and report industry performance against sustainability priorities. This requires contemporary, meaningful, and high-quality information.

### To ensure robust and transparent data collection and reporting, the SSF will:

- · Implement and maintain robust and transparent data collection protocols for both existing and new metrics.
- · Continue the transition to an agile, web-based visual insights dashboard.
- · Regularly undertake extensive materiality assessments to define and prioritise sustainability issues and investment.
- · Report to industry on a regular basis.

### **Key performance indicators**



The SSF continues to make improvements in its alignment with its reporting principles (transparency, accountability, inclusivity, credibility, practicality and relevance).



Data is consistently reported for all indicators in the SSF.



Materiality assessments are conducted every three years.



Digital accessibility of the SSF's data and reporting continues to improve.



Source: Meat & Livestock Australia



### **RESPONSIVENESS TO INDUSTRY NEEDS**

The sustainability landscape in which sheep producers and their products exist is constantly evolving. To maintain its value as an industry leadership initiative, the SSF must be agile and responsive to current material issues and opportunities within this landscape.

### To do this, the SSF will:

- · Undertake evaluation of SSF progress and relevance every 12 months.
- · Review responses to contemporary and emerging trends in sustainability.
- $\cdot$  Continuously refine the SSF to meet market needs.
- · Ensure ongoing collaboration and alignment with other agricultural commodity frameworks.

### **Key performance indicators**



Evaluation of SSF relevance is undertaken annually.



Ongoing refinement of SSF is made to meet market needs.



Collaboration and alignment with other agricultural frameworks occurs regularly.



Source: Meat & Livestock Australia



### **SECTION 2: THE FRAMEWORK'S OPERATIONS**

# **Material topics**

Materiality is the process of identifying sustainability topics important to the continued success of the Australian sheep industry. The SSF's second materiality assessment was completed in 2024.

The SSF materiality assessment involved a desktop review and testing topics with industry stakeholders. Further testing occurred to confirm topics, scopes, and ranking, which were subsequently validated by the SSG.

The process sought to align with the evolving needs of both internal and external stakeholders throughout the value chain. It aimed to adhere to double materiality methodology considering both 'inside-out' impact materiality and 'outside-in' financial materiality.

Overall, the assessment highlighted a more mature understanding of sustainability topics among stakeholders.

It underscores the greater connections between the topics' drivers, emphasising the need for collaboration to effectively address complex cross-industry challenges.

The materiality assessment identified 14 highly material topics to the industry and its key stakeholders. An additional 11 topics were also identified for consideration. A full list of topics and their scopes can be found in Appendix 2.

The highly material topics for the SSF are provided in Figure 1.

Caring for our sheep	Enhancing the environment and climate	Looking after our people, our customers and the community	Ensuring a financially resilient industry
Animal wellbeing and welfare	3. Greenhouse gas emissions and carbon management	4. Access to labour and capacity building	6. Responsible value chain and traceability
Animal husbandry and handling	5. Climate change resilience	10. Safety	7. Economic resilience and market access
14. Biosecurity	8. Biodiversity	11. Labour standards, human rights, and employment	12. Food safety and quality
20. Food sourcing	9. Water security	13. Occupational health	19. Economic contribution
	15. Soil health and pasture management	22. Human health and nutrition	23. Product innovation and stewardship
	16. Chemicals	24. Community engagement	
	17. Energy	25. Industry engagement and collaboration	
	18. Water quality		
	21. Waste		

Figure 1 – The highly material topics for the Australian sheep and wool industry.

The complete list of material topics for the sheep sustainability topics appears in the matrix below (Figure 2).

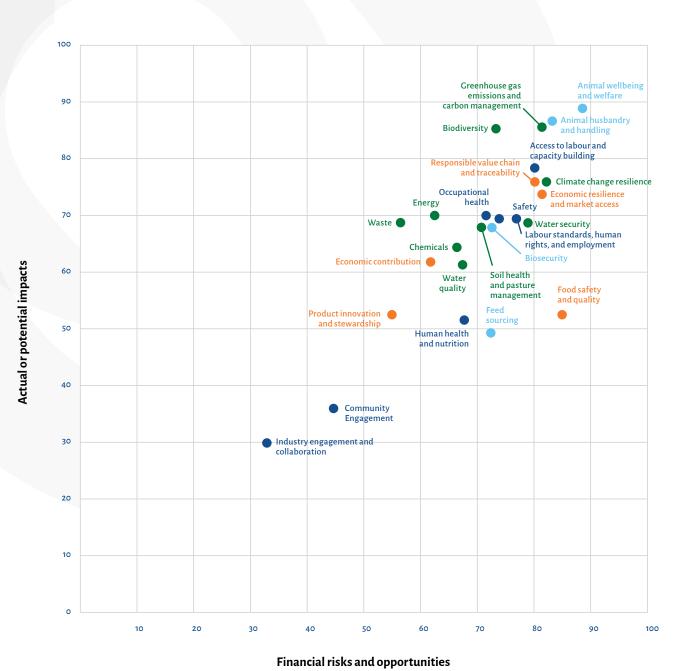


Figure 2 - Matrix of material topics for the Australian sheep industry.

The SSG, with the assistance of subject matter experts, carefully reviewed the findings of the revised materiality matrix to identify what changes were required to the Framework. These changes are being progressively implemented.



# Consulting with our stakeholders

The SSF regularly consults with its stakeholders to understand the sustainability risks and impacts of most interest to them, and to ensure the Framework is meeting their needs.

The SSF utilises two key forums to engage with its broad range of stakeholders. Further information on the types of stakeholders that engage with the SSF can be found in Appendix 3.

### **CONSULTATIVE COMMITTEE FORUM**

The Consultative Committee is an invaluable reference group for the SSF and includes representatives from Australian and international retailers, banks, investors, NGOs, industry representative groups, government, and researchers. The forum is held once a year to share information, identify emerging issues and opportunities, and obtain valuable input and feedback from stakeholders.

The Consultative Committee forum held in December 2024 focused on understanding how the data provided by the Framework is being utilised by industry and its customers. It also featured a discussion on the Taskforce for Nature-related Financial Disclosures (TNFD).

#### **INDUSTRY FORUM**

An annual industry forum is held to ensure ongoing engagement and ownership of the SSF by industry. The SSF must represent the views of the industry to be an effective customer and consumer-facing framework.

The event involves internal industry stakeholders including Research and Development Corporations (RDCs), peak industry councils (PICs), state farming organisations (SFOs), industry representative groups and service providers.

The industry forum held in April 2025 considered the strategic plan for the SSF and the implications of the revised materiality assessment.

### **EVENTS**

SSF representatives often present at events and online webinars, forums and meetings with representative groups, whose membership base extends to both internal and external stakeholders across the value chain, enabling the SSF to reach a broader audience.

### **DIGITAL ENGAGEMENT**

As of 1 July 2025, the SSF had increased its engagement across all three of its primary communications channels.



The SSF LinkedIn page had

996 followers, an increase of 18% from the previous year.



The SSF Facebook page had 192 followers, an increase of 22% from the previous year.



The quarterly SSF e-newsletter

Newes and Wether was read

936 times, an increase of

5% from the previous year.

Sheep Sustainability Framework Annual Report 2025

# Alignment with global sustainability initiatives

Global environment, social and governance (ESG) initiatives and reporting standards are rapidly evolving, with an increasing focus on climate- and environment-related impacts. The SSF is continuing to adapt its reporting with a focus on aligning with these changing sustainability reporting requirements.

# UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (UN SDGS)

The United Nations 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 UN SDGs consist of 17 goals (Figure 3), 169 targets, and 232 unique indicators. National governments, including Australia's, are expected to contribute to and report on all 17 goals through the UN process. The sheep industry supports Australia's contribution to the UN SDGs. Using a robust methodology based on consideration of each goal's targets and indicators, the SSF demonstrates alignment with 10 of the 17 goals including both leading and supporting contributions or impacts.

The Framework is most closely aligned with:



### Goal 2 — Zero hunger

By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.



Figure 3 - Alignment of Sheep Sustainability Framework to the United Nations Sustainable Development Goals.

### **GLOBAL REPORTING INITIATIVE**

The most widely used standards for sustainability reporting are those of the Global Reporting Initiative (GRI).

The GRI Sustainability Reporting Standards (GRI Standards) enable an organisation to report information about its most significant impacts on the economy, environment, and people, including impacts on their human rights, and how it manages these impacts.

In July 2022, GRI released a sector standard for companies in the agriculture, aquaculture and fishing sectors (GRI 13).

The SSF commissioned a review of the alignment of its reporting with the GRI 13 sector standard in early 2023. Overall, there is good alignment between the material topics in the SSF and GRI 13. However, some differences in scope, language, terminology, and topics were identified. The SSF continues to work to ensure alignment with the GRI 13 and has sought to address some of these differences in this report.

# TASKFORCE ON NATURE-RELATED FINANCIAL DISCLOSURES

In September 2023, the Taskforce on Nature-related Financial Disclosures (TNFD) released a set of disclosure recommendations and guidance for organisations to report and act on evolving nature-related dependencies, impacts, risks and opportunities. These enable business and finance to integrate nature into decision making and ultimately support a shift in global financial flows away from nature-negative outcomes and toward nature-positive outcomes.

# TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

The Financial Stability Board (FSB) created the Taskforce on Climate-related Financial Disclosures (TCFD) to develop recommendations on the types of information that companies should disclose to assess financial risks related to climate change.

Concurrent with the release of its 2023 report on October 12 2023, the TCFD fulfilled its remit and disbanded. The standards have since been managed by the International Sustainability Standards Board (ISSB), a standard-setting body established by the International Financial Reporting Standards (IFRS) Foundation in 2021. Australia has largely adopted the IFRS S2 Climate-related Disclosures standard now reflected in AASB S2 Climate-related Disclosures. Certain entities are required by the Corporations Act 2001 to apply AASB S2 for annual periods beginning on or after 1 January 2025.

### **SCIENCE BASED TARGETS INITIATIVE**

The Science Based Targets initiative (SBTi) is a global organisation that helps companies and financial institutions set ambitious emissions reduction targets in line with the Paris Agreement – which is to limit the global average temperature increase to 1.5°C above pre-industrial levels. The SBTi Forest, Land and Agriculture guidance encourages companies to reduce global greenhouse gas emissions from agriculture and commit to zero deforestation targets by 2025.

Many participants in the wool supply chain report against the SBTi targets. The SSF currently does not include these targets in its reporting framework. However, there is strong alignment with the key focus areas of the SBTi.



Source: Meat & Livestock Australia

### **SECTION 3: REPORTING**

# The Framework's structure

## Vision

Sustainably producing the world's best sheep, meat and wool, now and into the future.

### **Definition**

Sustainable sheepmeat and wool production means producing sheepmeat and wool by current and future generations in an ethical and environmentally, socially, and financially responsible manner.

## **Principles**

The principles that guide implementation and improvement of the SSF are:

- 1. Transparency
- 4. Credibility
- 2. Accountability
- 5. Practicality
- 3. Inclusivity
- 6. Relevance

The SSF structure comprises



9. Market access

**Themes** 



Focus areas



**Priorities** 

comprises	Themes	Focus areas Priorities
THEME	FOCUS AREA	PRIORITY
Caring for our sh	еер	
	1. Animal care and	1.1 Reduce, refine and replace painful husbandry practices
(A)	handling	1.2 Implement best practice sheep management
		1.3 Ensure humane processing and on-farm euthanasia
	2. Animal health	2.1 Prevent and manage disease
Enhancing the e	nvironment and climate	
	3. Environment	3.1 Improve natural resource management
67		3.2 Responsible environmental practices
(24)		3.3 Encourage biodiversity
	4. Climate change	4.1 Reduce net greenhouse gas emissions
		4.2 Adapt to a changing climate, including extreme weather events
Looking after ou	r people, our customers ar	nd the community
	5. Health and safety	5.1 Improve industry safety culture
		5.2 Improve our people's health
( 000	6. Capacity building	6.1 Support and grow our workforce
		6.2 Encourage workforce diversity
	7. Contribution to	7.1 Enhance community trust
	community	7.2 Deliver products that customers demand
Ensuring a finan	cially resilient industry	
	8. Profitability,	8.1 Maintain or increase industry profitability
0	productivity and investment	8.2 Maintain or increase contribution to the Australian economy
		8.3 Increase productivity
		8.4 Encourage innovation

9.1 Ensure positive market positioning and access

9.2 Guarantee product integrity and safety



# The indicators and metrics

The SSF board and steering committee have been working hard to find metrics and data to support all its indicators. In this report, 98% of SSF indicators have supporting data.

While the SSF reports are produced annually for the most recent financial year, some data reporting periods vary from annual (either financial or calendar years), biennial, to every five years depending on the metric.

### **METRIC UPDATES**

On recommendation from the SSG and on approval from the Board, the following metric changes have been made.

### **METRIC CHANGE**

### Caring for our sheep

### 2.1.2b Change in Australian Sheep Breeding Values (ASBV)

This metric has been modified to present the actual change in ASBV value for each trait, as opposed to the percentage change year on year. This change in reporting style will provide greater transparency by providing data that is more familiar to industry and more easily comparable year-on-year.

## Looking after our people, our customers and the community

### 7.2.1b Willingness to consider wool for apparel

This metric was amended in 2024, to utilise an alternative data source – the AWI Global Consumer survey which evaluates community perceptions around wool and its quality. This change means that the new data is not comparable to previous data, but this change provides a more appropriate forward-looking indicator of wool's relevance in consumer decision-making.

### Ensuring a financially resilient industry

## 8.2.1b Gross value (AUD) of agricultural production for wool

The wording of this metric has changed from 'greasy wool' to simply 'wool' in line with the ABARES definitions of commodities and the available data.

### 8.3.1b Change in Sustainable Merino (SM) index

This metric has been modified to present the index value for each trait, as opposed to the percentage change year on year (as for 2.1.2b). Historical values have been updated where appropriate.

### **METRIC ADDITION**

### Caring for our sheep

### 1.2.1b Change in Australian Sheep Breeding Value (ASBV)

### for weaning rate (WR)

To support our reporting on lamb survivability, the SSF has now included this metric as a measure of ewe reproductive efficiency and maternal ability.

### Enhancing the environment and climate

### 3.1.2 Conservation practices

The SSF previously reported on the percentage of sheep-producing land identified for conservation or protection purposes utilising data from ABARES and ABS. Following the cessation of this information being collected, the SSF has instead sought to report on changes in vegetation types associated with sheep or feed production, through four metrics on the balance of tree and grass cover:

3.1.2a Extent of primary forest

3.1.2b Extent of secondary forest

3.1.2c Extent of primary woodland

3.1.2d Extent of secondary woodland

## Looking after our people, our customers and the community

## 5.2.1b Getting Involved in the Community Index of Australian sheep graziers

To support our reporting on the physical and mental wellbeing of our producers, the SSF now includes this metric. Utilising information from the Regional Wellbeing Survey, this metric reports on the extent of a person's involvement in local community activities as a mean score from (1) "never or almost never" to (7) "all the time" taking part in community events. Its inclusion also fosters further alignment with the Australian Beef Sustainability Framework (ABSF).



### Caring for our sheep

## 1.2.5a Percentage of sheep transported in line with animal welfare standards

It is anticipated that through a Federal Sustainability Reporting Uplift Grant, awarded to MLA, that animal movement and performance data by animal welfare accredited transport operators will commence reporting in 2025-26.

## Looking after our people, our customers and the community

The SSF has committed to reporting data on the availability of workforce among sheep and lamb processors using an aggregated industry-level database via AMPC's Data Portal, to which Australian processors voluntarily supply information. As participation in this initiative increases, the SSF will be able to report this information.



Source: Meat & Livestock Australia



# Caring for our sheep

### ABOUT THE MATERIAL TOPICS

Material topics	
Animal wellbeing and welfare	Animal husbandry and handing
Feed sourcing	Biosecurity

Continuous improvement in animal welfare and husbandry practices is a major driver in positive public perceptions of the Australian sheep and wool industry.

Animal welfare is protected by legislation in each of the states and territories of Australia. This legislation is harmonised through the *Australian Animal Welfare Standards and Guidelines*; national guidelines that specify the legal standards of management and husbandry required to protect and maintain the welfare of sheep.

WPA specifically defines a positive welfare state of an animal to be when "it is healthy, comfortable, well nourished, safe and able to express natural behaviours, indicated by science-based evidence" [7].

Good health and handling of sheep provide productivity advantages. The outcome of improved husbandry practices (such as refining/replacing aversive practices, minimising pain) and improved capacity to prevent and treat disease, contributes to an increase in individual animal and flock performance and a reduction in livestock mortality. SPA and WPA support the use of pain management to reduce the impact of husbandry procedures on sheep.

The threat of biosecurity incursions remains an ongoing risk to animal welfare and trade. Emergency animal diseases, such as foot and mouth disease (FMD), remain prevalent in many neighbouring countries to Australia. SPA and WPA support raising awareness of biosecurity and the implementation of biosecurity practices on-farm.

The LPA National Vendor Declaration (NVD) communicates the food safety and treatment status of every animal every time it moves between properties, to saleyards or to processors. NVDs are key to Australian red meat traceability and market access, and act as a legal document of movement throughout the supply chain. All declarations must be supported by accurate farm records. This is a pledge that Australian meat has been produced safely and ethically on-farm and meets biosecurity requirements.

Furthermore, in September 2022, federal and state agriculture ministers agreed to implement a nationally consistent individual electronic identification (eID) system for sheep and goats by 1 January 2025. Industry is working through the national implementation of this commitment.

Finally, the SSF board and steering committee have been considering how it reports on feed sourcing in the Australian sheep industry. This includes understanding the sources of imported feed and possible association with deforestation as well as water security and other risks associated with domestically sourced feed. It is a topic common to multiple livestock sectors, so there are potential sources of collaboration with other agricultural frameworks.

### **FOCUS AREA 1: ANIMAL CARE AND HANDLING**

**PRIORITY 1.1** 

Reduce, refine and replace painful husbandry procedures

Painful husbandry procedures can impact animal welfare. Mulesing is a high-profile example. Efforts are continually being made to reduce, refine or replace the need for painful husbandry procedures.

INDICATOR		VALUE	STATUS	SOURCE
1.1.1 Incidence of mulesing in the Australian flock	(			
1.1.1a Percentage of producers who mules their flock	Merino	57.7%	•	National Sheep Producer Survey 2024
	Non-Merino	3.9%	•	

These figures are taken from the National Sheep Producer Survey conducted in 2024 assessing management activities in 2023. The figures reported are for ewe lambs only, with n=1,268 sheep producers.

In comparison, the previous survey in 2022 (on management activities in 2021) found that 52.0% of producers mulesed Merino lambs and 8.0% of producers mulesed non-Merinos.

The slight increase in mulesing reported in the 2024 National Sheep Producer Survey is not statistically different from the previous survey undertaken in 2022, and the trend for producers in mulesing their ewe lambs continues to decrease since data was reported in 2021 (67%).

A producer's decision to mules their sheep is often influenced by anticipated flystrike risk, which is affected by weather conditions. Hence, variability is expected from year to year.

1.1.1b Percentage wool declared as non-mulesed/ ceased mulesing	Merino	18.6%	AWEX 2023-24
ceasea maresmy	Non-Merino	47.1%	

These figures represent the percentage of Australian bales of first-hand auction offered wool (excluding reoffers) with the National Wool Declaration (NWD) status of either non-mulesed or ceased mulesing.

The percentage of wool declared as non-mulesed or ceased mulesing increased by 2.8% for Merino and 7.0% for non-Merino wool since the last report.

The NWD is a voluntary scheme where not all wool is declared. For 2023-24 season:

- · 78.8 % of all Merino wool was declared.
- · 62.7% all non-Merino wool was declared.

INDICATOR		VALUE	STATUS	SOURCE
1.1.2 Use of appropriate pain management associ	iated with mulesing, ca	stration and t	ail docking	
1.1.2a Percentage of producers who use appropriate pain management at mulesing	Merino	89.7%	•	National Sheep Producer Survey 2024
Baseline: producers who mulesed in 2023	Non-Merino	96.2%		

It is good husbandry practice for mulesing to be accompanied by appropriate pain management. The local anaesthetic Tri-Solfen® was registered for use in mulesing in 2007. Several products which contain the non-steroidal anti-inflammatory drug meloxicam are also registered for pain management for mulesing. The use of Tri-Solfen®, and products containing meloxicam, is recognised as appropriate pain management for mulesing (see Table 1).

The data reported is from the sample of producers who reported that they mulesed animals in 2023 from the National Sheep Producer Survey 2024. From the survey, 95.0% of Merinos and 95.4% of non-Merinos received pain management (of some kind) for mulesing. The figures above reflect those that received appropriate pain management for the procedure.

Compared to the last survey, the percentage of producers using appropriate pain management for mulesing of Merinos held steady (88% in 2023) and significantly increased for non-Merinos from 83%.

INDICATOR		VALUE	STATUS	SOURCE
1.1.2 Use of appropriate pain management associ	ated with mulesing, ca	stration and t	ail docking	
1.1.2b Percentage of producers who use appropriate pain management at castration	Merino	22.3%		National Sheep Producer Survey 2024
Baseline: producers who castrated their male sheep in 2023 using the ring method only	Non-Merino	14.7%		

It is good husbandry practice for castration to be accompanied by appropriate pain management. Appropriate pain management for castration is dependent on the method used. The use of Tri-Solfen® and/or a registered product containing meloxicam is considered appropriate for the knife method while NumOcaine® and/or a registered product containing meloxicam is considered appropriate for the ring method (see Table 1).

The figures are reported from the sample of producers who reported that they castrated their sheep using the ring method in the National Sheep Producer Survey 2024.

Since the last survey, the percentage of producers who used appropriate pain management for castration of their male lambs (using the ring method) increased by 10.3% for Merinos (up from 12% in 2023) and 3.7% (up from 11% in 2023) for non-Merinos.

### Producers who castrate male lambs

Merino 98.3%

Non-Merino 95.3%

### Producers who castrate male lambs with rings

Merino 98.2%

Non-Merino 98.9%

1.1.2c Percentage of producers who use appropriate pain management at tail docking	Merino – Hot knife	78.8%	0	National Sheep Producer Survey 2024
Baseline: producers who tail docked their male lambs in 2023 using the ring and hot knife methods	Merino – Rings	24.2%		
2023 using the ring und not kinje methods	Non-Merino – Hot knife	32.3%	0	
	Non-Merino – Rings	14.4%	•	

It is good husbandry practice for tail docking to be accompanied by appropriate pain management. Appropriate pain management for tail docking is dependent on the method used. The use of Tri-Solfen® and/or a registered product containing meloxicam is appropriate for the knife method while NumOcaine® and/or a registered product containing meloxicam is appropriate for the ring method (Table 1).

These figures are reported from the samples of producers who tail docked their male lambs in 2024 using the ring method and producers who tail docked their male lambs in 2024 using the knife method.

Since the last report, the percentage of producers using appropriate pain management for tail docking using the hot knife method held steady for Merinos (78% in 2023) and declined for non-Merinos (39%). For the ring method, the percentage of producers using appropriate pain management increased from the last report for both Merinos (11% in 2023) and non-Merinos (10% in 2023).

#### Producers who tail dock male lambs

Merino 96.6%

Non-Merino 82.0%

### Tail docking method used

Note the differences in the prevalence of hot knife and ring use between Merino and non-Merino producers for tail docking.

	HOT KNIFE	RING
Merino	65.6%	30.8%
Non-Merino	24.4%	76.7%

### Appropriate pain management

The following table summarises the types of pain management that have been acknowledged as appropriate for the various husbandry procedures (mulesing, castration and tail docking) within the SSF.

Table 1 – Matrix of appropriate pain management methods considered within the SSF

	MULESING	CASTRATION	TAIL DO	OCKING
		Ring	Knife	Ring
Anaesthetic and antiseptic spray at the surgery site (e.g. Tri-Solfen®)	<b>√</b>	×	<b>✓</b>	X
Analgesic/pain killing oral gels; veterinary and nonveterinary prescribed - (e.g. Butec®, Buccalgesic®)	<b>/</b>	<b>√</b>	✓	<b>✓</b>
Analgesic/pain killing injection (e.g. meloxicam)	<b>√</b>	J	1	1
Anaesthetic injection at the surgery site (e.g. NumOcaine®)	X	<b>/</b>	X	<b>✓</b>

### PRIORITY 1.2

Implement best practice sheep management

Implementing best-practice sheep management will support the health and wellbeing of animals and ensure industry meets customer and community expectations regarding animal welfare.

INDICATOR	VALUE	STATUS	SOURCE
1.2.1 Lamb survival			
1.2.1a Percentage of producers pregnancy scanning ewes for litter size	31.4%	•	National Sheep Producer Survey 2024

The information gained from pregnancy scanning for litter size allows producers to manage each group of ewes more strategically. Managing ewes based on their litter size (single or multiples) through changes in feeding or paddock allocations at lambing time can lead to increased lamb survival. It is for this reason that scanning for litter size is a good proxy for lamb survival.

In the survey, 45.1% of producers reported they scanned their ewes. Of these, 69.6% scanned for dry, single, and multiple foetuses. This is a 2.4% increase on results from the previous survey conducted in 2022.

INDICATOR	VALUE	STATUS	SOURCE
1.2.1 Lamb survival			
1.2.1b Change in Australian Sheep Breeding Value (ASBV) for weaning rate (WR)	0.03	*	MERINOSELECT Database MLA June 2025 Analysis

Weaning rate refers to the number of lambs weaned per ewe joined and is a key indicator of reproductive efficiency and maternal ability. In this instance, the WR index combines the traits of Conception (CON), Litter Size (LS) and Ewe Rearing Ability (ERA) into a single ASBV for selection of animals.

The industry average ASBV for WR was 0.14 in 2023. This is an increase from 0.11 in 2022.

This means that ewes with a higher value will rear a greater number of lambs, improving lamb survival but also productivity and profitability.

1.2.2. Adoption of best practice management			
1.2.2a Percentage of producers who have completed Lifetime Ewe Management (LTEM) training	12.3%	•	AWI 2023-24

The percentage of producers who have completed LTEM was evaluated at the end of 2023-24. This is calculated by comparing the number of producers who have completed LTEM (4,857) with AWI-eligible wool levy payers (39,510 wool levy payers at 30 June 2024).

Since the last report, this figure has increased by 0.9%.

LTEM is a course designed to increase woolgrowers' knowledge and understanding of the influence of ewe nutrition and management on overall reproduction rates and lamb and ewe survival. Participation in the six-day LTEM training program indicates a strong likelihood of best practice adoption. 256 producers completed LTEM within the financial year.

1.2.3 Shearing welfare			
1.2.3a Total number of days per year spent by shearing trainers in woolsheds nationally	840	0	AWI 2024-25

Targeted training reinforces best practice with new shearers and upskills existing shearers. Practical coaching is a key strategy to develop highly skilled shearers and optimise sheep welfare during shearing. AWI offers training on a demand basis, with fluctuations in training days dependent on contractors and woolgrowers seeking shearer training.

Since the last report this figure has declined by 9% in line with training needs.

1.2.4 Wild predator management			
1.2.4a Percentage of producers with a documented wild predator management strategy	18.5%	*	National Sheep Producer Survey 2024
Base: producers who reported having a problem with predators on their property in 2023.			

Producer adoption of wild predator management strategies is considered a good indicator of effective predator control. To support adoption of best practice, the metric was changed this year to include producers who have a documented wild predator management strategy. For this reason, this is a benchmark data point.

This figure is from producers who reported having a problem with predators in 2023, which was 74.9% of producers surveyed. For reference, 44% of producers reported using wild predator management strategies in 2023.

INDICATOR	VALUE	STATUS	SOURCE
1.2.5 Transport of sheep within Australia to ensure their welfare			
1.2.5a Percentage of sheep transported in line with animal welfare standards (fit to load)	-	-	-

It is anticipated that through a Federal Sustainability Reporting Uplift Grant, awarded to MLA, animal movement and performance data by animal welfare accredited transport operators will commence reporting in 2025-26.

1.2.6 Sheep welfare in saleyards		
1.2.6a Percentage of sheep transacted through NSQA saleyards	38.2%	MLA 2023-24

The National Saleyards Quality Assurance (NSQA) program was developed in 1996-97 to provide the saleyard sector of the livestock industry with a QA program linking the sectors of industry from the 'paddock to the plate'. NSQA is audited by a third party (which is currently AUS-MEAT).

In 2023-2024, the number of sheep transacted through an NSQA facility increased by 2.6% compared to the previous financial year.

1.2.7 Wellbeing of sheep during live export			
1.2.7a Percentage mortality rate on ships	0.17%	•	DAFF 2024

The Department of Agriculture, Fisheries and Forestry (DAFF) reports livestock mortalities on every sea voyage. In the 2024 calendar year, a total of 449,221 sheep were exported by sea.

The total mortality rate for sheep on ships, which was 0.17%, was the same as the previous calendar year. There were no live sheep voyages in 2024 that exceeded the notifiable mortality limit within this period.

### **PRIORITY 1.3** Ensure humane processing and on-farm euthanasia

## On-farm euthanasia and processing are an integral part of sheep production. It is important that these procedures are done competently.

INDICATOR	VALUE	STATUS	SOURCE
1.3.1 Humane on-farm euthanasia			
1.3.1a Percentage of producers aware of humane killing requirements in the Australian Animal Welfare Standards & Guidelines (AAWSG) for sheep.	76.8%	•	National Sheep Producer Survey 2024

This figure is reported as a percentage of producers surveyed in the National Sheep Producer survey 2024 (n=1,268) that were aware of the Australian Animal Welfare Standards and Guidelines (AAWSG) for Sheep.

The survey showed that 84.8% of producers were aware of the AAWSG for Sheep. Of those that reported awareness of the AAWSG, 90.6% were aware of the specific standards for the humane killing of sheep. This result was slightly less (-1.6%) than reported last time the survey was undertaken in 2022.

1.3.2 Humane processing			
1.3.2a Percentage of lambs and sheep slaughtered through an establishment accredited by the Australian Animal Welfare Certification System (AAWCS).	92.0%	•	MLA 2023-2024

The Australian Animal Welfare Certification System (AAWCS) is an independently audited certification program. It is used by livestock processors to demonstrate compliance with Australian industry standards from receival of livestock to the point of humane processing.

This figure increased by 6.8% this year.

### **FOCUS AREA 2: ANIMAL HEALTH**

#### **PRIORITY 2.1**

Prevent and manage disease

The outbreak or spread of pests and diseases would have a severe impact on the sheep industry — on both individual businesses and access to markets. Vaccination is a key prevention mechanism for endemic diseases. Appropriate treatment of disease reduces impact on individual animals. Biosecurity measures, including effective traceability, also mitigate risk of disease.

INDICATOR	VALUE	STATUS	SOURCE
2.1.1 Australia maintaining freedom from disease			
2.1.1a Australia continues to be declared free from 12 major diseases	YES	•	Animal Health Australia 2024

Australia continues to be free of the world's worst sheep diseases, recognised by the World Organisation for Animal Health (WOAH).

This metric is derived from the *Animal Health in Australia Annual Report 2024* [13] that draws together information provided by the Australian Government's Department of Agriculture, Fisheries and Forestry, state and territory government agencies and Animal Health Australia's members.

The major diseases considered are foot and mouth disease (FMD), classical scrapie, brucellosis (*Brucella melitenisis*), enzootic abortion of ewes or ovine chlamydiosis (*Chlamydophila abortus*), Nairobi sheep disease, peste des petits ruminants (PPR), sheep scab (*Psoroptes ovis*), salmonellosis (*Salmonella abortus-ovis*), sheep pox, Wesselbron disease, maedi-visna and pulmonary adenomatosis (Jaagsiekte).

2.1.2 On-farm activity to prevent and treat disease			
2.1.2a Percentage of producers who vaccinate for clostridial diseases	87.6%	*	National Sheep Producer Survey 2024

Vaccination is an important and highly effective method to protect sheep from disease. When used correctly as part of a property health plan, vaccines can help prevent many common endemic diseases.

A sound vaccination program improves animal health and welfare and enhances enterprise productivity. The prevalence of vaccine use is a strong indicator of the Australian sheep industry's commitment to disease prevention.

This metric was changed in 2024 to improve alignment between the SSF and the ABSF, to enable more effective reporting across livestock species. Previously, the SSF has reported the percentage of producers using any vaccine on their flock.

Clostridial vaccines are by far the most commonly used vaccines across the industry, regardless of production region. Other vaccines tend to be region- or issue-specific, hence the decision to narrow this metric to clostridial vaccines only.

The National Sheep Producer Survey 2024 found that 91.9% of producers vaccinated their sheep with at least one type of vaccine. Of these, 95.2% vaccinated for clostridial diseases.

INDICATOR		VALUE	STATUS	SOURCE
2.1.2b Change in Australian Sheep Breeding Values (ASBV)	Worm Egg Count (WEC)	-1.73	*	MERINOSELECT Database MLA June 2025 Analysis
	Early breech wrinkle (EBWR)	-0.02	*	MERINOSELECT Database MLA June 2025 Analysis

Worms and breech flystrike are among the most important health challenges for the Australian sheep industry. Genetic improvement is key to preventing disease. Tracking changes in ASBVs over time provides insights on changes in genetic disease resistance in the Australian flock.

This metric has been modified to present the *actual change* in ASBV value for each trait, as opposed to the *percentage change* year on year.

The ASBV for both WEC and EBWR breeding values both reduced, meaning that the flock's resistance to worms and breech flystrike is improving.

Last year, the SSF reported that the ASBV for WEC was -12.78 in the 2022 lamb drop. This improved further to -14.51 for the 2023 drop lambs, a reduction of 1.73 ASBV units between the 2022 and 2023 drop.

Furthermore, last year, the industry average ASBV for EBWR was reported as -0.28 in the 2022 lamb drop. This year it improved further to -0.30 for the average of the 2023 drop lambs, a reduction of 0.02.

2.1.3 Producers adhering to biosecurity requirements			
2.1.3a Percentage of sheep producers compliant with Livestock Production Assurance (LPA) biosecurity requirements	76.7%	•	Integrity Systems Company 2024

To meet the requirements of the LPA program, each enterprise must have a documented biosecurity plan. In 2024, there were 1,276 sheep producers audited, of which 76.7% had a biosecurity plan in place. This number declined by 1.4% from 2023.

The LPA Program conducts both random and risk-based auditing, to provide an indication of conformity across the industry. The 23.3% who did not have a biosecurity plan when audited have either put a biosecurity plan in place or have been removed from the LPA program. Removal from the program means that sheep from that enterprise may not be transacted.

Integrity Systems Company (ISC) has implemented improvements to the LPA accreditation process to improve the assurance the program provides as well as support increased producer knowledge and conformity. Producers will have access to resources and self-assessments that will help them to develop a documented biosecurity plan for their property.



# Enhancing the environment and climate

#### **ABOUT THE MATERIAL TOPICS**

Material topics		
GHG emissions and carbon management	Climate change resilience	Biodiversity
Water security	Soil health and pasture management	Chemicals
Energy	Water quality	Waste

The Australian red meat industry, managing nearly 50% of the country's land mass, holds a unique position to significantly influence GHG emissions and sequestration. SPA and WPA advocate for reducing GHG emissions and the carbon footprint within the agricultural sector.

WPA also supports the need to develop a wool-specific emissions reduction target. Consequently, industry has made substantial investments in technologies and products aimed at reducing GHG emissions and achieving a net zero future. These investments include the advancement of methane-suppressant additives, delivery methods for additives in grazing systems and genetic selection for low methane-producing animals.

Australia experiences one of the most variable climates globally. Extreme weather events, such as heatwaves, frost, and heavy rainfall, along with climate variability, have a significant impact on agricultural production and income. Therefore, enhancing understanding of and preparedness for extreme weather events enables farmers to make proactive on-farm management decisions, such as buying and selling livestock or fodder based on long-range forecasts, to minimise production impacts.

Effective grazing land management adapts to climate changes, soil health, and grazing pressure from pest animals, ensuring production efficiency and reducing animal feed costs. It is also crucial to consider soil nutrient and sediment loss, erosion and soil carbon. The SSF operates a *Ground Cover Dashboard*, which enables stakeholders, industry, and producers to analyse trends in woody vegetation and ground cover at a regional level. This dashboard integrates an exhaustive 30 years of satellite data, identifying annual trends in woody vegetation and seasonal trends in ground cover.

The Global Biodiversity Framework (GBF) continues to shape Australian policy, recognising Australia as one of 17 'mega diverse' countries. In response, Australia has committed to protect and conserve 30% of land by 2030, achieve zero new extinctions [14], take real and significant climate action, and establish a nature repair market.

Given that agriculture utilises approximately three-quarters of Australia's total water supply, producers have a significant responsibility to ensure water safety by minimising fertiliser run-off, pesticide use and livestock effluent from polluting waterways and groundwater.

Use of chemicals including fuel, pesticides, fertilisers, and veterinary products have brought long-term benefits by reducing the effects of weeds, pests, and diseases on agricultural production. This has led to increased productivity, better quality produce, more competitive industries, and improved environmental outcomes. However, with the use of chemicals comes the responsibility to protect individuals using them and the environment from adverse effects, including residues, groundwater, and waterway contamination. SPA advocates for improved education for industry participants on the correct use of chemicals to prevent residue issues.

The Australian sheep industry is increasingly adopting circular management practices for solid and liquid waste streams to enhance sustainability. This includes the recovery of wool fibres, which can be repurposed into other products, and the recycling of organic waste from processing or sheep production, which can be converted into bioenergy.

<sup>62022-2032</sup> Threatened Species Action Plan

#### **FOCUS AREA 3: ENVIRONMENT**

**PRIORITY 3.1** 

Improve natural resource management

## Maintaining natural resources, including water, soil and vegetation, is fundamental to the success of the industry.

INDICATOR	VALUE	STATUS	SOURCE
3.1.1 Protecting soil resource			
3.1.1a Percentage of natural resource management regions achieving healthy ground cover thresholds	51.3%	0	CIBO Labs December 2023

Fractional ground cover is a key indicator of land condition and refers to pasture plants, native species, and plant and tree leaf litter that can protect the soil surface from erosion. Ground cover is also a good proxy for degree of biodiversity and magnitude of atmospheric carbon dioxide uptake and storage.

The SSF's Ground Cover satellite imagery dashboard allows discernment and evaluation of seasonal measures from sheep grazing regions [15]. While the 30 years of satellite data expressed is continuous, the ground cover tracking for the SSF will be reported annually.

This figure is drawn from the summer seasonal data collection phase. In December 2023, 20 of 39 sheep-producing NRM regions were reaching their ground cover targets. This was a 12.8% decrease on the number of NRM regions achieving their ground cover targets from December 2022. Many sheep production regions had received significantly below-average rainfall during this period, which may have contributed to the reduced ground cover.

3.1.2 Conservation practices			
3.1.2a Extent of primary forest ('000 ha)	19,570	*	CIBO Labs 2021-22
3.1.2b Extent of secondary forest ('000 ha)	7,712	*	
3.1.2c Extent of primary woodland ('000 ha)	3,337	*	
3.1.2d Extent of secondary woodland ('000 ha)	6,957	*	

The SSF previously reported on the percentage of sheep-producing land identified for conservation or protection purposes utilising data from ABARES and ABS.

Following the cessation of this information being collected, the SSF has instead sought to report on changes in vegetation types associated with sheep or feed production. This also serves as a further point of alignment with the ABSF.

Based on satellite imagery, these indicators represent the extent of national primary and secondary forest and woodland from 2021 to 2022.

A forest is defined as woody vegetation with a minimum 20% canopy cover (CC), potentially reaching 2m high and a minimum area of 0.2ha. Woodland is defined as woody vegetation with a canopy cover between 5-19%. Primary forest ( $\geq$ 20% CC) or woodland (5-19% CC) is defined as woody vegetation present in 1988. Secondary forest or woodland has been disturbed at any time post-1988.



Responsible environmental practices on-farm include use of chemicals, and pest management including pest plants and animals. In processing, water use and waste minimisation are important issues. All of these elements must be managed appropriately to minimise harm to the environment.

INDICATOR	VALUE	STATUS	SOURCE
3.2.1 Responsible chemical stewardship			
3.2.1a Percentage of producers who have attended a ChemCert course or similar	81.1%	•	National Sheep Producer Survey 2024

Independent training of producers on the safe and effective use of agricultural chemicals (e.g., ChemCert) is an important step in responsible chemical use.

The National Sheep Producer Survey reports that 81.1% of producers attended a chemical training course in 2023. This was 0.9% less than the result reported from the previous survey, which represented on-farm practices for the year 2021.

Of the producers who had completed a chemical training course, 77% have ChemCert accreditation or hold a current ChemCert card.

3.2.2 Efficient water use in processing			
3.2.2a Kilolitres water used per tonne hot standard carcase weight (HSCW) when processing sheepmeat	6.7kL	•	AMPC Environmental Performance Review 2024

This metric provides a measure of water usage by the Australian sheepmeat processing sector.

AMPC reports water use and waste production from processing in its Environmental Performance Review (EPR). AMPC engages CSIRO to conduct the EPR biennially.

Compared to 2022, when the EPR was last conducted, water use by sheep and lamb processors has decreased by 6.9%. Water use for processing sheepmeat continues to be marginally lower than that of beef processors.

NB: Some processors included in this calculation also processed goats and other small animals.

3.2.3 Minimise waste in processing			
3.2.3a Kilograms of solid waste per tonne hot standard carcase weight (HSCW) when processing sheepmeat	68.1kg	0	AMPC Environmental Performance Review 2024

This metric provides a measure of solid waste (organic and inorganic) produced by the Australian sheepmeat processing sector.

AMPC reports water use and waste production from processing in its Environmental Performance Review (EPR). AMPC engages CSIRO to conduct the EPR biennially.

Compared to 2022, when the EPR was last conducted, solid waste produced by sheep and lamb processors increased by 128.5%.

Most waste generated by red meat processors is organic, comprised mainly of paunch stomach solids, manure and yard wastes, as well as sludge and pond crusts from wastewater treatment plants. Organic waste is almost entirely processed into other beneficial products, such as compost. In rare cases, often related to scale and location and where rendering is not possible, organic waste can also include non-commercial animal parts. Scrap metals and waste oil are also typically recycled.

Solid waste sent to landfill typically includes miscellaneous mixed waste for which local recycling pathways have not been found.

These results are largely explained by some processors disposing of large quantities of organic waste to landfill, comprising non-commercial value skins and hides, due to a lack of local composting options. In a few cases, some processors also reported an increase in solid waste due to demolition and construction waste, and an increase in single-use PPE.

NB: Some processors included in this calculation also processed goats and other small animals.



Encourage biodiversity

# Biodiversity is increasingly highlighted by stakeholders as an important consideration in appropriate environmental management.

INDICATOR	VALUE	STATUS	SOURCE
3.3.1 Maintaining and increasing biodiversity			
3.3.1a Percentage of producers undertaking deliberate activities to maintain or enhance biodiversity	72.6%	*	National Sheep Producer Survey 2024

This figure represents the percentage of producers who take steps to measure, maintain or enhance biodiversity on their property. The inclusion of this metric is an important first step for the SSF in reporting on biodiversity management practices on-farm.

The results indicate that 72.6% of producers surveyed through the National Sheep Producer Survey 2024 (n=1,268) undertake deliberate activities to measure, maintain or enhance biodiversity on their property.

Examples of these activities include ground cover management, minimum tillage and multi-species planting.

Furthermore, 6% of producers said they used remote sensing technologies or external assessment to track biodiversity indicators on their property.



#### **FOCUS AREA 4: CLIMATE CHANGE**

**PRIORITY 4.1** 

Reduce net greenhouse gas emissions

Greenhouse gas emissions (GHGs) contribute to climate change and climate variability, including extreme weather events. Under Red Meat 2030 and Wool 2030, sheep producers aim to be carbon neutral by 2030. Using renewable energy sources will help to reduce GHG emissions. Carbon sequestration and improving ewe reproductive rates will also play a role.

INDICATOR	VALUE	STATUS	SOURCE	
4.1.1 Contribution of sheep production to greenhouse gas (GHG) emissions				
4.1.1a Net emissions: MtCO $_{\rm 2}$ e generated by sheep industry (farm and sheepmeat processing)	11.51 Mt	0	MLA 2023	

The reported figure is calculated using data from Australia's National Greenhouse Gas Inventory (NGGI) of national emissions, AR5 values for GWP100 and land use (LU) and land use change & forestry (LUCF). GHG emissions are grouped under a standardised unit of measure known as carbon dioxide equivalents ( $CO_2e$ ). Wool processing has not been included as most Australian wool is processed overseas.

Since the last report, emissions figures have become available for 2022 and 2023, during which time the sheep flock increased by 6.3%. Further, refinements to emissions from land use, land use change & forestry (LULUCF) and agricultural soils have caused modest revisions to historical emissions.

These changes in calculation methodology, combined with an increase in sheep numbers and dry conditions across many production areas, resulted in the industry's net emissions increasing from 9.54 MtCO<sub>2</sub>e in 2022 to 11.51 MtCO<sub>2</sub>e in 2023. Dry conditions increased net emissions through a number of mechanisms including reduced sequestration attributed to plant growth, increased decomposition of soil organic matter, increased reliance on processed supplementary feeds, and reduced fertiliser efficiency.

In context, sheepmeat production represented approximately 16% of total net greenhouse gas emissions attributable to the Australian red meat industry in 2023 [16].

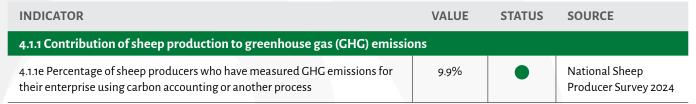
, , , , , , , , , , , , , , , , , , , ,				
4.1.1b Emission intensity: kg of CO2e emitted per kg liveweight (LW) when raising sheep	6.8kg	•	Integrity Ag 2025	
A Life Cycle Assessment report estimated the emissions intensity of the Australian flock used for wool, sheepmeat production or live export for the year 2023. There has been a 7% reduction in emissions intensity since 2020 [17].				
4.1.1c Emission intensity: kg of CO₂e emitted per kg greasy wool shorn	24.5kg	•	Integrity Ag 2025	
A Life Cycle Assessment report estimated the emissions intensity of the Australian flock used for wool, sheepmeat production or live export for the year 2023. There has been a 7% reduction in emissions intensity since 2020 [17].				
4.1.1d Emission intensity: kg of CO₂e emitted per tonne hot standard carcase weight (HSCW) when processing sheepmeat	308kg	•	AMPC Environmental Performance Review 2025	

This figure reports the emissions intensity of the Australian sheepmeat processing sector.

AMPC reports water use and waste production from processing in its EPR. AMPC engages CSIRO to conduct the EPR biennially.

Compared to 2022, when the EPR was last conducted, emissions intensity for processing sheepmeat has decreased by 15.4% [18].

NB: Some processors included in this calculation also processed goats and other small animals.



Calculating baseline carbon emissions and stored carbon can be an important first step for producers who are considering opportunities arising from low or zero carbon branded products. A carbon account can be used in on-farm decision making and sets a benchmark to show progress over time. Just as financial accounting assists in financial decision making and reporting, carbon accounting aids decision making and reporting around how carbon is, or is not, used on-farm.

The National Sheep Producer Survey found that 9.9% of producers have estimated their greenhouse gas emissions for their enterprise in 2023, which is a 6.9% increase on the previous report (3%).

Furthermore, 13.4% of producers had undertaken carbon neutral or carbon accounting training which was also an increase on previous figures (9%).

4.1.2 Renewable energy			
4.1.2a Percentage of producers who generate and use renewable energy	46.9%	0	National Sheep Producer Survey 2024

The National Sheep Producer Survey found that 46.9% of producers generate and use renewable energy. This is 3.1% less than the previous report.

Of the producers who generated and used renewable energy, 82% used solar energy without a battery and 5.5% used wind energy.

#### Updated Net GHG emissions from the Australian sheep industry

Annual emissions reports by MLA continue to be informed by the best available science and nationally maintained data. GHGs attributed to the red meat industry (including sheep) are updated retrospectively if/when source data from the National Greenhouse Gas Inventory becomes available or is revised.

Refinements to emissions from land use (LU) and land use change & forestry (LUCF) and agricultural soils caused modest revisions to historical emissions. The below figures are inclusive of LULUCF.

Emissions are attributed to the red meat industry based on animal numbers, feed intake, livestock processed and resources used. It is part of the industry's work in annually benchmarking its GHG footprint, which has been occurring since 2015.

YEAR	2020	2021	2022
Net emissions: Mt of CO₂e generated by sheep industry (farm and sheepmeat processing)	13.45	7.03	9.54



Climate change is increasing the incidence of extreme weather events such as droughts, heatwaves, floods and fires. Extreme weather events have significant implications for animal welfare (e.g. mortality, transport), environmental impact and profitability.

INDICATOR	VALUE	STATUS	SOURCE
4.2.1 Response to a changing and variable climate			
4.2.1a Climate-adjusted TFP growth	-0.2%	•	ABARES 1999-00 (base year) to 2023-24

Total Factor Productivity (TFP) is expressed as average annual percentage (%) growth over a given period and is relative to change from the base year. In this case, climate-adjusted TFP takes climatic activity into account and, year on year, will evaluate the change in productivity due to extreme climate events.

Climate-adjusted productivity aims to account for climate change effects. It models the effect of climate conditions (such as rainfall and temperature) on TFP and then calculates climate-adjusted productivity with the effects of climate removed.

Increases in climate-adjusted productivity show an industry is increasing productivity despite the impacts of climate – in other words, it is adapting and demonstrating resilience to climate change.

The last reported value was to 2021-22. Since then, data has become available to 2023-24.

Since 2021-22, this metric has decreased slightly.

1999-00 (BASE YEAR)	1999-00 (BASE YEAR)	1999-00 (BASE YEAR)
TO 2021-22	TO 2022-23	TO 2023-24
0.1%	-0.1%	-0.2%



Source: Meat & Livestock Australia



# Looking after our people, our customers and the community

#### **ABOUT THE MATERIAL TOPICS**

Material topics		
Access to labour and capacity building	Safety	Labour standards, human rights and employment
Occupational health	Human health and nutrition	Community engagement
Industry engagement and collaboration		

The Australian sheep industry faces a critical need for individuals equipped with the appropriate skills, knowledge, training, and experience to effectively manage farming operations. People, whether they be farmers, workers, customers or community members, are agriculture's most important asset.

Organisations such as AgHealth Australia [19] have reported an increase in on-farm fatalities and serious injuries, emphasising the need for ongoing vigilance and management of worker safety. Ensuring healthy working conditions involves addressing various hazards such as musculoskeletal injuries from manual handling, slips, trips, and falls, as well as exposure to dust and chemicals.

WPA actively encourages woolgrowers to protect all farm workers, recognising that there are many types of farm labour, including family, full-time, part-time and casual employees or contract labour by eliminating hazards, ensuring all workers have the necessary skills to handle animals and equipment and closely supervising new and inexperienced workers.

Globally, nutrition and food security are critical issues, with efforts focused on ensuring access to safe, sufficient, and nutritious food for all. Challenges such as economic disparities and climate-related shocks impact food availability and access.

Lamb is a highly nutritious red meat protein, that is rich in vitamins and minerals such as iron, zinc, and B vitamins, which are crucial for maintaining good health (Table 2). Antimicrobial stewardship is also a key consideration to reduce the inappropriate use of antibiotics and prevent antimicrobial resistance. SPA and WPA contributed to the development of national Antimicrobial prescribing guidelines for sheep. These efforts are essential to maintaining both human and animal health, contributing to a sustainable and secure food system in Australia.

Community and stakeholder engagement in the Australian sheep industry is vital for fostering meaningful relationships and effective collaboration. The Sheep Sustainability Framework (SSF) plays a pivotal role in this, in encouraging industry ownership for enhancing sustainability practices.

Table 2 - Nutritional profile of lamb

Nutritional information	Per 150g serve*
Protein	32.7g
Omega-3 fatty acids	54mg
Iron	3.4mg
Zinc	6.2mg
Magnesium	41mg
Phosphorus	385mg
Selenium	23µg
Riboflavin (vitamin B2)	0.34mg
Niacin (vitamin B3)	8.6mg
Pantothenic acid (vitamin B5)	1.17mg
Pyridoxine (vitamin B6)	0.28mg
Cobalamin (vitamin B12)	2.3µg

Source: Meat & Livestock Australia



Source: Meat & Livestock Australia

 $<sup>{}^*\!</sup>Average\,nutrition\,information\,per\,150g\,serve\,raw\,weight\,of\,four\,major\,lamb\,cuts.$ 

#### **FOCUS AREA 5: HEALTH AND SAFETY**

**PRIORITY 5.1** 

Improve industry safety culture

People, whether they be farmers, workers, customers or community members, are agriculture's most important asset. Agriculture is one of the most dangerous industries to work in due to the combination of hazards [20]. Safe and healthy workplaces and work processes protect people from injury and illness. Proactive focus and investment in safety is a foundation for cultural change.

INDICATOR	VALUE	STATUS	SOURCE
5.1.1 Health and safety prevention and training			
5.1.1a Percentage of producers who have undertaken a WHS risk assessment	54.6%	*	National Sheep Producer Survey 2024

Serious injuries can be significantly reduced by ensuring that all on-farm workforce participants understand and commit to formal onfarm risk assessments, safety planning and training, induction obligations and legislative requirements in their state or territory.

The National Sheep Producer Survey 2024 found that 54.6% of producers have undertaken a WHS risk assessment on farm.

Less than half of producers (42.4%) have a WHS management plan for their property or induct workers in WHS obligations (48.6%).

5.1.2 Number of deaths and serious injuries			
5.1.2a Number of fatalities in the sheep industry	23	•	SafeWork Australia 2019-23

Safe Work Australia (SWA) captures information on all work-related traumatic injury fatalities in Australia. Fatality data includes all persons who were traumatically fatally injured, and whose injuries resulted from work activity or exposures, and whose injuries occurred in an incident that took place in Australian territories or territorial waters.

Fatalities data is derived from the Work-related Traumatic Injury Fatalities (TIF) database. This database collates information sourced from workers' compensation data, fatality notifications from Australia's various WHS authorities and information in the National Coronial Information System.

The on-farm figure combines fatalities attributable to specialised sheep farming and sheep-beef cattle farming and is broken down as follows:

- · Sheep farming (specialised): 10 worker fatalities
- · Sheep-beef cattle farming: 11 worker fatalities
- · Meat processing: 2 worker fatalities.

This number has reduced since the last reporting period.

5.1.2b Lost time injury frequency rate (number of claims per million hours worked)	Farming	12.6	0	SafeWork Australia 2022-23p
	Processing	23.1	0	SafeWork Australia 2022-23p

The lost time injury frequency rate (LTIFR) refers to the number of lost time injuries – injuries that occurred in the workplace that resulted in an employee's inability to work the next full workday – which occurred in a given period.

The LTIFR is calculated across all livestock farms and meat processing facilities (irrespective of the species they produce or process). The calculator uses NDS data to determine the number of lost time injuries in each industry, and data from the Australian Bureau of Statistics Labour Force Survey to determine the number of hours worked.

In 2022-23, the LTIFR for farming and processing increased slightly. The 2022-23 data is preliminary (denoted by 'p'). Revisions in preliminary results are likely over future years as open claims are finalised.

#### Improve our people's health

#### It is critical that the industry supports our people to look after their physical and mental health.

INDICATOR	VALUE	STATUS	SOURCE
5.2.1 Status of physical and mental health			
5.2.1a Global Life Satisfaction Index score of Australian sheep graziers	70.2	0	Regional Wellbeing Survey 2023-24

The Global Life Satisfaction Index score is calculated based on respondents rating their satisfaction with their 'life as a whole' on a scale from 'completely dissatisfied' (0) to 'completely satisfied' (10). Scores are multiplied by 10 to give an index of 0 to 100.

It encapsulates people's satisfaction with their standard of living, health, what they are achieving in life, personal relationships, safety, feeling part of their community and future security.

Measuring feelings can be very subjective but is nonetheless a useful complement to more objective data when comparing quality of life across countries. This aligns with accepted OECD metrics and reporting.

This year, Australian sheep graziers scored 70.2, which was 8% lower than 2022-2023. This may be attributable to challenging operational and production conditions. However, the score is relatively good in comparison to other industries. For example, Australian beef graziers scored 69.7 and Australia overall was 66.2.

5.2.2 Connectedness to community			
5.2.1b Getting Involved in the Community Index of Australian sheep graziers	3.6	*	Regional Wellbeing Survey 2023-24

Connectedness to community is an important aspect of physical and mental wellbeing. This index evaluates the extent of a person's involvement in local community activities, as an average score from (1) "never or almost never" to (7) "all the time" taking part in community events, such as clubs or sporting groups/teams.

In comparison, beef graziers scored 3.4.



Source: Meat & Livestock Australia

#### **FOCUS AREA 6: CAPACITY BUILDING**

#### **PRIORITY 6.1**

Support and grow our workforce

To be sustainable, the sheep industry needs access to people with the right skills to manage and operate businesses, and to look after those people. Access to training and continuous improvement is required to upskill the workforce. Succession planning supports the future workforce.

INDICATOR	VALUE	STATUS	SOURCE
6.1.1 Capacity of workforce			
6.1.1a Percentage of on-farm industry participants who have completed further education	45%	*	ABS 2021 Census

This data is taken from the Australian Census conducted in 2021 for those who are employed in sheep farming and shearing services across the 40 sheep-grazing NRM regions of Australia.

Further education is defined as training designed for skilled work outside secondary school. It includes certificate III, IV, diploma and advanced diploma, bachelor's degree, graduate certificate, graduate diploma, and postgraduate degrees.

The next census will be conducted in 2026.

6.1.2 Appropriate working conditions			
6.1.2a Federal award rate ratio	1.20:1	•	Fair Work Ombudsman Pastoral Award Casual National Minimum Wage 2023-24

This ratio compares the shed hand hourly casual rate with more than 65 days' work experience (\$37.35) from the national Pastoral award, with the national minimum hourly casual rate (\$24.95 minimum wage + 25% casual loading) per hour.

The shed hand rate is as per the Federal Pastoral Award and is considered the most utilised on-farm payment rate. This ratio increased compared to 2024-2025 (1.14:1) increasing the amount paid under the Pastoral Award rate as compared to the Casual National Minimum Wage.

6.1.3 Availability of workforce				
6.1.3a Percentage of producers who find labour availability to be a major issue in their operation	General labour	42.0%	0	National Producer Survey 2024
	Shearing labour	35.3%	•	<b>,</b> ,

The National Sheep Producer Survey asks producers to rate the extent to which availability of general labour/shearing labour is an issue for their sheep operation.

In 2023, 42.0% of sheep producers reported major issues with finding general labour and 35.3% with shearing labour. This was a 7% increase for general labour and a 3.5% decrease for shearing labour since the last survey.

Fewer than half of producers reported no issues with general labour availability (37.9%) or shearers (43.7%).



The SSF has committed to reporting data on the availability of workforce among sheep and lamb processors using an aggregated industry-level database via AMPC's Data Portal, to which Australian processors voluntarily supply information.

As participation in this initiative increases, the SSF will be able to report this information.

6.1.4 Extent of succession planning in the industry			
6.1.4a Percentage of producers with a formal succession plan in place	19.9%	•	National Sheep Producer Survey 2024

The National Sheep Producer Survey found that succession preparedness varied among respondents. Nationally, 33.2% are yet to commence any discussion or planning while 28.2% have begun discussions with the family but have not reached an agreed outcome. Only 19.9% report having a formal succession plan in place. This figure has declined 1.1% from the last report.

Succession planning is often a complex issue for farm businesses. Family situations are unique and meeting the expectations of all members can be difficult. Furthermore, the decisions to be made about assets and liabilities can be triggered by unexpected and traumatic events outside the owner's control, such as divorce or death.

#### **PRIORITY 6.2** Encourage workforce diversity

A diverse workforce brings a range of skills and perspectives to the industry and assists in attraction and retention of workers.

INDICATOR		VALUE	STATUS	SOURCE
6.2.1 Extent of workforce diversity				
6.2.1a Age distribution of those who are employed in sheep farming and shearing services	Aged 15-34	20%	*	ABS 2021 Census
sneep farming and snearing services	Aged 35-54	32%		
	Aged 55-74	40%		
	Aged 75-100	7%		

This data is taken from the Australian Census conducted in 2021 for those who are employed in sheep farming and shearing services across the 40 sheep grazing NRM regions of Australia.

The sheep industry skews strongly towards an older age profile, with 40% aged between 55 and 74. For the Australian population, 55-74-year-old people comprise 25%. Of concern is that the industry under-indexes on younger people aged 15-34 at 20% compared the national figure of 32%.

The next census will be conducted in 2026.

6.2.1b Gender breakdown of those who are employed	Men	72%	*	ABS 2021 Census
in sheep farming and shearing services	Women	28%		

This data is taken from the Australian Census conducted in 2021 for those who are employed in sheep farming and shearing services across the 40 sheep-grazing NRM regions of Australia.

The sheep industry is strongly male, with fewer than three in 10 women.

The next census will be conducted in 2026.

INDICATOR	VALUE	STATUS	SOURCE
6.2.1 Extent of workforce diversity			
6.2.1c Percentage of Aboriginal and Torres Strait Islanders who are employed in sheep farming and shearing services	1.5%	*	ABS 2021 Census
This data is taken from the Australian Census conducted in 2021 for those who are across Australia.	employed in s	heep farming	and shearing services
Aboriginal and Torres Strait Islanders represent only 1.5% of those employed in she	eep farming ar	nd shearing se	rvices.
The next census will be conducted in 2026.			

This data is taken from the Australian Census conducted in 2021 for those who are employed in sheep farming and shearing services

Two percent of people employed in sheep farming and shearing services speak a language other than English (LOTE).

The next census will be conducted in 2026.

#### FOCUS AREA 7: CONTRIBUTION TO COMMUNITY

6.2.1d Percentage who speak a Language Other Than English (LOTE) in those

who are employed in sheep farming and shearing services

PRIORITY 7.1

across Australia.

Enhance community trust

Community trust in farmers is high and is critical to maintain. Reputation underpins the industry's social licence. The sheep industry makes a significant contribution to Australian society — beyond its economic contribution. The SSF will help to demonstrate this.

INDICATOR	VALUE	STATUS	SOURCE
7.1.1 Community perceptions of the sheep industry			
7.1.1a Percentage of Australians who believe that Australian lambs are farmed and raised in a humane manner	55%	•	MLA Consumer Sentiment Study 2024

MLA's Consumer Sentiment Research has been ongoing since 2010. Currently conducted by Pollinate, it tracks community sentiment, trust and perceptions towards the red meat industry.

The 15-minute online survey primarily seeks to engage around 1,500 primary household grocery buyers and meal-preppers aged 18-64, living in metropolitan Australia. This figure has held steady since the last report (54%).

7.1.1b Percentage of respondents who believe wool is more environmentally friendly than other fibres	40%	*	AWI 2024 Global Brand Tracking Study
--	-----	---	---

The AWI Global Brand Tracking design was modified in 2024 to accommodate changes in global market dynamics. The South Korean market was added to the study, meaning the study was conducted across nine countries: USA, UK, Germany, France, Italy, Japan, China, South Korea, and Australia.

In addition, the survey was split into two categories: 'clothing/apparel' and 'sportswear'. The figure reported is for clothing/apparel.

For these reasons, this year's figure is classed as benchmark and not comparable to previous years. The survey is repeated every two years and will next be conducted in early 2026.

Under the PEF Framework, Australian wool is categorised as a 'high impact' material, whereas synthetics are considered more environmentally sustainable. This is beginning to impact consumer behaviour, and wool producers and users are facing a complex challenge to quantify and communicate wool's environmental benefits to provide a more accurate sustainability claim.

ABS 2021 Census



#### **PRIORITY 7.2**

#### Deliver products that customers demand

Lean red meat is recommended in a healthy diet because it is an excellent source of protein, iron and zinc—essential nutrients important for good health. Wool is a natural, renewable and biodegradable fibre with numerous human health benefits. These qualities are integral in providing a sustainable fibre choice to consumers. Strong consumer demand for Australian sheepmeat and wool is a key success factor for the industry.

INDICATOR	VALUE	STATUS	SOURCE
7.2.1 Consumer perceptions of product quality			
7.2.1a Percentage of Australians who believe that Australian lamb is worth paying a bit more for	27%	•	MLA Domestic Consumer Tracker 2024
The MLA Domestic Tracker is conducted by Kantar. The reported figure is the Moving Annual Total (MAT) for about 100 nationally representative respondents surveyed weekly over 12 months among main grocery buyers aged 18-64 years old across metropolitan Australia. There was no change to the metric in 2024 (27%).			
7.2.1b Willingness to consider wool for apparel	62%	*	AWI 2024 Global Consumer Survey

This metric was amended in 2024, to utilise an alternative data source – the AWI Global Consumer survey which evaluates community perceptions around wool and its quality.

This change means that previous figures are not comparable to previous data but provides a forward-looking indicator of wool's relevance in consumer decision-making.

The global apparel market presents significant opportunities for wool, with both with high levels of penetration and consideration when consumers are looking to purchase apparel.

Of the consumers surveyed, 62% indicated that when looking to purchase apparel, they would consider buying products made from wool.



# Ensuring a financially resilient industry

#### **ABOUT THE MATERIAL TOPICS**

Material topics		
Economic contribution	Economic resilience and market access	Food safety and quality
Product innovation and stewardship	Responsible value chain and traceability	

The Australian sheep industry continues to play a pivotal role in national and regional development, significantly contributing to export income and employment.

As the world's leading exporter of sheepmeat, Australia supplied 849,249 tonnes cwt in sheepmeat (lamb and mutton) produced in 2023 [1]. This is particularly impressive considering that Australia only held around 5.8% of the global sheep flock in 2022 [1]. The long-term outlook for global sheepmeat consumption is largely positive, underpinned by growth in population and household wealth in emerging markets, particularly throughout Asia [1].

Australia's live sheep export industry faces significant challenges and uncertainties given the legislated phase-out of live sheep exports from 1 May 2028. However, positively for the livestock export sector, after a 12-year hiatus, Saudi Arabia resumed Australian sheep imports in December 2023, quickly becoming Australia's third-largest market in 2024. In January 2025, Australia signed an export health protocol with Morocco, which has experienced severe livestock depletion due to prolonged drought. This new market for live export holds promising growth potential and is being explored further.

Wool producers had a difficult year. Gross value of agricultural production for wool dropped by almost 10%. Subdued prices, reflecting sluggish final demand, and difficult seasonal conditions in southern Australia saw producers shift from wool into sheepmeat and other enterprises.

The Australian sheep industry strives to ensure all aspects of food safety, quality, product integrity, and traceability are consistent with its high standards, to protect Australia's reputation for high-quality meat production. It does so through the LPA program which provides evidence of livestock history and on-farm practices when transferring animals through the supply chain. In addition, Food Standards Australia New Zealand (FSANZ) certifies sheepmeat products through a comprehensive process that ensures food safety and compliance with standards.

Traceability throughout the supply chain of sheep and wool, including at sourcing, production and processing is crucial to ensure the integrity of the supply chain and enables operational efficiencies for producers. Since 1 January 2025, all sheep and farmed goats born are required to be fitted with an approved electronic identification (eID) ear tag before leaving their property of birth. The eID devices are linked to the National Livestock Identification System (NLIS) so that stock can be individually identified and traced. Having Australia's livestock individually electronically identified will enable more effective management in the event of an emergency disease outbreak or food safety issue.



#### FOCUS AREA 8: PROFITABILITY, PRODUCTIVITY AND INVESTMENT

**PRIORITY 8.1** 

Maintain or increase industry profitability

Profitability underpins the success of the sheep industry — as well as individual businesses.

INDICATOR		VALUE	STATUS	SOURCE
8.1.1 Rate of return				
8.1.1a Rate of return on capital, including and excluding capital appreciation, using a five-year	Including	8.1%	•	ABARES 2020-24
rolling average	Excluding	0.5%	•	

The rate of return on capital has been calculated using data obtained from the annual Australian Agricultural and Grazing Industries Survey (AAGIS). The figures provided represent the average per farm.

Since the last report, the rate of return including and excluding capital appreciation decreased by 1.6% and 0.3% respectively.

**PRIORITY 8.2** 

Maintain or increase contribution to the Australian economy

The industry seeks to demonstrate the value of the industry to stakeholders, including its contribution to the National Farmers' Federation (NFF) target of a \$100 billion agriculture sector by 2030.

INDICATOR	VALUE	STATUS	SOURCE
8.2.1 Contribution to the Australian economy			
8.2.1a Gross value (AUD) of agricultural production for sheepmeat	\$4.25b	0	ABARES 2023-24

This includes the production value of sheep and lamb meat. It does not include value derived from live sheep exports.

Since the publication of the last report, the gross value of production for sheepmeat for 2022-2023 was revised to \$4.59b. Therefore, the value has decreased by 7.4% over the past financial year.

8.2.1b Gross value (AUD) of agricultural production for wool \$2.822b ABARES 2023-24
--

This includes shorn, fellmongered and wool on skins. Furthermore, the wording of this metric has changed in line with the ABARES definitions of commodities and the available data.

Since the publication of the last report, the gross value of production for wool for 2022-23 was revised to \$3.133b. Therefore, the value has decreased by 9.9% over the past financial year.

#### **PRIORITY 8.3**

Increase productivity

## Improving farm productivity contributes to profitability by allowing farmers to produce more output using fewer inputs.

INDICATOR	VALUE	STATUS	SOURCE
8.3.1 Productivity			
8.3.1a Total factor productivity average annual growth rate	0.0%	•	ABARES 1999-00 (base year) to 2023-24

Total factor productivity (TFP) is expressed as average annual growth (%) over a given period and is relative to change from the base year.

The last reported value was to 2021-22. Since then, data has become available to 2023-24.

Since 2021-22, the TFP rate has remained steady at 0.0%.

1999-00 (BASE YEAR)	1999-20 (BASE YEAR)	1999-20 (BASE YEAR)
TO 2021-22	TO 2022-23	TO 2023-24
0.1%	-0.1%	0.0%

8.3.1b Change in the Sustainable Merino (SM) index	135.23	•	MERINOSELECT Database MLA June 2025 Analysis
--	--------	---	--

Selection indexes incorporate economically important traits into a single value so that genetic progress across a range of important traits can be made in balance. Tracking changes in industry indexes over time provides insights on the genetic progress of the Merino flock.

The new Sustainable Merino index focuses on genetic improvement of fleece weight, growth, lean meat yield and reproduction in combination with reducing breech wrinkle, dag and worm egg count.

The Sustainable Merino index increased from 132.4 for the average of the 2022 drop, to 135.23 for the average of the 2023 drop animals, or a 2.1% increase.

#### PRIORITY 8.4

Encourage innovation

# Innovation supports sheep businesses' ability to respond to challenges and opportunities. It can preserve or increase margins and foster competitive advantage.

INDICATOR		VALUE	STATUS	SOURCE
8.4.1 Investment in research, development and adoption (RDA)				
8.4.1a AUD invested in research, development and adoption (RDA) per annum	Sheepmeat	\$23.7m	•	MLA 2023-24
adoption (RDA) per annum	Wool	\$28.8m	0	AWI 2023-24

The investment in RDA is calculated as the sum of levies and government matching funds directed to Australian sheepmeat and wool Research and Development Corporations.

Since the last reporting period, investment in sheepmeat RDA has increased by 15.6% and investment in wool RDA has fallen by 13.3%. Primary drivers for this were high meat prices, reduced size of the wool flock, and low wool prices.



#### **FOCUS AREA 9: MARKET ACCESS**

**PRIORITY 9.1** 

Ensure positive market positioning and access

Market position underpins demand for Australian sheepmeat and wool. Based on reputation, it links to market access and price.

INDICATOR	VALUE	STATUS	SOURCE
9.1.1 Value of product			
9.1.1a Australian value share (%) of sheepmeat exports	48.2%	•	MLA 2024

This indicator is a value-based expression of Australia's share of global sheepmeat exports. In 2024, Australia exported more than 614,000 tonnes of sheepmeat (shipped weight).

In comparison to other producer countries, New Zealand exported 372,000 tonnes and the United Kingdom exported 79,000 tonnes.

Australia's value share for sheepmeat exports increased slightly by 2.2%.

9.1.1b Australian value share (%) of greasy wool exports	76.9%	0	AWI 2024	
--	-------	---	----------	--

This indicator is a value-based expression of Australia's share of global greasy wool exports. In 2023, Australia exported more than 325,000 tonnes of wool. In comparison to other producer countries, South Africa exported 41,000 tonnes and New Zealand 23,600 tonnes.

The historical values for this metric have been updated, as the values were previously reported for volume share of greasy wool (see Appendix 1 for further information).

Australia's value share of greasy wool exports decreased by 2.7%, compared to 2023, when the value share of the market was 79.0%.

9.1.2 Access to markets			
9.1.2a Cumulative alleviation (from 2020) of red meat non-tariff barriers	\$535m	•	MLA 2023-24

The cumulative alleviation (from 2020) of red meat non-tariff barriers increased by 12.9% to \$535m in 2023-2024.

Non-tariff barriers (NTBs) such as the use of import restrictions, accreditation of export establishments, labelling, or unnecessary sanitary rules can impose significant delays and additional costs on Australian sheepmeat exports. Alleviation of NTBs is therefore critical in improving international competitiveness.

The harmonisation of extensions to shelf-life for chilled sheepmeat across several Middle East destinations is an example of recent benefits of removing an NTB impact.

Indicator 9.1.2a aligns with the Red Meat 2030 success factor of reducing the impact of NTBs.

Note: Some NTB alleviation value incorporates both sheepmeat and beef.

9.1.2b Percentage value share of Australian sheepmeat, sheep offal and live sheep exports covered by one or more preferential trade agreements (PTA)	66.0%	0	MLA 2023-24
--	-------	---	-------------

INDICATOR	VALUE	STATUS	SOURCE
9.1.2 Access to markets			
9.1.2c Percentage value share of Australian greasy wool exports covered by one or more preferential trade agreements (PTA)	91.7%	•	AWI 2023-24

Preferential or free trade agreements (FTAs) provide access to a market beyond what has been granted multilaterally via the World Trade Organization. FTAs have significantly reduced the tariff and quota barriers Australia faces in export markets. The percentage of preferential coverage fluctuates according to export destination volume/value in any particular year.

The sheepmeat indicator (9.1.2b) aligns with the Red Meat 2030 success factor of having the majority of exports covered by a preferential trade agreement.

This year the metric declined by 5.7% for sheepmeat – reflecting increased exports to the Middle East where Australia does not have preferential access. It should be noted that Australia has recently concluded negotiations with the United Arab Emirates with entry into force of the agreement pending. Once effective, the percentage of exports covered by an FTA will increase to 74%.

The Australian value share for greasy wool exports covered under one or more PTAs increased by 1.7% over the reporting period. Under the China-Australia Free Trade Agreement (ChAFTA), in addition to the existing World Trade Organisation (WTO) quota, Australia received an exclusive duty-free Country Specific Quota of 33,075 tonnes of clean wool from 1 January 2018. This volume will grow by 5% each year to 44,324 tonnes clean (approximately 63,500 tonnes greasy wool) by 2024, all at duty-free rates.

#### **PRIORITY 9.2**

Guarantee product integrity and safety

Product integrity and safety are critical to meeting customers' expectations. These are underpinned by Australia's integrity systems for sheepmeat and wool.

INDICATOR	VALUE	STATUS	SOURCE
9.2.1 Compliance with product integrity and safety standards			
9.2.1a Proportion (%) of the wool clip that is produced with a voluntary product integrity scheme	14.9%	•	AWEX 2023-24

Voluntary product integrity schemes include Authentico, ZQ Merino, Better Choices, Responsible Wool Standard, EU-Ecolabel, Australian Wool Sustainability Scheme and others\*. The figure is calculated using first-hand offered bales with P and D Certificates only. It excludes rehandled wool such as bulk-class and interlots.

Figures from the 2022-23 season were recalculated with the final value being 14.7%. As such, the percentage of the clip associated with one of these schemes for this season, has slightly declined slightly, by 0.2%.

9.2.1b Compliance rates (%) for chemical residues in sheepmeat	99.81%	•	DAFF National Residue Survey 2023-24
--	--------	---	--------------------------------------

The National Residue Survey (NRS) within the Department of Agriculture, Fisheries and Forestry (DAFF) monitors residues in animal products through various random and targeted testing programs.

In 2022-23, a total of 2,113 samples were collected for analysis. The results highlight excellent compliance with Australian standards and demonstrate the strong commitment of the industry to good agricultural practice.

The consistently high compliance rates help maintain the reputation and integrity of Australian sheep in domestic and international markets.

<sup>\*</sup>The full list of product integrity schemes for the 2023-24 season from AWEX is available here.



- 1. Meat & Livestock Australia, "State of the Industry Report," Meat & Livestock Australia, Sydney, 2024.
- 2. Australian Bureau of Statistics, "Livestock Products, Australia, June 2022," 2022. [Accessed May 2025].
- Meat & Livestock Australia, "Industry projections 2025 Australian Sheep," Meat & Livestock Australia, Sydney, 2025.
- 4. ABARES, "Agricultural Commodities Report: March quarter 2025," ABARES, Canberra, 2025.
- 5. Australian Wool Innovation Limited, "Australian Wool Production Forecast Report May 2025," May 2025. [Accessed 12 May 2025].
- 6. Department of Agriculture, Fisheries and Forestry, "All Livestock Exports," 15 December 2023. [Accessed 8 January 2024].
- 7. Australian Bureau of Statistics, "Agricultural Commodities, Australia," 2021-22. [Accessed 15 July 2025].
- 8. WoolProducers Australia, "Policy Document 23/24," 2024. [Accessed 29 June 2025].
- 9. The Woolmark Company, "Wool: a sustainable solution," 2022. [Accessed 27 October 2025].
- 10. Department of Primary Industries and Regional Development, "Sheep industry turn-off update", June 2025. [Accessed 27 October 2025].
- 11. Department of Finace, "Commonwealth Climate Disclosure Requirements," 2025. [accessed 28 October 2025].
- 12. Australian Competition & Consumer Commission, "Environmental and sustainability claims". [Accessed 27 October 2025].
- 13. Animal Health Australia, "Animal Health in Australia Annual Report 2024," Animal Health Australia, Canberra, 2025.
- 14. Department of Climate Change, Energy, the Environment and Water, "2022-2032 Threatened Species Action Plan: Towards Zero Extinctions", 2022. [Accessed 27 October 2025].
- 15. JF. Leys, JE. Howorth, JP. Guerschman, B. Bala and JB. Stewart, "Setting targets for National Landcare Program monitoring and reporting vegetation cover for Australia," NSW Department of Planning, Industry and Environment, 2020.
- 16. D. Mayberry, "Red meat greenhouse gas emissions update 2021 (B.CCH.2124)," Meat & Livestock Australia, 2024.
- 17. Australian Meat Processor Corporation, "Sustainability Reporting Uplift Project Final Report", 2025. [Accessed 27 October 2025].
- 18. Australian Meat Processor Corporation, "Environmental Performance Review", 2024. [Accessed 27 October 2025]
- 19. AgHealth Australia, "Non-intentional farm-related incidents in Australia," University of Sydney, December 2024. [Accessed 20 May 2025].
- 20. Safe Work Australia, "Agriculture,". [Accessed 27 October 2025].



# **Appendices**

#### **APPENDIX 1: RESTATEMENTS OF INFORMATION**

#### 4.1.1a Net emissions: Mt of CO₂e generated by sheep industry (farm and sheepmeat processing)

Annual emissions reports by MLA continue to be informed by the best available science and nationally maintained data. GHGs attributed to the red meat industry (including sheep) are updated retrospectively if/when source data from the Commonwealth Government's National Greenhouse Gas Inventory becomes available or is revised.

Refinements have been made by the Commonwealth to emissions from land use (LU) and land use change & forestry (LUCF) and agricultural soils, which have resulted in modest revisions to historical emissions as presented below. Previously reported figures have been included for ease of reference; however, the calculation method is different so comparisons should be made with caution.

YEAR	2020	2021	2022
Net emissions: Mt of CO₂e generated by sheep industry (farm and sheepmeat processing)	13.45	7.03	9.54
Previously reported in 2024 Annual Report	8.93	8.94	-

#### 4.1.1b and 4.1.1c Emissions intensity figures

The results for 2020 and 2023 were recalculated in 2025. This recalculation resulted in a higher number for 2020 than previously reported. 2023 results happen to be the same as the previously reported 2020 figure. The outcome was a 7% reduction in emissions intensity from 2020 to 2023.

The biggest change in attribution of emissions to the sheep industry is the allocation of LULUCF emissions to the grazing sector. In previous data, it was assumed that all grasslands were used for grazing by livestock and that approximately 68% of 'other native forests' (forest land excluding plantations, harvested forests and protected areas) were available for grazing. The first assumption overestimates the area of grasslands used for livestock production and the accuracy of the second assumption is also low. This year, the National Inventory directly reported LULUCF emissions from cropping, grazing, aquaculture, forestry, conservation and other land uses by Economic Sector data tables. This provides a more accurate estimate of emissions from the LULUCF sector attributable to livestock production.

#### 8.2.1a Gross value (AUD) of agricultural production for sheepmeat

Since the publication of the last report, the gross value of production for sheepmeat for 2022-23 was revised to \$4.59b. This is a slight decrease on the value previously reported.

#### 8.2.1b Gross value (AUD) of agricultural production for wool

Since the publication of the last report, the gross value of production for wool for 2022-23 was revised to \$3.133b. This is a slight decrease on the value previously reported.

#### 9.1.1b Australian value share (%) of greasy wool exports

The SSF identified that the values previously reported for this metric were for volume share of greasy wool exports, as opposed to value share. The correct values are below and have been updated throughout the report where applicable.

CALENDAR YEAR	2021	2022	2023
Value share	78.9%	81.7%	79.0%

#### 9.2.1a Proportion (%) of the wool clip that is produced with a voluntary product integrity scheme

Since the last report, the proportion of the wool clip that was produced with a voluntary product integrity scheme for 2022-23 was recalculated to be 14.7%. Figures have been updated throughout the report where applicable.

#### **APPENDIX 2: FULL LIST OF MATERIAL TOPICS AND SCOPES**

Material topics reflect a sector's significant economic, environmental, and social impacts, or substantively influence the assessments and decisions of stakeholders.

The topics and scopes below were identified and ranked during an independent materiality assessment undertaken to inform development of the Framework. They form the basis of the Australian sheep industry's materiality matrix.

In line with good practice, the material topics for the SSF were reviewed in 2024.

MATERIAL TOPIC	RANKING	SCOPE
Caring for our sheep		
Animal husbandry and handling	2	Animal management and handling practices, include shearing, lamb marking, and the use of pain relief on-farm euthanasia, slaughter practices at processing, and mulesing. This also includes treatment and compliance with regulations and industry guidance on the farm, in transit and at the final destination.
Animal wellbeing and welfare	1	Animal welfare including access to food and water, the provision of shelter and space and lamb survivability in transit and at destination. This includes progressively shifting away from mulesing practices through the development of long-term management plans to protect sheep against flystrike, as well as genetic and breeding innovation and the management of broad impacts of climate change on animal conditions (e.g., water availability, heat, floods, droughts, etc).
Biosecurity	14	Involves the management of infectious diseases including through managing the risk of transmission.
Feed sourcing	20	Sourcing of animal feed and the associated impacts of feed production on water stress, vegetation and labour standards.
Enhancing the environm	ent and clim	ate
Biodiversity	8	Practices impacting on biodiversity, including vegetation and land clearing (deforestation and reforestation), forestation and carbon sequestration, the management of invasive species (including pests, weeds and wildlife management) and the protection of the native plants, animal species and genetic diversity. This also includes positive and negative impacts on natural ecosystem services, such as through working towards regenerative farming practices.
Chemicals	16	The responsible use of fertilisers, herbicides, and pesticides on farms, including withholding periods. This includes managing the restricted substances and hazardous chemicals on the farm and in processing.
Climate change resilience	5	Responding to and preparing for extreme weather and events which are expected to increase due to climate change, such as droughts, floods and fires. This includes increasing resilience to physical and transitional climate-related risks.
Energy	17	Includes energy consumption, as well as resource efficiency and the use of renewable energy.
Greenhouse gas emissions and carbon management	3	Management of scope 1, 2 and 3 emissions and the mitigation of emissions in the medium and long term, in line with net zero and carbon neutrality targets. This includes carbon management practices, including carbon sequestration, carbon credits, offsetting and in setting, etc.
Soil health and pasture management	15	Soil health and pasture management focuses on positive and negative practices impacting soil nutrient and sediment loss, erosion, pasture management and soil carbon.

MATERIAL TOPIC	RANKING	SCOPE
Enhancing the environn	nent and clim	ate
Waste	21	The circular management of solid and liquid waste streams including fibre recovery, food waste and packaging trade waste.
Water quality	18	Water stewardship involving waterway management, water reuse, wastewater treatment and discharges to watercourses, as well as contamination of waterways due to fertiliser and chemicals.
Watersecurity	9	Practices impacting water security, including water withdrawal (extraction) and consumption, as well as responses to water scarcity.
Looking after our peopl	e, customers	and the community
Access to labour and capacity building	4	Access to people with the appropriate skills, knowledge, training, and experience to perform the activities needed to run sheep industry businesses, including modernisation skills. This includes building capacity through attracting and retaining younger workers and enhancing individual capabilities through training.
Community engagement	24	Community engagement supporting meaningful relationships with surrounding communities, including through engaging and promoting opportunities for Indigenous development (RAP) and providing education and contributions to society.
Human health and nutrition	22	Nutrition and food security including access to safe, sufficient, and nutritious food, as well as antimicrobial stewardship.
Industry engagement and collaboration	25	Engaging in collaboration across the industry, with a focus on strong partnerships and information sharing, reducing unnecessary industry and government regulations, as well as facilitating industry-wide social and environmental measurement disclosure.
Labour standards, human rights and employment	11	Labour practices and decent work for all workers including freedom of association and freedom from modern slavery, as well as the protection of human rights across the workforce including non-discrimination, diversity, and indigenous employment.
Occupational Health	13	Healthy working conditions for all workers and farm owners including mental health, and protection against occupational illnesses and exposure to chemicals.
Safety	10	A safe work environment for workers across the value chain, including farm owners, direct employees, seasonal workers, and contractors.
Ensuring a financially re	silient indust	ry
Economic contribution	19	Industry contributions to national and regional development through export income and employment.
Economic resilience and market access	7	Improving economic resilience through addressing supply chain disruptions, free trade commerce, global economic growth and managing resilience to global pandemics, including through best practice biosecurity management practices. Access to markets through productivity, profitability, critical mass in processing, and equitable value creation across the industry value chain. This includes through increasing market share of wool in the fibre market and improving the viability of wool.
Food safety and quality	12	Encompasses all aspects of food safety and quality, including product integrity and compliance with standards

MATERIAL TOPIC	RANKING	SCOPE
Ensuring a financially res	silient indust	ry
Product innovation and stewardship	23	Product and packaging innovations such as reducing plastic packaging and microplastics, as well as advocacy work to enhance recognition of the environmental credentials of wool products. This includes product stewardship practices involving the management of environmental and social impacts across the value chain.
Responsible value chain and traceability	6	Traceability throughout the supply chain, including at sourcing, production, processing, and trade phases. This encompasses communication and transparency of sustainability initiatives, digital connectivity, and data systems to enable supply chain data integration and efficiency to build trust and respect throughout the supply chain. This includes compliance with accepted standards, including sustainability-related disclosure verification and certifications.

#### **APPENDIX 3: STAKEHOLDER CONSULTATION**

#### **Establishment of the Framework**

Comprehensive engagement with stakeholders was required to help build a SSF that is widely supported by stakeholders and fit for purpose. The consultation approach was based on the principles of the International Association of Public Participation (IAP2). The approach was further informed by the AA1000 Stakeholder Engagement Standard (AA1000SES). This is a broad framework used in the assessment, design, implementation and communication of quality stakeholder engagement.

Further information on this process can be found on the SSF website.

#### **Consultative Committee Forum**

The SSF's third Consultative Committee Forum was held in December 2024 in Melbourne. The event was attended by more than 40 people and included representatives from Australian and overseas retailers, banks, non-government organisations, agribusiness, researchers, government, policy organisations and industry groups.

The purpose of the event was to:

- · Provide updates from the 2024 Annual Report,
- · Consult stakeholders about the development of the SSF's next Strategic Plan and reinvigorated Stakeholder Engagement Strategy, and
- Provide the forum with information on the Taskforce for Nature-related Financial Disclosures (TNFD) and discuss how the sheep industry may begin to interact with this reporting framework.

The following organisations were represented at the event (independent of those represented by members of the Board and Steering Committee):

- · AgForce Queensland
- · Animal Health Australia
- · AUS-MEAT
- · Australian Beef Sustainability Framework
- · Australian Farm Institute
- · Australian Livestock Exporters' Council
- · Australian Meat Industry Council
- · Australian Meat Processor Corporation
- · Australian Superfine Wool Growers Association
- · Australian Veterinary Association
- · Australian Wool Exchange
- · Australian Wool Innovation
- · Coles

- · Dairy Australia
- · Grain Growers
- LiveCorp
- · Livestock SA
- · Meat & Livestock Australia
- · National Farmers Federation
- · NSW Farmers
- · Sheep Producers Australia
- · Southern Australia Livestock Research Council (SALRC)
- · Thomas Foods International
- · WA Livestock Research Council (WALRC)
- · WoolProducers Australia

#### **Industry Forum**

The 2024 SSF Industry Forum was held online in the form of a webinar with a focus on the implementation of the SSF's second materiality assessment.

The event was attended by more than 20 representatives from the following organisations (independent of those represented by members of the Board and Steering Committee):

- · AgForce Queensland
- · AMPC
- · Animal Health Australia
- Australian Beef Sustainability Framework
- · Australian Wool Exchange
- · Australian Wool Innovation

- · Department of Agriculture, Fisheries and Forestry
- LiveCorp
- · Meat & Livestock Australia
- · NSW Farmers
- · Sheep Producers Australia
- · WoolProducers Australia

#### **Expert working groups**

Other expert working groups are convened when necessary to support the SSF with specialist or technical advice.

Specialist working groups were convened in 2025 to support the implementation of the SSF's materiality assessment. These included representatives from MLA, AWI, members of the SSF Steering group and experts from throughout the sheep and wool supply chain.

#### **APPENDIX 4: REPORTING PRINCIPLES**

A set of key reporting principles guide the development and implementation of the Framework.

#### **Transparency**

The industry will provide an open and honest picture of practice and performance (including improvement, no change or decline), using the most appropriate and robust data available.

#### Accountability

The industry is accountable for its practices and performance as demonstrated via the Framework and is committed to continuous improvement.

#### Inclusivity

The constructive views and feedback from industry (including producers, processors and other value chain participants), customers, retailers, special interest groups, government and investors as to how industry can improve practice and performance are valued and considered.

#### Credibility

Decisions on Framework design will be made with consideration of topics identified as important or material by the industry and its stakeholders. Reporting against Framework priorities and indicators is based on robust evidence.

#### **Practicality**

The Framework works within the industry's scope of influence to make changes that encourage improvement and adoption of best practice. The indicators can, or have the potential to be, monitored and managed. The Framework should harmonise with other relevant industry strategies to avoid duplication or contradiction.

#### Relevance

The Framework's priorities and indicators are aligned with topics identified as important or material to the industry and its stakeholders and are within the industry's scope of influence. The Framework will adapt over time to remain relevant. It will be useful and highlight areas for improvement.

#### **APPENDIX 5: GOVERNANCE**

#### The Board

The SSF Board is comprised of an independent Chair plus six other members, three each representing SPA and WPA. This includes the Chief Executive Officers (CEOs) of both organisations. Excluding the CEOs and Independent Chair, all members are non-executive directors of their representative organisations.

All members of the SSF Board, excluding the CEOs of SPA and WPA, are eligible to sit on the committee for a maximum of three consecutive 24-month (two-year) terms.

The Chair of the Steering Group also attends Board meetings to support information sharing and provide recommendations made by the Steering Group. A representative from each of MLA and AWI attends Board meetings but does not hold voting rights.

The SSF Board met quarterly throughout the financial year. As well as discussing emerging issues for the Australian sheepmeat and wool industries, the Board's primary focus this year was on promoting ongoing engagement with the Framework, and the development of the SSF's second Strategic Plan.

The *Terms of Reference for the Board* is available on the SSF website. It includes information on the appointment of the Chair, quorum requirements, decision-marking and how conflicts of interest are managed by the Board.

The Board is responsible for reviewing and approving the release of the Annual Report, including this edition.

#### **Sustainability Steering Group**

The SSG comprises the Chair and between six to eight committee members.

Members of the Sustainability Steering Group (SSG) are identified through an Expressions of Interest process, or through direct nomination. All members of the SSG are endorsed by the Board. The Board oversees the skills and representative composition of the SSG to ensure that it effectively represents various sheep-producing regions and stakeholder groups throughout the wool and meat value chain.

Members of the Steering Group are eligible to sit on the committee for a maximum of three consecutive 12-month terms. A representative from each of MLA and AWI attends SSG meetings but does not hold voting rights.

The SSG is accountable to the Board and seeks its endorsement on all major recommendations related to the SSF.

The SSG met five times throughout the financial year. As well as discussing emerging issues for the Australian sheepmeat and wool industries, the SSG's focus this year was the implementation of the Framework's second materiality assessment, addressing data gaps within the Framework and improving the SSF's reporting, including ensuring alignment with the Global Reporting Initiative (GRI).

The *Terms of Reference for the Steering Group* is available on the SSF website. It includes information on the appointment of the Chair, quorum requirements, decision-marking and how conflicts of interest are managed.

SSG members also participate in professional development opportunities throughout the year to advance individual understanding and improve the collective knowledge of the Committee on sustainability-related issues and reporting.

During this financial year, the SSG met with a representative from EY to further their knowledge on the Taskforce for Nature-Related Financial Disclosures. In addition, one member completed an Australian Institute of Company Directors (AICD) short course on Climate Governance for Australian Directors.

#### About the industry bodies

Meat & Livestock Australia (MLA) is the declared industry marketing and research body and is a public company limited by guarantee. MLA delivers marketing, research and development on behalf of cattle, sheep and goat levy payers through five business units and two subsidiary companies. MLA is headquartered in Sydney, Australia but also operates several international offices.

Australian Wool Innovation (AWI) is a not-for-profit enterprise that conducts research, development and marketing along the worldwide supply chain for Australian wool on behalf of about 60,000 woolgrowers that principally fund the company. It is headquartered in Sydney, Australia. The Woolmark Company is the marketing subsidiary of AWI and has 16 offices around the world in key markets for wool.

Neither MLA nor AWI engage in agri-political activities. Responsibility for policy and advocacy lies with the relevant peak industry councils.

#### **APPENDIX 6: REPORTING INDEX**

This Index provides a navigation of the content of the Australian Sheep Sustainability Framework Annual Update 2025 to selected disclosures in common standards including the Global Reporting Initiative (GRI), the Taskforce on Nature-related Financial Disclosures (TNFD) and the Sustainability Accounting Standards Board (SASB). The Australian Sheep Sustainability Framework Annual Update 2025 has not been prepared in accordance with these standards and many disclosures are addressed partially. The information presented has not been assured by a third party.

GRI CONTENT INDEX	
Statement of use	Meat and Livestock Australia and Australian Wool Innovation have prepared the information cited in this GRI content index, on behalf Sheep Producers Australia and Wool Producers Australia (as the parties responsible for the Sheep Sustainability Framework), for the period 1 July 2024 to 30 June 2025 with reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022

GRI STANDARD	DISCLOSURE	LOCATION	ADDITIONAL SOURCES	SECTOR STANDARD
General disclo	sures			
GRI 2: General	2-1: Organisational		Sheep Producers Australia	
Disclosures 2021	details		WoolProducers Australia	
			Meat & Livestock Australia	
			Australian Wool Innovation	
	2-3: Reporting period, frequency and contact point	Page 3		
	2-4: Restatements of information	Page 58		
	2-5: External assurance	Pages 3, 16, 34, 36		
	2-6: Activities, value chain and other business relationships	Pages 5-6, 14-15		
	2-7a: Employees	Pages 49-50		
	2-9 a,b,c (i), (ii), (iv), (v):	Pages 7 and 63	Sheep Producers Australia	
	Governance structure and composition		WoolProducers Australia	
	•		Terms of Reference – Board	
			Terms of Reference – Steering Group	
	2-10: Nomination and	Pages 7 and 63	Terms of Reference – Board	
	selection of the highest governance body		Terms of Reference – Steering Group	
	2-11: Chair of the highest	Pages 7 and 63	Terms of Reference – Board	
	governance body	ance body	Terms of Reference – Steering Group	
	2-14: Role of the highest	Pages 3, 7 and 63	Terms of Reference – Board	
	governance body in sustainability reporting		Terms of Reference – Steering Group	

GRISTANDARD	DISCLOSURE	LOCATION	ADDITIONAL SOURCES	SECTOR STANDARD
General disclosi	ures			
	2-15: Conflicts of interest	Page 63	Terms of Reference – Board	
			Terms of Reference – Steering Group	
	2-17: Collective	Page 63	Terms of Reference – Board	
	knowledge of the highest governance body		Terms of Reference – Steering Group	
	2-22: Statement on sustainable development strategy	Pages 18-20	SSF Strategic Plan 2025 - 2030	
	2-29: Approach to stakeholder engagement	Pages 18, 23, 61-62	Three-Step Engagement Process	
Material topics				
GRI 3: Material Topics 2021	3-1: Process to determine material topics	Page 21-22	2024 Sheep Sustainability Framework Materiality Assessment	
	3-2: List of material topics	Pages 21-22, 59-61		
Emissions				
GRI 3: Material Topics 2021	3-3 c, d, e Management of material topics	Pages 37, 41-42	AMPC and AWI Sustainability Reporting Uplift Project Final Report	13.1.1
GRI 305: Emissions 2016	305-4 a,b,c,d GHG emissions intensity	Pages 41-42	2025  AMPC Environmental Performance Review 2024	13.1.5
	305-5 a. Reduction of GHG emissions	Page 41	2023 Greenhouse gas emissions footprint of red meat	13.1.6
Biodiversity				
GRI 3: Material Topics 2021	3-3: c,d,e Management of material topics	Pages 37-38 and 40		13.3.1
Soil health				
GRI 3: Material Topics 2021	3-3 c,d,e: Management of material topics	Page 38		13.5.1
Pesticides use				
GRI 3: Material Topics 2021	3-3 c,d,e: Management of material topics	Pages 37, 39, 56		13.6.1
Water and efflu	uents			
GRI 3: Material Topics 2021	3-3 c,d,e: Management of material topics	Pages 37, 39	AMPC Environmental Performance Review 2024	13.7.1

GRI STANDARD	DISCLOSURE	LOCATION		SECTOR STANDARD
Food safety				
GRI 3: Material Topics 2021	3-3 c,d,e: Management of material topics	Pages 52		13.10.1
GRI 416: Customer Health and Safety 2016	416-2a Incidents of non- compliance concerning the health & safety impacts of products and services	Page 56		13.10.2
Animal health a	nd welfare			
GRI 3: Material Topics 2021	3-3 c,d,e: Management of material topics	Pages 16, 28-36	Australian Animal Welfare Standards and Guidelines for Sheep	13.11.1
GRI 13: Agriculture, Aquaculture and Fishing Sectors 2022	13.11.2 Report the percentage of production volume certified to third-party animal health and welfare standards and list these standards.	Page 34		3.11.2
Occupational he	ealth and safety			
GRI 3: Material Topics 2021	3-3 c,d,e: Management of material topics	Page 46		13.19.1
GRI 403: Occupational Health and Safety 2018	403-9 a(i), (iii), e: Work- related injuries	Page 46		13.19.10
Climate adapta	tion and resilience			
GRI 3: Material Topics 2021	3-3 c,d,e: Management of material topics	Page 43		13.2.1
GRI 201: Economic Performance 2016	201-2 a. (i) Financial implications and other risks and opportunities due to climate change	Pages 43 and 52		13.2.2



TNFD CONTENT INDEX			
CORE GLOBAL METRICS	DISCLOSURE METRIC	LOCATION	ADDITIONAL SOURCES
C1.0: Total spatial footprint (km²)	Total surface area controlled/ managed by the organisation, where the organisation has control (km²)	656,000	
C1.1 Extent of land/ freshwater/ ocean-use change	Extent of land/freshwater/ ocean ecosystem use change (km²) by:	Page 38	
	· Type of ecosystem; and		
	· Type of business activity		
C4.0 Measures against unintentional introduction of invasive alien species (IAS)	Proportion of high-risk activities operated under appropriate measures to prevent unintentional introduction of IAS, or low-risk designed activities	Pages 16, 29, 35-37, 39	

SASB CONTENT INDEX (MEAT, POULTRY AND DAIRY STANDARD VERSION 2023-12			
CODE	METRIC	LOCATION	ADDITIONAL SOURCES
FB-MP-110.a2	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Page 41	
FB-MP-320a.1 Workforce Health & Safety	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Page 46	
FB-MP-410a.3 Animal Care & Welfare	Percentage of production certified to a third- party animal welfare standard	Pages 16, 28-36	

#### **APPENDIX 7: GLOSSARY**

TERM	EXPLANATION	
AAGIS	Australian Agricultural and Grazing Industries Survey. Annual survey undertaken by ABARES.	
AAWCS	Australian Livestock Processing Industry Animal Welfare Certification System. An independently audited certification program used by Australian livestock processors to demonstrate compliance w the industry best practice animal welfare standards.	
AAWSG	Australian Animal Welfare Standards and Guidelines. The standards are accompanied by voluntary guidelines that set out recommended practice for the care and husbandry of farm animals.	
ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences.	
ABS	Australian Bureau of Statistics.	
ABSF	Australian Beef Sustainability Framework. Sets out, and reports on, key indicators of performance in sustainability for the Australian beef industry.	
AgHealth Australia	A research activity group within the School of Rural Health, University of Sydney investigating non-intentional fatal and non-fatal incidents on farms in Australia.	
AMPC	Australian Meat Processor Corporation. The rural Research and Development Corporation that supports the red meat processing industry throughout Australia.	
ASBV	Australian Sheep Breeding Value. An estimate of the genetic potential a sheep will pass on to its progeny and available for a range of economically important traits.	
AUS-MEAT	A joint venture organisation funded by MLA and AMPC maintaining national industry standards for meat production and processing.	
AWEX	Australian Wool Exchange. National body which manages and administers wool marketing arrangements in the Australian wool industry.	
AWI	Australian Wool Innovation. The rural Research and Development Corporation responsible for supporting woolgrowers throughout Australia.	
Carbon sequestration	A process of capturing and storing atmospheric carbon dioxide, which has the potential to mitigate climate change.	
Castration	Removal of the testicles of a male sheep by either surgical or non-surgical methods. This procedure is usually undertaken for reasons such as limiting the animal's breeding abilities and for safer animal handling.	
СС	Canopy cover. The forest cover of branches and foliage formed by tree crowns.	
CO₂e	Carbon dioxide equivalent. A standard unit for measuring greenhouse gas emissions.	
CON	Conception. An ASBV describing the genetic difference between animals for conception.	
CSIRO	Commonwealth Scientific and Industrial Research Organisation. An Australian	
DAFF	federal government agency responsible for scientific research.	
EBWR	Department of Agriculture, Fisheries and Forestry.	
elD	Electronic Identification. Approved eID ear tags are required to be fitted to sheep before leaving a property and are linked to the National Livestock Identification System.	

TERM	EXPLANATION		
EMI	Eastern Market Indicator. Includes a basket of wool types, reflecting overall offering in selling centres in the eastern states of Australia.		
EPR	Environmental Performance Review.		
ERA	Ewe Rearing Ability. An ASBV describing the genetic difference between animals for rearing ability.		
ESG	Environment, social and governance.		
FMD	Foot and mouth disease, a serious and highly contagious animal disease that affects all clovenhoofed animals.		
FSANZ	Food Standards Australia New Zealand. Sets the standards for safe food in both countries.		
FTA	Free Trade Agreement. International treaty to reduce or eliminate trade and investment barriers.		
GBF	Global Biodiversity Framework. International framework of goals and targets adopted by parties to the Convention on Biological Diversity.		
GDP	Gross Domestic Product. The total monetary or market value of all the finished goods and services produced within a country. Also known as Industry Value Add.		
GHG	Greenhouse gas. The gases in the atmosphere which absorb wavelengths of radiation that a planet emits.		
GRI	Global Reporting Initiative. An international sustainability reporting standard.		
HSCW	Hot Standard Carcase Weight. Used to describe the weight of an animal, particularly when the animal is sold directly from a farm to an abattoir.		
IFRS	International Financial Reporting Standards. A global set of accounting rules.		
ISC	Integrity Systems Company. ISC manages and delivers the Australian red meat industry's three key on-farm assurance and through-chain traceability programs: Livestock Production Assurance (LPA) program, LPA National Vendor Declarations (LPA NVD) and National Livestock Identification System (NLIS).		
ISSB	International Sustainability Standards Board. A standard-setting body established by the International Financial Reporting Standards Foundation.		
IWTO	International Wool Textile Organisation. The global authority for standards in the wool textile industry.		
LCA	Life Cycle Assessment. A technique to assess environmental impacts associated with a product across a supply chain.		
LiveCorp	Australian Livestock Export Corporation (LiveCorp). An RDC which provides research, development and extension (RD&E) and marketing services to licensed exporters of cattle, sheep and goats.		
LOTE	Languages Other Than English.		
LPA	Livestock Production Assurance. The Australian livestock industry's on-farm assurance program covering food safety, animal welfare and biosecurity. It provides evidence of livestock history and onfarm practices when transferring livestock through the value chain.		
LS	Litter size.		
LTEM	Lifetime Ewe Management. A course designed to increase woolgrowers' knowledge and understanding of the influence of ewe nutrition and management on overall reproduction rates and lamb and ewe survival.		

TERM	EXPLANATION	
LULUCF	Land use, land use change and forestry. A category of accounting for GHG emissions and sequestration associated with land management.	
Materiality	The principle of reporting against and addressing the industry's most material issues. These are issues with a direct or indirect impact on an organisation's ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large.	
MERINOSELECT	Australia's genetic evaluation system for Merino producers.	
MLA	Meat & Livestock Australia. A producer-owned industry service provider that provides marketing and research and development services to cattle, sheep and goat industries.	
Mulesing	Mulesing is the removal of wool-bearing skin from around the breech of a sheep to prevent the parasitic infection flystrike. The wool around the buttocks can retain faeces and urine, which attracts flies.	
NFF	National Farmers' Federation. Peak national body representing farmers.	
NLIS	National Livestock Identification System. Australia's system for identifying and tracing cattle, sheep and goats.	
NRM	Natural resource management region. Australia has 54 NRM regions, which are defined by catchments and bioregions. Many activities of organisations and ecosystem services within the NRM regions are vulnerable to impacts of climate change.	
NRS	National Residue Survey. Program by DAFF to monitor residues in animal products through various random and targeted testing programs.	
NSQA	National Saleyards Quality Assurance. A program to provide the saleyard sector of the livestock industry with a QA program linking sectors of the industry.	
NTB	Non-tariff barriers. Any kind of 'red tape' or policy measure other than tariffs that unjustifiably restric trade.	
NVD	National Vendor Declaration. A form that documents the movement of livestock when they are bougl sold or moved off a property. This form accompanies all such movements.	
NWD	National Wool Declaration. The NWD is an initiative of the Australian wool industry to assist buyers and their clients gain access to credible information on issues such as mulesing status and dark and medullated fibre risk.	
OECD	Organisation for Economic Cooperation and Development.	
PEF	Product Environmental Footprint. European Union-backed program for reporting environmental impacts of a product or organisation, covering the full supply chain.	
PIC	Peak Industry Council. PICs provide policy direction on behalf of the red meat and livestock industry and includes Australian Lot Feeders' Association, Cattle Australia, Sheep Producers Australia and Goat Industry Council of Australia.	
РТА	Preferential Trade Agreement.	
RDC	Research and Development Corporation. There are 15 RDCs established in a government-industry partnership model to help drive agricultural innovation by co-investing in strategic, collaborative and targeted research and development.	
Red Meat 2030	The industry's shared 10-year plan to create a productive, profitable and sustainable future while creating and capturing value along the supply chain.	

TERM	EXPLANATION
SafeWork Australia	An Australian government statutory body established to develop national policy relating to work health and safety and workers' compensation.
SBTi	Science Based Targets initiative. Global organisation that helps companies set emissions reductions targets in line with the Paris Agreement.
SDG	The United Nations Sustainable Development Goals. A set of 17 goals which are an urgent call for action by all countries — developed and developing — in a global partnership.
SFO	State Farming Organisation.
SPA	Sheep Producers Australia. SPA is the peak industry organisation for sheep and lamb producers in Australia.
SSF	Sheep Sustainability Framework.
SSG	Sustainability Steering Group.
Tail docking	Tail docking is a standard practice in the sheep industry to help reduce susceptibility of an animal to flystrike.
TCFD	Taskforce on Climate-related Financial Disclosures.
TFP	Total Factor Productivity. A measure which identifies the growth in output relative to the combined growth in all inputs.
TNFD	Taskforce on Nature-related Financial Disclosures. A global nature-related risk management and disclosure framework.
WEC	Worm Egg Count. A measure of the number of worm eggs in a gram of faeces.
WOAH	World Organisation for Animal Health. An intergovernmental organisation coordinating, supporting and promoting animal disease control.
Wool 2030	A 10-year strategic plan for Australian woolgrowers.
WPA	WoolProducers Australia. WPA is the peak national body for the wool producing industry in Australia, representing farmers who have an interest in growing wool.
WR	Weaning Rate. The number of lambs weaned per ewe joined.
WTO	World Trade Organisation. International body that determines international trade rules.



# For more information, please contact:

#### **Alister Hawksford**

Program Manager – Sustainability Credentials Meat & Livestock Australia

Level 1, 40 Mount Street North Sydney NSW 2060

E: ahawksford@mla.com.au

T: +61 (7) 3620 5250

M: +61 423 659 140

@sheepframework

@Sheep\_Framework

www.linkedin.com/company/sheep-sustainability-framework

SHEEP PRODUCERS AUSTRALIA

