



awi Australian Wool
Innovation Limited

ANNUAL REPORT 2018/19



Woolgrowers are at the heart of everything AWI does.



FRONT COVER: AWI and The Woolmark Company this year began offering Australian woolgrowers a free stencil of the Woolmark logo for use on their wool bales, to identify and brand their wool fibre as being proudly grown in Australia. Order yours at wool.com/stencil

THIS PAGE: Will Bennett of 'Ashby' near Ross in Tasmania, who with his wife Nina runs approximately 20,000 Merinos. Part of their clip supplies German mountainwear company and Woolmark licensee ORTOVOX. Photo: ORTOVOX/Franz Walter

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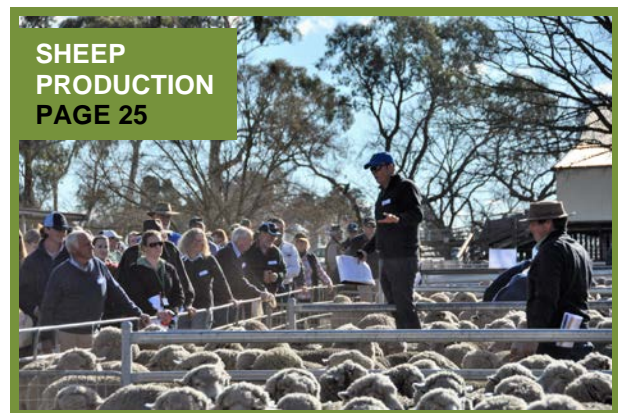
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ABOUT YOUR COMPANY: AWI



awi Australian Wool
Innovation Limited

“AWI is the R&D and marketing organisation for the Australian wool industry.”

WHAT AWI DOES

Established by the Australian Government in 2001, AWI is the research, development (R&D) and marketing organisation for the Australian wool industry.

The company invests along the global supply chain for Australian wool – from woolgrowers through to retailers.

AWI is not a peak industry body, does not create or execute industry policy, and is not an advocate on issues outside its core functions.

AWI works with the Australian Government through legislation (the *Wool Services Privatisation Act 2000*), regulations and an agreement between AWI and the Australian Government called the Statutory Funding Agreement. The Statutory Funding Agreement defines the conditions under which AWI may invest wool levies and Government-matched funds.

THE WOOLMARK COMPANY

When AWI acquired The Woolmark Company in 2007, AWI became the owner of the Woolmark brand, the world's best-known textile fibre brand. Notably, marketing activities re-commenced.

To build demand for Australian wool, The Woolmark Company offices are strategically located to develop direct business relationships with global brands/retailers, textile manufacturers and fashion designers in key markets across Asia, Europe and the Americas.

HOW AWI IS FUNDED

AWI investments are funded through a wool levy paid by woolgrowers and a matching contribution from the Australian Government for eligible R&D activities, capped at 0.5 per cent of the gross national value of wool production. The sale of Woolmark licences is a further source of income for AWI.

Woolgrowers vote every three years on the percentage of the sale price received for their shorn greasy wool that they would like to invest in industry R&D and marketing activities. Up until 30 June 2019 there was a two per cent levy rate. However at WoolPoll 2018, woolgrowers voted in favour of a 1.5 per cent levy which became effective from 1 July 2019. The next WoolPoll vote is scheduled for 2021.

HOW AWI HAS EVOLVED

On 1 January 2001, Australian Wool Services (AWS) replaced the Australian Wool Research and Promotion Organisation (AWRAP), which had been operating since 1993. AWS was established with two subsidiaries: AWI and The Woolmark Company Pty Ltd. On 30 April 2002 AWI separated from AWS to become a fully independent public company limited by shares.

AWI's role was to manage woolgrowers' collective investment in R&D for the benefit of the industry. In October 2007, AWI acquired The Woolmark Company Pty Ltd from AWS on behalf of woolgrowers.

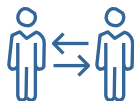
AWI'S MISSION, VISION AND GOAL



AWI's mission

AWI's mission is to make strategically targeted investments to:

1. enhance the profitability, international competitiveness and sustainability of the Australian wool industry
2. increase demand and market access for Australian wool.



AWI's vision

AWI's vision is for it to be a highly valued contributor to a vibrant, profitable and sustainable Australian wool industry.



AWI's goal

AWI's goal is to increase the profitability, and support the sustainability of the Australian wool industry through strategically targeted investments in research, development and marketing designed to optimise return on investment.

AWI SHAREHOLDERS

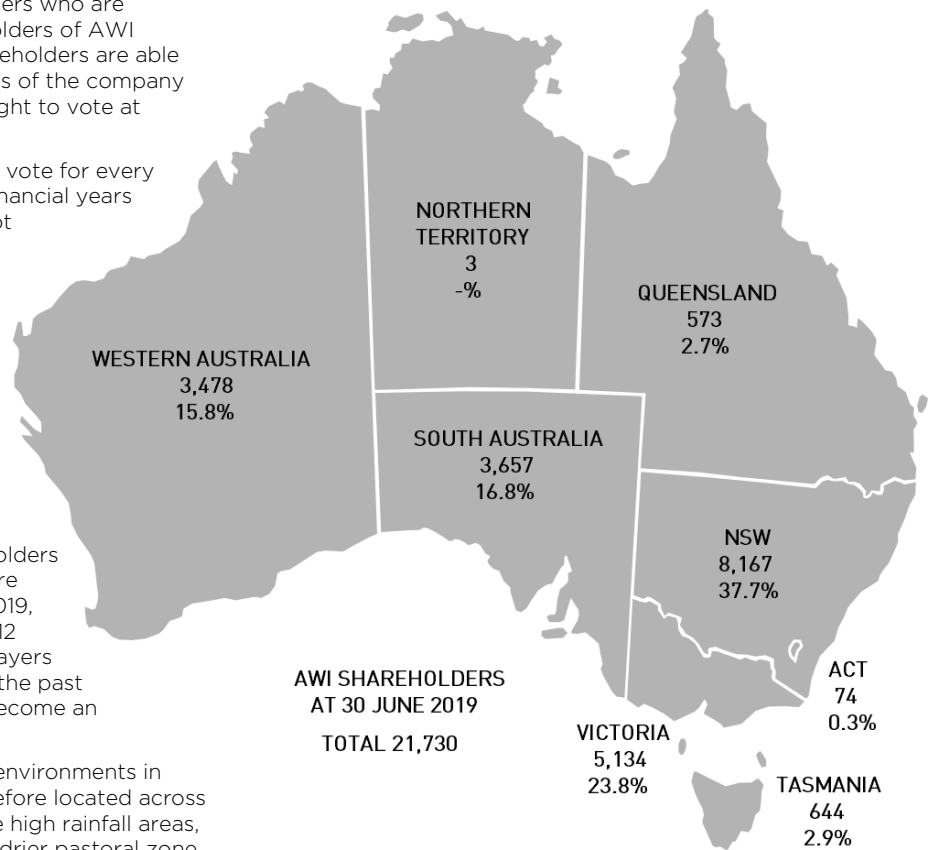
AWI has more than 21,000 shareholders who are Australian woolgrowers. The shareholders of AWI contribute to the wool levy. The shareholders are able to shape the decision-making process of the company via their access to information and right to vote at Annual General Meetings.

AWI shareholders are entitled to one vote for every \$100 of wool levy paid in the three financial years before any vote. A share in AWI is not tradeable and is of no capital value. Paying wool levies does not make the levy payer automatically a shareholder of AWI.

Levy payers who are not already an AWI shareholder can contact the AWI share registry at Link Market Services on 1800 113 373 (free call) to enquire about becoming a shareholder.

AWI had 21,730 shareholders at 30 June 2019, a decrease of 744 shareholders during the past 12 months. There were 61,716 wool levy payers at 30 June 2019, an increase of 6,374 during the past 12 months. 46,998 of those wool levy payers had paid more than \$100 in levies in the past three years and so were eligible to become an AWI shareholder.

Wool is produced across a range of environments in Australia. AWI shareholders are therefore located across a broad area of the country, from the high rainfall areas, to the wheat/sheep zone, out to the drier pastoral zone.



AWI'S VALUES



Innovative

AWI will drive a sustainable culture of innovation to deliver tangible solutions to research, development and marketing across the global wool industry.



Accountable

AWI, its staff and contractors are accountable to our stakeholders (internal and external) in all we do to provide the best return on their investment.



Integrity

Integrity drives our commitment to put growers first.



Collaborative

AWI will engage in collaborative and supportive partnerships across our global supply chain.



Transparent

In all our operations, AWI will be transparent about what, why and how we operate, and how we have performed, reporting measurable outcomes on investments and programs.



Respect

We will engage with each other and consult and interact with woolgrowers and other industry stakeholders in a professional and respectful way.

HIGHLIGHTS

MARKETING



The Live & Breathe campaign went to market as a global awareness campaign, educating key consumers in New York, San Francisco, Tokyo and London of wool's natural breathability for performance and athleisurewear.

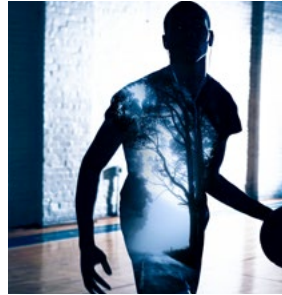
Live & Breathe earned **8 million** views of its campaign video, with campaign engagement of 2.3 million consumers across all four major markets.

90% of the audience felt better about wool after seeing the Live & Breathe campaign video.



Across the strategic period, the International Woolmark Prize worked with **32** luxury retailers and **60** new alumni designers.

Partnering with Adidas and Boston Marathon, the TWC-created video content achieved **583,000** video views; driving awareness for wool's technical benefits.



The Boston Marathon partnership drove innovative collaborations: **38,000** woollen garments were created with Adidas, with 30,000 Merino wool blend running T-shirts being sold in Europe in 2018.



SHEEP PRODUCTION

Lamb mob size research demonstrated that decreasing mob size by **100 ewes** resulted in increased survival of twin-born lambs by 2.25% and single-born lambs by 0.85%.



30% of Australia's breeding ewe flock is now managed by LTEM graduates, who report on average a **7%** increase in lamb marking percentages and **9.3%** increase in whole-farm stocking rates.

AWI-funded wild dog control reduced participants' sheep losses from predation by on average **83%**, with 84% of participants reporting improved wellbeing after participation.

Research using the gene editing technology **CRISPR** has the ability to quickly and efficiently edit any gene desired.



More than **5,500** ewe progeny were evaluated for lifetime performance through the Merino Lifetime Productivity project, with more than **700,000** data points collected so far.



BUSINESS SERVICES

The newly inaugurated Woolmark Performance Challenge, created to drive innovation amongst young entrepreneurs in the textile space, launched across

16

countries in 2018.

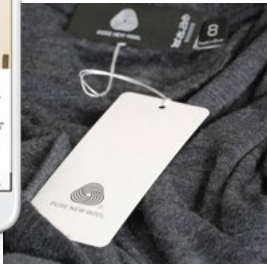
The Woolmark Company partnered with online luxury shopping giant, Farfetch. As a result, between 2017 and 2018, searches for “wool” products grew by

165%.

61% of these searches were by consumers in the 18-34 age bracket.



More than **60 million** garments were assured for quality, carrying The Woolmark Company certification.



WOOLGROWER SERVICES

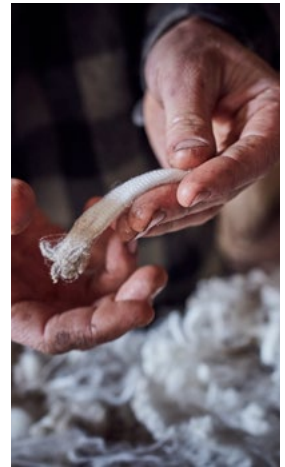
More than **15,000** shearers were trained and upskilled to support the wool-growing industry.

AWI practical resources on AWI websites for woolgrowers were accessed more than

250,000

times.

AWI extension network participants reported annual cost savings on average of more than **\$3,200** as a result of participating in the networks.



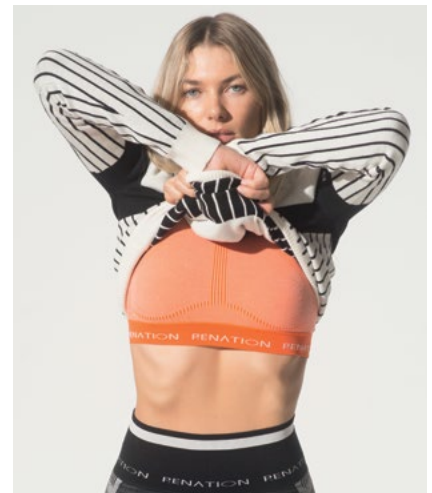
PROCESSING INNOVATION & EDUCATION EXTENSION

More than **125,000** primary, secondary and tertiary students in 14 countries were educated about wool's natural properties and benefits.



155 supply chain partners

were collaborated with to develop new wool innovations, processes and technology.



More than **3,000** meetings were held with supply chain partners at which The Wool Lab sourcing guide was used.



CHAIRMAN'S REPORT



The 2018/19 year at AWI has been characterised by an enormous amount of very positive activity. Not only has the company been pushing forward with its vital work in R&D and marketing for the benefit of woolgrowers, but it has also been consulting widely with industry, it has actioned and is implementing the 82 recommendations from

the Review of Performance, and it has developed the company's Strategic Plan for the next three years.

History has shown us the importance of marketing Australian wool, and so the company's activities in this area remain paramount. However, our marketing is undertaken against a background of changing habits and demands from consumers across the world.

For instance, all aspects of our marketing are now examined to see what digital as well as traditional channels should be utilised. Not only is digital marketing very cost effective, but many consumers are researching and purchasing products online rather than visiting bricks and mortar stores. Digital tools enable us to monitor trends in real time and provide us with deep insight into consumer habits. This enables us to position wool to obtain the best return for woolgrowers.

The provenance and eco-credentials of products are also becoming increasingly important for our target market. Consumers began asking some time ago where their food came from; now they are also wanting to know where their clothes come from, the origin of the fibre and how it was produced. This is playing to wool's advantage because of the fibre's natural origins, and its superior comfort/performance and biodegradability – and we are promoting these benefits of wool widely and loudly.

We have also been getting some very good results from our on-farm and off-farm R&D investments. AWI and its staff have been working hard across all our portfolios, while managing your funds prudently. You can read about the past financial year's results from our investment in this Annual Report.

LOOKING FORWARD

At AWI, we believe that the company can be most effective, accountable and productive when we have consulted and engaged with our levy payers and industry stakeholders – and when we work together. This year we have placed great focus on reviewing our consultation arrangements and, as a result, we have developed a new consultation model that provides a more effective, respectful and meaningful two-way consultation between AWI and woolgrower representative bodies. It strikes a balanced position, meeting the expectations of woolgrowers, woolgrower representative groups, government and AWI's business needs.

This year, we have also placed great emphasis on actioning and implementing the 82 recommendations from the 2018 Review of Performance. Our online Implementation Portal has been available at

rop.wool.com since September 2018 for woolgrowers to see how well we are progressing. At the time of writing, AWI's overall implementation is tracking at more than three quarters.

The Review of Performance was instrumental in guiding the formation of our new three-year Strategic Plan. As well as traceability and consultation, the measurement and evaluation (M&E) of our investments is another key area identified in the Review and which is integral to the new Plan. Our new M&E framework, which has now been introduced throughout the company, provides a robust and transparent means of tracking our performance to ensure operational activities continue to deliver value to woolgrowers.

CHALLENGES AND OPPORTUNITIES

During the past year we have seen volatility in wool prices, including all-time record highs in August. Although there has been a recent drop in prices, averaged out over the whole 12-month period, prices have been very strong, rewarding woolgrowers for their loyalty and commitment to the fibre.

With almost all of Australia's wool exported overseas, the industry has always been susceptible to global economic conditions, and that has come into prominence in the past few months due to the increasing uncertainty in trade between two of our largest markets. However, as in the past, the industry will weather the storm underwritten by our marketing programs to build demand for Australian wool.

We have also regrettably seen the devastating drought continue to affect woolgrowers across large parts of the country. We desperately hope for woolgrowers' sake that it breaks soon.

The impact of the drought along with the 1.5% levy rate vote from WoolPoll reduces AWI's revenue over the next few years. As you adjust to the seasonal conditions, so will AWI adapt, and in doing this we will make certain our operations continue to be lean, efficient and transparent.

The company's highest priority in this new three-year strategic period is to ensure we invest in projects that will deliver outcomes that benefit all woolgrowers. We believe that delivering those outcomes is more important now than at any time in recent history because of climate pressure on wool production and the changing demands of international markets.

As ever, there will always be challenges and opportunities, but you have my commitment that this company – your company – will continue to operate for your benefit.

A handwritten signature in black ink, which appears to read 'Colette Garnsey'. The signature is fluid and cursive.

Colette Garnsey
Chairman, Australian Wool Innovation
30 August 2019

CEO'S REPORT



2018/19 was the final year covered by AWI's 2016/19 three-year Strategic Plan, and I am pleased to report to woolgrowers that the company fully attained or exceeded almost three quarters of the targets in the Plan, with significant progress achieved in most of the remaining targets. It means we have delivered significant results for Australian woolgrowers.

This is a great performance for an R&D and industry marketing organisation, especially one working in an industry such as ours that goes through market cycles.

Regarding wool prices, the first quarter of the financial year saw the EMI hovering around or above the \$20 mark and it reached an all-time high of \$21.16 in mid-August. It again surpassed the \$20 mark in March and, despite a recent drop in the price, ended up averaging an extremely healthy \$19.31 for the year, which has benefited all woolgrowers.

There has been some recent volatility in prices, caused largely by macro-economic factors and international trade tensions such as those involving the US and China, the largest buyer of our wool. Coming off such high prices that we've experienced can make any reduction in the EMI appear dramatic. However, it's important we remain confident and show resilience during this period of market fluctuation.

A very unfortunate feature of the year for many woolgrowers, especially in the eastern states, has been the effect of enduring drought conditions on their land, sheep and finances. This has been devastating, but I'm sure that when the good rains come again, which they will, that woolgrowers will rebuild their flocks and take advantage of the wool industry's promising future.

MARKETING AUSTRALIAN WOOL

We have continued our focus on promoting Australian wool as a premium and natural fibre.

We've partnered with premium brands to help promote their products in target markets across the world. Australian wool has many unique benefits that enable us to promote it in lucrative markets in which consumers are willing to pay a premium price. These premium prices then flow through to Australian woolgrowers.

While we have worked to defend traditional markets like suiting, we have also been very active in pursuing new and growing markets, especially in sports and athleisure apparel. This year we launched a new global consumer campaign – the first in recent years – to educate a lost generation on the technical performance benefits of our fibre and drive demand through our partners in this segment.

We have also put an increased focus on promoting the eco-credentials of our fibre. It seems not a day goes by without news reports about the terrible pollution created by plastics. In contrast to man-made synthetic fibres, wool has a great story to tell. It is a natural, renewable and biodegradable fibre, and we take every opportunity to remind brands and consumers of these attributes.

“Despite poor seasonal conditions and uncertainty over international trade relations, woolgrowers have benefited from the results of AWI’s marketing and R&D programs.”

RESEARCH, DEVELOPMENT AND EXTENSION

We have continued to invest heavily in on-farm programs to address the farming issues that woolgrowers say most matter to them. Investment in R&D and extension by AWI in its Sheep Production and Woolgrower Services portfolios increased by 23% last year, following a 27% increase in the previous year, delivering a range of outputs to help woolgrowers improve their on-farm productivity and profitability. For example, our animal health programs continued to address the impact of flies, worms, lice and other welfare issues. AWI has now funded 194 community groups to address wild dog attacks, with participants on average experiencing an 83% reduction in sheep losses from predation. The field days at the five Merino Lifetime Productivity sites continue to prove popular with woolgrowers. There are also some very exciting results in the technology area, such as with smart tags and with artificial intelligence to help aid selection.

In the extension area, the average participant in Lifetime Ewe Management training reports an increase in whole farm stocking rate by 9.3% and lamb marking percentage by 7%, and reduced ewe mortality from 4.1 to 3.0%. Our Realising Performance Potential, RAMping up Repro and Winning With Weaners workshops are also proving popular, as are our woolgrower networks in each state. We also continue to fund a robust schedule of shearer and wool handler training, which is aimed at increasing productivity, skills development and professionalism in the industry.

Overall, the progress we have made across the whole supply chain during this financial year and the past three-year period has been very rewarding and I look forward to the company continuing its successes in the future, for the benefit of woolgrowers that own the company.



Stuart McCullough
CEO, Australian Wool Innovation
30 August 2019

AWI BOARD OF DIRECTORS

The Directors of Australian Wool Innovation Limited, their qualifications, experience and special responsibilities as at 30 June 2019 are listed below.

The AWI Board sets the Company's strategic direction and delegates responsibility for day-to-day management to the Chief Executive Officer (CEO). The Board is committed to governance systems that enhance performance and ensure AWI operates according to accountability provisions required by various Acts, Regulations and Guidelines. A report on corporate governance is on page 62.



MS COLETTE GARNSEY OAM CHAIRMAN OF AWI

Elected to Board Nov 2011 **Experience and expertise:**

Ms Ms Garnsey has 38 years of retail, wholesale, distribution and marketing experience with Australia's top brands in multiple geographies. Currently she is Non

Executive Director of Flight Centre Travel Group and Seven West Media. Previously Ms Garnsey was executive director at Premier Investments' The Just Group, and in senior executive positions at David Jones and Pacific Brands. She has had over 30 years' experience in department stores and has dealt with globally successful brands and designers bringing many to Australia. Ms Garnsey has also been Advisory Board member of CSIRO 1997-2001; Advisory Board member Australian Government Innovation Council 2010-2012; Director Australian Fashion Week 1998-2009; Judge Veuve Clicquot Business Women of the Year 2008-2014 and TTIPAC advisor to Ministers Robb and Ciobo.

Special responsibilities:

Finance & Audit Committee member
Remuneration & Appointments Committee member
Science & Welfare Committee member
Stakeholder Engagement Committee member.



DR MEREDITH L SHEIL MBBS FRACP PhD GAICD DEPUTY CHAIR OF AWI

Elected to Board Nov 2008 **Experience and expertise:**

Dr Sheil, a commercial woolgrower, is a Medical and Veterinary Research Scientist, Paediatrician and a founding

director of Bio-medical Research and Development company "Medical Ethics" Pty Ltd responsible for inventing / developing a wound anaesthetic for lambs and calves for pain relief following husbandry procedures, and is currently pioneering research and development of similar practical and affordable pain relief medications for livestock, companion animals and humans. Dr Sheil has served as a local government councillor, Deputy Mayor and a member of the board of NSROC (North Shore Regional Organisation of Councils). She is a Graduate of The Australian Institute of Company Directors.

Special responsibilities:

Chair of Science & Welfare Committee.



MR JOCK LAURIE

Elected to Board Nov 2015 **Experience and expertise:**

Mr Laurie and his family operate a farming business that consists of wool, lamb, beef and grain on properties at Walcha, Bendemeer and Gunnedah. Mr Laurie has also been actively involved in agricultural policy and lobbying since

2000. He spent four years as President of the NSW Farmers Association and two and a half years as President of the National Farmers Federation. During this period, he gained experience and training in both corporate governance and as a director. Through his role at the National Farmers Federation, he was exposed to international trade negotiations that are very important to the profitability of Australian agriculture. Mr Laurie has long term experience in the agriculture industry, and also ten years of board and agricultural policy experience. He aims to direct his skills at driving profitability in the wool industry.

Special responsibilities:

Finance & Audit Committee member.



MR DON MACDONALD

Elected to Board Nov 2017 **Experience and expertise:**

Don Macdonald has been involved in the wool industry since 1975 as a wool classer, shearer, wool broker and grower. He has extensive knowledge and experience in all aspects of wool production, harvesting, marketing and

logistics. As Managing Director of Macdonald & Co Woolbrokers in Dubbo, NSW, he has developed strong business skills and enduring relationships with the grower sector and the downstream exporting and processing sector. He has farming interests at Brewarrina, where he also operates a CRT outlet and Molong in NSW. Mr Macdonald has served as a Director on AWEX, Chairman of the Inland Wool Brokers Association, member of Industry Service Advisory Committee and member of NSW Farmers Wool Committee.

Special responsibilities:

Chair of Stakeholder Engagement Committee.



MR WALTER B MERRIMAN

Elected to Board Nov 2004 **Experience and expertise:**

Mr Merriman is Managing Director of the Merryville Stud. He oversees extensive commercial pastoral interests giving him broad farming and grazing experience. Mr Merriman has

served on several industry boards, including National Woolgrower Forum, Major Woolgrowers Group and is past president of both NSW and Australian Stud Merino associations. Mr Merriman also has strong links with the Italian wool industry.

Special responsibilities:

Finance & Audit Committee member
Remuneration & Appointments Committee member
Science & Welfare Committee member
Stakeholder Engagement Committee member.



MR JAMES MORGAN

Elected to Board Nov 2013
Experience and expertise:

Mr Morgan is presently the Managing Director of the Mutooroo Pastoral Company, which operates an extensive pastoral Merino and Beef Cattle enterprise in the North East region of South Australia.

Additionally, he operates Outalpa Station with his wife and children, and administers a large livestock enterprise in the Hunter Valley region of NSW. Mr Morgan has over 30 years' experience in pastoral and high rainfall wool production, and on-shore marketing. Being a committed commercial woolgrower, Mr Morgan has a strong faith in the industry and in wool's natural ability to offer the world's textile and industrial producers a raw material which is both cost effective and eco-friendly.

Special responsibilities:

Chair of Remuneration & Appointments Committee
Science & Welfare Committee member.



MR DAVID A A WEBSTER

Elected to Board Nov 2008
Experience and expertise:

Mr Webster has spent his working life putting together a wool growing, livestock and cropping enterprise. A keen student of economics, he is a strong advocate of private enterprise commerciality

and competition. He advocates upholding the rights of farmers without undue regulation and impediments to running their businesses. Mr Webster places a high priority on giving value to shareholders, particularly for compulsory levy payers. Mr Webster is Chairman of iron ore resources company Athena Resources Limited. He is also a Director of Australian Wool Testing Authority Ltd.

Special responsibilities:

Chair of Finance & Audit Committee
Science & Welfare Committee member.

COMMITTEES OF THE AWI BOARD

The Board has several committees that monitor and guide specific activities. These committees assist the Board to effectively implement, monitor and enforce appropriate corporate governance throughout the Company.

Finance & Audit Committee

Chaired by David Webster

Directors appointed by the Board provide guidance and recommendations to the Board and the CEO to assist in fulfilling their responsibilities relating to risk, accounting, reporting and compliance practices of the Company.

Remuneration & Appointments Committee

Chaired by James Morgan

This Committee provides guidance and recommendations to the Board and the CEO in matters pertaining to recruitment and retention of employees and policies governing remuneration for current and potential employees.

Science & Welfare Committee

Chaired by Meredith Sheil

This Committee was established to provide guidance and recommendations to the Board and CEO regarding the scientific and research policies of the Company and on the conduct of programs relating to activities undertaken by the Company that utilise science or impact animal welfare activities.

Stakeholder Engagement Committee

Chaired by Don Macdonald

This Committee was established in November 2018. Its major role is to provide input and guide development of AWI's policy and direction of stakeholder relations and engagement with a focus on monitoring and improving stakeholder perceptions and satisfaction.

Board Nomination Committee

For 2019, the Board Nomination Committee has external members who are specifically described in an updated Charter for this Committee. The composition of the committee is as follows:

- A Chair independent of the wool industry and independent from AWI, initially appointed by the Secretary of the Department of Agriculture
- Two independent non-executive Directors of the Company (other than the Chair of the Company)
- One representative of the wool industry independent from the Company, nominated by the Wool Industry Consultation Panel
- One representative from an international executive search firm, nominated by the CEO of the Company (subject to approval by the independent Chair of the Board Nomination Committee).

The committee Chair is Dr Mary Corbett. Dr Corbett is an experienced Director, spanning a diverse range of industries from cotton growing to public health. She has a strong focus on research and development and corporate governance.

The two AWI director members are James Morgan and Meredith Sheil. The wool industry representative is Simon Cameron, a grower from Tasmania. The representative from an international executive search firm is Guy Farrow, the Managing Partner of the Sydney office of Heidrick & Struggles.

The objectives and responsibilities of the Board sub-committees are set out in the 'Charter of the Committees of the Board' and the objectives and responsibilities of the Board Nomination Committee are set out in the 'Board Nomination Committee Charter'. Both of these documents are available on the AWI website www.wool.com.

COMPANY SECRETARY

The Company Secretary is Mr Jim Story BA, LLB, FGIA.

Jim Story was appointed as company secretary in 2012. Jim is a company secretary and corporate lawyer with more than 40 years of experience. He has extensive public company experience, having held senior in-house positions, mostly as legal counsel and company secretary, with a range of publicly listed industrial, mining and mining exploration companies.

WOOL MARKET SUMMARY

AUSTRALIAN WOOL PRODUCTION HISTORY AND FORECAST

AWI's revenue is largely dependent on wool levy income. Wool production and prices are used to calculate wool levy income using the following formula: Eastern Market Indicator (EMI) price in cents per kg clean *multiplied* by shorn greasy wool production adjusted to kilogram clean *multiplied* by the levy percentage (two per cent up to and including 2018/19; 1.5 per cent for 2019/20 – 2021/22).

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Forecast 2019/20
Market price EMI* (cents per kg clean)	1070	1099	1254	1408	1739	1939	1865 (f)
Sheep numbers shorn** (millions)	78.0	76.9	73.4	74.3	76.8	71.2	67.9 (f)
Wool production** (shorn greasy wool*** in millions of kg)	341	346	325	340	341	298	285 (f)

* Figures derived from AWEX data. Forecast figure from ABARES (June 2019 Agricultural Commodities).

** Figures from the Australian Wool Innovation Production Forecasting Committee (April 2019 report).

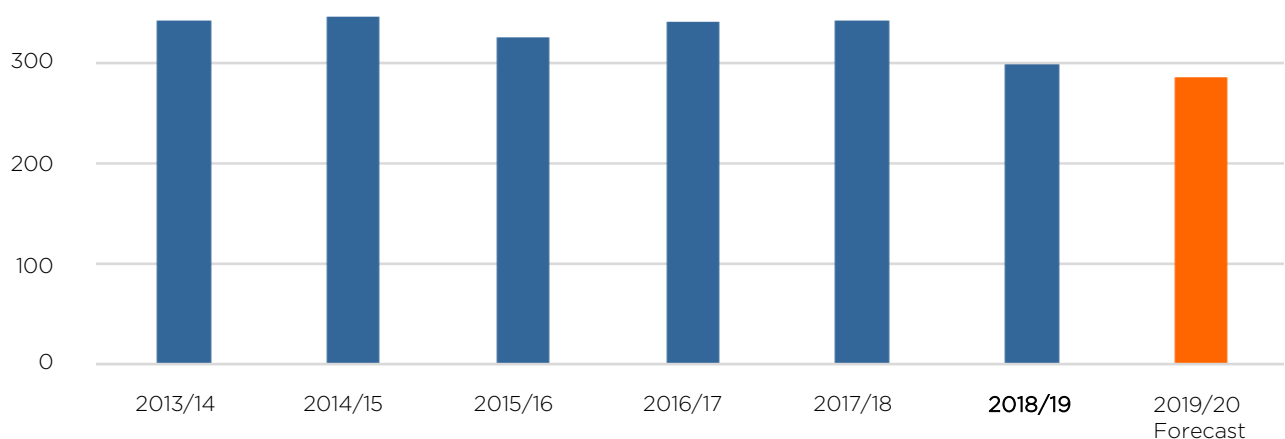
*** Clean wool under this model is assumed to represent approximately 65% of the weight of greasy wool.

(f) Forecast

EMI DURING THE PAST SIX YEARS (AU CENTS PER KG CLEAN)



WOOL PRODUCTION DURING THE PAST SIX YEARS (SHORN GREASY WOOL IN MILLION KG GREASY)



AWI FINANCIAL SUMMARY

AWI REVENUE FOR 2018/19

Total revenue for 2018/19 was \$101,150,000 compared with \$103,070,000 in 2017/18. Sources of revenue are shown in the table below.

	2017/18 \$'000	2018/19 \$'000
Wool levy	72,479	68,077
Government contributions	17,870	20,801
Licence fees	7,321	6,789
Interest	2,556	2,907
Royalties	1,975	1,963
Rents and sub-lease rentals	548	201
Sales of goods and services	242	398
Other operating revenue	79	14
Total revenue	103,070	101,150

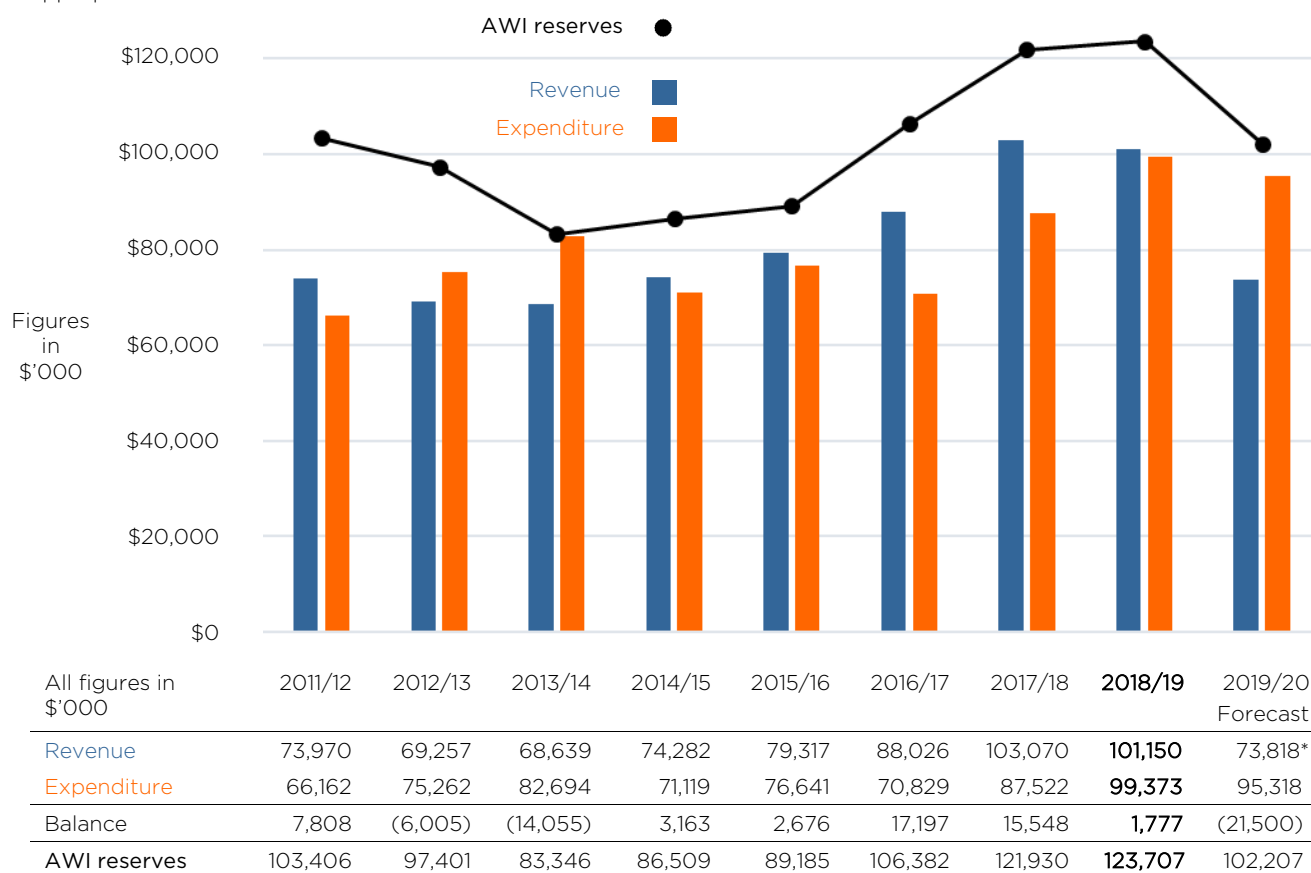
AWI EXPENDITURE FOR 2018/19

Total expenditure in 2018/19 was \$99,373,000 compared with \$87,522,000 in 2017/18. Expenditure is shown in the table below. More detailed information can be found in the Financial Report beginning on page 72.

	2017/18 \$'000	2018/19 \$'000
Sheep Production	13,957	18,544
Woolgrower Services	9,861	10,834
Processing Innovation & Education Extension	9,459	10,056
Marketing	39,950	45,412
Digital Services	4,244	4,582
Support & Administration	10,052	9,945
Total expenditure	87,522	99,373

AWI FINANCIAL HISTORY AND FORECAST

The chart below details Revenue, Expenditure and AWI reserves for the past eight years, plus the forecast for 2019/20. AWI will invest future funds in line with its 2019/20-2021/22 Strategic Plan, drawing on some of its reserves when appropriate.



* This forecast revenue includes levy income forecast based on an EMI of 1800c/kg clean. This forecast figure was determined in June 2019 and is continually monitored and reviewed by AWI throughout the year. This figure differs from the 1865c/kg clean forecast by ABARES (see table at top of opposite page).

AWI STRATEGIC PRIORITIES

2016/17 TO 2018/19

The 2018/19 financial year was the last year that AWI operated under its three-year Strategic Plan for 2016/17 to 2018/19. The strategies implemented during 2016/17 to 2018/19 are summarised below.

PORTFOLIOS

Marketing
<p>Objective:</p> <ul style="list-style-type: none"> • Increase demand for Australian wool <p>Strategies:</p> <ul style="list-style-type: none"> • Fashion – develop and implement co-marketing campaigns that build demand in key consumer markets. • Sportswear – market wool as a technical fibre to meet consumer needs for comfort and performance. • Global Campaigns – implement the International Woolmark Prize and the Campaign for Wool.
Sheep Production
<p>Objective:</p> <ul style="list-style-type: none"> • Increase the profitability and sustainability of wool-growing <p>Strategies:</p> <ul style="list-style-type: none"> • Healthy Productive Sheep – improve wool sheep health, welfare and productivity to increase farm profitability. • Farm Automation & Software Development – improve labour use efficiency to increase farm profitability. • Feedbase & Fibre Advocacy – improve wool's reputation as a sustainable fibre and textile.
Woolgrower Services
<p>Objective:</p> <ul style="list-style-type: none"> • Increase woolgrower profitability • Provide cost effective services to woolgrowers and other parties on their behalf <p>Strategies:</p> <ul style="list-style-type: none"> • Training & Technology Uptake – engage in a broad range of communication, engagement and training initiatives. • Consultation – undertake consultation with AWI's stakeholders, from woolgrowers through to consumers.
Processing Innovation & Education Extension
<p>Objective:</p> <ul style="list-style-type: none"> • Increase the profitability and sustainability of wool processing <p>Strategies:</p> <ul style="list-style-type: none"> • Processing Innovation – assist manufacturers to adopt innovative technologies that add value to wool products. • Education Extension – educate, train and inspire supply chain participants to use wool.
Business Services
<p>Objective:</p> <ul style="list-style-type: none"> • Enable AWI to operate cost effectively through the efficient provision of a range of cross-company support services <p>Strategies:</p> <ul style="list-style-type: none"> • Corporate Services – provide high quality support services globally for all AWI business divisions. • Woolmark – maintain the strength of the Woolmark brand globally. • Digital Services – be recognised as a leader in digital services for the Australian wool industry.

The following pages provide highlights during 2018/19 of each of the programs under these strategies, and the project expenditure of each of the strategies in both 2018/19 and across the whole strategic period 2016/17 to 2018/19.

The results achieved during the 2016/17-2018/19 strategic period are provided. A colour-coded summary for each target is also provided, using the following key:

- Target achieved
 ● Target partly achieved
 ● Target not achieved

MARKETING



Filmed on Matthew and Cherie Coddington's property 'Roseville Park' near Dubbo, NSW, a campaign from UK brand ashmei showcased the performance benefits of Merino wool.

PORTFOLIO OBJECTIVE

To help increase demand for Australian wool.

STRATEGIES

Fashion

PROJECT EXPENDITURE

\$11.877 million in 2018/19
\$29.150 million in 2016/17-2018/19

PROGRAMS

- Menswear
- Womenswear

Sportswear

\$9.893 million in 2018/19
\$17.644 million in 2016/17-2018/19

- Sportswear

Global Campaigns

\$7.362 million in 2018/19
\$20.309 million in 2016/17-2018/19

- International Woolmark Prize
- The Campaign for Wool

FASHION

HIGHLIGHTS OF 2018/19

PRIVATE WHITE V.C.



The Merino Wool Doeskin Mac was part of the collection from Manchester-based Private White V.C.

The Woolmark Company and Manchester-based Private White V.C. collaborated for the first time to create a classic, elegant and casual Australian Merino wool collection. These garments were formed with a sophisticated individual in mind who consistently seeks out refined innovation.

The aim and objective of this partnership was to offer customers an immaculate collection of quintessentially British menswear pieces that highlight the natural properties of Merino wool. All the 100% Merino wool fabrics were woven locally in the some of the UK's most venerable mills.

WESTERN RISE'S MERINO WOOL SHIRT

After two years of R&D and testing, Western Rise launched in April its Limitless Merino Wool Shirt - a highly functional everyday shirt that can be worn more and washed less.

Combining performance with style, the Limitless Merino Wool Shirt is ideal for travel, replacing three or more shirts in your bag. It's built to stay fresh for days, move with you, pack small, and look clean, allowing wearers to do more with less.

The Woolmark-certified shirt debuted exclusively on the Kickstarter crowdfunding platform on 15 April. The project was fully funded by the public within just 45 minutes and received more than of US\$270,000 from backers during the month-long campaign. People who backed this Kickstarter project were offered the shirt at a reduced price in exchange for their investment.

HANKYU MEN'S TOKYO DEPARTMENT STORE



Large adverts showcasing the wool promotion at the entrance of the high-end men's department store.

In September, Hankyu Men's Tokyo and The Woolmark Company, collaborated with 12 Japanese designer brands to market wool apparel. Hankyu Men's Tokyo is the only specialty men's fashion store in Tokyo's upmarket Ginza shopping district and is one of the largest speciality men's fashion stores in Japan.

Key co-branded marketing activities included a pop-up shop in the store's entrance, instore displays, co-branded swing tags, large adverts on the outside of the store, magazine advertorials, brochures mailed to customers and distributed in store, and digital marketing including a targeted Instagram campaign.

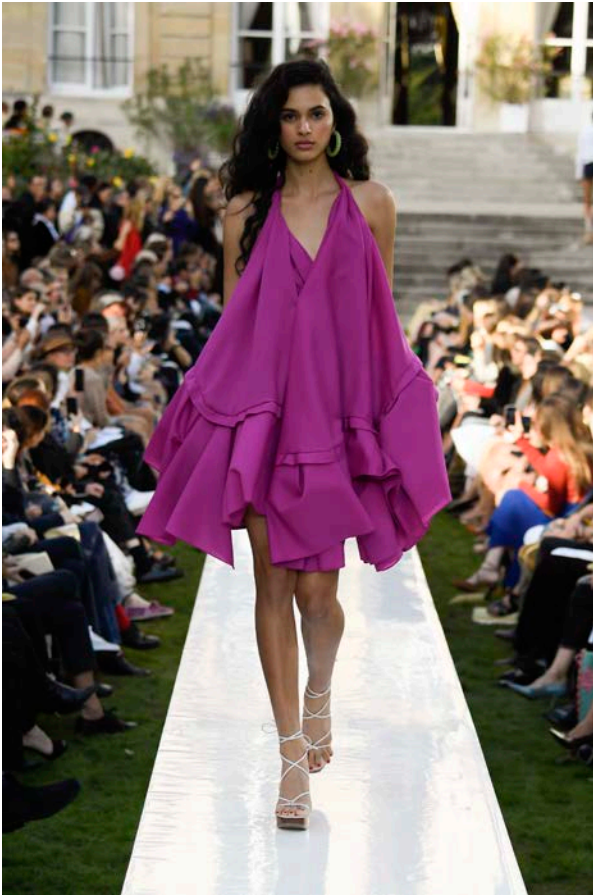


PERFORMANCE AGAINST MENSWEAR STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
2.5 million kgs of new demand over this strategic period.	● Across the three-year period, partnerships in menswear achieved a near total of 2.8 million kgs of demand.
Six new global partnerships.	● The target of six new global partnerships was overachieved.

“Australian Merino wool is positioned as the premium fibre for luxury apparel, and it’s also good for the planet.”

JACQUEMUS



A summery Cool Wool look from a collection of French designer label JACQUEMUS.

Continuing to showcase Merino wool as a fibre for all seasons, French fashion label JACQUEMUS highlighted the natural fibre in its Spring/Summer 2019 womenswear collection, in a collaboration with The Woolmark Company.

Celebrated French fashion designer Simon Porte Jacquemus, of the label JACQUEMUS, is credited with bringing freshness to the French fashion scene and considered by many as its brightest new star.

JACQUEMUS’ strong positioning as a young, fresh, edgy and contemporary French brand aligns with AWI’s desire to position wool as an innovative and premium fashion fibre.

VOGUE FASHION NIGHT OUT TOKYO



Eye-catching flags promoting wool during Vogue Fashion’s Night Out, on the main street of the Omotesando fashion district of Tokyo.

More than a quarter of a million shoppers took part in Tokyo’s Vogue Fashion’s Night Out (VFNO) in September, throughout which the message ‘VFNO loves wool’ was widely promoted.

For the first time AWI’s marketing arm, The Woolmark Company, took the unique opportunity to be a main sponsor of the event. The aim was to reinforce the position of Merino wool and the company at the forefront of the women’s high fashion segment. The ‘VFNO Loves Wool’ message was amplified through Vogue Japan’s digital and social media channels as well as in Vogue Japan’s print edition.

PHILLIP LIM MERINO SERIES



The collaboration with award-winning designer Phillip Lim came to fruition with his fashion label’s new Merino wool collection hitting stores across the world.

PERFORMANCE AGAINST WOMENSWEAR STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
2.0 million kgs of new demand over this strategic period.	● Across the three-year period, partnerships in womenswear achieved a near total of 2.1 million kgs of demand.
Six new global partnerships.	● The target of six new global partnerships was overachieved.

FASHION (CONTINUED)

HIGHLIGHTS OF 2018/19 (CONTINUED)

AUSSIE WOOL-GROWING RECEIVES ECO AWARD



Australian woolgrowers Richard and Jenny Weatherly (left) and Vanessa and Matt Dunbabin (right) accepted the Eco Stewardship Award (presented by Cate Blanchett) on behalf of all Australian woolgrowers.

Australian woolgrowers were awarded the inaugural Eco Stewardship Award at last year's Green Carpet Fashion Awards held as the conclusion of Milan Fashion Week. The award, supported by The Woolmark Company, recognises the commitment to the environment demonstrated by the tens of thousands of woolgrowers across the country.

The Green Carpet Fashion Awards – often referred to as the 'Oscars of sustainable fashion' – is a star-studded celebration of the best in sustainable fashion. It is a joint initiative of the National Chamber of Italian Fashion and sustainability consultants Eco-Age, headed by global sustainability champion Livia Firth.

Both the Dunbabins and the Weatherlys, who received the award on behalf of all Australian woolgrowers, have actively demonstrated their efforts to regenerate the land and increase the biodiversity of their properties across the years.



The Woolmark Company champions the eco-credentials of Australian wool and Australian woolgrowers, promoting the fibre across the supply chain as a natural, renewable and biodegradable fibre.

CHINA'S NEW WORLD WOOL



The 'New World Wool' gala event in Shanghai, which highlighted the strong relationship between the Australian and Chinese wool industries, was attended by key supply chain partners in China.

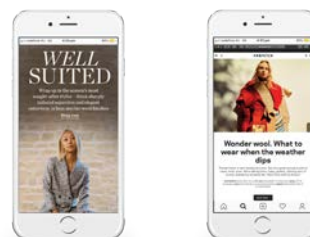
In a series of initiatives, AWI marked more than half a century of a cross-cultural partnership between Australia and China – spanning the wool trade through to design creativity.

By not only looking back at China's astonishing growth, but more importantly looking to the future, AWI aims to secure Merino wool's position as the fibre of choice for China's burgeoning middle class and thereby increase awareness and demand for the fibre.

In the final of the series of initiatives, AWI's subsidiary The Woolmark Company utilised its strong position in the market to present at a special event in Shanghai six of China's established designers who have achieved success and recognition, locally and internationally. Their collections, which utilised innovative wool fabrics from manufacturing partners in China, were launched at the 'New World Wool' gala event in October attended by key supply chain partners and which included an exhibition and digital runway presentation.

ONLINE RETAIL PARTNERSHIPS

With more and more apparel purchases being made online, The Woolmark Company collaborated with two of the world's largest luxury online retail platforms, to highlight the winter season's best wool apparel and build demand for the fibre. NET-A-PORTER is a leading luxury online retailer which has a monthly audience of more than six million people, while Farfetch is an online platform for third-party retailers.



A promotion of commercially available wool apparel on NET-A-PORTER (left) and Farfetch (right).

SPORTSWEAR

HIGHLIGHTS OF 2018/19

LIVE & BREATHE CAMPAIGN

AWI's marketing arm The Woolmark Company launched in September 2018 the global consumer campaign - Live & Breathe - the first new campaign in recent years.

The campaign, which ran for three months in several USA, UK, Japanese and Chinese markets, aimed to educate a young generation of consumers about the technical performance benefits of Australian Merino wool. Post-campaign analysis shows that the campaign engaged 2.3 million consumers.

The campaign featured a carefully curated selection of some of the most technically advanced and innovative wool and wool-rich garments and footwear commercially available in the performance, athleisure and streetwear categories.

On average, there was a 12% increase in drive to purchase wool after seeing the campaign.

The overarching message of the campaign was that wool is breathable, making it the perfect fibre for performance and athleisure. Focusing on breathability also allowed the campaign to talk about a number of wool's other key elements in the performance category, such as temperature regulation, odour resistance and its moisture-wicking nature.

A hero aspect of the campaign was a short film that was viewed eight million times and went on to win a prestigious gold award at the World Luxury Awards held in Monaco. A second hero aspect of the campaign was fashion/sportswear imagery in an out-of-home (OOH) campaign involving 325 placements on billboards, bus shelter advertising etc. The OOH campaign received 19.2 million impressions. To spread the message further, there were also media partnerships reaching two million readers worldwide, and a social media campaign that reached 51 million.

A layered influencer campaign of 52 of the world's leading fitness stars helped connect product to consumers in an approachable, authentic way, while custom landing pages and product hubs of wool products were available to shop on Amazon USA (84 thousand page visits) and Farfetch.com.

Product launches and interactive events in the US (eg P.E Nation workout), China (eg Elle Fit Club events), Japan (eg Vogue Fashion Night Out), and UK (eg Nagnata yoga launch) amongst others, localised and personalised the wool messaging.



An example of campaign collateral, highlighting commercially available apparel, that was rolled out in key markets across the world.



A clip from the award-winning three-minute campaign film that highlights the natural and breathable aspects of wool. The film has been viewed eight million times.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
20 new partners working with AWI.	● The strategic period sportswear target of 20 new brand partners was exceeded.
2 million kgs new demand for Australian wool over this strategic period.	● Sportswear delivered a total of 2.2 million kgs of new demand across the strategic period.

SPORTSWEAR (CONTINUED)

HIGHLIGHTS OF 2018/19 (CONTINUED)

ADIDAS CAMPAIGN AT BOSTON MARATHON



A post-race advert in the *Boston Globe* newspaper, the day after the race.

The performance benefits of Merino wool were once again highlighted at this year's Boston Marathon – the most prestigious marathon in the world – thanks to the three-way partnership between global sportswear giant adidas, the Boston Athletic Association and AWI's marketing arm The Woolmark Company.

Throughout March and April, a large-scale pre-race marketing campaign was created to build consumer interest in wool and adidas wool product in particular, centred around the theme 'We Wool Win'. The campaign, co-branded with adidas, ran across social media channels, in the *Boston Globe* newspaper and outdoor advertising.

The Woolmark Company was on-site in Boston with a 'We Wool Win' training truck – featuring running coaches, training runs and nutrition workshops to help the runners prepare for the race – as well as promoting the performance benefits of wool.

THE AMERICA'S CUP



Luna Rossa Prada Pirelli team members in their wool-rich garments, training in June on a scaled-down model of the AC75 Luna Rossa that will take part in the America's Cup.

AWI's marketing arm, The Woolmark Company, was announced in June 2019 as the official technical partner of the America's Cup team Luna Rossa Prada Pirelli.

Now in its 36th edition, the America's Cup is the oldest trophy in the history of sport, which sees the participation of the most technologically advanced boats in the world. The America's Cup has always symbolised the best of the best – from the best boats, to the best crews and now the best fibre. The America's Cup World Series will begin next year, in the lead up to the America's Cup which is scheduled for March 2021.

The Woolmark Company's commitment to championing innovation will see the development of a Merino wool-rich uniform to support the entire Luna Rossa team and crew across the regattas, events and activities – during training and sailing. The Woolmark-certified uniform will include: waterproof jacket, soft shell jacket, polo shirt, T-shirt, wet jacket, blouson, wetsuit and base-layers.

The new partnership highlights the strong link between the world of sport and the world's original performance fibre: Merino wool.

ASHMEI RUNNING & CYCLING APPAREL

With the help of the in-house videography and marketing teams of AWI, a new video and promotional campaign was created by leading UK-based sportswear brand ashmei – titled 'Be Cool In Wool' (see image on page 15). The campaign championed the performance benefits of Merino wool for cycling and running apparel and highlighted it as a fibre for all seasons.

The film was released in time for the northern hemisphere's summer months and has been shown on ashmei's social media channels, via 60 stores across North America, Europe and Asia and has been picked up by numerous online media outlets.

Since launching back in 2012, ashmei has established itself as producing some of the world's best activewear, known not only for its stylish designs but also for its innovative fabrics and technical performance. It has built this reputation with the help of Australian Merino wool.

“Wool has the opportunity as a technical fibre to meet increasingly demanding consumer needs for comfort and performance.”

AUSTRALIAN CRICKET'S BAGGY GREEN



Australian international cricketer Mitchell Starc and woolgrower Grant Burge with a sample of the baggy green cloth, a ram and fleece at the Adelaide Oval.

AWI's Flock to Baggy Green was a unique project that combined the Australian wool industry through AWI's marketing arm The Woolmark Company, Cricket Australia and Kookaburra to create special baggy green cloth made from wool donated from right across Australia.

Responding to the call for donations, 450 woolgrowers from across Australia sent in samples of their wool to be collated together, resulting in about 500 kilograms of raw wool that has now been made into 350 kilograms of baggy green cloth.

WOOLMARK PERFORMANCE CHALLENGE

The winner of the inaugural Woolmark Performance Challenge was announced in November 2018. This competition, held in partnership with leading sports brand adidas and now in its second year, focuses on the development of innovative, forward-thinking products for the sports and performance industry. Now open to tertiary students globally, it provides an unrivalled opportunity to apply the unique science and performance benefits of Australian Merino wool to innovative new product applications.



The finalists of the inaugural Woolmark Performance Challenge. 510 students from 58 universities were engaged in the inaugural year. More than 1,300 students have now entered since the initiative began.

NAGNATA ACTIVEWEAR



In collaboration with The Woolmark Company, Australian label NAGNATA has created a seamless knitwear collection using Australian Merino wool, which is ideal for yoga and other similar exercise.

OUTERKNOWN WOOLAROO BOARDSHORT



US lifestyle brand Outerknown – the brainchild of surf legend Kelly Slater and designer John Moore – has created the world's first boardshort crafted from 100% Australian Merino wool.

P.E NATION SPORTSWEAR



Leading street-inspired luxury Australian sportswear label P.E Nation released a premium Merino wool activewear collection, championing Merino wool as the original performance fibre.

INTERNATIONAL WOOLMARK PRIZE

HIGHLIGHTS OF 2018/19

INTERNATIONAL WOOLMARK PRIZE AT A GLANCE

To achieve its mission of **increasing the global demand for Australian wool**, it is vital for AWI to reinforce the presence of Australian Merino wool in the international fashion industry.

The International Woolmark Prize is designed to do exactly that, ie generate long-term incremental demand by connecting emerging designers, emerging markets and consumers.

- Connecting the world's leading fashion designers with Australian Merino wool is extremely important due to the **enormous influence these designers have in setting global textile trends** for mainstream retail brands.
- Every year, the designers develop and present the most innovative designs, made from at least 80% **Australian Merino wool**.
- Since its relaunch in 2012, nearly 500 of the award's participating designers from 65 countries have received an **extensive wool education** from product development to sourcing.
- The competition's **alumni** (designers and judges) are imbued with a love of wool that often translates into their subsequent collections being wool-rich.
- The designs are judged by some of the most famous and **respected authorities on fashion**, and presented in front of the world's media.
- The winning collections are stocked (including online) by the program's **retail partners**, some of the world's most prestigious department stores and boutiques.

2018/19 COMPETITION

In 2018/19, the International Woolmark Prize continued to be the 'jewel' in AWI's fashion promotion activities.

New demand comes from the creation of increased knowledge of and lifetime loyalty to wool amongst designers, along with the immediate presence of Woolmark-branded Merino wool collections in the top boutiques and retailers across the globe.

Three semi-final events were held in July in Hong Kong, London and New York to determine the 12 fashion labels to compete in the global final of the 2018/19 International Woolmark Prize. The 12 finalists were selected from more than 300 applicants representing 46 countries.

The designs from the 12 finalists were judged in February at the finals event at Lindley Hall in central London by some of the most respected authorities on fashion along with representatives from the International Woolmark Prize retail partner network.

The winners of the 2018/19 International Woolmark Prize were then announced in front of global fashion celebrities and media at a special event during the official schedule of London Fashion Week.

Edward Crutchley from Britain and Colovos from the USA were the winners of the menswear and womenswear categories. Edward Crutchley also won the Innovation Award for the most innovative or sustainable approach to systems production, materials, textile design or product design.

The world's most prestigious department stores and boutiques, including Harvey Nichols and David Jones, is showcasing and stocking the wool collections of the menswear and womenswear winners.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
An additional 3.5 million kgs in new demand.	● Across the three-year period, the International Woolmark Prize achieved a near total of 1.8 million kgs of demand. While kg of demand was lower across the strategic period, the International Woolmark Prize continued to deliver strong brand awareness for key consumers and retailers.
Grow the Alumni database by 60 new designers annually.	● The annual average for the International Woolmark Prize across the strategic period matched the target of 60 new designers.
Grow media awareness and editorial coverage by \$10 million.	● The most recent financial year achieved a \$8.4 million growth in editorial value and grew awareness by 100+% through a growth in media clippings. The media strategy was updated during the strategic period to focus on digital and social coverage opportunities rather than print as this provides greater reach to a younger target audience; however, traditional media monitoring platforms continue to attribute more editorial value to print media.
Grow the retailer partner network by three new retailers from a base of 11.	● New retailers through the International Woolmark Prize reached a total of 32 across the strategic period.

“Participating designers are imbued with a long-term knowledge and love of wool that continues throughout their professional lives.”

2018/19 INTERNATIONAL WOOLMARK PRIZE WINNERS



Designs from this year's International Woolmark Prize menswear winner and Innovation Award winner Edward Crutchely, who grew up on a sheep farm in the Yorkshire Dales in northern England.



The winning designs of this year's womenswear winner Colovos, from the USA, made using innovative wool fabrications with contemporary finishes that evoke the look and feel of denim and silk.

2017/18 INTERNATIONAL WOOLMARK PRIZE WINNERS LAUNCH WOOL COLLECTIONS



Last year's International Woolmark Prize menswear winner, Matthew Miller (centre), at the launch of his winning collection at the Takashimaya department store in Tokyo.

As part of Matthew Miller's International Woolmark Prize menswear win for 2017/18, he travelled to Tokyo to unveil his awarded collection at leading department store Takashimaya.

Founded in 1829 in Kyoto, this heritage Japanese store has an impressive presence across the country and particularly in Tokyo's central business and luxury district, Nihonbashi. It was here that Miller's garments were prominently showcased for two weeks in a special International Woolmark Prize pop-up space on the ground floor, a space usually reserved for high-turnover cosmetics and women's accessories.



Last year's International Woolmark Prize womenswear winner Ruchika Sachdeva of Bodice Studio, from India, visited Australia to see the source of Merino wool and launch her winning wool collection Downunder.

2017/18 womenswear winner Ruchika Sachdeva visited Australia to launch her winning collection at stores including David Jones in Sydney and luxury fashion boutique Parlour X in Paddington, Sydney.

While in Australia, Ruchika also visited a wool-growing property to discover the source of Merino wool, conduct a retail training session with Parlour X, attend the David Jones Spring/Summer runway show (which featured Bodice Studio and marked the first time the International Woolmark Prize has been included in this show) and participate in a Q&A panel with fashion students studying at the Whitehouse School of Design.

THE CAMPAIGN FOR WOOL

HIGHLIGHTS OF 2018/19

UNITED KINGDOM WOOL WEEK



Founder of menswear retailer Hackett, Jeremy Hackett, at the Wool Week installation in London's Covent Garden that highlighted the versatility of wool.

The Campaign for Wool's annual Wool Week in the UK marked its ninth year in 2018 with an extended program of events spanning a fortnight in October.

Initiated by The Prince of Wales, the campaign encourages manufacturers, retailers and designers of apparel and interiors products to live naturally and choose wool, and educate consumers about the fibre's unique, natural, renewable and biodegradable benefits. An important part of the Campaign for Wool is the promotion of wool of all microns, including of a broader micron and crossbred wool. The campaign therefore continues to promote wool for the interior textiles sector - including bedding, carpets and furnishing - as well as the apparel sector.

Centring around an interactive pop-up in London's iconic Covent Garden, Wool Week in 2018 showcased retailer collaborations and educated consumers about the ease of owning, caring for and cleaning wool products. It highlighted that the purchase of a wool product is an investment that will stand the test of time to look as good as the day it was bought.

Key retailers and designers once again threw their support behind Wool Week, through in-store activities and shop window displays across the UK. The Campaign for Wool collaborated with retail partners and brands including Brora, Jack Wills, Hackett, Pringle of Scotland, Vivienne Westwood, Marks & Spencer, John Smedley, Walker Slater, Hobbs, Finisterre, Johnstons of Elgin, DAKS, Smalls, Brintons, Harris Tweed Hebrides, Axminster, Alternative Flooring, Abraham Moon & Sons, Headlam Group, Brockway and more.

AUSTRALIA WOOL WEEK



The main window display at the David Jones store in Sydney during Wool Week, displaying the theme 'The Art of Wool'.

Wool Week Australia, an initiative that arose from the global Campaign for Wool, was held in May 2019 to coincide with the start of the winter retail season. Some of the country's biggest labels and retailers threw their support behind the campaign and used an increasing amount of wool within their collections.

This year's Wool Week was brought to life by leading department store David Jones throughout its stores and digital channels, spearheaded by a beautiful campaign starring David Jones ambassador Jessica Gomes and created by The Woolmark Company. The campaign was shot at the iconic Nundle Woollen Mill in NSW.

Featured in the campaign were wool-rich winter fashion and accessories, all available to buy at David Jones, from brands including Aje, Bassike, Bianca Spender, Calibre, Camilla and Marc, Dion Lee, Jac+ Jack, Reiss, Studio Italia, Trenery and Viktoria & Woods.

Australia's leading premium department store, David Jones, which has 47 stores across Australia as well as its popular online shop, was enthusiastic about its Wool Week promotion.

Australian retailers across the country also took part in Wool Week, with window displays and online and in-store promotions to educate consumers about the natural benefits of wool and increase sales of wool product.

By heroing Australian wool, Wool Week highlighted the opportunity for consumers to check the label for a garment's fibre composition, choose wool and throw their support behind Australian woolgrowers.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19

Additional 1.0 million kgs of new demand.

Result achieved during three-year period

● Across the strategic period, Campaign for Wool delivered nearly 720,000 kg of new demand, which spanned across 105 key partners for the Strategic period.

SHEEP PRODUCTION

Penside sire introductions at the Merino Lifetime Productivity field day hosted by the New England Merino Sire Evaluation Association and CSIRO in June 2019 at CSIRO's Chiswick site.



PORTFOLIO OBJECTIVE

To increase the profitability and sustainability of wool-growing.

STRATEGIES

Healthy, Productive Sheep

PROJECT EXPENDITURE

\$10.879 million in 2018/19
\$25.220 million in 2016/17-2018/19

PROGRAMS

- Sheep Health & Welfare
- Vertebrate Pests
- Reproduction
- Genetic Improvement

Farm Automation & Software Development

\$2.274 million in 2018/19
\$4.665 million in 2016/17-2018/19

- Farm Automation & Software Development

Feedbase & Fibre Advocacy

\$2.841 million in 2018/19
\$6.753 million in 2016/17-2018/19

- Feedbase & Eco-credentials
- Fibre Advocacy

SHEEP HEALTH & WELFARE

HIGHLIGHTS OF 2018/19

IMPROVED FLYSTRIKE MANAGEMENT PRACTICES

An extensive survey of 1,200 Merino woolgrowers was undertaken in 2018/19 by Kynetec to collect comprehensive benchmark data on the husbandry practices they undertook in 2017. The data collected allows for comparisons between Merino types, states, regions, enterprise size and mulesed and non mulesed Merino enterprises. The survey results will be used to

determine priorities for research, development and extension (RD&E) investment in improved husbandry practices.

From questions asked every two years in the Wool Forecasting Survey the following results were obtained:

- **June 2017**, for previous 12 months: 12.8 million lambs mulesed.
- **June 2019**, for previous 12 months: 9.5 million lambs mulesed.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Pre-operative pain relief available for routine surgical procedures.	<p>● Producer utilisation of pain relief increased by 7% from 77% to 84% over the strategic period. A variety of options and methods of application now exist to encourage grower utilisation. Oral and injectable meloxicam analgesia (the former supported by AWI) is available for routine surgical procedures.</p> <p>Numnuts castration and tail docking anaesthetic device, also supported by AWI, is available to woolgrowers.</p> <p>Completion of a residue study of anaesthetic actives supporting product registration and/or further product development to decrease their registered withhold period or broaden their use were made available to pharmaceutical companies.</p> <p>Gap analysis of anaesthetic and analgesia research to identify future R&D opportunities in this area is under way.</p>
Breech modification alternatives commercialised.	<p>● Skin Traction is available to be commercialised. AWI is open to working with new commercialisation partners.</p>
Development of an ASBV for faecal consistency, so fostering development of non-allergenic genetic resistance to internal parasites.	<p>n/a The R&D required to create an ASBV for faecal consistency was delayed by the service provider but remains on the priority list. The strategic target was deleted from the current Strategic Plan in February 2018.</p>
Improved laboratory diagnostic testing for worms and larvae.	<p>● Projects to validate a new method for improved laboratory testing for worms is nearly complete. Early results suggest the new method provides an improved level of sensitivity for worm egg counts compared to current methods.</p>
Sustained increase in grower utilisation of the ParaBoss website.	<p>● The ParaBoss website achieved an 85% increase in utilisation of information and tools available throughout this strategic period, growing from 8,600 average monthly users to 15,900. The site content was improved to inform woolgrowers of best practice for management of parasites.</p>
Wool bale decontamination and disinfection procedures developed.	<p>● A prototype bale disinfection device for use in the event of an emergency animal disease (EAD) outbreak has been successfully developed.</p> <p>A model system to demonstrate deactivation of EAD agents has been developed. It requires further validation work to ensure variables affecting the internal versus ambient temperature of wool bales are appropriately addressed.</p>

“AWI has a fast-tracked R&D program to achieve welfare-improved flystrike prevention practices.”

- **June 2017**, for previous 12 months: 73% of producers that mulesed Merinos used Pain Relief (22% for all other lambs mulesed).
June 2019, for previous 12 months: 87 % of producers that mulesed Merinos used Pain Relief (71% for all other lambs mulesed).
June 2019: use of PR for mulesing by major wool-growing states is: Vic 94%, SA 89%, NSW 88%, WA 81%.
- **June 2017**: 17% of producers looking to cease mulesing.
June 2019: 25% of producers looking to cease mulesing in the next five years.

A comprehensive review of breech flystrike risk factors was undertaken in 2018/19, including a workshop with expert blowfly researchers and consultants. The review identified recommendations for further investment in key areas of research towards new and more effective means of flystrike control in sheep.

A national survey of the levels of blowfly resistance to current flystrike prevention and treatment insecticides commenced in 2018/19. The findings from NSW Department of Primary Industries will alert woolgrowers to what chemicals are at risk of increasing resistance and what to do about it. The outcomes will inform further RD&E through an integrated pest management approach to maximise flystrike control and maintain the efficacy of available insecticides.

Innovation in nanotechnology has potential for extending protection periods of chemical treatments by encapsulating actives into nanocapsules, allowing treatments to be released at steady active levels over a prolonged period, or only at times and sites where they are needed (eg a rain event). Research from the University of Queensland and a pharmaceutical company commenced in 2018/19 to develop nanoencapsulated formulations of current insecticides that will provide new, labour efficient options for managing flystrike in sheep, whilst countering the development of resistance to chemical treatments for sheep blowflies and lice.

Research by University of Melbourne to update the Australian sheep blowfly (*Lucilia cuprina*) genome was completed in 2018/19. It has isolated 576 unique blowfly genes with 26 of special interest for potential insecticide or vaccine control. The outcomes from this work has contributed to the next stages in the blowfly genome work to develop a flystrike vaccine.

The research and development of a flystrike vaccine by CSIRO has recently commenced; this is a high-risk project but its potential has been recognised by woolgrowers for decades.

A detailed examination by University of Melbourne of the population structure of the Australian sheep blowfly, over three years, collected in both urban and rural regions, will provide critical information required for future implementation of vaccine and other blowfly management strategies, including containment of blowfly resistance outbreaks.

University of Melbourne research into the CRISPR/CAS9 gene editing technologies for the sheep blowfly has

recently been completed. Fully developed, CRISPR/CAS9 technology provides the ability to quickly and efficiently generate any desired edit to examine a gene of interest. Outcomes from this research include valuable tools to understand the biology of blowfly parasitism and identify and exploit weaknesses.

Scouring is a common and complex syndrome on Australian sheep properties, and a significant impost due to direct costs and the increased risk of flystrike. Information for growers and their advisors was completed in late 2018/19 on the causes, diagnosis, management and treatment of scouring in sheep.

BREEDING AND SELECTION FOR FLYSTRIKE RESISTANCE

Information generated since 2005, from the breech flystrike resistant and susceptible flocks, was used by the University of Adelaide to model scenario-based predictions of how long it might take to breed Merino sheep for low breech flystrike risk, to a point where mulesing could be ceased without increased use of chemicals. The predictions suggest that ram selection, based on genomic enhanced breeding values, in ram breeding flocks of average flystrike risk, with existing efficient well recorded programs, aided by modified MERINOSELECT indexes placing reasonable pressure on reducing breech flystrike, may take between 11 to 20 years to reduce the incidence of flystrike to less than 1 strike per 100 ewes per year. Genetic gains for fleece weight, although still positive, were predicted to be 30% less than if there was no selection pressure given to decreasing flystrike incidence. However, there was no impact on fibre diameter or reproductive rate.

A recently completed CSIRO genome wide association study of breech flystrike, breech wrinkle, breech cover and dags suggested that there is no strong evidence that marker assisted selection would be a successful approach to breed for breech flystrike resistance. However, the report concluded that selection, based on genomic breeding values, will be a possible approach. There are now estimated genomic enhanced breeding values for all four related breech flystrike traits for 1,535 breech flystrike resistance and susceptible animals.

ANALGESIA AND ANAESTHETICS

An analysis of results from animal trials for metabolism and tissue residue deletion studies for common local anaesthetic actives was completed in 2018/19. Results have been provided to animal pharmaceutical companies for use in applications to the APVMA to assist with potentially broadening the use options and reducing withholding periods for the current approved actives.

A stocktake by CSIRO of published research into the welfare impacts of castration, tail docking and mulesing, alternatives to these procedures, and potential anaesthetic and analgesic strategies commenced in 2018/19. A report on the stocktake, including a gap analysis and recommendations as to future research directions, is expected to be available in late 2019.

SHEEP HEALTH & WELFARE (CONTINUED)

HIGHLIGHTS OF 2018/19 (CONTINUED)

COMMUNICATIONS AND ENGAGEMENT

ParaBoss is an AWI collaboration with Meat & Livestock Australia and University of New England. It is a resource for growers and their advisors on best practice management of the sheep parasites: flies, worms and lice. In 2018/19, more than 120 veterinarians, industry consultants, laboratory staff, pharmaceutical representatives, researchers and academics attended a ParaBoss Conference to hear about the latest in best practice management of sheep parasites.

A flystrike RD&E forum to update key stakeholders on the latest in AWI-funded RD&E activities in management, breeding, training and marketing in flystrike was held on the 17 July 2018. Presentations from the forum are available on the AWI website at www.wool.com/flystrikeRnDupdate.

The AWI Animal Welfare Forum met on the 12 December 2018. This is an annual event where representatives from animal welfare groups get the opportunity to hear directly from researchers on progress in key AWI-funded RD&E projects addressing flystrike.

A number of publications for woolgrowers on breech flystrike management were produced and subsequently made available on the AWI website in 2018/19 - see www.wool.com/flystrike/latest. These included information on the development of an insecticide resistance management strategy and final project reports on the 2017 Merino Husbandry Practices Survey, Rate of Genetic Gain in Reducing Breech Flystrike and Genetics of Blowfly Parasitism.

BREECH FLYSTRIKE PROGRAM AUDITS

The AWI Breech Flystrike RD&E Program is independently audited at least annually, by the Australian Veterinary Association (AVA). In the latest review, undertaken in April 2019, AVA auditors Dr Bruce Allworth and Dr David Hucker concluded that:

"AWI continues to invest in research aimed at decreasing breech strike...(t)his work, while still focused on "solving" the mulesing issue, continues to support much broader sheep welfare outcomes, and in this reporting period, had increased emphasis specifically on reducing sheep exposure and susceptibility to the sheep blowfly."

A genetic review of the AWI Breech Flystrike RD&E Program is undertaken on an annual basis. Following a review in April 2019, reviewers Dr Peter James and Dr Forbes Brien reported:

"We commend the considerable effort to date to develop improved methods for selecting sheep for breech strike resistance, adapting these to practical recommendations for woolgrowers and in ensuring the information is readily available to wool producers, ram breeders and other industry stakeholders."

NATIONAL WOOL DECLARATION

National Wool Declarations have increased for all wool in nine years from 38% of the clip in 2008-09 to 70% in

2018-19. Merino wool produced from mulesed sheep given analgesia or anaesthesia at time of mulesing increased from 292,667 bales in 2014/15 to an estimated 459,488 bales in 2018/19. This represents an increase from 22% to 40% of all Merino bales declared under the National Wool Declaration. The number of Merino wool bales declared non-mulesed under the National Wool Declaration has grown from 68,632 bales in 2014/15 to 110,328 bales in 2018/19. This represents an increase in percentage of non-mulesed from 5% to 9.6% of all Merino wool bales.

FOOTROT

A project, commenced in 2018/19 with University of Sydney and Treidlia Biovet, to investigate a new multivalent vaccine formulation is expected to lead to improved short-term protection or control of footrot. Early results suggest the new formulation may reduce the clinical severity and prevent the spread of footrot in endemic and chronic infected areas. Results will also be used to define best practice for footrot vaccine use in different flocks with different types of footrot.

EMERGENCY ANIMAL DISEASE (EAD) PREPAREDNESS

The ability to provide reliable assurances to exporters, importers and authorities of the status of the wool to be exported will be critical in the lifting of potential export bans following an EAD outbreak. A report on the performance of a prototype bale sprayer unit that will allow rapid disinfection of the outside of wool bales with a citric acid solution, under field conditions, was finalised by Australian Wool Testing Authority in 2018/19. Following input from an independent review of the bale sprayer unit, the proposed next steps for the deployment of the unit in the event of an EAD outbreak are now under consideration by the Federation of Australian Wool Organisations (FAWO) EAD Working Group.

Advances in wool identification and traceability, including a study of the traceability of wool through the pipeline from farm to storage, identified a number of areas for improvement that are progressively being implemented, for example the inclusion of Property Identification Code (PIC) in wool associated documentation.

A study by the Victorian Department of Economic Development, Jobs, Transport and Resources to model the accumulated heat*time units experienced by wool in storage or transfer sufficient to demonstrate deactivation of EAD agents was developed for further validation. In the event of an EAD, the information will enable industry to provide assurances that the wool in the bales has been exposed to sufficient environmental storage conditions to render a specific virus inactive.

A new post-farm gate Emergency Animal Disease Preparedness RD&E Strategy 2019/20 - 2021/22 was endorsed by the FAWO EAD Working Group in late 2018/19. Preparation of this new strategy followed a detailed external review of the previous strategy.

VERTEBRATE PESTS

HIGHLIGHTS OF 2018/19

COMMUNITY WILD DOG CONTROL INITIATIVE

The focus of the Community Wild Dog Control Initiative (CWDCI) remains on:

- assisting groups or clusters to establish control of their situation or eradicate the last wild dog.
- establishing activities and infrastructure which facilitate ongoing long-term wild dog control where re-infestation occurs.
- making the most of the three-year or 36-month time frame available for CWDCI (Round 3) funding available to each group.

The total number of current and past groups supported is 194, being 16 current groups and 178 past groups. The current 16 supported groups comprise: NSW 7; Victoria 4; Queensland 3 (including 2 with 'Cluster Clean-Out' assistance); South Australia 1 (co-funding for the statewide 'Trappers' program available across 21 wild dog groups); Western Australia 1 (Exclusion Fence Construction Unit – see right).

The current average financial support per group is \$63,476. The long-term average per group is \$26,618. Group size has grown significantly with increasing coverage and scale.

EXCLUSION FENCE CONSTRUCTION UNITS

The AWI-funded Exclusion Fence Construction Unit in Queensland continued to be based with Longreach Regional Council (LRC) and has been used by woolgrowers in the Central West of Queensland at a minimal cost thanks to a grant from AWI and management by LRC. LRC has informed AWI management that an estimated 70% of the potential exclusion fencing is now complete and demand for the unit has declined significantly. As a result, AWI management are evaluating requests for access to this equipment from SA for replacement of the SA Dog Fence and from NSW for extensions to the NSW Border Wild Dog Exclusion Fence.

A second AWI-funded Exclusion Fence Construction Unit has been purchased and provided for use in WA. The unit will be managed by the WA State Barrier Fence (SBF) unit of the Department of Primary Industries & Regional Development. The unit has already completed the first 10km of the 660km Esperance Extension and while waiting on delayed supply of construction materials, has been diverted to replacement works 1,200km north near Kalbarri on the northern end of the SBF.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Effective national and regional coordination of vertebrate pest control effort in sheep producing areas.	<p>● Eight AWI-funded coordinator positions are in place and achieving significant improvements in coordination, coverage and scale of wild dog control activities. The National Wild Dog Management Facilitator position based with the Centre for Invasive Species Solutions was renewed with collaborative co-funding from AWI 51%, MLA 23%, AHA 26% (on behalf of Wool Producers Australia, Sheep Producers Australia and Cattle Council Australia) from 1 July 2017 to 30 June 2022.</p> <p>Federal Government support for the review of the National Wild Dog Action Plan was obtained and this review is now well advanced.</p>
15 new community based vertebrate pest control groups established each year, bringing to a total of 150 group supported by end of 2018/19, with the value of avoided stock loss (sheep) greater than costs to woolgrowers and AWI combined.	<p>● AWI has supported 57 vertebrate pest control groups over the past three years. Since inception, AWI has funded 194 community groups with participants on average experiencing an 83% reduction in sheep losses from predation. The value of avoided stock loss at the completion of each project was greater than the cost of investment in a ratio of 2:1. Further benefits will accrue throughout time.</p>
National release of RHDV1 K5, and successful development of RHDV strains of enhanced virulence.	<p>● The planned national release of RHDV1 K5 took place in March 2017 at almost 600 sites across Australia; an initial reduction of 42% in wild rabbit numbers has been recorded at release sites (the forecast reduction was 10-40%). This has now levelled off at 38% which is an extremely valuable and useful outcome. RHDV1 K5 can now be considered as a niche tool in the control suite of tools.</p> <p>New investment in understanding the spread of RHDV2 and beginning its registration as a bio-control agent has commenced.</p>

VERTEBRATE PESTS (CONTINUED)

HIGHLIGHTS OF 2018/19 (CONTINUED)



Eight AWI-funded wild dog coordinator positions across mainlands state are helping reduce the impact of wild dog predation in sheep producing areas.



State and territory wild dog coordinators and AWI staff at a workshop in Queensland held in September 2018.



Community fencing working bee to erect a new fence line to provide more reliable power to the existing Tallangatta Community Dog Fence.

WILD DOG CONTROL COORDINATION

Victoria

In partnership with the Victorian Department of Environment, Land, Water and Planning (DELWP), the AWI-funded Wild Dog Coordinator positions continue to provide a high level of facilitation for arguably Australia's most successful community group-based wild dog control programs.

The current agreement with DELWP, with slightly less than one year to run, has provided two Wild Dog Coordinator positions: one east of the range in Gippsland, which is job shared between two people (Brian Dowley and Michael Freeman) to enhance coverage; and the second (Lucy-anne Cobby) in the north-east of the state, based in Wodonga servicing the western side of the Great Dividing Range.

Predation has not been totally eliminated but is controlled to the degree that when an incident occurs, there is a pre-planned and timely response. This capacity for producers and Wild Dog Controllers (DELWP employees) to work together to control predation is to the extent that most producers, most of the time, now feel that they are now back in charge of their sheep production destiny. It has been disappointing to note a recent trend towards reduced landholder participation in bi-annual wild dog baiting programs when groups reach the end of their AWI-supported three years of bait purchases.

Western Australia

Renewed in February 2019 for a further three years, the WA Wild Dog Control Coordination contractor Meja Aldrich, based in Geraldton, has made significant contributions to the successful establishment of the five Recognised Biosecurity Groups (RBGs) which line the State Barrier Fence from north of Geraldton to Ravensworth and Esperance. These RBGs provide the first line of defence against wild dogs for the agricultural region of WA and 90%+ of the WA state sheep flock.

West of the SBF and these first line of defence RBGs, significant areas and numbers of wool producers are not yet part of the RBG system. The development of awareness and ownership of the RBG establishment process will need to be repeated as RBGs continue to establish. The challenge in these regions will be raising awareness of, and commitment to, the impending wild dog problem *prior* to significant predation occurring.

Queensland

In South West Queensland Skyela Kruger, who is located near St George, has continued on from a strong start and is making steady progress with increasing participation in wild dog control across shires in this important wool-growing area of Queensland.

There is also a Central West Queensland Wild Dog Control Coordinator position. These two western Queensland coordinators, along with Brett Carlsson (Senior Wild Dog Coordinator / North Queensland) work toward building effective coordination and action across more than 70% of the state.

“AWI works with woolgrowers and other stakeholders to help achieve sustained on-the-ground control of wild dogs.”

South Australia

AWI is partnering with Primary Industries Research South Australia (PIRSA) to provide the Wild Dog Control Coordinator position in SA held by Marty Bower. AWI's share of this is 70% and PIRSA 30%. PIRSA is in negotiations with other industry bodies to secure further on-going funding for this position and the expectation is that this co-funding will extend the present three-year agreement for a further year. In addition, AWI is a co-funding partner in the SA Wild Dog Trappers program: 12.5% of the \$1,200,000 cash program (\$150,000 over four years) in partnership with the SA Sheep Industry Fund, SA State Government (PIRSA Biosecurity – cash and in-kind) and SA Wild Dog Advisory Group (in-kind support).

NE NSW

The NE NSW Wild Dog Coordinator David Worsley has continued to grow the participation in wild dog control by extending control measures on both private and public lands in both ground and aerial wild dog baiting programs, to the extent that the Northern Tablelands LLS bi-annual wild dog control programs stand out amongst NSW LLS.

The NE NSW Wild Dog Coordinator has assisted with calls from other regions where feasible and has provided advice, acted as an independent arbiter and facilitator and given presentations on best practice wild dog control from the North Coast to the North West and Central Tablelands LLS regions. He has facilitated three three-day wild dog control/trapping training workshops in the Mudgee, Hargraves, Hill End district of the Central Tablelands LLS region; 26 people attended, and feedback was in the usual 90%+ approval range.

Wild dog control training

Individually and in conjunction, wild dog coordinators David Worsley (NE NSW) and Bruce Duncan (Western NSW) have managed the provision of wild dog control techniques training to almost 300 participants in the highly acclaimed three-day wild dog control workshops over four consecutive years. The regional reach of this training has recently expanded to the Central Tablelands of NSW and south-east of Queensland. The focus on a combination of ideal training sites and the provision of very high-quality trainers and training program continues to result in participant ratings above 90%.

The marksmanship training course developed and piloted in two forms in 2017/18 – the one-day introduction and two-day long-range sighting-in courses – have been offered without AWI financial support, ie on a 'cost recovery' basis, using the same high quality trainer and curriculum, and have achieved similar high feedback ratings. These courses have sufficient commercial appeal to be viable without further AWI subsidy. AWI will complete the development of the training resources kit and provide this under contract to suitably qualified and licensed training providers, in wild dog affected areas.

In WA, Wild Dog Control Coordinator Meja Aldrich is working with the Northern Institute of TAFE to develop a similar curriculum – albeit shortened to two days.



South Australia State Wild Dog Coordinator Marty Bower explaining Canid Pest Ejectors (CPEs).

RESEARCH & DEVELOPMENT

Wild Dog Alert

The project identified significant limitations in existing digital imaging equipment, to the extent that an extension of the project has produced an innovation in motion activated detection and transmission equipment. Thus the project will deliver four separate products: Wild Dog Alert (3G system), Wild Dog Alert (Buck-eye system), Wild Dog Alert Node (Satellite system) and ClassifyMe software package.

The final path to commercialisation is not yet identified and inquiries can be directed to NSW DPI Vertebrate Pest Research Unit (Paul Meek) and Centre for Invasive Species Solutions (Richard Price). The project team and Centre for Invasive Species Solutions have commenced discussions with US commercial interests on the range of camera and trap related technologies. Potential commercialisers, however, are not at this early stage prepared to estimate a timing or the potential price of any product – this requires an extensive market testing process that cannot conceivably be undertaken during this project.

Trap Alert

AWI has invested a modest amount in the development of current technology to provide an electronic alarm link between set leg-hold traps and their manager (trapper, dogger etc). In conjunction with NSW DPI Vertebrate Pest Research Unit and New Zealand company Encounter Solutions, development trials have been conducted in the extreme high temperatures and associated semi-desert conditions near Moomba in the north-east of South Australia.

The use of leg-hold traps is strictly regulated in all states and one of the principal requirements is the limit on the interval of inspection for traps, and any associated lethal technology. This in turn limits the number of traps a trapper can have set at any one time. If the trapper knows which traps have triggered in the past 24 hours, this allows much greater efficiency in travelling to check traps and minimises the amount of time any trapped animal is held in the trap before being humanely euthanised or released.

Initial trials were successful, and with some 'fine tuning' Encounter Solutions is currently in the process of determining a path to commercial availability.

REPRODUCTION

HIGHLIGHTS OF 2018/19

LIFETIME EWE MANAGEMENT

AWI's support of Lifetime Ewe Management (LTEM) continues to prove popular amongst woolgrowers. The LTEM course, delivered through Rural Industry Skills Training, aims to increase producers' understanding of the influence of ewe nutrition and management on overall reproduction rates and lamb and ewe survival. Producers develop the skills to manage their ewes to achieve condition score targets and explore the benefits of supplementary feeding and pasture management to review stocking rates.

A recent evaluation of the program's benefits provided an overall combined analysis to quantify the changes in attitudes, skills, management practices and production resulting from participation in LTEM over the 11-year period from 2008 to 2018.



Learning ewe condition scoring at Dowrene Farm near Cranbrook in WA as part of a Lifetime Ewe Management course.

LTEM participants made significant changes in their whole-farm stocking rate, lamb marking percentage and annual ewe mortality due to their participation in LTEM.

The evaluation showed that, on average, LTEM participants increased whole-farm stocking rate by 9.3% from 8.5 to 9.3 DSE/ha and lamb marking percentages by 7% from 97.3 to 104.3%.

The combined analysis confirms that LTEM provided the skills and confidence to enable participants to simultaneously increase stocking rates and lamb marking percentage.

The greatest changes in adoption attributed to LTEM was 'condition scoring ewes' and 'managing ewes to condition score targets' and on average about 90% of producers had adopted these practices after completion of LTEM.

IMPROVING LAMB SURVIVAL BY OPTIMISING LAMBING DENSITY

The Improving Lamb Survival by Optimising Lambing Density project with Meat & Livestock Australia wrapped up in January. In summary, the Agriculture Victoria-led project found lamb survival was poorer at higher mob sizes, but the stocking rate of ewes at lambing did not influence lamb survival.

The research results showed that decreasing mob-size by 100 ewes:

- increased the survival of twin-born lambs by 2.25% (range 1.1% to 3.5%), regardless of breed, when stocking rate typically ranged from 1.5 to 12.5 ewes/ha
- increased the survival of single-born lambs by 0.85% (range 0.3% to 1.4%), regardless of breed, when stocking rate typically ranged from 5 to 10 ewes/ha.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
An extra 1,500 AWI-funded participants in LTEM (500 per annum), representing 15% of the adult ewe flock in Australia, that increase lamb weaning rates by 7%, and reduce ewe mortality by 30%.	● An additional 1,400 woolgrowers participated in the LTEM program throughout the 2016/19 strategic period bringing the total ewes impacted by LTEM to 12 million, representing 30% of the breeding ewe flock. Lamb marking rates increased on average from 97.3 to 104.3% - an increase of 7%. Ewe mortality reduced from 4.1% to 3.0% representing a reduction of 27%.
At least 250 producers engaged in determining the impact of lambing density (ewe mob size and stocking rate) on lamb survival.	● 279 producers participated in a study finding lamb survival was poorer at higher mob sizes, but the stocking rate of ewes at lambing did not influence lamb survival. The research showed decreasing mob size increases survival of twin born lambs by 2.25% and increases the survival of single born lambs by 0.85%.
At least 200 producers engaged in developing the strategies and guidelines for improving weaner and maiden performance.	● The Winning with Weaners strategies and guidelines for improving weaner and maiden performance have been developed. This has resulted in the extension program Winning with Weaners being delivered nationally.

“Lifetime Ewe Management participants have made significant improvements in their whole-farm stocking rate, lamb marking percentage and annual ewe mortality.”

The research showed that this effect was also not influenced by ewe condition score at lambing, Feed On Offer (FOO) at lambing or the characteristics of the lambing paddock.

Implementing reduced mob sizes at lambing may require temporary or permanent fencing of paddocks, however the cost-benefit analysis shows that reducing mob size is justified even where paddocks require subdivision.

The level of return achieved from subdividing paddocks depends on the current mob size, with greater returns from subdividing larger mobs. Optimum mob sizes for twins are about half that for singles.

To maximise the benefits of reducing mob size on lamb survival, producers must pregnancy scan their ewes for multiples and preferentially lamb twin-bearing ewes in smaller mobs and paddocks.

METABOLIC DISORDERS IN PREGNANT EWES

Results from the Charles Sturt University Metabolic Disorders in Pregnant Ewes project showed minor deficiencies of calcium and magnesium, where the ewe appears healthy, did not reduce lamb survival in recent trials.

However, even when mineral levels in the diet are at levels currently recommended as ‘adequate’, research has shown that increasing dietary calcium and magnesium improved the immunity levels in twin born lambs, increasing the chances of survival, and increased their weight gains to four weeks of age, likely leading to improved survival of weaners and the potential for earlier turn off.

Supplements also improved energy regulation in ewes, likely reducing the risk of metabolic disease such as pregnancy toxaemia (twin-lamb disease). Supplementation of a loose mix of lime/causmag/salt in a ratio of 1:1:1 fed daily at 20g per ewe is recommended as a low-cost risk management strategy for pregnant ewes (especially twin bearers) to improve lamb survival.



Charles Sturt University PhD student Forough Ataollahi and Professor Michael Friend who researched the effect of supplementary feeding calcium and magnesium to pregnant ewes.

MERINO REPRODUCTION EFFICIENCY FITNESS AND SURVIVAL

The Merino Reproduction Efficiency Fitness and Survival project by CSIRO is collecting additional information on reproductive performance and survival, above that required in the core Merino Lifetime Productivity project.

Specifically, this includes maternal pedigree from lambing rounds; litter size born, marked and weaned; birth weight; any compromises to lamb (and dam) fitness; and death date. This additional information will enable comprehensive evaluation of ewe reproductive performance and lamb survival at different age stages.

The project is due to wrap up in January 2020; results to date show high performance in any of the components of ewe reproduction do not necessarily confer high reproductive efficiency. For example, high conception rate or high litter size do not necessarily result in high lamb survival rate.

IMPROVING THE SUCCESS OF SHEEP ARTIFICIAL INSEMINATION PROGRAMS

Industry interest in revising artificial insemination (AI) protocols has been met with the AWI-funded Improving the Success of Sheep AI Programs project by SARDI in collaboration with SA Stud Merino Breeders. The major aim of the project is to develop improved protocols for synchrony of oestrus.

The data so far collected from the detailed examination of the follicle wave emergence, progesterone concentrations and on progesterone clearance rates provide valuable information on how this may be achieved.

Various options will be evaluated in an AI program conducted in July with pregnancy data becoming available in September. It will be at this point that plans to extend all relevant findings to industry will be developed – interactions with practitioners, producers and other researchers are expected to extend well into 2019/2020.

QUANTIFYING AND UNDERSTANDING THE DISPLACEMENT OF THE MERINO EWE

The Quantifying and Understanding the Displacement of the Merino Ewe project provided AWI with valuable information about the decision-making processes of woolgrowers in Australia.

Focus group meetings, in-depth case studies and a telephone survey were conducted to identify the factors influencing displacement (or the factors in favour of retaining Merino ewes), the barriers to increasing Merino ewes and views on future RD&E needs.

A wide range of ideas were put forward with four main themes suggested: better use of genetics (focus on desirable traits and management of genetic progress), improved reproductive performance (improving ewe fertility and lambing performance), sheep health and welfare (parasite management), and marketing and promotion (pursue emerging markets and new everyday wool products). All themes are consistent with the AWI Strategic plan 2019-2022.

GENETIC IMPROVEMENT

HIGHLIGHTS OF 2018/19

SIRE EVALUATION

There are seven sites joining for a 2019 drop lamb. These are Balmoral, North East Victoria, MerinoLink Boorowa, MerinoLink Yass, South Australia, Muresk and Yardstick. A total of 102 sires were joined at these sites by artificial insemination. Macquaire and New England sites did not join due to drought. Each site is self-funded through entry fees with AWI funding used with coordination, analysis, link sire funding and publication of results.

Sires entered at Sire Evaluation sites since 1989, are the sires or grandsires of 876,281 animals in MERINOSELECT. These sons and grandsons represent 33.7% of all animals in the MERINOSELECT database. The extensive number and older age assessments taken on progeny in Sire Evaluation is adding significant value to the Australian Sheep Breeding Values in MERINOSELECT.

Visits to the Merino Superior Sires website increased 25% in 2018/19. Site reports from the past five years were downloaded during 2018/19 on 7,202 occasions and the Merino Superior Sire publications from the past five years on 3,066 occasions.

Semen that had been stored for 50 years was used in the 2018 drop joining at the Balmoral site. The pooled semen from four sires was part of a semen freezing trial conducted by the University of Sydney in 1967, well before the use of frozen semen was commercialised in 1982. The progeny will be on display at the Balmoral 2020 field day and then shorn at 18 months of age with 11 months wool.

WETHER TRIALS

NSW DPI has conducted another wether trial analysis and in September 2018 published the update on the AWI and NSW DPI websites. The relative performance of 73 commonly used Merino bloodlines come from 25 wether trials conducted in NSW (24) and Tasmania (1) between 2007 and 2018. Bloodlines have been assessed

for clean fleece weight, fibre diameter, liveweight, staple length and staple strength along with wool quality traits (style and colour). Simulation modelling using Grassgro™ generated two measures of financial performance of the bloodlines, expressed on a \$/head and \$/DSE basis. The previous 2006-2016 analysis reported data from 26 trials with 77 bloodlines.



Professional classer Chris Bowman talking to the crowd at the Macquarie field day at Trangie in July 2018.



Balmoral MLP site committee classing sheep in December 2018.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
At least 3,800 Merino ewe progeny being evaluated for lifetime productivity across at least four regionally representative sites, in partnership with Australian Merino Sire Evaluation Association.	● 5,500 Merino ewe progeny were evaluated across five representative sites in collaboration with AMSEA.
Routine, low-cost per head alternatives to genomic parentage technology in wide commercial use for mothering-up Merino lambs.	● Mothering up trials using Actigraphs (human health monitoring devices) proved that proximity sensors can be used to obtain maternal pedigree with high level of accuracy. The AWI smart tags that use the same technology have been demonstrated for mothering up in four sites (Vic, WA and NSW) obtaining good results. Hardware and software are being improved to increase efficiency and accuracy of this functionality.
Australian sheep breeders maintain access to consolidated and improved wether trial, central test sire evaluation and MERINOSELECT databases.	● AWI is no longer a co-funder of MERINOSELECT. MLA publishes members' animal data on the MERINOSELECT website. Sire Evaluation and NSW DPI Bloodline information is published on their own websites and can be accessed via AWI's website.

“Our investments are supporting an increase in net reproductive rates while maintaining fleece weight and increasing productivity per unit land area.”

MERINO LIFETIME PRODUCTIVITY (MLP)

The MLP project is assessing how well correlated early age assessments and predictions of productivity are with their actual lifetime productivity. Results will support or assist the fine-tuning of current predictions so that ram breeders and buyers can be more confident in selections for lifetime productivity at the increasingly young ages that industry has adopted in recent decades. It will also assess the current push for even younger age ram selection at five to six months of age, using genomically enhanced Breeding Values.

The MLP project will also create a database where a wide range of hypotheses can be assessed about visual and objective classing, the value of fat and muscle, the number of sires whose daughters improve or decline in productivity as they get older and the current advice from geneticists that at least one adult age fleece assessment and full lambing records are required to optimise genetic gain.

There are five sites – Balmoral, Pingelly, MerinoLink, Macquarie and New England – and it will take some years to collect the lifetime data required. All ewes are retained for their lifetime; a classer may describe them as a cull at any of the annual classings but they are all retained in the project.

Site	Progeny drop	Stage in 2018/19	Year of last Lamb
Balmoral	2015 drop	2 nd lambing	2021
	2016 drop	1 st lambing	2021
Pingelly	2016 drop	1 st lambing	2022
	2017 drop	1 st joining	2022
MerinoLink	2016 drop	1 st lambing	2022
	2017 drop	1 st joining	2022
Macquarie	2017 drop	1 st joining	2023
	2018 drop	Weaners	2023
New England	2017 drop	1 st joining	2023
	2018 drop	Weaners	2023

To date 700,000 records have been taken on the 5,500 ewe progeny of the 134 AI sires. A total of 1.6 million records will be taken by 2023.

AWI continues its efforts to have the MLP progeny records used within MERINOSELECT and to make the MLP results broadly accessible.

Each site held a field day during 2018/19 and the Site Reports can be found on the AWI website at www.wool.com/MLP.

A series of ‘add on’ projects using the F1 ewes and wethers are taking place. They include ‘Improving Foetal Aging’, ‘Assessing Resilience and Ewe Survival’, ‘Adult Wether Productivity’, ‘Genetic Evaluation of Productivity, Efficiency and Profit’, ‘Comparison of Classing Within and Across Sire Progeny Groups’, ‘Comparing Wool Sampling Site for Fleece Yield Estimates’, ‘Evaluation of Anti Mullerian Hormone in Young Ewes to Predict Lifetime Fertility’ and ‘Wether Carcass and Eating Quality’ (an MLA-funded project).

LOWER COST AI WITH FROZEN RAM SEMEN

Cervical artificial insemination (AI) using frozen/thawed semen has conception rates of around 20% compared to laparoscopic rates of 70%. The aim of a trial with the University of Sydney and NSW Stud Merino Breeders Trust Fund aimed to find a way for cervical results to be comparable to laparoscopic conception results. The upside is that cervical AI costs less per ewe and is a non-invasive procedure.

Unfortunately, the trial was unable to find the cause of the low conception results over the five-year period and further R&D is required to find the breakthrough. The trial has produced 24 scientific publications, two post-doctoral fellows, four PhDs, 13 Honours students, 13 conference presentations and led to a large increase in international R&D funding in this area.

Proteins in seminal plasma were successfully utilised to improve the freezing success of sperm and their quality prior to AI.

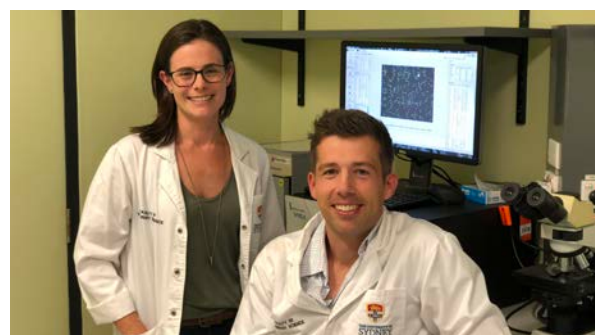
The proteins in semen that are impacted by freezing and required for the sperm to move through the ewe’s tight cervix were isolated. Some of the proteins that provide immune evasion properties to sperm, a trait necessary for their survival in the female tract, were also isolated but further work is required.

New internationally funded projects continue to investigate these proteins. Large numbers of ewes are inseminated in Europe each year using fresh semen and there are advantages in being able to use higher genetic merit frozen semen. (Europe collectively inseminates 7.0 million ewes per year compared to Australia’s 0.25 million). We await the outcomes of the European R&D.

SEXED SEMEN

A project with the University of Sydney, Michelle Humphries of Livestock Breeding Services and Wurrook Merino Stud tested improved techniques and outcomes from sexing fresh (non-frozen) ram semen. The results were positive with similar conception rates to unsorted semen and >90% of the progeny the required sex. Sexing Technologies has just commercialised the ‘Sexed Semen’ for sheep in Australia.

While sexed semen will have a niche market, it could offer ram breeders the option of a more rapid change in breeding direction or increase in breeding ewe numbers.



Dr Jessica Rickard and Associate Professor Simon de Graaf who are undertaking the ‘sexed semen’ research at The University of Sydney.

FARM AUTOMATION & SOFTWARE DEVELOPMENT

HIGHLIGHTS OF 2018/19

AWI SMART TAGS



A mob of sheep with the AWI smart tags in their ears during a farm trial. Smart tags aim to enable woolgrowers to track, monitor and assess the status of their stock in real time.

The development of the AWI smart tags has progressed significantly this year. The design of the ear tag has been improved to reduce the risk of solar panel losses. Readers have been enhanced by the addition of a GPS module and different antennas are being tested to increase the range.

Mothering up functionality has been refined to optimise the collection and data package transfer from tags to readers ensuring the information is secured even when the sheep are out of range.

Three new research projects using AWI smart tags have started. These projects will use the data collected from the tags to understand and optimise the detection of

sheep behaviour. The behaviours that are currently being investigated are in grazing, reproduction and predation/welfare.

The first new project, with Murdoch University and NextGen Agri, will use the AWI smart tags to enable optimisation of grazing decisions. It will generate data across a range of grazing situations to train machine learning algorithms that will predict Feed On Offer and detect grazing behaviours.

The aim of these outcomes is to help producers optimise their grazing strategies in real time and by doing so optimise both pasture and animal performance.

The second project, with the University of Sydney, aims to understand male and female reproductive behaviour and how it can be detected using AWI smart tags.

Experiments have been conducted to measure the physical event of rams mounting ewes, with tags on both the ewes and rams. Researchers are developing algorithms to accurately identify the mounting event.

Further research will be aimed at the detection of oestrus, assessment of ram libido, identification of sire at point of mating and the efficacy of oestrus synchronization protocols and time of ovulation (including PMSG-free synchronization).

The third new project, with CQUniversity, is investigating ways that the smart tags could help predict predation by wild dogs as well as detect other welfare issues (worms, flystrike, lice).

Currently the CQUniversity researchers are taking steps to ensure that the tags can more accurately recognise normal behaviour: walking, grazing, standing etc. This is important as it provides a baseline, which will make detecting changes in behaviour due to a predation threat or event, or a welfare issue, easier and more accurate.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Develop and demonstrate across sheep production systems smart sheep ear tags capable of generating maternal pedigree, automatic geo-location, and welfare alerts, and integrating with virtual fencing advances.	● Smart sheep ear tags are in development/developed for welfare alerts, predation, reproductive management and grazing behaviour and have been demonstrated for mothering up at four sites in Vic, WA and NSW. The smart tag network and its ability to locate sheep enables integration with other remote technologies such as virtual fencing.
Integrate pasture feedbase assessment technologies into digital farm management tools.	● The LTEM app has been developed and launched for smart phones on both the Apple store and Google Play store. It has been installed more than 7,000 times. This provides growers with Feed On Offer digital assessment tools to improve nutritional management of breeding ewes. The development gives producers a mobile decision-making tool to optimise the energy requirements of their flock.

“Technology is rapidly changing many areas of agriculture – and AWI aims to ensure Australian woolgrowers are on the front foot to take advantage of the latest opportunities.”

ARTIFICIAL INTELLIGENCE TO AID SELECTION



A staging rig in which the sheep were photographed from several angles. The digital images were then analysed by an artificial intelligence system to identify phenotypical traits to aid in productivity management.

A study examined whether artificial intelligence (AI) technologies can automatically identify in young sheep several of the phenotypical traits that predict their lifetime performance – a solution that would help woolgrowers in their selection and productivity management decisions.

The project involved taking repeat digital photographs of several different views of the sheep in conjunction with an AI algorithm. The project has demonstrated that with the correct training data set, machine learning models will be very powerful in predicting a range of informative traits from the image-based inputs of sheep collected by an automated camera.

Facial recognition, bodyweight and wrinkle score from 4,000 sheep were predicted applying AI techniques. Results are promising, especially in the prediction of those traits that have a robust value (not subjective) that can be used to train the model.

VIRTUAL HERDING

AWI supports the Department of Agriculture’s Rural R&D for Profit Virtual Herding project. This across-industry collaborative project builds on work undertaken about 10 years ago by CSIRO to examine the potential of virtual herding for beef cattle, using a GPS system to define fence boundaries and a specially designed collar that alerts the animal to the fact that it has reached the ‘fence’.

The Rural R&D for Profit project aims to evaluate the on-farm application of present-day technology for virtual fencing and herding; It is examining the responses of different livestock (including sheep) to various cues and stimuli.

This year, trials have proved that sheep learn the association between the audio and pulse cues better in groups. However manual neckbands are used in the

trials, which limits the number of sheep that can participate in them. It is proposed that the data from these small studies on spatial distribution of sheep may be used to model what may happen in larger flocks.

FARMERS 2 FOUNDERS COLLABORATION

Farmers 2 Founders (F2F), a collaborative initiative between several Research and Development Corporations, is a world-first program launched this year.

F2F is designed to attract and develop proactive and innovative Australian primary producers, and it works across two streams: firstly, helping ‘early adopters’ to be more ready to adopt and meaningfully engage with cutting edge technologies; secondly, supporting ‘innovators’ to create and scale up their own ag tech ventures.

Ideation workshops have been held across the country. The first pre-accelerator program in the ‘innovators’ stream has started with three woolgrowers among the participants.

SEMI-AUTONOMOUS SHEARING

AWI this year brought together some of the best shearers and robotic experts in Australia to help determine how and if a semi-autonomous robot, equipped with the latest digital technology, will be able to shear a sheep.

A scoping study to assess semi-autonomous shearing was completed by the University of Technology Sydney with funding from AWI. The project formally catalogued existing robotics’ algorithms and commercially available hardware with respect to the technical challenges of automated shearing.

The project also helped to identify plausible use-case scenarios of semi-autonomous shearing that will advise the focus of near-future technical development and help to inform AWI’s robotic shearing investment over the next three years.



The robotics team from UTS used the latest digital technology to demonstrate gentle and intuitive shearing blow patterns using two robot arms on each side of a 3D printed sheep.

FEEDBASE & ECO-CREDENTIALS

HIGHLIGHTS OF 2018/19

WOOL'S ENVIRONMENTAL FOOTPRINT RATINGS

AWI's research over the past decade on wool's impact on the environment across the whole lifecycle from the farm, through wool processing to the use phase, where people are actively wearing and washing their garments and then onto end of life, has been brought together into a single paper and submitted for publication in a high rating journal. Unlike other agricultural products such as eggs, meat and milk, where the major impacts occur at the farm stage, wool has been shown to have major impacts in the use phase, where a large proportion of energy and water use occurs during clothes washing – hence the importance of including this phase in lifecycle assessment (LCA), as it is currently overlooked by environmental ratings agencies, such as the Sustainable Apparel Coalition (SAC).

Having properly measured wool's own footprint, AWI's investment is being refocused on the goal of levelling the playing field with synthetics in lifecycle assessment.

- AWI's detailed review of SAC's Material Sustainability Index identified significant flaws and inconsistencies in this commonly referenced textile rating tool. In particular, the review found natural fibres were disadvantaged by the Index, and proposed solutions to these issues through application of LCA best practice principles. Publication of the paper arising from this study in the journal *Sustainability*, together with correspondence with approximately 80 brands summarising the key issues, has helped broaden the textile industry's awareness of these important weaknesses in LCA ratings.

- Following the successful publication of our review of microfibre release from different clothing fibre types, we are now contributing to the 'PlasticLeak' project, led by Quantis. This project, which seeks to quantify the amount of microplastics entering the environment, is an essential first step towards accounting for microplastics in LCA.
- Research assessing the biodegradability of wool as well as the easy-care finishes applied to wool in both marine and terrestrial environments is well progressed. This project is generating evidence supporting wool's eco-credentials, such as the images on the opposite page.

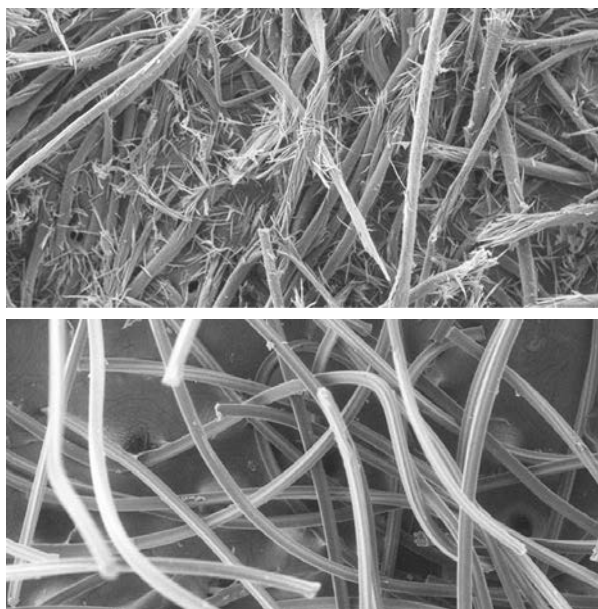
The European Union is now seeking to become the global leader in Product Environmental Footprinting (PEF), with the stated intent of labelling products of all types with their environmental footprint by 2021. There are risks to Australian agriculture without engagement with the EU to help ensure PEF method developers design environmental accounting methods that are relevant to Australian conditions and don't disadvantage Australian products, so AWI has proposed a collaboration with other Australian rural Research and Development Corporations to ensure we have strong representation in Brussels. AWI has already nominated its LCA expert for participation in the EU forum specific to textiles and clothing.

With AWI's research identifying that many major environmental impacts of wool occur in the use phase where people are actively wearing and washing their garments, several projects are under way to more accurately account for this important phase:

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Generate significant improvement in wool's environmental footprint ratings and strengthen wool's reputation for environmental stewardship.	● Research into wool's environmental footprint is progressing with integrated cradle-to-grave life cycle analysis of wool garments being prepared for publication. Further research into wool's biodegradability in water and on land is being pursued. Market research in wool's nine key consumer markets found on average 63% of consumers perceive wool to be more environmentally friendly than other fabrics.
Through better understanding of constraints to grower investment in pasture renovation, increase adoption of beneficial feedbase practices with currently modest adoption rates – reaching 20% of all growers by 2018.	● Pasture panels, extension programs such as Feedbase Fit, as well as research into crop stubbles and shrubs are progressing well. Field days, participatory research and extension activities are improving management of pastures across the wool industry.
Prepare woolgrowers for the effects of climate change - by 2019, 50% of woolgrowers will have implemented climate change mitigating or adapting technologies without loss of profit.	● AWI has developed and delivered programs to prepare woolgrowers to mitigate the effects of climate change. The initial three modules of 'Are you feedbase fit?' have been delivered. The 'P-efficiency' project is in its final growing season with the final report due to the Commonwealth in April 2020. 'Grower Stewardship' has completed the first year of data collection with conference presentations and journal articles now being prepared. The 'Dryland legumes' project is in its second year with field days and associated surveys commencing in August.

“Improving wool’s reputation as a sustainable fibre for the planet is an increasing priority for the Australian wool industry.”



Images showing how well progressed wool’s biodegradability (top) is relative to polyester (bottom) after 90 days in the marine environment.

- A global wardrobe survey has been completed in five key markets assessing the use and laundering practices for apparel of different fibre types. The study identified positive aspects for wool, including longer garment life and lower washing frequency than other fibre types.
- The potential to further reduce the washing frequency of wool garments because of its innate characteristics including odour and wrinkle resistance is now being explored. This recently initiated study will identify best practice laundering protocols for garments made from wool in comparison to similar garments made from polyester and cotton.

Scientific evidence of the impact of contemporary wool production on soil health, biodiversity, landscape health and drought resilience is lacking. As a consequence, AWI has commissioned two studies to fill this important knowledge gap and enable the eco-credentials of the wool industry to be reported and promoted.

- The first year of a long-term study assessing environmental stewardship of wool producers who’ve installed exclusion fences has been completed. The early feedback is that producers who are now gaining control over the predators of sheep and over total grazing pressure are observing greater numbers of ground feeding and nesting birds including Bustards, Little Button-Quail and Grey goshawk.
- A project is commencing utilising Environmental Economic Accounting (EEA) to prepare environmental profit and loss statements for a number of NSW wool-growing properties. This accounting method is used by brands, such as Kering and Patagonia, to help quantify the environmental credentials of woolgrowers in their supply chains.

INCREASING ADOPTION

AWI’s Feedbase Advisory Panel comprising woolgrowers and research and industry experts has now concluded the initial review with the final meeting being held at Clare in South Australia in October 2018. This project generated insights informing strategy in this area, including that a major opportunity exists to develop a feedbase extension program similar in approach to AWI’s Lifetime Ewe Management (LTEM) program. Key activities during 2018/19 included:

- Development of the initial three “Are you feedbase fit?” training modules.
- Generating a framework for the feedbase extension activities and materials to suit woolgrowers.

Field days and producer surveys have been conducted as part of the two Rural R&D for Profit projects: Delivering Phosphorus Efficient Pasture Systems and Dryland Legume Pasture Systems. As these projects continue, ongoing grower engagement will contribute towards set adoption targets.

PREPARING FOR CLIMATE CHANGE

Delivering phosphorus efficient pastures

Using a combination of farmer-participatory and traditional research, this five-year co-funded project is building on earlier research which is anticipated to deliver transformational change that can reduce the phosphorus dependence of Australian grazing systems.

It focusses on proving the performance of high-yielding pasture legumes with lowered phosphorus requirements. This project is entering its final growing season with the final report due for submission to the Commonwealth in April 2020.

Novel legumes

AWI has been investing in developing annual legumes such as the serradellas and biserrulas for many years. These aerial seeding, hard seeded, high nitrogen fixing annuals are suited to summer dry-sowing of seed in drier regions of WA, SA, Victoria and southern NSW and have the potential to transform mixed enterprises. Their compatibility with cropping systems is contributing to the re-introduction of livestock to these areas.

This project will work with grower groups in 10 of these regions to increase the adoption of these legumes by assisting producers with five integrated programs of work: legume selection, integration into cropping and livestock systems, economics and farm modelling, and extension.

This is a five-year funded project currently in its second year and first field trial season. Given the difficult seasonal conditions the initial results are excellent with some notable stand out species in each regional area.

Climate Change Research Strategy for Primary Industries (CCRSPI)

AWI continues to collaborate in this Commonwealth initiative. A full stocktake of all primary industry research on climate variability has been conducted and opportunities identified for future work. The current phase of this working group is scheduled to conclude in 2021.

FIBRE ADVOCACY

HIGHLIGHTS OF 2018/19

SKIN HEALTH

AWI's research over the past decade into the skin health benefits of base-layer superfine wool garments is bearing fruit, with the initial pilot study and the three clinical studies of wool and eczema showing positive effects on eczema symptoms. With up to 28% of infants suffering from eczema, it represents a large potential new market, so AWI has ramped up the rate of research by initiating a parallel study in the USA, Europe and Asia to establish whether the benefits seen to date are applicable in different countries, climates and skin types.

A skin health awareness program in Australia, America, France, England and Germany is under way to help overcome historical barriers to wool from health care professionals including GPs, paediatricians and dermatologists. Presentations on wool's benefits at the World Congress of Dermatology in Milan and the European Atopic Dermatitis Congress in Madrid this year are providing leverage points to magnify the messaging program being delivered through social media, publications and press releases.

SLEEP HEALTH

Following the successful study demonstrating the benefits of wool sleepwear to the baby boomer demographic, a further sleep study is now being initiated. This study is evaluating the comparative benefits of wool and cotton sleepwear fabrics on the sleep outcomes of post-menopausal women. Our

researchers will test the hypothesis that wool sleepwear provides beneficial measured sleep outcomes over cotton sleepwear for women experiencing hot flashes.

EXPANDING WELLNESS MARKETS

Wool's growth in the active outdoor market is hindered by the absence of a test method to measure garment breathability during active use. This study, at North Carolina State University, seeks to develop a test method for (arguably) wool's greatest attribute and includes laboratory testing of garments using benchtop testing, physiological manikin testing as well as human subjects. The study aims to enable simple lab test data to be related to the human experience of clothing in dynamic circumstances - enhancing the trade's ability to specify wool fabrics for active health applications.

Base-layer garments for the military and emergency services markets represent a growth opportunity for wool. The unique combination of wool's attributes including breathability in dynamic circumstances, flame resistance, non-melt as well as absorption of harmful and potentially carcinogenic products of combustion/smoke, provide natural advantages over other fibre types. This project utilised pig skin as a human skin-simulant to mimic the human skin response to hazardous circumstances, in order to generate evidence in the form of a video, technical bulletin and journal publication to help grow wool's share of the first-responder market.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Internationalize studies demonstrating that Merino base-layer garments ameliorate chronic skin conditions associated with microclimate management of the skin.	● 150 children across three major wool markets have participated in research ameliorating chronic skin conditions. The US eczema study of adolescents/adults has been published in the journal <i>Dermatitis</i> . The global eczema study is under way in the US while an Asia-based paediatrician has been confirmed and talks are progressing with EU paediatricians.
Demonstrate that wool bedding and sleepwear improves sleeping conditions.	● A study of the sleep quality of Baby Boomers is being reviewed for publication. Older study participants are shown to fall asleep faster with less sleep fragmentation than other fibres (both natural and synthetic).
Support development of product market opportunities in categories such as corporate wear, safety wear, medical product and infants wear.	● The IWTO Product Wellness Working Group is functioning well (AWI Chair), and the AWI-funded Technical Advisory Group is active. A project assessing optimised fire-resistant base-layers is complete with positive results for wool and wool blend materials. The publication of results is currently being drafted.
Develop specifications for next-to-skin wear to improve reliability and consumer confidence in Merino base-layer garments.	● An active Technical Advisory Group process is working to further develop next to skin specifications. A study with NCSU addressing gaps in demonstrating wool's dynamic advantages is now 20% complete. Identified specifications are being applied to existing brands and products to assess which meet requirements.

WOOLGROWER SERVICES



161 young people from across Australia enjoyed a hands-on introduction to the wool industry at this year's National Merino Challenge that highlighted an array of careers.

PORTFOLIO OBJECTIVE

To increase woolgrower profitability.

To provide cost effective services to woolgrowers and other parties on their behalf.

STRATEGIES

Training & Technology Uptake

Consultation

PROJECT EXPENDITURE

\$5.886 million in 2018/19
\$16.164 million in 2016/17-2018/19

\$2.213 million in 2018/19
\$5.019 million in 2016/17-2018/19

PROGRAMS

- Sheep & Wool Management Skills
- Wool Harvesting & Quality Preparation
- Stakeholder
- Woolgrower

SHEEP & WOOL MANAGEMENT SKILLS

HIGHLIGHTS OF 2018/19

STATE-BASED EXTENSION NETWORKS



A Winning With Weaners workshop at Armidale in NSW that was delivered through the Sheep Connect NSW extension network.

AWI-supported extension networks continue to provide opportunities for producers to get involved in practical programs that focus on making positive changes to on-farm production and management practices. The networks are fundamental to the spread of new ideas, continuing education and the adoption of best practice, as well as providing a two-way communication platform for growers and AWI.

Networks are present in each wool-growing state and all woolgrowers are encouraged to get involved. The AWI-supported extension networks – Sheep Connect NSW, Sheep Connect SA, Sheep Connect Tasmania BESTWOOL/BESTLAMB (Victoria), The Sheep’s Back (WA) and Leading Sheep (Queensland) – have seen another successful year.

99 events were held throughout the year; the satisfaction rating of participants with the events was rated 8.7 out of 10 (an increase from last year). All states

are performing well above target with the national average annual cost saving to woolgrowers participating in the networks in 2018/19 being \$3,682 (an increase of \$764 from 2017/18).

These events included the ‘RAMping Up Repro’, ‘Picking Performer Ewes’ and ‘Winning With Weaners’ workshops, developed by AWI to help woolgrowers identify key practical actions to implement on-farm to achieve improved productivity. The workshops are rolled out through the AWI state-based extension networks in conjunction with leading deliverers.

IT’S EWE TIME! FORUMS

It’s ewe time! forums were held at 17 locations:

- NSW: Cooma, Gunning and Cowra in July 2018; Dubbo and Walgett in August 2018; Deniliquin in February 2019; Armidale in April 2019.
- Queensland: Longreach, Tambo, Dirranbandi and Mitchell in August 2018
- Victoria: Birchip and Benalla in February 2019
- South Australia: Jamestown, Karoonda and Naracoorte in March 2019
- Tasmania: Campbell Town in June 2019.

These popular half-day forums, which are a joint initiative between AWI and Meat & Livestock Australia, are designed to showcase timely practical tools and tips and information to help sheep producers improve on-farm productivity and profitability.

Most of the presentations were recorded and are available on the Making More From Sheep website at www.makingmorefromsheep.com.au/presentations.

Each presentation includes the presentation slides along with the audio of the presenter in the one video file, so people can listen to the presenter and follow along with the slides at the same time.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Over 10 practical sheep skills training events held across the country each year, reaching over 100 people and at an average cost not exceeding \$150 per effective participant.	● 34 practical sheep skills training events were attended by 1,153 people, providing informative and applicable information to participants. These courses were delivered at an average cost of \$31 per participant.
Delivery of the National Merino Challenge on a fixed annual budget in real terms.	● The National Merino Challenge engaged 390 tertiary and secondary students from NSW, Qld, Vic, Tas, SA and WA. The three events were delivered on a fixed annual budget in real terms.
Average annual cost saving to woolgrowers participating in AWI-supported networks exceeds \$700, net of AWI and grower costs.	● Average national self-reported cost savings of participating in AWI-supported networks exceeded \$3,200 per grower.
Achievement of a minimum of 8,000 page-views for practical sheep management resources on AWI websites at a maximum cost per hit of \$1.50.	● Practical sheep management resources on AWI websites were accessed more than 250,000 times. AWI research and knowledge was leveraged to provide meaningful, useful information to woolgrowers with minimal cost.

“Now in its seventh year, the National Merino Challenge has provided nearly 800 secondary and tertiary students with the basic skills involved in the wool industry.”

AUSTRALIAN RURAL LEADERSHIP PROGRAM

AWI's Australian Rural Leadership Program (ARLP) position was this year awarded to Kirsty Wall from Bukkulla near Inverell in NSW, who commenced ARLP Course 26 in July 2019.

David Young from Bookham in NSW commenced his AWI-supported Course 25 in July 2018, while Stacey Lugsdin from Hay in NSW completed Course 24 in October 2018.

The ARLP graduates funded through the program by AWI use their learnings for the benefit of rural and regional Australia, and the sheep and wool industry in particular.

NUFFIELD FARMING SCHOLARSHIPS

Anthony Close of Culla in Victoria was awarded AWI's 2019 Nuffield Farming Scholarship to research the factors that have caused the reduction of Australia's sheep flock during the past 20 years. His research aims to identify ways that the Merino industry can grow to become a more prominent feature of the Australian farming landscape.

At the Nuffield Conference in September 2018, AWI's 2017 Nuffield Farming Scholarship recipient, Felicity McLeod of Wentworth in NSW, presented the findings of her research into how to increase income potential through diversification in pastoral wool enterprises.

YOUNG FARMING CHAMPIONS

Two young shearers - Tom Squires from Tasmania and Matt Cumming from Inverell in northern NSW - were announced in June 2019 as the latest crop of enthusiastic Young Farming Champions, sponsored by AWI.

AWI has been involved in the program, run by Picture You in Agriculture, since 2012 and has now sponsored 23 Young Farming Champions during this time.

They actively engage with the public and school students, spreading their passion for wool, bridging the rural-urban divide, and inspiring the next generation of youngsters to consider a career in the wool industry.

SHEEP CLASSING WORKSHOPS

AWI ran 12 one-day, hands-on sheep classing workshops (NSW 7, Victoria 2, South Australia 2, Tasmania 1), for people of all ages and enterprises, that are a practical way to learn about increasing the production of their Merino flocks.

Through a combination of theory and hands-on components, experienced sheep classers lead the workshop and take commercial producers through the process of classing sheep, including understanding the type of sheep that breeders are aiming for, comparing individual traits between sheep, and other sources of information.

NATIONAL MERINO CHALLENGE



Students testing their wool appraisal skills at the National Merino Challenge (NMC) this year in Sydney.

AWI held the National Merino Challenge (NMC) in May 2019 in Sydney, attracting 161 students from 23 institutions across NSW, Victoria, SA, WA and Tasmania. Now in its seventh year, the NMC has attracted nearly 800 participants.

The NMC involves presentations from industry professionals to enable young people to develop their industry knowledge, skills and networks. During the two-day event, the students are educated and then assessed on their skills across a range of areas such as feed budgeting, condition scoring, breeding objectives and wool harvesting together with the commercial assessment and classing of animals and fleeces.

As part of the planning process for the 2019 NMC and to maximise interest in the event, the NMC was promoted at regional workshops, resulting in an increasing number of contacts with schools, colleges and teachers.

OTHER YOUNG WOOLGROWER INITIATIVES

AWI continued to support multiple wool and sheep industry young grower initiatives across Australia, contributing to, amongst others:

- Science and Innovation Awards for Young People in Agriculture (Hugh McKay of Henty in NSW, who is developing a prototype automated trailer system that is capable of building farm fences)
- AgriFutures Horizon scholarships
- Hay Inc. rural traineeship program
- National Merino Sheep & Merino Fleece Judging Competitions
- Young Stud Masters Muster at the Australian Sheep & Wool Show
- Corriedale Youth judging and stockmanship initiative
- Farm Business Boot Camp
- Charles Sturt University and University of Sydney Sheep & Wool Tour
- Murdoch University Sheep & Wool Tour
- SA Sheep Expo.

WOOL HARVESTING & QUALITY PREPARATION

HIGHLIGHTS OF 2018/19

SHEARER AND WOOL HANDLER TRAINING

In 2018/19, AWI funded training for shearers and wool handlers across a range of skill development activities. These included from learner to professional shearers and from novice to professional wool handlers.

The aim of the training is to attract and train new workers into the wool harvesting industry, and also build the capacity of existing staff through improved work practices (shearing speed and quality) and longevity in the workforce.

In the past financial year, more than 1,500 days training were delivered through AWI-funded programs across Australia (see table below), which was a similar amount to the previous year. The delivery was a combination of in-shed training, novice schools and workshops.

AWI-funded training in the Shear-Jitsu technique, the new way to perform the catch and drag continued this year.



An AWI-funded shearing school held at Tambo in Queensland in August 2018, which proved very popular. Photo: Sally Cripps, Queensland Country Life.

2018/19 SHEARER AND WOOL HANDLER TRAINING ACTIVITIES*		NSW	WA	Vic	SA	Qld	Tas	2018/19 TOTAL
In-shed shearer coaching	Days:	425.5	224	134.2	78.75	8	13	883.45
	Number trained:	1,309	933	375	299	27	38	2,981
In-shed wool handler coaching	Days:	122.5	114	86.5	49.75	-	31	403.75
	Number trained:	350	257	251	136	-	118	1,112
Novice/workshops	Days:	16	35	35	41	15	-	142
	Number trained:	72	114	86	273	48	-	593
Shear-Jitsu coaching	Days:	72						72
	Number trained:	980						980
TOTAL TRAINING DAYS PROVIDED		636	373	255.7	169.5	23	44	1,501.2
TOTAL NUMBER COACHED/TRAINED		2,711	1,304	712	708	75	156	5,666

* In addition to the above, during 2018/19 there were 16 online training sessions through the Lojik training website during which there were 3,357 views by shearers.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Increase shed productivity by, on average, four sheep per day by 2019 across the whole industry.	● AWI has engaged and trained 15,172 through developing shearer and in-shed skills, techniques and practices. On average, shearers increased the number of sheep shorn safely by more than 20 per day.
Cost per person trained remains constant in real terms.	● AWI has engaged and trained 15,172 people interested in joining or being a part of the shearing industry. Across 4,500 days of training, participants have learnt the basics of shearing, how to extend their careers, protect their body and care for sheep.
Commercial availability of at least one technology, by 2019, to increase the efficiency of wool harvesting.	● The 'best practice shed design' project has been developed with open days for growers to investigate opportunities to improve the efficiency of their shearing operations.

“AWI’s funding of shearer and wool handler training ultimately aims to improve returns to woolgrowers by increasing the value and quality of their wool clip.”

Provided by Registered Training Organisations (RTOs), and AWI’s Independent Coaching Program (ICP), the face-to-face training focused on shearers and wool handlers in the shed, particularly on increasing their productivity, skills development and professionalism. The ICP is proving very successful at providing AWI with an avenue to contract directly with experienced trainers, reducing administrative costs and is proving a cost-effective way of delivery.

In addition to face-to-face training, AWI also funded online training through the Lojik training website and Facebook page run by world shearing record holder and top shearer trainer Dwayne Black. More than 3,300 views by shearers during 16 online training sessions were held during the year. The popular online learning resource for shearers helps them perfect their techniques, which in turn improves the quality of woolgrowers’ clips.

SHEAR EASY TRAINING CAMPS



Trainers Paul Hicks, Dylan Fowler and Stacey Te Huia with the Sandilands Shearing team on the Shear Easy training camp at Andrew Heinrich’s ‘Ella Matta’ property on Kangaroo Island, South Australia.

AWI along with The Evolved Shear Fitness sponsored three new Shear Easy training camps to help improve shearers’ performance in the shed or on the competition board. The five-day training camps were held at Dubbo (NSW) in August 2018 and June 2019, and at Kangaroo Island (SA) in April 2019. The Dubbo camps also included an accompanying course for advanced wool handlers.

As well as learning how to improve their technique and gear, an emphasis was placed on improving their fitness, nutrition and how to take care of their body to reduce the risk of break downs.

The shearers learnt from some of the best in the industry, including Wayne Hosie, Stacey Te Huia, Daniel McIntyre, Paul Hicks and Dylan Fowler – and wool handler trainers Penny Clout and Rachael Hutchison.

SHEARING SHED DESIGN

Over the past 18 months, shearing contractor Hilton Barrett, with the support of AWI, went through a rigorous process to create an innovative shearing shed design.

Through extensive consultation with shearers, wool handlers, classers and woolgrowers the shed designing process addressed the following criteria and their relationships:

- efficiency for workers and the flow of livestock
- worker safety
- quality wool preparation
- animal welfare.

Based on this design, the shearing shed was built at Dubbo in NSW during 2018/19.

The shed blueprints, along with documentation and video files, are available free on the AWI website at www.wool.com/sheddesign to woolgrowers who may be interested in building a new shed or renovating a current shed.

SHEARING AND WOOLHANDLING COMPETITIONS

In 2018/19, AWI provided support to 46 local shearing competitions across the country affiliated with Sports Shear Australia: NSW 17, Vic 9, SA 8, WA 9, Tas 3. Part of AWI’s support includes payment of entry fees for novice shearers and wool handlers.

AWI also provided support to state and the national shearing and woolhandling championships.

The aim of providing support to shearing competitions are to promote excellence in the wool harvesting industry, encourage young people to join the industry, and encourage continued development of techniques in shearing and woolhandling.



AWI-sponsored Under 21 shearing competition at Boddington in Western Australia.

STAKEHOLDER

HIGHLIGHTS OF 2018/19

INDUSTRY STAKEHOLDERS

AWI has undertaken a significant review of its consultation activities over the past strategic period, commencing in 2016 and particularly since the completion of the 2018 Review of Performance.

In January 2019, AWI held a Strategic Planning Workshop, involving 25 woolgrower groups and a representative from the Department of Agriculture, to participate in identifying woolgrower priorities to guide AWI's research, development and marketing activities for the next three years. The feedback provided was invaluable to the development of AWI's 2019/20 to 2021/22 Strategic Planning process and AWI's new consultation model.

This new consultation model, which replaces the AWI Woolgrower Industry Consultative Committee (ICC), has two key forums: a core group of the AWI Woolgrower Industry Consultation Panel (WICP) and a broader group of the AWI Woolgrower Consultation Group (WCG). This model strikes a balanced position, meeting the expectations of woolgrowers, woolgrower representative groups, government and AWI's business needs.

AWI's objective is to provide a model, through the new WICP and WCG, which provides a more effective, respectful and meaningful two-way consultation with woolgrower representative bodies. AWI sought to ensure the model is inclusive of more groups, to bring feedback from the varied regional and organisational perspectives, while ensuring there was a core group that AWI could engage more regularly on more specific issues.

WICP meetings will be held three times per year and the WCG workshop will be held once a year to coincide with key dates in AWI's planning cycle, enabling industry feedback to be considered in the company's decision-making.

The changes to AWI's consultation model are focused on improving the flow of information to and from industry representative groups to increase transparency of reporting. Publication of all previous stakeholder engagement correspondence is updated regularly on AWI's website at www.wool.com/consultation.

MARKET ACCESS AND SUPPLY CHAIN ENGAGEMENT

AWI works with domestic and foreign governments and welfare stakeholders in key markets to minimise the obstacles to commercial trade and to manage sensitive issues in order to protect the industry from external threats.

This year, AWI continued its trade and market access activities, which were mainly focused around market maintenance.

AWI also continued engagement with the supply chain, focusing on sustainability and traceability issues.

AWI hosted the Animal Welfare Forum and meetings with key welfare stakeholders in Australia and internationally to update stakeholders on AWI's sheep welfare R&D extension program.

GOVERNMENT STAKEHOLDERS

AWI has regular and informal discussions and meetings with government officials on a range of issues. AWI aims to work productively with government stakeholders to ensure a sufficient understanding of the wool industry, AWI priorities, and outcomes of AWI's investments, and to ensure statutory compliance.

AWI also meets with the Department of Agriculture on a six-monthly basis to ensure AWI is compliant in the 2016-2020 Statutory Funding Agreement (SFA). This agreement will be reviewed again in October 2020.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
AWI reports on and meets its statutory requirements every six months.	● AWI has engaged extensively with the Australian government through biannual meetings with relevant state and federal key personnel. AWI partially complied with two and did not comply with one statutory requirement within the agreed time frame. These have been recognised and incorporated into the new strategic period.
Measure positive change in stakeholder awareness of AWI's activities and outcomes (evidenced through annual stakeholder surveys).	● Key stakeholders for AWI reported to show a greater awareness of AWI's activities and outcomes. These results further showed that producers are performing more effectively.

“The new consultation model aims to provides a more effective, respectful and meaningful two-way consultation with woolgrower representative bodies.”

R&D PRIORITIES IDENTIFIED IN AWI’S CONSULTATION AND INTEGRATED INTO AWI’S ANNUAL OPERATING PLAN

Priorities identified by ICC members	Priorities identified in other grower consultation	Integration of these priorities in AWI’s Annual Operating Plan
<ul style="list-style-type: none"> Animal welfare Flystrike Wild dog and other vertebrate pest control Diseases – ovine brucellosis, foot rot, OJD Lice Expanding LTEM program Genetics and genomics 	<ul style="list-style-type: none"> Lamb survival Reproduction Weaner management and early weaning Wild dogs – fencing, baiting Diseases – ovine brucellosis, footrot Paraboss – lice, worms and flies Pain relief Animal health and nutrition Seeking alternatives to mulesing Investment in flystrike prevention Investment in genetics and genomics 	<p>Strategy: Healthy Productive Sheep</p> <ul style="list-style-type: none"> Program: Sheep Health & Welfare Program: Vertebrate Pests Program: Reproduction Program: Genetic Improvement
<ul style="list-style-type: none"> On-farm technology Ear tag technology 	<ul style="list-style-type: none"> On-farm technology eIDs Water monitoring 	<p>Strategy: Farm Automation & Software Development</p>
<ul style="list-style-type: none"> WoolQ Increase in shearer and wool handler numbers Shed safety training Wool harvesting alternatives More wool classers and better training Lower costs of production Enticing young people into the industry Improving grower consultation Advice on clip preparation Decline in wool production 	<ul style="list-style-type: none"> Shearing alternatives Flexibility in clip preparation Tools and guidance on yard design/infrastructure Sheep handling efficiency and training Training for new entrants in the industry Wool Exchange Portal (WEP) Business management Supply chain and market knowledge Invest in more agri-tech 	<p>Strategy: Training & Technology Uptake</p> <ul style="list-style-type: none"> Program: Wool Harvesting & Quality Preparation Program: Sheep & Wool Management Skills Program: Woolgrower
<ul style="list-style-type: none"> Research into wool’s eco-credentials Fibre advocacy Life Cycle Assessment (LCA) Climate change 	<ul style="list-style-type: none"> Feedbase education Soil and pasture health Feedlotting Dry time feeding Water security Labour shortages 	<p>Strategy: Feedbase & Fibre Advocacy</p> <ul style="list-style-type: none"> Program: Fibre Advocacy Program: Feedbase & Eco-credentials
<ul style="list-style-type: none"> Educating the global supply chain on the Australian wool industry Research into impact of a live export ban on wool industry 		<p>Strategy: Consultation</p> <ul style="list-style-type: none"> Program: Woolgrower Program: Stakeholder
<ul style="list-style-type: none"> Dominance of China Providing training to retailers 	<ul style="list-style-type: none"> Chlorine in early stage processing Educating students on industry practices 	<p>Strategy: Processing Innovation</p> <p>Strategy: Education Extension</p> <ul style="list-style-type: none"> Program: Consumer Education Program: Trade Education Program: Student Education
<ul style="list-style-type: none"> Marketing for superfine wool Marketing for broad wool Update on Campaign for Wool 	<ul style="list-style-type: none"> Measurement of success of Marketing program Address the issues around sustainability, synthetics vs wool, woollen blends and recycling of woollen cloth and garment etc Address risks to supply chain integrity 	<p>Strategy: Fashion</p> <ul style="list-style-type: none"> Program: Menswear Program: Womenswear <p>Strategy: Global Campaigns</p> <ul style="list-style-type: none"> Program: The Campaign for Wool

WOOLGROWER

COMMUNICATIONS TO WOOLGROWERS

Direct communications to woolgrowers continued to be a major focus for AWI this year. The aim primarily is to keep woolgrowers up-to-date on AWI activities, make them aware of marketing initiatives to increase the demand for Australian wool, and provide them with information on new R&D to improve on-farm productivity and profitability.

Regular communications this year included the quarterly *Beyond the Bale* magazine and related e-newsletter, monthly e-newsletters, 45 editions of AWI's The Yarn podcast, the Wool.com website, advertorials in rural newspapers, *The Broader View* newsletter for non-Merino woolgrowers, and various social media channels. A new initiative this year was the production twice-yearly of six versions of the *AWI In Your State* publication that highlight key AWI on-farm results and resources in each of the six wool-growing states.

AWI also attended and/or presented at sheep and wool industry events across the country.

COMMUNICATIONS FROM WOOLGROWERS

Woolgrowers can provide feedback to AWI in person at the many industry events across the country attended by AWI staff and Board members. Woolgrowers can also communicate with AWI via the free AWI Helpline telephone number 1800 070 099, AWI Sydney telephone number (02) 8295 3100, email address

feedback@wool.com, the Wool.com 'Contact Us' online form, and post (including the 'Feedback Postcard' distributed with every edition of *Beyond the Bale*).

MARKET INTELLIGENCE

AWI's Weekly Price Reports were provided each Friday via email and are available on the Wool.com website. Woolgrowers can also receive wool prices daily and market intelligence weekly on their mobile phones via SMS. Subscribe for free at www.wool.com/sms.

AWI's monthly Market Intelligence Reports were provided as part of AWI's monthly e-newsletter for woolgrowers and on the AWI's website.

Market intelligence data was also disseminated at various woolgrower and trade events throughout the year. Trade data and market intelligence reports were provided on demand to trade participants, educational institutions, manufacturers and retailers. Ongoing market intelligence wool pricing updates and special interest reports were provided quarterly in *Beyond the Bale*. There was also physical presentation of market intelligence reporting at trade conferences, seminars, field days and congresses.

Three Australian Wool Production Forecasting Committee reports were released – in August 2018, November 2018 and April 2019. AWI and MLA's joint Wool and Sheepmeat surveys of producers were conducted in October 2018 and February 2019.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Provide multiple channels for shareholders to access and consult AWI directly, in person at specific and industry events or digitally.	● AWI has developed numerous avenues for woolgrowers to learn about the industry, AWI operations and methods of consultation. These include the quarterly <i>Beyond the Bale</i> magazine, The Yarn podcast, SMS text services, direct emails, field days, extension networks, publications in rural newspapers and attendance and support of rural and regional events.
A greater awareness amongst shareholders of the ongoing research, development and marketing projects conducted by AWI for the wool industry.	● Throughout the strategic period, producers have displayed a greater awareness of AWI's activities and outcomes. Lack of awareness of AWI extension networks has decreased by 7% and awareness of marketing campaigns has remained at 84%. Producers however believe AWI is performing more effectively. Woolgrowers' rating of AWI's efforts to increase demand from wool increased from 5.8 to 7.0, improve the profitability of woolgrowers increased from 5.7 to 6.7, and provide market access for Australian wool increased from 5.9 to 7.0.
Provide a more customised flow of information to and from shareholders, delivered regularly and digitally through <i>Beyond the Bale</i> quarterly and newsletters monthly.	● AWI continued to establish its flow of information to and from shareholders, with <i>Beyond the Bale</i> achieving a very positive 95% value rating.
Create the most valued market intelligence in the wool industry.	● 78% of growers identified AWI market intelligence reports as having some or considerable value. Comparative statistics, however, do not exist.
Continue to provide strong and recognised support for over 50 wool industry events nationwide.	● More than 86 industry events were supported (excluding WoolPoll and SFO events). Events included forums and workshops (practical skills, It's ewe time!), field days, sheep shows and ewe competitions.

PROCESSING INNOVATION & EDUCATION EXTENSION

AWI has undertaken direct product development with Italian machinery company Santoni to create innovative Merino wool garments for the yoga market using seamless knitting technology.



PORTFOLIO OBJECTIVE

To increase the profitability and sustainability of wool processing.

STRATEGIES

Processing Innovation

PROJECT EXPENDITURE

\$1.992 million in 2018/19
\$4.577 million in 2016/17-2018/19

PROGRAMS

- Processing Innovation

Education Extension

\$4.901 million in 2018/19
\$14.564 million in 2016/17-2018/19

- Student Education
- Trade Extension
- Consumer Education

PROCESSING INNOVATION

HIGHLIGHTS OF 2018/19

Over the past three years, there has been a growing interest in wool for technical sports and outdoor applications beyond wool base-layers. Concurrently, in fashion markets there has been a growing need for function and more technically minded materials without the loss of desirability. Furthermore, companies that have always been synthetics-based are also seeing the opportunity to build in a 'naturals' component to their offering.

2018/19 was a year in which these market needs crystallised in the form of specific R&D and marketing partnerships that are yielding unique opportunities for wool. The Woolmark Company has drawn upon process developments, machine capability and construction techniques to optimise wool for increased performance and resilience, building on its naturally innovative qualities. Some highlight projects include:

- A partnership with Jeanologia, a machine producer specialising in the dyeing and finishing of denim, to commercialise a new process for shrink resist wool in garment form without the use of chemicals and water. Launched at ITMA 2019, the machine and process has been commercialised.
- Woven product development for compression elastomeric fabrication for running and cycling designed to provide superior wind resistance comfort and warmth with Italian performance weaver Tessitura Taiana.
- Commercialisation of wearable technology under the KnitWarm brand in China where conductive yarns are integrated throughout the knitted fabric allowing for heat to effectively be conducted on demand when the temperature drops (see right).
- New yarn developments such as Nuyarn and Lincspun Tech have led to increased performance attributes and these are being utilised commercially – the former in a partnership with Black Diamond with the development of the world's lightest climbing and hiking T-shirt which is a highlight of an ongoing product focused partnership (see right).
- LA-based athleisure brand APL launched its TechLoom Breeze wool runner in January 2019, followed by a 10-piece Woolmark-certified Merino and Merino blend capsule collection (see right).
- The development of a three-way partnership with Amsterdam-based textile innovation studio BYBORRE and adidas to develop an extreme cold weather kit, with wool at its core, for an expedition to the North Pole in winter 2020.

- Development of sailing kit in wool and wool performance blends for the Luna Rossa Prada Pirelli boat team, on and off the boat, competing in the America's Cup. See page 20.
- Nagnata and P.E Nation, two desirable brands bridging active and streetwear, utilised new flat bed and circular knitting technology to develop desirable performance orientated product for fitness, health and wellness. See page 21.
- Leading surf brand Outerknown launched the first board short made from 100% wool utilising Neulana Protect. See page 21.

Footwear developments continue to be an important growth area for wool. Developments of highly technical yarns have enabled better functionality for footwear such as greater strength, abrasion resistance and comfort. Previously seen in the sports and outdoor market, wool footwear developments have now extended into lifestyle and fashion markets. The Woolmark Company supported Neeman's with the development of a wool fabric for a shoe which was successfully launched in India.

Machinery collaborations:

- Working closely with flat-knit and whole garment machinery manufacturers such as STOLL, Shima Seiki and Santoni (see previous page), new products have been produced for sports categories such as cycling, yoga, run and lifestyle.
- Focused technical developments for soft tailoring, such as knitted jackets, has seen opportunities for product development in an untapped, potential growth market.

Ongoing areas of research include processes that have a reduced environmental impact, eg reduction in water, energy and chemical consumption, and streamlined manufacturing processes eliminating unnecessary steps and reducing wastage. Finding smarter solutions for the processing of wool from fibre through to end product is an ongoing commitment. Some examples include:

- Research into advanced garment construction through No sew techniques.
- Printing techniques such as digital print and low temperature sublimation, which allows for increased flexibility and personalisation, consuming less water, chemicals and energy.
- The use of natural dyestuff and the development of less impactful dyeing processes.
- Non chlorine treatment for shrink resist wool.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Develop and commercialise six new processes and transfer to 15 manufacturers, yielding an average mill profit increase exceeding \$20,000 by 2019. ¹	● AWI developed and commercialised eight new processes with eight partners, developing new uses and methods of processing wool.
Develop four innovations and transfer to 33 manufacturers, yielding an average mill profit increase exceeding \$20,000 by 2019. ¹	● AWI developed nine new innovations, which were transferred to 38 global manufacturers working in the Americas, China, Hong Kong, Europe and India.

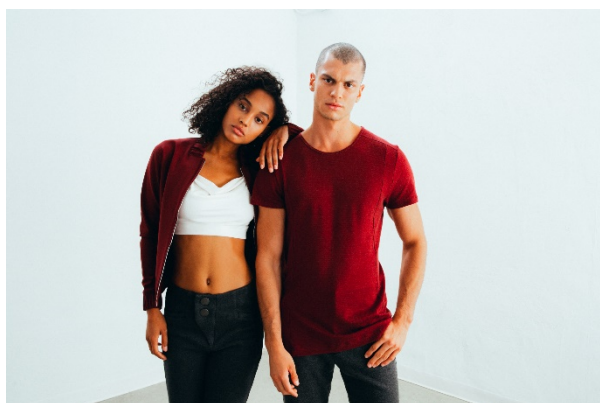
¹ Data regarding profit margins has been difficult to capture and substantiate.

“Through technology transfer, we assist manufacturers to adopt innovative technologies that add significant value to their wool products.”

APL'S WOOL RUNNING SHOES & APPAREL

Hot on the heels of the launch this year of its inaugural wool running shoes, LA-based Athletic Propulsion Labs (APL) released a 10-piece apparel collection, again highlighting Australian Merino wool.

The elite athleisure brand – whose products are regularly seen on celebrities including the Kardashians, Jessica Alba and even Oprah – collaborated with The Woolmark Company, to develop the wool apparel which the brand calls its “most sustainable and luxe apparel collection”.



APL's Woolmark-certified 10-piece Perfect Merino Wool Apparel Collection and its TechLoom Breeze Merino wool sneakers provide optimum comfort.

BLACK DIAMOND'S NUYARN

Leading mountaineering and outdoor brand Black Diamond made its first foray into using wool, with its millions of customers in 40+ countries across the world this year showcased the new ultralight Rhythm Tee made from the fibre.

It features a breakthrough co-developed Nuyarn Merino wool fabric technology at a superlight 95gsm – making it significantly lighter than other T-shirts, while increasing durability and performance. The machine washable fabric is breathable and engineered for incredible stretch and much faster drying times.



The new Rhythm Tee from US outdoor brand Black Diamond is perfectly suited for pursuits such as trail running and rock climbing.

KNITWARM'S SELF-HEATING TECHNOLOGY

The Woolmark Company's technical team worked closely with wearable technology company KnitWarm to develop wool-rich garments that incorporate electric self-heating technology.

KnitWarm is a first-of-its-kind, self-heating textile, with unique softness, flexibility and breathability. It will heat up within 30 seconds to offer instant warmth after plugging into a portable 5V/2A power bank, which can be controlled by a mobile phone app, and can also be made to be machine washable.



Suedwolle and Taiwanese mill Chia Her showcased KnitWarm technology in a wool rich 4-in-1 jacket, winning a prestigious ISPO Award.

BYBORRE'S THE LAYERED EDITION™

The Autumn/Winter 2019 collection of leading knit innovator BYBORRE, titled The Layered Edition™, developed in partnership with The Woolmark Company, incorporates three unique knitted fabrics developed with Merino wool yarns from Chinese company Xinao.

Placement of the BYBORRE fabrics on particular parts of a garment have been deliberately used for a desired functionality. For example, heavier fabrics like the 3D™ have been used to provide warmth, whereas lighter weight fabrics like the 8-Bit™ are used in areas that require a higher range of motion or which are warmer.



Pieces from BYBORRE's collection that demonstrate how several different Merino wool multi-layer fabrics have been used in a single garment.

STUDENT EDUCATION

HIGHLIGHTS OF 2018/19

WOOL4SCHOOL

AWI's Wool4School fashion design competition continues to go from strength to strength. First launched in 2012, Wool4School has now involved about 100,000 students globally not only learning the fundamentals of design but also exploring the benefits and versatility of wool and the fabric it creates. The design project is planned carefully to fit within the curriculum of each region and country in which it is held.

Now in its ninth year in Australia, the Wool4School design competition builds knowledge about Australian Merino wool among the nation's school students. It is open to all Australian school students from years 7 to 12, allowing all high school students to explore the versatility of Australian Merino wool and gain insights into the fashion industry. 13,444 Australian school students are registered for this year's competition.

Overseas, following the launch of the competition into England in June 2017, the Wool4School design competition was extended and held this year in the whole of the United Kingdom (England, Scotland, Wales and Northern Ireland). The competition this year was also held in Italy for the first time, and again in Hong Kong following the extension of the competition into this important region in 2015.

LEARN ABOUT WOOL WEBSITE & KITS

Complementing AWI's Wool4School fashion design competition, AWI's Learn About Wool website (www.learnaboutwool.com) and kits, tailored to both primary and high school teachers and students, continued to offer a flexible and interactive range of resources that can easily be incorporated into everyday classroom activities. Work this year continued on updating the kit, for example to emphasise the natural, renewable and biodegradable aspects of wool.

TERTIARY EDUCATION

Seminars explaining the attributes, benefits and versatility of wool to textile and fashion students in the early stage of their careers are an important component of AWI strategy. There has been a greater than expected interest at a tertiary level globally for educational materials and seminars from both fashion design and textile engineering institutions.

The Woolmark Company's 'Naturally Inspiring' seminars were held in Melbourne in August 2018, and overseas in Istanbul in March 2019 and London in May 2019.



Fashion and textile students at the Première Vision trade show in Istanbul received an education about wool at a seminar run by The Woolmark Company.

'Merino Wool' seminars were held at the Première Vision trade shows and attended by visiting students from a range of fashion and textile colleges across Europe. 20 students from four universities were also taken on an exclusive tour to visit key global manufacturers exhibiting at Première Vision.

Examples of other institutions across the world, to which seminars and the Wool Appreciation Course were presented by The Woolmark Company this year, include amongst many others:

- **China:** Beijing Institute of Fashion Technology, Xi'an Polytechnic University.
- **France:** Aix-Marseille University, Institut Francais de la Mode, École Duperré Paris.
- **Germany:** AMD Akademie Mode & Design Düsseldorf, Hochschule Hannover, Atelier Chardon Savard Berlin, Weißensee Academy of Art Berlin.
- **India:** National Institute of Fashion Technology, National Institute of Design, Pearl Academy, Indian Institute of Technology, DKTE, ISDI, VJTI.
- **Italy:** Politecnico di Milano, NABA, Domus Academy, Istituto Marangoni, IED Milano, Politecnico di Torino.
- **Japan:** Bunka Fashion Graduate University, Bunka Fashion College, ESMOD Japan, Tokyo Mode Gakuen.
- **Netherlands:** Zuyd University of Applied Sciences, Maastricht Academy of Fine Arts, Summa College.
- **Turkey:** Marmara University, Bilgi University, Ege University, Mimar Sinan University, Halic University.
- **USA:** Parsons School of Design, Bergen Community College, Colorado State University, Fashion Institute of Technology, Thomas Jefferson University.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Directly engage participants at an average cost per effective participant of \$10.	● More than 125,000 primary, secondary, and tertiary students across 14 countries were engaged through educational program about Australian wool. This was cost at an average cost per head of \$12.22. Efforts to broaden the reach of educational programs will be pursued through the launching and further development of the Woolmark Learning Centre.

“Seminars and courses are held globally to educate and inspire future generations about the attributes and benefits of Australian wool.”

In China, the seven core units of the Wool Education Courses (Wool fibre science; Introduction to wool processing; Raw wool scouring; Worsted top making; Woollen and worsted spinning; Wool dyeing; Wool fabric finishing) were delivered to 32 textile engineering students at Yantai-Nanshan University in September-October 2018 and April-May 2019. Agreed units were delivered to textile engineering and some design students at:

- Jaixing University in November 2018
- Xian Polytechnic University
- Wuhan University
- South Western University (Chongqing)
- Dong Hua university summer school in June 2019.

In June 2019, 12 design students from University Technology Sydney visited Yantai-Nanshan University forming teams with Chinese textile engineering students to design and weave innovative textiles from wool.

In India, a train-the-trainer workshop was held with representatives of 10 Indian universities, institutes and textile colleges to discuss the Woolmark wool education program. Three universities have obtained copies of the Woolmark course materials to use as part of their teaching program

TERTIARY STUDY TOURS

AWI helps support wool supply chain study tours of Australia for overseas students. Examples in 2018/19 included the winners of the AWI-supported Hong Kong PolyU Institute of Textiles and Clothing's graduation awards; the winner of the Bunka Fashion Graduate University award (Japan), the winners of the two Merino Awards (China), the winners of the Xinao 'Knit for Next' knitwear award (China), the 'Biella Masters' postgraduate students (Italy); and students from the IED Institute of Design (Spain).

Study tours overseas included The Woolmark Company Prato Study Scholarship in which two Australian students visited the industry at Biella in Italy (following a previous visit to a wool-growing property in Geelong).

For Australian tertiary students, AWI organised for a group from the Whitehouse Institute of Design, Raffles College, University of Technology Sydney and TAFE NSW to visit wool-growing properties to further expand their understanding of wool's farm to fashion journey.



Fashion and textile students from Sydney visit Belgenny Farm to see the on-farm side of the wool supply chain.

TERTIARY SPONSORSHIPS & COMPETITIONS

AWI provided sponsorship and supported leading textile student design prizes to educate early career textile designers about the benefits of working with Merino wool. Examples this year included:

- **Australia:** AWI partnered with Sydney-based Calcoup Knitwear to sponsor Isabella Snelson as part of her BA (Hons) fashion and textile design studies at University of Technology Sydney. A Woolmark Sponsorship Prize was also awarded to Valeska Dominguez at the Ultimo TAFE Fashion Design Studio in Sydney.
- **China:** AWI's Merino Awards were presented at Shanghai International College of Fashion and Innovation at Donghua University and the Beijing Institute of Fashion Technology; and the Xinao 'Knit for Next' knitwear awards were sponsored.
- **Hong Kong:** AWI sponsored the Hong Kong PolyU Institute of Textiles and Clothing's graduation award.
- **Italy:** A collaboration between AWI, American outdoor clothing brand Woolrich and Accademia Costume & Moda involved its students developing a capsule collection using Merino wool.
- **Japan:** AWI sponsored the Next Generation Award at the Bunka Fashion Graduate University and the ELLE Solidarité Mode scholarship program.
- **Turkey:** Sponsorship with the Australian Embassy to Istanbul's Bilgi University to support a Merino wool project that celebrates Australian culture.
- **UK:** AWI sponsored a TexSelect design award and a Bradford Textile Society design award.
- **USA:** AWI supported the Open Style Lab course focusing on innovative products for clients with disabilities.

India, Wool Runway: Hundreds of tertiary fashion students from 18 fashion university campuses across India learned about the benefits of Australian Merino wool, by taking part in the third annual edition of The Woolmark Company's Wool Runway initiative. This education program also gives students the opportunity to design an outfit made from Australian Merino wool and connect with key representatives from the textile and fashion industry. The students utilised the Wool Appreciation Course and nearly 200 students submitted their sketched designs to enter the competition.



The 15 finalists (front) and judging panel (back) at AWI's Wool Runway fashion design competition, at the award ceremony in Mumbai, India.

TRADE EXTENSION

HIGHLIGHTS OF 2018/19

TRADE SHOWS

AWI exhibited at the following 22 international trade shows to showcase its new product developments and The Wool Lab to brands and retailers and inform them about the benefits of wool. The target audience at each of these trade shows is retail buying teams, designers and manufacturers.

- Functional Fabric Fair – sports and outdoor wear (New York: July 2018)
- India Fashion Forum – apparel fabrics (Mumbai: March 2019)
- Intertextile – apparel fabrics (Shanghai: September 2018)
- Intex South Asia – apparel fabrics (Sri Lanka: November 2018)
- ISPO – sports and outdoor wear (Beijing: January 2019, Munich: February 2019)
- ITMA – textile machinery (Barcelona: June 2019)
- Japan Best Knit Selection – knitwear (Tokyo: December 2018)
- Milano Unica – high end textiles and fashion (Milan: July 2018 and February 2019)
- Outdoor Retailer – sports and outdoor wear (Denver: November 2018)
- Performance Days – functional fabrics (Munich November 2018 and April 2019 editions)
- Pitti Filati – knitting yarns and knitwear (Florence: January 2019 and June 2019)
- Pitti Uomo – menswear apparel (Florence: January 2019 and June 2019)
- Première Vision – woven fabrics and wovenwear (Paris: Sept 2018 and February 2019, Istanbul: October 2018)
- SpinExpo – knitting yarns and knitwear (Shanghai: September 2018).
- TITAS – innovative textiles (Taipei: October 2018).



The Woolmark Company's booth at SpinExpo in Shanghai in September 2018.

AWI's presence at trade shows provides an important source of leads for continual business development as well as the opportunity to support our trade partners. Following the trade shows, workshops about AWI's innovation collections and The Wool Lab (see following page) were held individually with retailers and brands.

The AWI Marketing & Design team supported AWI's presence at trade shows and trade development by providing marketing collateral, from trade show booth design to bespoke presentations for key brands.

THE WOOL LAB

AWI's The Wool Lab – the seasonal guide to the best wool fabrics and yarns in the world – continues to be a global success and an important tool for the fashion industry, including brands, retailers, manufacturers, spinners, weavers and the media.

The Wool Lab contains a selection of the most innovative and quality wool fabrics and yarns commercially available on the market from the best spinners and weavers in the world.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Operating under a fixed budget AWI will seek to generate leads at a cost (project and staff) of \$1 per lead.	● AWI and The Woolmark Company developed a near-figure of 300,000 in leads, connections, and relationships across the global supply chain. There were more than 3,000 meetings leveraging The Wool Lab, 5,000 visits to the Wool Resource Centre in Hong Kong, and 10,000 visits at The Woolmark Company trade stands.
For our technology transfer investment, we will seek to work with 45 new manufacturers by 2019, with the average profit increase per manufacturer exceeding \$20,000 annually.	● The Woolmark Company engaged with 155 industry partners, 53 of which were new. Leveraging internal expertise and prior development and innovations, skills, techniques and developments were transferred to supply chain participants globally.
The Wool Lab will seek to deliver a minimum of 350 client meetings and to determine the extent to which our clients use The Wool Lab in their products.	● The Wool Lab was utilised in more than 3,000 meetings globally with designers and industry members drawing inspiration from developments and trends displayed. More than 65,000 swatch requests placed directly to wool processors increased the demand and use of wool globally.

“At leading global trade shows, we continually explore new ways to promote Australian wool along the supply chain.”

What initially started in 2011 as an inspirational guide divided in macro trends, The Wool Lab this year evolved to become a more functional guide.

It is now divided into product categories to facilitate and better address the research and sourcing of fabrics and yarns.

The Wool Lab spring/summer 2020

The Wool Lab guide for the spring/summer 2020 retail season, which was launched at the Pitti Uomo trade show in January 2019, presented six fashion-oriented categories:

- Suiting – woven formal fabrics
- Outerwear – woven fabrics for outerwear
- Shirts & blouses – woven fabrics for shirts, dresses and printed fabrics
- Jersey & knitwear – circular knitted fabrics and yarns
- Informal – woven fabrics for casual wear and bottoms
- Lab – experimental inspirations.

The Wool Lab Sport and The Wool Lab Denim were also updated with the latest innovations and technical fabrics.

Following its release, AWI's team of The Wool Lab specialists had more than 420 one-on-one meetings with clients to present the edition. The spring/summer 2020 season generated more than 11,800 requests for swatches from clients, an increase from the previous spring/summer season.

The Wool Lab autumn/winter 2020/21

The Wool Lab guide for the autumn/winter 2020/21 retail season was launched at the Pitti Filati trade show in June and presented six fashion-oriented categories:

- Suiting – woven formal fabrics
- Blazers & bottoms – woven fabrics for separate jackets and trousers
- Jackets & coats – woven fabrics for outerwear and for the athleisure area
- Shirts & blouses – woven fabrics for shirts, dresses and printed fabrics
- Jersey & knitwear – circular knitted fabrics and yarns
- Lab – experimental inspirations.



Trade delegates at the Pitti Filati trade show in June 2019 viewing The Wool Lab sourcing guide for the autumn/winter 2020/21 retail season.

The Wool Lab Sport and The Wool Lab Denim were again updated with the latest innovations and technical fabrics.

Following the release of the autumn/winter 2019/20 edition in June 2018, AWI teams had 420 one-on-one meetings with clients showcasing the edition, an increase from the previous year, with more than 11,300 swatch requests from clients.

This year a new digital component was introduced to the showing of The Wool Lab at trade fairs. Using the devices provided at the booth, visitors can scan the QR code of a swatch and immediately receive an email with requested details and contact information of the manufacturer.

This digital innovation has proved popular, with increased numbers of fabric swatches requested, strengthening the connection between The Woolmark Company's supply chain network and the world's leading brands.

WOOL RESOURCE CENTRE – HONG KONG

AWI's Wool Resource Centre in Hong Kong, launched in April 2016, continued this year to showcase Australian wool and help supply chain partners develop, produce and market products in this important region for wool.

The multi-functional space acts as a global hub for wool, enabling visitors – including spinners, knitters, weavers, retailers, designers, students and garment makers – to discover the versatility of Australian wool.

About 1,800 people from 280 brands, designers, supply chain partners, educational institutions etc visited in 2018/19, an increase from the previous year. Australian woolgrowers travelling to Hong Kong were also welcomed to the Wool Resource Centre where they received presentations on developments in the region.

As well as meetings for technology transfer and product development purposes at the Wool Resource Centre, meetings in the region were also held with brands, manufacturers and retailers on site at their premises in Hong Kong and in China, and via e-meetings. The growing interest from brands for wool in footwear and seamless and warp knitting technologies continues, both in fashion and sports categories.



A seminar and networking event held for Südwole staff at The Woolmark Company's Wool Resource Centre in Hong Kong.

CONSUMER EDUCATION

HIGHLIGHTS OF 2018/19

RETAIL TRAINING

Training of retail decision makers, such as a company's buyers, merchandisers, designers and technologists continues, focusing on providing them with a 'toolkit' that both stimulates interest and builds their confidence to invest in wool product lines. It enables them to take full advantage of wool's technical and aesthetic properties.

Retail workshops were held with 25 retailers, educating 1,072 sales staff in several locations across the world about the natural properties and benefits of wool, so they can advise consumers more appropriately. Retail store managers were also trained, who in turn train their own staff.

The focus continues with large international retailers. Bespoke retail training programs (including pocket books, materials, videos, interviews with woolgrowers) completed in 2018/19 include, to Ralph Lauren, Bergdorff Goodman, Raymonds, Calvin Klein, Marks & Spencer, Lavin Sport, Black Diamond and Under Armour. The response to the training programs and materials has been extremely positive.

AWI has further refined the retail training materials, including the pocket book to meet the needs of retailers. Copies are available in hard-copy and digital formats.

AWI is now working towards expanding these materials to focus on specific product categories such as sports, knitwear and suiting.



Ralph Lauren's store managers from Russia, Middle East and Morocco who attended an AWI training seminar in Dubai about the latest trends and innovations in wool.

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
<p>Operating under a fixed budget, maximise opportunities for retail stores and consumers more broadly to access educational material on wool and its benefits.</p>	<p>● Retail workshops were held with 33 retailers, educating 1,507 to help educate sales staff in several locations across the world about the natural properties and benefits of wool, so they can advise consumers more appropriately. Retail store managers were also trained, who in turn train their own staff.</p>

BUSINESS SERVICES



AWI and its subsidiary The Woolmark Company respond to changing commercial drivers to ensure the ongoing relevance and applicability of the Woolmark brands.

PORTFOLIO OBJECTIVE

To enable AWI to operate cost effectively through the efficient provision of a range of cross-company support services.

STRATEGIES

Corporate Services

PROJECT EXPENDITURE

\$1.964 million in 2018/19
\$4.780 million in 2016/17-2018/19

PROGRAMS

- Finance Services
- People Services
- Legal Services
- Evaluation Services

Woolmark

\$1.416 million in 2018/19
\$2.983 million in 2016/17-2018/19

- Licensing
- Business Development

Digital Services

\$2.911 million in 2018/19
\$7.965 million in 2016/17-2018/19

- Digital Services

BUSINESS SERVICES

CORPORATE SERVICES

FINANCE SERVICES

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Compliance - no default notices for financial reporting.	● Across the strategic period, AWI met all its financial reporting requirements and received no default notices.
Risk - Manage the group reserves policy ensuring the reserves are maintained to target.	● The group reserves policy was adhered to throughout the strategic period.
Provide financial reports to the Board/management and audited financial statements.	● The Board and management have been provided with financial reports regularly during the strategic period at every Board/management meeting. The accounts for all subsidiaries have been completed and filed in accordance with local requirements.

PEOPLE SERVICES

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Talent Acquisition - talent recruited matches business needs.	● A number of key hires were made bringing needed talent into the business as well as feeding succession plans.
Engagement - Year on year improvement in employee engagement measure.	● A global employee engagement survey was launched in September 2018.
Workplace Culture - Compliance with local and international employment legal requirements and key HR policies globally.	● Compliance training is rolled out globally on an annual basis, to ensure employee adherence to key HR policies.


LEGAL SERVICES

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Provide legal and commercial advice and support to the company in order to reflect its strategic and commercial needs as well as mitigating risks.	● Commercially astute and legally sound advice was provided to the company on a range of matters in order to achieve business needs while limiting the company's exposure.
Manage the company's intellectual property assets to ensure that they are protected and their value enhanced and provide assistance with commercialisation.	● The company's Intellectual Property (IP) Portfolio was proactively managed to ensure that the company's IP assets remain protected globally.
Administer the affairs and corporate governance for AWI, its Board, Board Committees as well as its subsidiaries, branches and representative offices to ensure their observance of legal requirements.	● Adherence to corporate governance commitments has been attained.

EVALUATION SERVICES

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17 to 2018/19	Result achieved during three-year period
All AWI Programs will be evaluated on a routine basis.	 AWI engaged with consultants to develop a new Measurement & Evaluation (M&E) framework in the 2018/19 financial year, which has been rolled out for the 2019/20 to 2021/22 Strategic Plan. All programs have been effectively measured against the M&E framework established in the 2013/14 financial year.

Note: For further information on AWI program monitoring and evaluation, see page 70.

WOOLMARK


LICENSING

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
Maintain License numbers at the 2015 level.	 This target was not achieved. The Woolmark Company currently licenses 886 manufacturers, retailers and brands ensuring branded wool containing product is of high quality.

BUSINESS DEVELOPMENT

PERFORMANCE AGAINST STRATEGIC TARGETS





Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
75% of Key Accounts report a measurable increase in wool production or sales over the period.	 The target was not achieved. However, where information was accurately supplied, 100% of key marketing campaigns in collaboration with The Woolmark Company increased wool purchased and sold year-on-year.

Note: For further information on the work undertaken in the Business Development program, see the Marketing portfolio beginning on page 15, and the Processing Innovation & Education Extension portfolio on page 49.

BUSINESS SERVICES (CONTINUED)

DIGITAL SERVICES

PERFORMANCE AGAINST STRATEGIC TARGETS

Targets for three-year period 2016/17-2018/19	Result achieved during three-year period
By 2019, increase the amount of new customers entering the AWI/Woolmark digital eco-system by 20%.	 Through deploying a new digital engagement strategy that allowed AWI to increase its digital footprint and attract new customers, AWI was able to increase the amount of new customers entering the AWI/The Woolmark Company digital ecosystem by 240% across the strategic period.
Integrate CRM across the entire business to improve communication.	 CRM training has been conducted for all employees and is now part of the induction process for new starters. Better use of the CRM across the business has seen the number of database entries increase by 400% during the strategic period.
Ensure all offices and projects are fully supported digitally and increase overall staff awareness of these services.	 AWI's Digital team has been restructured to mirror the strategic channels and now works across the delivery of projects in all strategic areas as well as internal facing applications (eg HR, Intranet). The team also works across The Woolmark Company's global network and has delivered projects in every key language/market that The Woolmark Company works in.
Provide leadership and guidance to ensure digital future proofing of the business.	 Digital representatives now provide input into overall business strategy and have implemented effective ways of working to ensure digital growth strategies are incorporated into the wider program. New initiatives such as Augmented Reality, Virtual Reality and New Retail Technologies have led to better engagement with and education of customers. The Digital team has also been recognised for this work through numerous industry awards.

GOOD BUSINESS



Thousands of woolgrowers have started utilising WoolQ since its launch – and used the WoolQ eSpeci to capture and store their clip data in their own, personal WoolQ dashboard.

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CORPORATE GOVERNANCE

CORPORATE GOVERNANCE FRAMEWORK

Governance principles

The main provisions governing the activities of AWI are legislation applicable to AWI including the *Wool Services Privatisation Act* and other legislation applicable to both companies and not-for-profit entities; the Statutory Funding Agreement with the Commonwealth whereby AWI receives certain funding as the designated research body for the wool industry; and its Constitution.

The Board is committed to governance systems that enhance performance and ensure AWI operates legally and responsibly on all matters and maintains the highest ethical standards.

The EY Review of Performance 2018 reported on AWI's governance framework. It found that the framework is broadly in compliance with the best practice guidelines in the ASX Corporate Governance Principles and Recommendations (Principles and Recommendations) in implementing a corporate governance framework. While AWI is not a listed company, it uses these principles as guidance in its governance practices to the extent that they are reasonably applicable to AWI's circumstances as a not for profit entity with charitable objects to act in the best interests of Australian woolgrowers.

Board functions and responsibilities,

Key functions and responsibilities for the Board are set out in the Board Charter. These include:

- Defining the Company's purpose and setting the Company's strategic objectives by providing input into management's development of, and approving, corporate strategy, programs, policies and performance objectives
- Overseeing management in its implementation of the Company's corporate strategy and monitoring performance generally, as well as the way in which management is instilling the Company's values
- Overseeing the development, implementation and performance of Research and Development and Marketing programs and projects aimed at enhancing the long-term profitability of Australian wool growers
- Monitoring and evaluating financial and other reports to understand the health of the Company and identify the need for any follow up action
- Approving the Company's operating budget and approving, and monitoring the progress of, major capital expenditure, capital management, acquisitions and divestitures
- Overseeing the integrity of the Company's accounting and corporate reporting systems, including the external audit
- Overseeing that the Company complies with all requirements under the Statutory Funding Agreement with the Commonwealth of Australia
- Monitoring the effectiveness of the Company's governance practices
- Approving the Company's statement of values and Company's Code of Conduct and Business Ethics to underpin the desired culture within the Company
- Receiving information regarding material breaches of the Code of Conduct and reports of material incidents under the Whistleblowing Policy

- Setting the risk appetite within which the Board expects management to operate
- Satisfying itself that the Company has in place an appropriate risk management framework for both financial and non-financial risks, including reviewing systems for risk management, internal compliance and control, and legal compliance
- Appointing and, where appropriate, removing the CEO (or equivalent), determining remuneration for the position and overseeing succession planning
- Approving the appointment, terms and conditions and, where appropriate, approving removal of senior executives reporting to the CEO
- Satisfying itself that the Company's remuneration policies are aligned with the Company's purpose, values, strategic objectives and risk appetite
- Ensuring appropriate resources are available to senior executives for achievement of the strategic and operational objectives
- Monitoring the CEO's and other senior executives' performance and their implementation of strategy, and whenever required, provide feedback to, challenge and hold them to account
- Regularly evaluating the Board's performance, including that of individual directors
- Setting measurable objectives for achieving gender diversity across the Company
- Overseeing the Company's process for providing timely, balanced and accurate reporting of the Company's activities to shareholders.

Corporate governance documents

AWI's corporate governance documentation is available on the AWI website at www.wool.com, and includes:

- AWI Constitution
- Board Charter
- Charter of the Committees of the Board
- Board Nomination Committee Charter
- Code of Conduct and Business Ethics
- Corporate Governance Policy
- Communications Strategy
- Rules and Procedures Governing the Election of Directors
- Statutory Funding Agreement

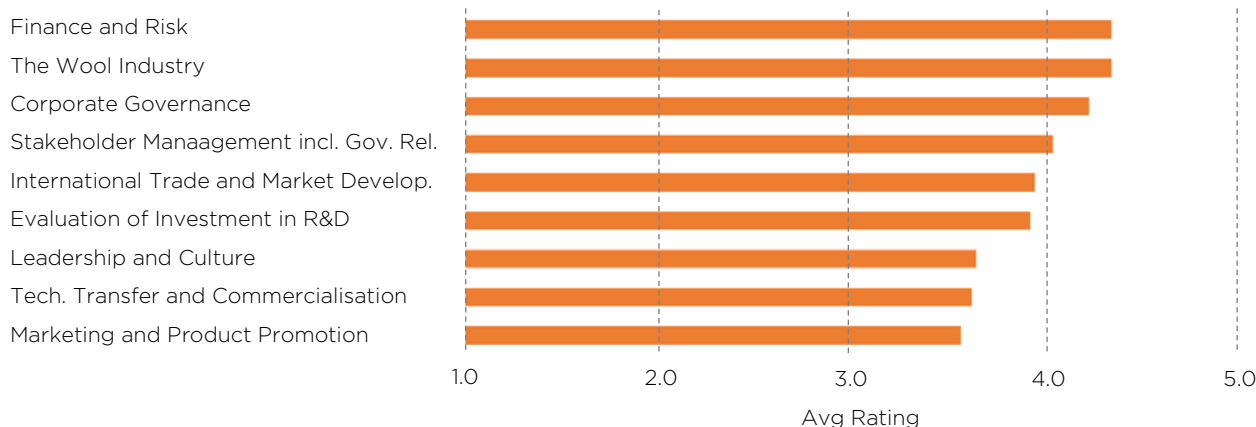
AWI continues to review and develop these documents on a regular basis to ensure they remain relevant to the Company and encapsulate the high standards the Board and management are committed to achieving.

AWI Board skills matrix

The Non-Executive Director Board skills matrix for FY2019 is set out on the opposite page. As part of the Annual Board Review for FY2019, the Board worked with an external governance advisor on development of the skills matrix for this year.

The methodology was for core areas of expertise to be identified. Director suggestions for additional skills, experience and characteristics as provided in the overall Board review and during interviews were incorporated. Each director completed self and peer assessments against the skills matrix.

The nine categories used in the 2019 skills matrix provide a sound basis for describing the overall capabilities of the AWI Board and to capture the essential skills and experience that the Board has agreed are necessary.



The results above show that the skills and experience included in the survey are in strong evidence on the AWI Board.

For expertise in these areas and others not listed above, the directors may seek expertise within AWI and externally where appropriate.

Review of Independence of Directors

AWI conducts an independent review of any director who has served more than ten years on an annual basis. This is in accordance with guidelines in the ASX Corporate Governance Principles. The review in 2019 was undertaken as a part of the annual board review, and the methodology was for self and peer assessments by all directors. The review found that all directors with tenure of ten years or more met all of the criteria for independence set out in the ASX Corporate Governance Principles.

Board effectiveness

The EY Review of Performance included a recommendation for AWI to report on the effectiveness of the board in contributing to the overall performance of the entity. This was considered as part of the Annual Board review, and undertaken by director and peer assessment. The conclusion reached is that the Board has performed well in core functions of oversight of management of AWI and maintaining a strong governance framework.

Performance of the board at a strategic level can be evinced in the three-year Strategic Plan and Annual Operating Plan. Consultation with stakeholders has been revamped in 2019 with the establishment of the Wool Industry Consultation Panel and the wider Woolgrower Consultation Group.

Code of Conduct and Business Ethics

AWI endeavours to be recognised as an organisation committed to high ethical standards in business.

Transactions connected, directly or indirectly, to Directors and Officers may occur in the ordinary course of AWI's business since the Board includes members actively involved in the wool industry.

The Board adopted a Code of Conduct and Business Ethics in 2013 to assist it to undertake decisions in an ethical and responsible way without being influenced by improper considerations, and to ensure that AWI's contracts are at arm's length commercial terms and are consistent with AWI's legal obligations.

The EY Review of Performance considered the Code of Conduct and Business Ethics and put forward various suggested amendments to it. These were taken into account in an update to the Code of Conduct and Business Ethics which was adopted in 2019. The updated Code is available on the AWI website at www.wool.com/aboutAWI.

Risk Management Policy and Framework

There are expectations by key stakeholders, including key business partners and financiers, that risk is being managed efficiently and effectively.

In addition, the Commonwealth Government requires AWI to have a Risk Management Plan and a Fraud Control Plan under the Statutory Funding Agreement.

Most importantly, a more formal approach to risk and opportunity management serves to enhance the quality of business decision-making and acts as another form of assurance of the quality of our operations and services.

Fraud Control Plan

AWI is committed to accountability and transparency in conducting its business.

The AWI Board believes that a strong corporate governance culture regarding fraud control is one of the cornerstones of this commitment and AWI's approach is to minimise the incidence of fraud and "other unethical behaviour" through the development, implementation and regular review of a range of fraud prevention and detection actions.

The desired outcome of this commitment is the elimination of fraud against AWI programs by staff and other persons. AWI considers that this policy applies to all Directors, employees, agents and contractors.

AWI will consider all avenues to recover losses due to fraud against the Company. Staff may also face action for misconduct under AWI's Code of Conduct and Business Ethics, and restitution for any money or property lost through fraudulent activity will be pursued.

The main objective of the Fraud Control Plan is to minimise the risk of fraud against AWI. This objective is achieved through reference to the Commonwealth fraud Control Guidelines including the adoption of the Australian Standard on Risk Management (ISO 31000) and the Australian Standard on Fraud and Corruption Control (AS 8001-2008) to identify fraud risks and to develop and implement actions to manage those risks.

AUDIT

AWI continues to maintain a strong focus on accountability and on its internal control environment. It engages the services of the following professional service firms:

HLB Mann Judd is engaged annually to conduct the external audit and report to AWI shareholders.

Ernst & Young, HLB Mann Judd and PricewaterhouseCoopers provide specific advice on taxation and other related matters pertaining to AWI and The Woolmark Company, as required.

REVIEW OF PERFORMANCE

As part of AWI's normal business cycle and Statutory Funding Agreement (SFA), every three years prior to WoolPoll, AWI is required by the Australian Government to have an Independent Review of Performance (ROP). AWI welcomes the regular review as the report assists AWI to refine its processes and approach to deliver long-term profitability for Australian woolgrowers.

The most recent review was conducted by Ernst & Young (EY); its report was released in July 2018. The report included 82 recommendations in the areas of monitoring and evaluation, consultation and governance. For woolgrowers, the report means that their company, AWI, is being rigorously evaluated every three years, so opportunities for AWI to do better can be identified and addressed.

In September 2018, AWI launched an online ROP Implementation Portal (ROPIP) which has allowed woolgrowers and other stakeholders to monitor in real time AWI's progress in implementing the recommendations. The comments and status on the ROPIP are updated regularly.

AWI also continues to meet with government officials on a monthly basis from the Department of Agriculture to update them on AWI's current progress against the ROP.

At time of writing, AWI was more than three quarters through the process of implementing the recommendations. The process continues with both rigour and vigour.

Disclosure: former staff

Finding 1.13.1 of the ROP recommended that AWI should "increase transparency of engagement of former staff as contractors ... by increasing the disclosure of these in future Annual Reports". AWI has one disclosure relating to a former staff member who retired in the preceding 12 months:

AWI contracted Alex Lai. In the 2018/19 financial year he was paid for services provided as an educational guide to a delegation from China visiting Australia.

MONITORING & EVALUATION

Monitoring and Evaluation (M&E) provides the framework to measure, analyse and report on the performance of AWI's investment on behalf of its stakeholders: Australian woolgrowers and the Australian Government.

In this 2018/19 Annual Report, the reporting of results achieved during the three-year strategic period 2016/17-2018/19 is based upon AWI's 2013/14 *Framework for Monitoring and Evaluation*. This M&E framework informed target setting and strategic planning at the beginning of the three-year strategic period and was in place for the whole of that period.

The 2013/14 M&E framework provides a logical system to facilitate measurement, and reporting in this Annual Report, of AWI's results and value delivered to Australian woolgrowers and Government. To best exemplify the performance of AWI's efforts across the past three-year strategic period, key highlights of 2018/19 provide context to the numbers presented in this Annual Report.

New Framework for Monitoring & Evaluation

Throughout the 2018/19 financial year, AWI's *Monitoring & Evaluation Framework* has been updated as a part of the company's continual development, resulting in a

new *2018/19 Monitoring & Evaluation Framework*, which reflects the unique technical and commercial context AWI operates in globally.

The new M&E framework has been embedded throughout the new 2019/20 to 2021/22 Strategic Plan.

All future projects and investments pursued by AWI will be subject to the latest requirements in the new M&E framework, which provides a common thread of measurability through AWI's projects. This will ensure AWI's transparency and assist in accurate, clear and timely reporting of results to Australian woolgrowers and Government.

During the review of the 2013/14 framework and the development of the new framework, AWI created roles responsible for M&E across the business globally; they collaborated with external consultants to construct a strong new M&E framework and ensure its ongoing effectiveness.

INTELLECTUAL PROPERTY

AWI has a portfolio of intellectual property (IP) assets comprising patents, plant breeders' rights, trade marks, registered designs, business names, copyright, domain names, and unregistered/confidential know-how. Some of these assets are owned jointly with other organisations, including Government departments, statutory corporations, CSIRO and commercial R&D companies.

In addition to the above IP assets, AWI is the beneficial owner of all IP assets owned by The Woolmark Company Pty Limited (TWC) and its associated entities.

These include the WOOLMARK logo, WOOLMARK BLEND logo and WOOL BLEND logo which are registered in more than 90 countries across multiple classes of goods.

IP is an important company asset. AWI's objective is to control and manage its IP to the maximum benefit of Australian woolgrowers by ensuring rapid, widespread adoption or commercialisation of its IP along the wool supply chain.

AWI seeks to develop revenue from IP and invest it back into R&D and marketing on behalf of woolgrowers.

REGISTERED IP OWNED BY AWI (INCLUDING TWC) OR IN WHICH AWI HAS AN INTEREST AS AT 30 JUNE 2019

PATENTS – innovation patent certified in Australia

- Long range wireless monitoring systems

REGISTERED DESIGNS – registered overseas, not in Australia

- Breech Clip
- Dog Bone Clip
- Hockey Stick Clip

TRADE MARKS – registered in Australia and overseas

- Cool Wool
- Circle Logo
- Flyboss
- Liceboss
- Merino Active
- Merino Perform
- OPTIM
- MMX Wool Without Limits & Device
- Red Island
- Sam the Lamb
- Wormboss
- WOOL4SCHOOL
- XWOOL Device

TRADE MARKS – registered in Australia, not overseas

- Australian Wool Innovation
- AWI & Swirl Device
- Evergraze
- Making More from Sheep
- Timerite
- Woolcheque
- WoolQ

TRADE MARKS – registered overseas, not in Australia

- Gold Woolmark
- IWS
- Merinocool
- MERINOEASYCLEAN
- Merino Extrafine Wool
- merinofresh
- Mother and baby device
- Neva-Shrink
- No Finer Feeling
- Pure Merino Wool
- Pure New Wool
- SGP
- Si-ro-set

TRADE MARKS – registered overseas, not in Australia (continued)

- Solospun
- Sportwool
- Super Crimp
- Superior Merino
- Superior Merino Blend
- We Love Wool
- Wool in heart
- Woolmark Gold
- Wool Rich Blend
- Wool Runs On Grass

TRADE MARKS – registered globally

- Woolmark
- Woolmark Blend
- Wool Blend
- Australian Merino

PLANT VARIETIES – registered in Australia, not overseas

- Arrowleaf Clover-Cefalu
- Biserrula-Mauro
- French Serradella-Cadiz
- French Serradella-Margarita
- Lucerne-Venus
- Persian Clover-Lusa
- Phalaris-Atlas
- Phalaris-Aquatica II
- Phalaris-Holdfast
- Subterranean Clover-Coolamon
- Subterranean Clover-Izmir
- Subterranean Clover-Mintaro
- Subterranean Clover-Napier
- Wallaby Grass-Bunderra
- Lotus Australis-LA07
- Birdsfoot Trefoil-LC07AUF
- Birdsfoot Trefoil-LC07AUYP
- Birdsfoot Trefoil-LC07AS
- Birdsfoot Trefoil-LC07AT
- Phalaris-Advanced AT
- Subterranean Clover-Bindoon

Note: the term 'registered' is used to describe an asset that is either registered or where an application for registration has been filed, or in the case of patents, where the patent has been granted.

STRATEGIC ALIGNMENT

AWI's investments align to broader wool industry and agriculture strategic plans. These plans bridge across the periods of AWI's Strategic Plan. Plans such as those under the National RD&E Framework guide activities not only within an AWI strategic period but join successive AWI strategic plans. The Framework includes plans for wool, climate change, animal biosecurity and animal welfare. Such plans help AWI address long term opportunities and threats facing Australian agriculture in a coordinated approach with other RDCs and research providers.

The *2030 Roadmap: Australian Agriculture's Plan for a \$100 Billion Industry* is a cross agriculture industry strategy where RDCs are looked to as support for Roadmap activities. The pillars of Customers and the value chain, Growing sustainably, Unlocking innovation, People and communities, and Capital and risk management are reflected in AWI's achievements. For example, AWI's launch of Wool Q, educating 125,000 international students about Australian wool, measuring and reducing our environmental footprint for wool textiles, leadership training for young woolgrowers and joining the Rural Safety and Health Alliance of RDCs and the Sheep Sustainability Framework are important projects for the long term.

National RD&E Framework

AWI's RD&E aligns with the National RD&E Framework, a 2009 Australian Government initiative to improve the efficiency and effectiveness of RD&E delivery nationally through collaboration, coordination and resource focus. Strategies exist for all agricultural sectors including wool, in addition to cross sector strategies including animal welfare, biosecurity and climate change. The RDCs, including AWI, the State Government agencies, CSIRO and universities are all signatories to the intent. AWI participates in the National RD&E Framework through its own sector strategy, the National Wool RD&E Strategy, and also through support for three cross-sectoral Strategies, in partnership with other RDCs: the National Animal Welfare RD&E Strategy, the Climate Change Research Strategy for Primary Industries, and the National Animal Biosecurity RD&E Strategy.

National Wool RD&E Strategy 2018-22

The Strategy Oversight Committee came together in March 2019 to share program updates, research capacity availability, future investment needs and opportunities for collaboration. The AWI Strategic Plans support the National Wool RD&E Strategy.

The following organisations represent the National Wool RD&E Strategy:

Government

- Department of Agriculture
- New South Wales Department of Primary Industries
- Queensland Department of Employment, Economic Development and Innovation
- South Australian Government Department of Primary Industries and Resources SA, and the South Australian Research and Development Institute
- Tasmanian Department of Primary Industries,
- Agriculture Victoria
- Western Australian Department of Agriculture and Food, the Department of Fisheries, and the Forest Products Commission

Research & Development Corporations

- Australian Wool Innovation Limited

Industry

- Australian Wool Exchange
- Australian Wool Testing Authority
- WoolProducers Australia
- Federation of Australian Wool Organisations
- Southern Australian Meat Research Council (link to MLA)

University Sector

- Australian Council of the Deans of Agriculture

Research Agencies

- CSIRO

Climate Change Research Strategy for Primary Industries (CCRSPI) 2017-20

AWI continues to participate in the CCRSPI. This year, this collaborative initiative reformed and completed a stocktake of industry projects in preparation for the annual National Conference. Research funds are directed towards research projects and activities, and communication with government policy makers on key climate issues facing the primary industries sector.

National Animal Biosecurity RD&E Strategy (NABRDES) 2017-22

AWI has continued to support the NABRDES financially and operationally, as well as actively driving the wool sector's own post farm gate biosecurity RD&E strategy (Australian Wool Industry EAD Preparedness RD&E Strategy), through the Federation of Australian Wool Organisations (FAWO), and internationally, through the International Wool Textile Organisation's (IWTO) Wool Biosecurity Working Group.

In August 2018, an updated NABRDES (2017-2022) was endorsed by all members of the National Primary Industries Research and Innovation Committee. AWI is represented on the NABRDES Implementation Committee, which is responsible for providing strategic overview and direction for the implementation of the updated Strategy, as well as development of work plans that capture value from opportunities and/or address biosecurity gaps, ensuring they are well aligned with other relevant strategies.

Delivery of the NABRDES is coordinated by Animal Health Australia and it is currently sponsored 50% by NSW DPI and 50% by the livestock RDCs, including AWI.

National Animal Welfare RD&E (NAWRDE) Strategy 2017-20

AWI continues its involvement in the National Animal Welfare RD&E Strategy. The NAWRDE Strategy aims to facilitate the development, implementation and delivery of cross-sectoral animal welfare RD&E nationally for livestock (farm animals) throughout the supply chain.

Membership of the NAWRDE Strategy includes livestock RDCs (AWI, Australian Eggs Limited, Australian Meat Processor Corporation, Australian Pork Limited, Dairy Australia, LiveCorp, Meat and Livestock Australia, AgriFutures Australia), universities, State Government Departments and the CSIRO. The Animal Welfare Science Centre at University of Melbourne provides executive support and Australian Pork Limited manages strategy administration.

GOVERNMENT R&D PRIORITIES

The Australian Government is a major investor in AWI, collecting and disbursing statutory levies and providing taxpayer funds for eligible industry research, development and extension (RD&E) activities. As the wool industry's rural Research and Development Corporation (RDC), AWI is the Australian Government's primary vehicle for funding innovation in the wool industry.

While AWI's R&D and marketing priorities are determined by woolgrowers as identified by industry through AWI's Annual Planning and Consultation Cycle, AWI has also taken into account the Australian Government's National Science and Research Priorities and Rural Research, Development and Extension Priorities in setting its R&D investments, in addition to other directives and priorities the Government communicates to AWI.

The **National Science and Research Priorities** were announced by the Australian Government on 26 May 2015. The nine priorities are titled: Food, Soil and water, Transport, Cybersecurity, Energy, Resources, Advanced manufacturing, Environmental change and Health. See www.science.gov.au for further information.

The **Rural Research, Development and Extension Priorities** were announced on 20 May 2016. The four priorities and aims are:

- **Adoption of R&D** – Focusing on flexible delivery of extension services that meet primary producers' needs and recognising the growing role of private service delivery.
- **Advanced technology** – To enhance innovation of products, processes and practices across the food and fibre supply chains through technologies such as robotics, digitisation, big data, genetics and precision agriculture.
- **Biosecurity** – To improve understanding and evidence of pest and disease pathways to help direct biosecurity resources to their best uses, minimising biosecurity threats and improving market access for primary producers.
- **Soil, water and managing natural resources** – To manage soil health, improve water use efficiency and certainty of supply, sustainably develop new production areas and improve resilience to climate events and impacts.

See www.agriculture.gov.au for further information.

These priorities replaced the previous National Research Priorities (announced by the Australian Government on 5 December 2002) and Rural Research and Development Priorities (announced by the Australian Government on 8 May 2007).

AWI investment during 2018/19 aligned to the Government's Rural Research, Development and Extension Priorities

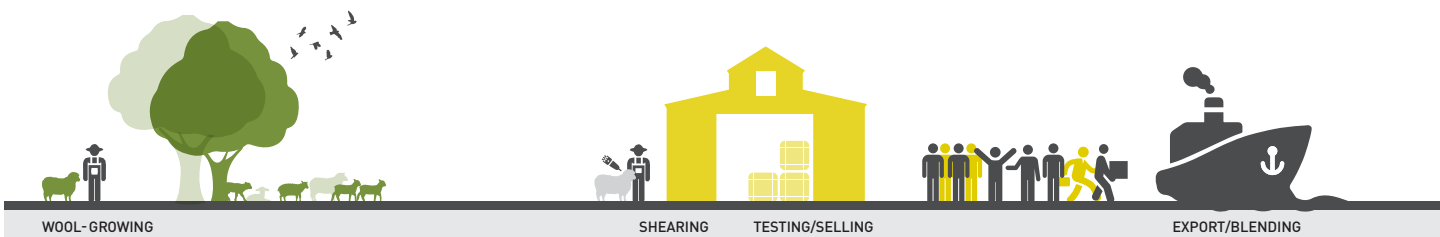
Rural Research, Development and Extension Priorities	R&D \$	Marketing \$	Other \$	Total \$	Total %
Adoption of R&D	24,074,000	-	-	24,074,000	25%
Advanced technology	16,720,000	-	-	16,720,000	14%
Biosecurity	680,000	-	998,000	1,678,000	5%
Soil, water and managing natural resources	2,245,000	-	-	2,245,000	1%
Non-R&D activities	-	55,450,000	-	55,450,000	55%
Total \$	43,719,000	55,450,000	998,000	100,167,000	100%
Total %	44%	55%	1%	100%	

COLLABORATION

AWI maximises the investment of Australian woolgrowers and the Australian Government's funds through pursuit of collaborative opportunities with industry participants on-farm and throughout the supply chain. This enables effective sharing of knowledge, efficient investment of funds and a greater scope of activities. Through collaboration with Research & Development Corporations, public and private research organisations, brand partners, manufacturers, producers and retailers, AWI leverages greater funds to invest in activities that deliver value to Australian woolgrowers.

Where possible, AWI pursues collaborators in projects for both cash and in-kind (goods, time and knowledge) contributions to deliver greater benefits to Australian woolgrowers and broader stakeholders.

Throughout this strategic period, AWI collaborated on **over 300 projects** across the entire supply chain.



On-Farm Research



TYPES OF COLLABORATORS

- RDCs
- CRCs
- Government
- Universities
- Private sector



LEAD RESEARCH COLLABORATORS

- MLA
- GRDC
- CSIRO
- Centre for Invasive Species Solutions
- University of New England

On-farm research throughout the strategic period delivered efficiencies through minimisation of duplication and maximisation of leveraged value through collaborating with a variety of partners. This was pursued across all programs.

Worked with
all 14
other RDCs

More than
250
unique
research
partners

Extension



TYPES OF COLLABORATORS

- RDCs
- Government
- Universities
- Schools
- Private sector



LEAD EXTENSION COLLABORATORS

- Department of Agriculture Victoria
- Department of Agriculture Tasmania
- Department of Agriculture South Australia
- MLA
- Zoetis
- WA Shearing Industry Australia

Collaborating with industry participants provides greater ability to reach Australian woolgrowers to provide assistance and inform them of on-farm practices. Providing multiple channels of communication through different mediums, providers and contributors expands the reach of AWI's extension efforts.

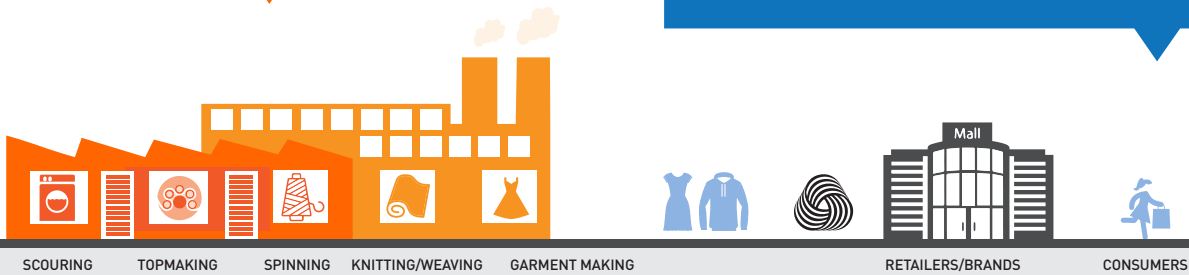
Multiple
methods of
extension
developed
and delivered

“Xinao have been working with AWI for more than fourteen years. In that time we have successfully developed numerous innovative yarns together which has allowed wool to be used in a multitude of new applications in sectors previously only occupied by synthetics...Thanks to the work of AWI our wool yarns have many more homes to go to ensuring demand remains strong.”

Mr Zhou, CEO,
Xinao Spinning

“We want to underline the significance of the presence of The Woolmark Company in support of our activity and the constant contribution to the enhancement of an extraordinary product: wool... Given the spread of industrial fibres, we consider essential a global action aimed at reminding consumers of the inimitable qualities of an absolutely natural product, consistent with the ever-increasing demands for environmental respect.”

Paolo Todisco, CEO,
Zegna Baruffa Lane Borgosesia SpA



Supply Chain Research, Development



TYPES OF COLLABORATORS

- RDCs
- Government
- Universities
- Manufacturers
- Retailers
- Brands
- Private sector



LEAD INNOVATION & DEVELOPMENT PARTNERS

- Xinao
- Nanshan
- Suedwolle
- Chemtax
- Aussco
- Stoll NYC
- Alpha
- Redaelli
- Danmao
- MITI SpA

AWI collaborated with processing and manufacturing partners globally to develop efficient techniques and new uses of Australian wool. By combining our partners skills and resources, in house expertise could find new uses of wool and link them with brands seeking Australian wool products.

Collaborated with
over 150
processing and
manufacturing
partners

Marketing & Fibre Promotion



TYPES OF COLLABORATORS

- Retailers
- Brands
- Other fibre organisations



LEAD MARKETING PARTNERS

- Prada Luna Rossa
- Max Mara
- Country Road
- Westfield
- Cricket Australia
- Missoni
- Raf Simmons
- Nano Universe
- adidas
- Thom Browne

135 projects were collaborated on with brand partners, retailers (online and brick and mortar) and fibre organisations. Leveraging the prestige and influence of brands as well as their financial contributions and expertise enables AWI to position wool as a premium fibre worth paying more for. New developments generated with supply chain partners were introduced to brands and found on shelves globally.

135
collaborative
Marketing
projects

WOOLQ

As of the 1 July 2019, WoolQ Pty Ltd became a wholly owned subsidiary of AWI, facilitating a suite of digital services that support the wool-growing and selling process. WoolQ has been delivered to industry in stages throughout 2018-19 with continual enhancements and optimisations applied to already deployed tools. WoolQ Market involved extensive testing and trial phases during its development and whilst it was delivered to industry later than planned, this delay caused no impact on the overall budget of the project.

WoolQ provides two distinct offerings:

- The first is a suite of tools designed to assist growers in making better and more informed decisions in the growing and selling of their wool.
- The second, an electronic marketplace for the buying and selling of wool. This online market operates outside the existing open-cry market hours and though it is only accessible by wool brokers on behalf of their grower clients, growers will get real-time visibility of the auction remotely.

The WoolQ Grower Toolkit was successfully rolled out between February 2018 and August 2018 which includes:

- WoolQ eSpeci
- WoolQ Network (Directory and Forum)
- My WoolQ - Grower data repository
- WoolQ Ready Reckoner - mortgage style calculator for wool valuation pre-sale.

WoolQ Market launched in late 2019 with a number of committed wool industry participants and volumes continue to grow.

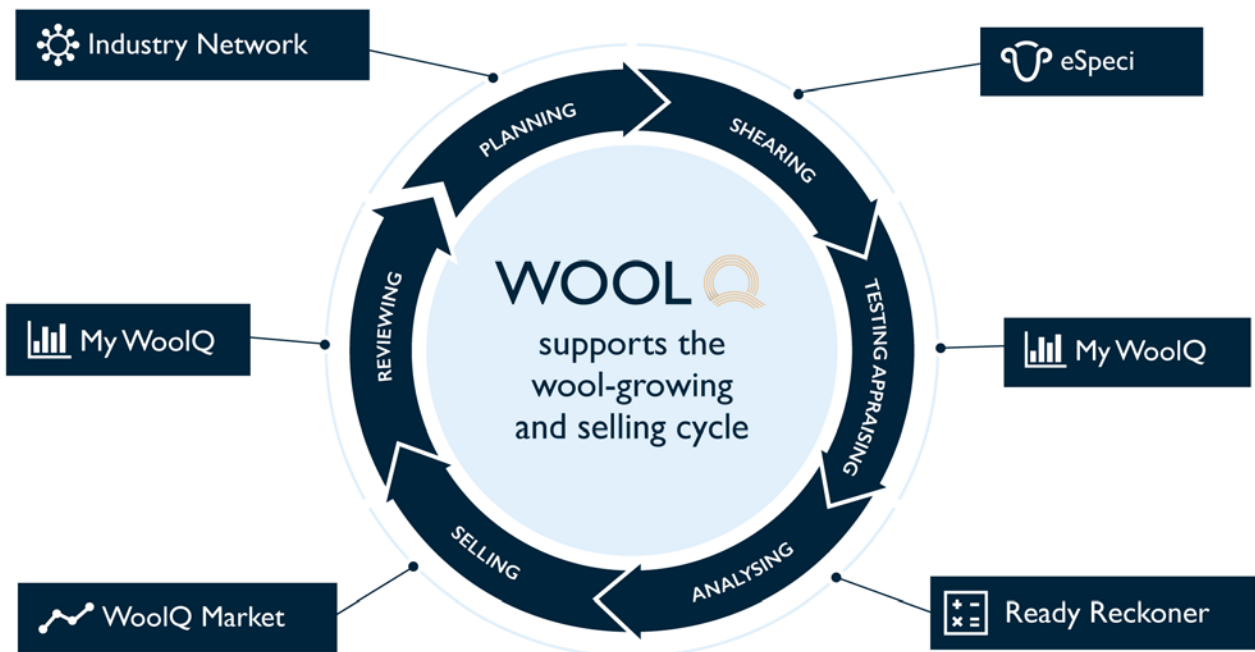
The following industry adoption metrics for WoolQ are:

- 2,000 user registrations from industry players
- 650 wool business profiles created on the platform covering woolgrowers, brokers, buyers/exporters or classers
- 13,500 bales entered/captured via the WoolQ eSpeci.

In the current Strategic Plan (2019/20-2021/22), traceability has become a stand-alone portfolio. Whilst Traceability has long been a focus of the organisation, it has now become a fully articulated program in its own right. WoolQ has provided the first stage of supply chain traceability from the sheep's back to the ships rail by securely collecting and storing relevant data in these early stages of wool production.

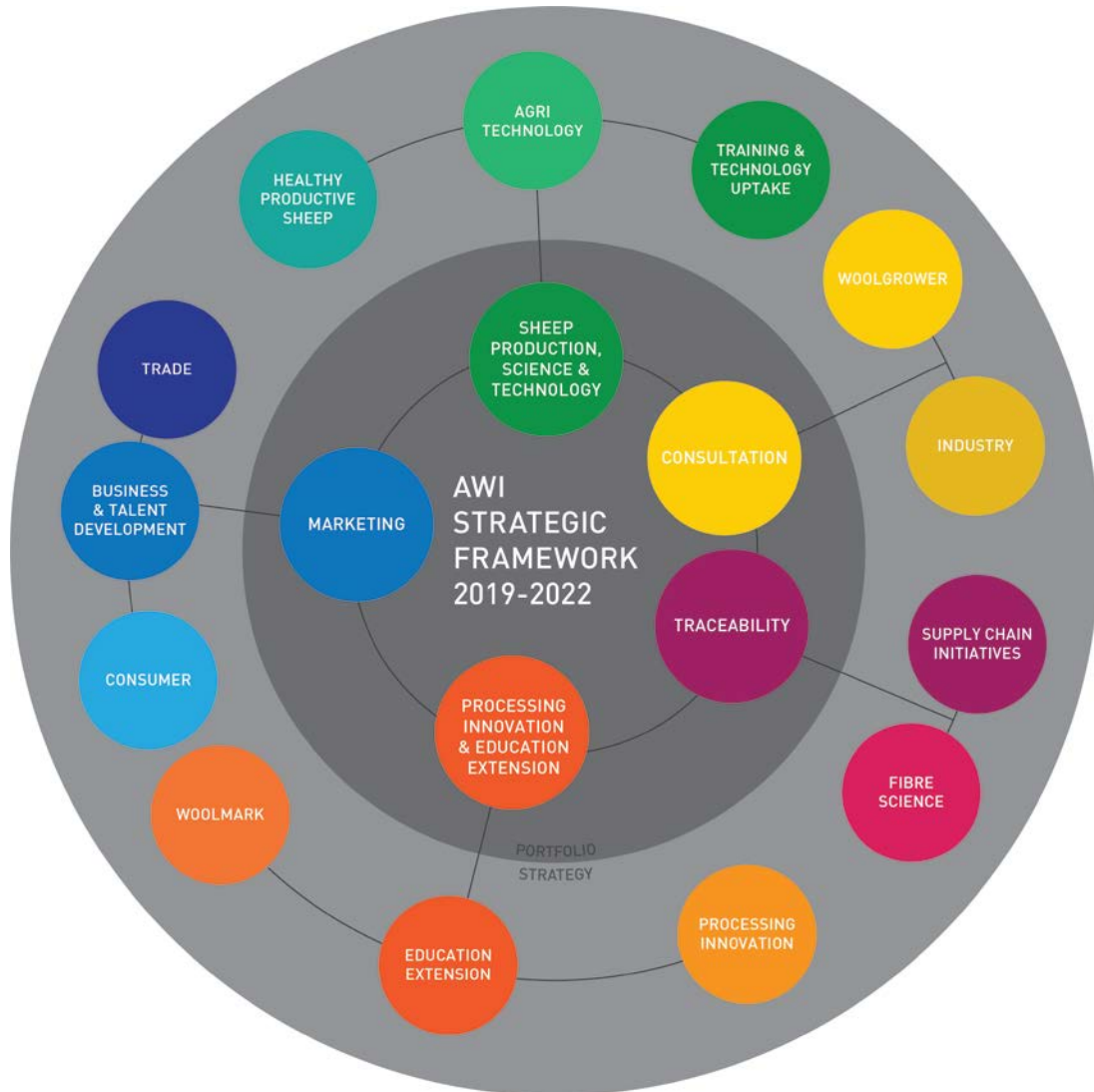
AWI's Investment Protocol ensures investments are made where market failure has been identified and/or to align with its role as an RDC i.e. in research, development, extension or marketing of Australian wool. Investment in WoolQ by AWI has been undertaken to modernise the wool supply chain through a move towards digitalisation and to improve its productivity in the absence of a coordinated market approach. The WoolQ platform is designed to assist woolgrowers to make more informed decisions regarding the production and sale of their wool and to secure the ongoing development of the wool industry.

WoolQ is available at www.woolq.com



AWI'S NEW STRATEGIC PLAN

Since 1 July 2019, AWI has been operating under a new three-year Strategic Plan for the years 2019/20 through to 2021/22. It is available on the AWI website at www.wool.com/consultation. Following extensive industry and government consultation, the strategies adopted and being implemented in the new Strategic Plan are:



Portfolio objectives

Across AWI's five portfolios, AWI plans to execute 13 strategies and 29 programs. The strategies and programs seek to address key industry priorities and opportunities.

The objectives of the five portfolios are:

Marketing
To continue to build demand for Australian wool by reinforcing its position in the market and solidifying a strong price to ensure a sustainable future for Australian woolgrowers.
Sheep Production, Science & Technology
To lower the cost of production of wool on-farm by increasing the productivity of sheep and land, and increasing the efficiency of use of inputs and resources while maintaining Australia's reputation for sustainability.

Consultation
To build trust and transparency across the supply chain through an industry best-practice structured, targeted and measurable engagement model; and for this intelligence to influence, inform or contribute to AWI's business activities.
Processing Innovation & Education Extension
To increase the profitability and sustainability of the wool processing and manufacturing supply chain and educate students, trade and retailers about the benefits of wool.
Traceability
To provide tools to ease the flow of information about Australian wool up and down the supply chain to all parties; to communicate wool's benefits, facilitate provenance and supply chain transparency.

FINANCIAL REPORT



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DIRECTORS' REPORT

Your directors present their report on the consolidated entity (referred to hereafter as the Group) consisting of Australian Wool Innovation Limited and the entities it controlled at the end of, or during, the year ended 30 June 2019.

DIRECTORS

The following persons were directors of Australian Wool Innovation Limited during the financial year and up to the date of this report:

Ms C Garnsey (Chairman)
Dr M L Sheil (Deputy Chair)
Mr J Laurie
Mr D Macdonald
Mr W B Merriman
Mr J Morgan
Mr D A A Webster

PRINCIPAL ACTIVITIES

Australian Wool Innovation Limited is a Not-for-profit, registered charitable company. Its principal activity as recorded in its adopted strategic plan is to drive research, development, innovation and marketing that will increase the long term profitability of Australian woolgrowers and the Woolmark brands. To achieve this mission, the Group receives funding from the Commonwealth Government of Australia by way of a statutory wool levy imposed upon Australian woolgrowers and a capped research and development matching fund contribution. Funding is also generated from revenue in respect of the Woolmark certification and ordinary trademark annual licence fees.

REVIEW OF OPERATIONS AND RESULTS

	2019 \$'000	2018 \$'000
Revenue	101,150	103,070
Profit from continuing operations	1,876	15,457

SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS

There have been no significant changes in the state of affairs of the Group during the year.

MATTERS SUBSEQUENT TO THE END OF THE FINANCIAL YEAR

There has been no matter or circumstance which has arisen since 30 June 2019 that has significantly affected or may significantly affect the Group's operations, the results of those operations or the Group's state of affairs in future financial years.

LIKELY DEVELOPMENTS AND EXPECTED RESULTS OF OPERATIONS

By actively and efficiently marketing wool and its attributes through investments in marketing and R&D - from farm to fashion and interiors - AWI aims to achieve its goal of increasing the demand for wool.

Pursuant to the result of WoolPoll 2018, the levy rate will decrease from 2% to 1.5% from 2020. The decrease in levy rate combined with the impact of the current drought is expected to result in a reduction in AWI's revenue. This reduction has been considered in the development of the new three-year Strategic Plan..

The Strategic Plan, which has been created in consultation with woolgrowers and other stakeholders, details AWI's five key portfolios divided into 13 strategies and 29 programs. These seek to address key industry issues and exploit opportunities across the global supply chain for Australian wool, from woolgrowers through to consumers.

Marketing - To continue to build demand for Australian wool by reinforcing its position in the market and solidifying a strong price to ensure a sustainable future for Australian woolgrowers.

Sheep Production - To lower the cost of production of wool on-farm by increasing the productivity of sheep and land, and increasing the efficiency of use of inputs and resources while maintaining Australia's reputation for sustainability.

Consultation - To build trust and transparency across the supply chain through an industry best-practice structured, targeted and measurable engagement model; and for this intelligence to influence, inform or contribute to AWI's business activities.

DIRECTORS' REPORT (CONTINUED)

LIKELY DEVELOPMENTS AND EXPECTED RESULTS OF OPERATIONS (CONTINUED)

Processing Innovation and Education Extension - To increase the profitability and sustainability of the wool processing and manufacturing supply chain and educate students, trade and retailers about the benefits of wool.

Traceability - To provide tools to ease the flow of information about Australian wool up and down the supply chain to all parties; to communicate wool's benefits, facilitate provenance and supply chain transparency.

These portfolios are supported by the Corporate Services function enabling AWI to operate cost effectively through the efficient provision of a range of cross-company support services.

COMPANY SECRETARY

The Company Secretary is Mr Jim Story BA, LLB, FGIA.

MEETINGS OF DIRECTORS

The numbers of meetings of the company's board of directors and of each board committee held during the year ended 30 June 2019, and the numbers of meetings attended by each director were:

Director	Meetings of Committees									
	Full meetings of directors		Finance & Audit		Remuneration & Appointments		Science & Welfare		Stakeholder Engagement	
	A	B	A	B	A	B	A	B	A	B
Ms C Garnsey	14	14*	4	4	5	5	4	4	4	4
Dr M L Sheil	14	14	-	-	-	-	8	6*	-	-
Mr J Laurie	14	14	8	8	-	-	4	4	-	-
Mr D Macdonald	14	14	4	4	-	-	-	-	4	4*
Mr W B Merriman	14	14	8	8	5	5	8	8	4	4
Mr J Morgan	14	14	4	4	2	2*	8	8	-	-
Mr D A A Webster	14	14	8	8*	3	3	8	8	-	-

A = number of meetings held during the time the director held office or was a member of the committee during the year.
B = number of meetings attended.

* = denotes Chair as at 30 June 2019.

CHAIRMANSHIP

Ms C Garnsey was appointed Chairman of the Board on 9th November 2018.

Dr M L Sheil was appointed Deputy Chair of the Board on 22nd November 2018.

INSURANCE OF OFFICERS

During the financial year, Australian Wool Innovation Limited paid a premium to insure directors and officers of the Group. The insurance policy specifically prohibits disclosure of the nature and liability covered and the amount of the premium paid.

PROCEEDINGS ON BEHALF OF THE COMPANY

No person has applied to the Court under section 237 of the *Corporations Act 2001* for leave to bring proceedings on behalf of the company, or to intervene in any proceedings to which the company is a party, for the purpose of taking responsibility on behalf of the company for all or part of those proceedings.

No proceedings have been brought or intervened in on behalf of the company with leave of the Court under section 237 of the *Corporations Act 2001*.

NON-AUDIT SERVICES

The Group may decide to employ the auditor on assignments additional to their statutory audit duties where the auditor's expertise and experience with the Group and/or the consolidated entity are important.

Details of the amounts paid or payable to the auditor/s for audit and non-audit services provided during the year are set out in note 22.

DIVIDENDS PAID

AWI's Constitution does not allow the company to pay any dividend.

ENVIRONMENTAL REGULATION

The entity's operations are not subject to any particular or significant environmental regulations under either Commonwealth or State legislation.

STATUTORY FUNDING AGREEMENT OBLIGATIONS

In addition to annual reporting requirements, there are further reporting requirements imposed upon the parent company under the Statutory Funding Agreement between Australian Wool Innovation Limited and The Commonwealth of Australia.

A number of the matters identified in this report contain commercial in confidence information and the company has elected to exercise its prerogative to provide that report separately to the Commonwealth on an 'in confidence' basis.

AUDITOR'S INDEPENDENCE DECLARATION

A copy of the auditor's independence declaration as required under section 307C of the *Corporations Act 2001* is set out on page 76.

ROUNDING OF AMOUNTS

The company is of a kind referred to in ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191 issued by the Australian Securities and Investments Commission, relating to the 'rounding off' of amounts in the directors' report. Amounts in the directors' report have been rounded off in accordance with that Legislative Instrument to the nearest thousand dollars, unless otherwise stated.

AUDITOR

HLB Mann Judd continues in office in accordance with section 327 of the *Corporations Act 2001*.

This report is made in accordance with a resolution of directors.



Ms C Garnsey (Chairman)
Director

Sydney
30 August 2019

AUDITOR'S INDEPENDENCE DECLARATION



AUSTRALIAN WOOL INNOVATION LIMITED
ABN 12 095 165 558

AUDITOR'S INDEPENDENCE DECLARATION

We declare that, to the best of our knowledge and belief, there have been no contraventions of any applicable code of professional conduct in relation to the audit of the financial report of Australian Wool Innovation Limited for the year ended 30 June 2019.

This declaration is in relation to Australian Wool Innovation Limited and the entities it controlled during the period.

A handwritten signature in blue ink, appearing to read 'S P James'.

S P James
Director

Sydney
30 August 2019

hlb.com.au

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HLB Mann Judd is a member of HLB International, the global advisory and accounting network.

FINANCIAL REPORT - 30 JUNE 2019

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This financial report covers the consolidated financial statements of the consolidated entity consisting of Australian Wool Innovation Limited and its controlled entities as listed in note 25 to the financial report. The financial report is presented in Australian dollars.

Australian Wool Innovation Limited is a company limited by shares, incorporated and domiciled in Australia. Its registered office and principal place of business is:

Level 6, 68 Harrington Street
The Rocks
Sydney NSW 2000

A description of the nature of the consolidated entity's operations and its principal activities is included in the directors' report on page 73, which is not part of this financial report.

The financial statements were authorised for issue by the directors on 30 August 2019. The directors have the power to amend and reissue the financial statements.

Through the use of the internet, we have ensured that our corporate reporting is timely, complete and available globally at minimum cost to the company. All press releases, financial reports and other information are available on our website: www.wool.com

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED 30 JUNE 2019

		Consolidated	
	Notes	2019 \$'000	2018 \$'000
Revenue from continuing operations			
Operating revenue	3	98,042	99,966
Other revenue	3	3,108	3,104
		101,150	103,070
Other gain/ (loss)	4	995	(470)
Expenses			
Project expenditure		(66,409)	(53,565)
Marketing		(15,524)	(15,929)
Sheep production		(1,675)	(1,682)
Woolgrower services		(2,329)	(1,963)
Processing innovation & education extension		(2,786)	(2,535)
Digital services		(1,499)	(1,298)
Support & administration		(9,945)	(10,052)
Profit before income tax		1,978	15,576
Income tax expense	7	(102)	(119)
Profit from continuing operations		1,876	15,457
Profit for the year		1,876	15,457
Other comprehensive income			
Exchange differences on translation of foreign operations		(99)	91
Total comprehensive income for the year		1,777	15,548
Total comprehensive income for the year is attributable to:			
Owners of Australian Wool Innovation Limited		1,777	15,548

The above consolidated statement of comprehensive income should be read in conjunction with the accompanying notes.

CONSOLIDATED BALANCE SHEET

AS AT 30 JUNE 2019

		Consolidated	
	Notes	2019 \$'000	2018 \$'000
ASSETS			
Current assets			
Cash and cash equivalents	8	12,260	10,254
Other financial assets	9	98,655	94,225
Trade and other receivables	10	15,979	19,330
Other current assets	11	769	1,061
Total current assets		127,663	124,870
Non-current assets			
Property, plant and equipment	12	2,162	2,377
Intangible assets	13	12,246	11,578
Other non-current assets	14	849	632
Total non-current assets		15,257	14,587
Total assets		142,920	139,457
LIABILITIES			
Current liabilities			
Trade and other payables	15	10,972	8,809
Deferred revenue	16	7,010	7,297
Total current liabilities		17,982	16,106
Non-current liabilities			
Provisions	17	329	295
Other non-current liabilities	18	902	1,126
Total non-current liabilities		1,231	1,421
Total liabilities		19,213	17,527
Net assets		123,707	121,930
EQUITY			
Contributed equity*	19	-	-
Reserves	20	1,489	1,588
Retained earnings	20	122,218	120,342
<i>Capital and reserves attributable to owners of Australian Wool Innovation Limited</i>		123,707	121,930
Total equity		123,707	121,930

*As at 30 June 2018 and 2019 contributed equity in the consolidated entity was \$100.

The above consolidated balance sheet should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 30 JUNE 2019

	Notes	Attributable to owners of Australian Wool Innovation Limited			Total equity \$'000
		Contributed equity* \$'000	Reserves \$'000	Retained earnings \$'000	
Balance at 1 July 2017		-	1,497	104,885	106,382
Profit for the year	20	-	-	15,457	15,457
Other comprehensive income	20	-	91	-	91
Total comprehensive income for the year		-	91	15,457	15,548
Balance at 30 June 2018		-	1,588	120,342	121,930
Balance at 1 July 2018		-	1,588	120,342	121,930
Profit for the year	20	-	-	1,876	1,876
Other comprehensive income	20	-	(99)	-	(99)
Total comprehensive income for the year		-	(99)	1,876	1,777
Balance at 30 June 2019		-	1,489	122,218	123,707

*As at 30 June 2018 and 2019 contributed equity in the consolidated entity was \$100.

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 30 JUNE 2019

		Consolidated	
	Notes	2019 \$'000	2018 \$'000
Cash flows from operating activities			
Levy, license, government grant and other receipts (inclusive of GST)		106,266	106,056
Payments to suppliers and employees (inclusive of GST)		(100,754)	(95,440)
		5,512	10,616
Other income		-	1
Interest received		2,718	2,414
Income taxes paid	7	(102)	(119)
Net cash inflow from operating activities		8,128	12,912
Cash flows from investing activities			
Payments for property, plant and equipment	12	(720)	(872)
Payments for other financial assets	9	(4,430)	(9,039)
Proceeds from sale of property, plant and equipment		3	36
Payments for website development	13	(668)	(1,578)
Net cash (outflow) from investing activities		(5,815)	(11,453)
Net increase in cash and cash equivalents		2,313	1,459
Cash and cash equivalents at the beginning of the financial year		10,254	9,024
Effects of exchange rate changes on cash and cash equivalents		(307)	(229)
Cash and cash equivalents at end of year	8	12,260	10,254

The above consolidated statement of cash flows should be read in conjunction with the accompanying notes.

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Australian Wool Innovation Limited (the "Company") is a company limited by shares, incorporated and domiciled in Australia and is a Not-for-profit, registered charitable company.

The principal accounting policies adopted in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated. The financial statements are for the consolidated entity consisting of Australian Wool Innovation Limited and its subsidiaries (the "Group").

The nature of the Group's operations and principal activities are described in the Directors' Report.

(a) Basis of preparation

These general purpose financial statements have been prepared in accordance with the requirements of the *Australian Charities and Not-for-profits Commission Act 2012*, Australian Accounting Standards and interpretations issued by the Australian Accounting Standards Board. Australian Wool Innovation Limited is a Not-for-profit, charitable entity for the purpose of preparing the financial statements.

(i) Compliance with Australian Accounting Standards - Reduced Disclosure Requirements

The consolidated financial statements of the Australian Wool Innovation Limited Group comply with Australian Accounting Standards - Reduced Disclosure Requirements as issued by the Australian Accounting Standards Board (AASB).

(ii) Historical cost convention and comparative information

This financial report has been prepared under the historical cost convention. Unless otherwise stated, the accounting policies adopted are consistent with those of the previous year. Comparative information is reclassified where appropriate to enhance comparability.

(iii) Critical accounting estimates

The preparation of financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The estimates and assumptions that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(1) Estimated impairment of the Woolmark certification trademarks

The Group tests annually whether the value of \$10,000,000 allocated to the Woolmark certification trademarks has suffered any impairment, in accordance with the accounting policy stated in note 1(g). These calculations require the use of assumptions regarding the separately identifiable future cash inflows relating to the brand, estimates of future costs required to support the brand and discount rates. Management determined budgeted cash flows based on license fees billed for the coming year and budgeted costs based on past performance and expectations for the future.

(iv) New standards and interpretations not yet adopted

The Group has adopted all of the new or amending Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ("AASB") that are mandatory for the current reporting period.

Any new or amending Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

The following new Accounting Standard is most relevant to the Group.

Adoption of AASB 9: Financial Instruments ("AASB 9")

The Group adopted AASB 9 from 1 July 2018 using the full retrospective approach of adoption. AASB 9 replaces AASB 139 Financial Instruments: Recognition and Measurement. The standard introduced new classification and measurement models for financial assets. A financial asset shall be measured at amortised cost if it is held within a business model whose objective is to hold assets in order to collect contractual cash flows which arise on specified dates and that are solely principal and interest. A debt investment shall be measured at fair value through other comprehensive income if it is held within a business model whose objective is to both hold assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest as well as selling the asset on the basis of its fair value. All other financial assets are classified and measured at fair value through profit or loss unless the entity makes an irrevocable election on initial recognition to present gains and losses on equity instruments (that are not held-for-trading or contingent consideration recognised in a business combination) in other comprehensive income ('OCI'). Despite these requirements, a financial asset may be irrevocably designated as measured at fair value through profit or loss to reduce the effect of, or eliminate, an accounting mismatch. For financial liabilities designated at fair value through profit or loss,

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(a) Basis of preparation (continued)

(iv) *New standards and interpretations not yet adopted (continued)*

Adoption of AASB 9: Financial Instruments ("AASB 9") (continued)

the standard requires the portion of the change in fair value that relates to the entity's own credit risk to be presented in OCI (unless it would create an accounting mismatch). New and simpler hedge accounting requirements are intended to more closely align the accounting treatment with the risk management activities of the entity. New impairment requirements use an expected credit loss model to recognise an allowance. Impairment is measured using a 12-month expected credit loss method unless the credit risk on a financial instrument has increased significantly since initial recognition in which case the lifetime expected credit loss method is adopted. For receivables, a simplified approach to measuring expected credit losses using a lifetime expected loss allowance is available.

The Group's financial instruments include cash and cash equivalents, trade and other receivables, other financial assets and trade and other payables. The Group does not apply hedge accounting.

On initial application of AASB 9, the Group assessed which business models apply to the Group's financial assets and liabilities and classified its financial instruments into the appropriate AASB 9 categories. Based on this assessment it was determined that the classification of the Group's financial instruments has not changed from prior periods and continue to be measured at amortised cost. The carrying amount of the Group's financial assets and liabilities did not change as a result of the adoption of AASB 9.

The Group has applied the simplified approach to measuring expected credit losses, using the lifetime expected loss allowance for all trade and other receivables. To measure the expected credit losses, trade and other receivables have been grouped based on days past due. A provision matrix is then determined based on the historical credit loss rate for each group, adjusted for any material expected changes to future credit risk for that group.

The Group has applied the loss allowance for expected credit losses on all other financial assets. The difference between the impairment for expected credit losses calculated under AASB 9 compared to the incurred loss approach under AASB 139 is not material to the Group.

There has been no material impact on the Group's profit after income tax, current or non-current assets and liabilities or net assets at 30 June 2018 as a result of the adoption of AASB 9.

There has been no impact on the Group's opening balance of retained earnings or equity as at 1 July 2018 or 1 July 2017 as a result of the adoption of AASB 9.

There have been no material impacts as a result of the adoption of AASB 9, consequently no further disclosures have been included regarding the adoption of AASB 9.

(b) Principles of consolidation

(i) *Subsidiaries*

The consolidated financial statements incorporate the assets and liabilities of all subsidiaries of Australian Wool Innovation Limited as at 30 June 2019 and the results of all subsidiaries for the year then ended.

Where control of an entity is obtained during a financial year, its results are included in the consolidated statement of comprehensive income and balance sheet from the date on which control commences. Where control of an entity ceases during a financial year, its results are included for that part of the year during which control existed.

The effects of all transactions between entities in the consolidated entity are eliminated in full.

(c) Foreign currency translation

(i) *Functional and presentation currency*

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The consolidated financial statements are presented in Australian dollars, which is Australian Wool Innovation Limited's functional and presentation currency.

(ii) *Transactions and balances*

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the consolidated statement of comprehensive income.

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(c) Foreign currency translation (continued)

(iii) Group companies

The results and financial position of foreign operations (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- income and expenses for each consolidated income statement and consolidated statement of comprehensive income are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
- all resulting exchange differences are recognised in other comprehensive income.

(d) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable.

Wool levies and government grants are brought to account when received or receivable from the Federal Government. Reasonable assurance that the Commonwealth Matching Funds grant will be received occurs when the Group complies with all conditions outlined in the Statutory Funding Agreement.

Invoiced licence fees are deferred as a liability on the balance sheet and brought to account as revenue over the period of the licence.

Interest revenue is recognised on a proportional basis taking into account the interest rates applicable to the financial assets.

Revenue for the sale of goods is recognised when goods have been delivered to a customer and the risks and rewards of ownership have transferred to the customer.

Revenue from the rendering of a service is recognised by reference to the stage of completion of contracts or other agreements to provide services.

Revenue for the disposal of non current assets is recognised when control of the asset has passed to the buyer.

(e) Income tax

The income tax expense or credit for the year is the tax payable on the current year's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting year and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in foreign operations where the company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Woolmark Holdings Pty Limited and its whollyowned Australian controlled entities have implemented the tax consolidation legislation. Australian Wool Innovation Limited is not a party to the tax consolidated Group as it is exempt from tax.

(f) Leases

Leases of property, plant and equipment where the Group, as lessee, has substantially all the risks and rewards of ownership are classified as finance leases. Leases in which a significant portion of the risks and rewards of ownership are not transferred to the Group as lessee are classified as operating leases (net of any incentives received from the lessor) and are charged to the statement of comprehensive income on a straight line basis over the period of the lease.

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(g) Impairment of non-financial assets

Intangible assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. As a not for profit organisation, value in use may be assessed on the basis of depreciated replacement costs for a similar asset. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows which are largely independent of the cash inflows from other assets or groups of assets (cash generating units).

(h) Impairment of financial assets

The Group recognises a loss allowance for expected credit losses on financial assets which are measured at amortised cost. The measurement of the loss allowance depends upon the Group's assessment at the end of each reporting period as to whether the financial instrument's credit risk has increased significantly since initial recognition, based on reasonable and supportable information that is available, without undue cost or effort to obtain.

Where there has not been a significant increase in exposure to credit risk since initial recognition, a 12-month expected credit loss allowance is estimated. This represents a portion of the asset's lifetime expected credit losses that is attributable to a default event that is possible within the next 12 months. Where a financial asset has become credit impaired or where it is determined that credit risk has increased significantly, the loss allowance is based on the asset's lifetime expected credit losses. The amount of expected credit loss recognised is measured on the basis of the probability weighted present value of anticipated cash shortfalls over the life of the instrument discounted at the original effective interest rate.

The loss allowance is recognised in profit or loss.

(i) Cash and cash equivalents

For cash flow statement presentation purposes, cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, floating rate notes, other short term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(j) Trade receivables

Trade receivables are initially recognised at fair value and subsequently measured at amortised cost using the effective interest method, less any allowance for expected credit losses. Trade receivables are generally due for settlement within 30 days. They are presented as current assets unless collection is not expected for more than 12 months after the reporting date.

The Group has applied the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance. To measure the expected credit losses, trade receivables have been grouped based on days overdue.

Other receivables are recognised at amortised cost, less any allowance for expected credit losses.

(k) Inventories

Inventories are stated at the lower of cost and net realisable value in the balance sheet. The net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

(l) Other financial assets

Other financial assets are initially measured at fair value plus transaction costs and subsequently measured at amortised cost, less any allowance for expected credit losses.

Other financial assets are derecognised when the rights to receive cash flows have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership. When there is no reasonable expectation of recovering part or all of a financial asset, its carrying value is written off.

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Property, plant and equipment

All assets are stated at historical cost less depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to profit or loss during the reporting period in which they are incurred.

Purchases of property, plant and equipment costing less than \$5,000 are expensed in the year of acquisition.

Depreciation is calculated on a straight line basis to write off the net cost amount of each item of property, plant and equipment (excluding land) over its expected useful life to the economic entity. Estimates of remaining useful lives are made on a regular basis for all assets, with annual reassessment for major items. The expected useful lives are as follows:

Buildings	10-20 years
Plant and equipment	2-10 years
Leasehold improvements	over the lease term

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (note 1 (g)).

Gains and losses on disposals are determined by comparing proceeds with carrying amount. These are included in profit or loss.

(n) Leasehold improvements

The cost of improvements to or on leasehold properties is amortised over the unexpired period of the lease or the estimated useful life of the improvement to the consolidated entity, whichever is the shorter.

(o) Intangible assets

(i) Research and development

Research expenditure is recognised as an expense as incurred.

(ii) Trademarks and licences

This represents the Woolmark certification trademarks acquired by the Group. The Woolmark is well established and is expected to generate cash inflows for the Group for an indefinite period. Therefore the certification trademarks are carried at cost without amortisation, but are tested for impairment in accordance with note 1(g).

(iii) Website development

Costs associated with maintaining software programmes are recognised as an expense as incurred. Development costs that are directly attributable to the design and testing of identifiable and unique software products controlled by the Group are recognised as intangible assets when the following criteria are met:

Website development costs include only those costs directly attributable to the development phase and are only recognised following completion of technical feasibility and where the Group has an intention and ability to use the asset.

(p) Trade and other payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of the financial year and which are unpaid. Due to their short-term nature they are measured at amortised cost and are not discounted. The amounts are unsecured and are usually paid within 30 days of recognition.

(q) Provisions

Provisions for make good obligations and restructuring are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated. Provisions are not recognised for future operating losses.

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(r) Employee benefits

(i) Short-term obligations

Liabilities for wages, salaries and annual leave expected to be settled within 12 months of the reporting date plus overseas pension benefits are recognised in other payables and are measured at the amounts expected to be paid when the liabilities are settled. Liabilities for non accumulating sick leave are recognised when the leave is taken and measured at the rates paid or payable.

(ii) Long-term employee benefit obligations

The liability for long service leave is recognised in provisions and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date.

The provision for employee entitlements includes on costs of superannuation, payroll tax and workers compensation.

(s) Dividends

AWI's Constitution does not allow the company to pay any dividend.

(t) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included with other receivables or payables in the consolidated balance sheet.

(u) Rounding of amounts

The company is of a kind referred to in ASIC Corporations (Rounding in Financial/Directors' Reports) Instrument 2016/191 issued by the Australian Securities and Investments Commission, relating to the 'rounding off' of amounts in the financial statements. Amounts in the financial statements have been rounded off in accordance with that Legislative Instrument to the nearest thousand dollars, unless otherwise stated.

(v) Parent entity financial information

The financial information for the parent entity, Australian Wool Innovation Limited, disclosed in note 28 has been prepared on the same basis as the consolidated financial statements, except investments in subsidiaries which are recorded at cost in the financial statements of Australian Wool Innovation Limited.

NOTE 2: FINANCIAL RISK MANAGEMENT

The Group's activities expose it to a variety of financial risks: market risk (including currency risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the financial performance of the Group. The Group uses different methods to measure different types of risk to which it is exposed. These methods include sensitivity analysis in the case of interest rate, foreign exchange, other price risks and aging analysis for credit risk.

Risk management is carried out by Head Office Finance under policies approved by the board of directors. Group Head Office Finance identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units. The board provides written principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 2: FINANCIAL RISK MANAGEMENT (CONTINUED)

(a) Market risk

(i) Foreign exchange risk

Foreign exchange risk arises from future commercial transactions and recognised assets and liabilities denominated in a currency that is not the entity's functional currency and net investments in foreign operations.

The Group's foreign exchange management policies include wherever possible creating natural hedges with the collection of licence income in the same currencies as the expenditure being incurred. The Group also purchased foreign exchange contracts during the year to minimise the exposure to fluctuations in the currency markets based on a proportion of budgeted cash flows.

Forward Exchange Contracts (Derivatives) are initially recognised at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The accounting for subsequent adjustment in the fair value of contract is recorded in the income statement with a corresponding impact in the Forward contract asset or liability.

(ii) Cash flow and fair value interest rate risk

The Group's main interest rate risk arises from cash and term deposit investments. The company's investment policy is to maintain a prudent and conservative investment profile that is risk averse.

(b) Credit risk

The Group has no significant concentrations of credit risk and credit risk is managed on a Group basis. Credit risk arises from cash and cash equivalents, deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions. Customers risk rating is assessed by the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal ratings and compliance with credit limits by customers is regularly monitored by management.

Australian Wool Innovation Limited's investment policy is conservative and designed to minimise principal, interest rate and currency risk.

Risk of principal amounts invested is minimised by only investing in deposits with Standard & Poor's ratings AAA, AA+, AA and AA- for long term and A-1+, A-1 and A-1- for short term.

Risk of loss due to adverse interest rate movements is minimised by investing in term deposits for terms per the AWI investment policy.

Wherever possible funds invested are held in Australian dollars thereby minimising any foreign exchange risk.

The Group has policies in place to ensure that customers have an appropriate credit history. Derivative counterparties and cash transactions are limited to high credit quality financial institutions.

The maximum exposure to credit risk at the reporting date is the carrying amount of the financial assets.

(c) Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities and having funding available. Head Office Finance aims at maintaining flexibility in funding by keeping funds on call and term deposits with regular rolling maturity dates. The Group manages liquidity risk by continually monitoring forecast and actual cash flows and matching the maturity profiles of financial assets and liabilities. Given the cash reserves available borrowing facilities are not required.

(d) Fair value measurements

The net fair value of cash and cash equivalents, other financial assets and financial liabilities approximate their carrying values.

NOTE 3: REVENUE

	Consolidated	
	2019	2018
	\$'000	\$'000
From continuing operations		
<i>Operating revenue</i>		
Wool levy	68,077	72,479
Government contribution	20,801	17,870
License fees	6,789	7,321
Royalties	1,963	1,975
Sale of goods and services	398	242
Other	14	79
	98,042	99,966
<i>Other revenue</i>		
Interest revenue calculated using the effective interest method	2,907	2,556
Rental and sub-lease rental income	201	548
	3,108	3,104
	101,150	103,070

NOTE 4: OTHER GAIN/ (LOSS)

	Consolidated	
	2019	2018
	\$'000	\$'000
Net foreign exchange gain/ (loss)	995	(470)

NOTE 5: EXPENSES

	Consolidated	
	2019	2018
	\$'000	\$'000
<i>Depreciation and amortisation</i>		
Buildings	2	2
Plant and equipment	533	677
Leasehold improvements	394	418
Total depreciation and amortisation	929	1,097

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 6: RESEARCH, DEVELOPMENT AND MARKETING EXPENDITURE

	Consolidated	
	2019	2018
	\$'000	\$'000
Marketing	46,206	39,451
Sheep production	18,544	13,957
Woolgrower services	10,834	9,861
Processing innovation & education extension	10,056	9,459
Digital services	4,582	4,244
Support & administration	9,945	10,052
Total RDM expenditure	100,167	87,024

NOTE 7: INCOME TAX EXPENSE

	Consolidated	
	2019	2018
	\$'000	\$'000
(a) Income tax expense		
Current tax on profits for the year	102	119
(b) Numerical reconciliation of income tax expense to prima facie tax payable		
Profit from continuing operations before income tax expense	1,978	15,576
Tax at the Australian tax rate of 30% (2018 - 30%)	593	4,673
Non-taxable income, tax losses and temporary differences not brought to account	(463)	(4,526)
Differences in overseas tax rates	(48)	(52)
Adjustments for current tax of prior periods	20	24
Income tax expense	102	119

The Group has not recognised deferred tax assets relating to tax losses or temporary differences arising from loss making operations as it is not probable that the benefits will be realised. AWI parent company is exempt from income taxes not indirect taxes.

NOTE 8: CURRENT ASSETS - CASH AND CASH EQUIVALENTS

	Consolidated	
	2019	2018
	\$'000	\$'000
Cash at bank and in hand	12,260	10,254

Further details of cash and cash equivalents are set out in note 9.

NOTE 9: CURRENT ASSETS – OTHER FINANCIAL ASSETS

	Consolidated	
	2019	2018
	\$'000	\$'000
Term deposits	98,655	94,225

Cash and cash equivalents (note 8) and other financial assets are represented as follows:

Unrestricted	17,382	20,139
Restricted as security against guarantees issued by the company's bankers ^(a)	2,533	2,440
Forward contract commitments ^(b)	23,300	15,700
Operating funds ^(c)	27,700	26,200
Emergency funds ^(d)	5,000	5,000
Discretionary funds ^(e)	35,000	35,000
	110,915	104,479

- (a) Bank guarantees have been issued to a number of parties in respect of the company's liabilities. The company has given its primary bankers security over term deposits in respect of those amounts, such deposits attracting commercial interest rates.
- (b) A reserve of \$23.3 million has been created to cover contracted forward commitments.
- (c) Operating funds representing nine months of AWI operational costs are set aside to cover an unexpected cessation of levy and government contribution.
- (d) The Emergency reserve is set aside to cover any contingent expenditure arising from the wool industry's obligation under the Emergency Animal Disease Response Agreement.
- (e) The directors resolved to create a discretionary reserve to have funds available to exploit opportunities outside the normal strategic plan and to cover fluctuations in income over a long term period.

NOTE 10: CURRENT ASSETS - TRADE AND OTHER RECEIVABLES

	Consolidated	
	2019	2018
	\$'000	\$'000
Net trade receivables		
Trade receivables	3,037	3,343
	3,037	3,343
Net other receivables		
Commonwealth matching funds and wool levy accruals	8,963	12,876
Other receivables	3,979	3,111
	12,942	15,987
	15,979	19,330

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 11: OTHER CURRENT ASSETS

	Consolidated	
	2019	2018
	\$'000	\$'000
Prepayments		
Insurance	45	176
Other	724	885
	769	1,061

NOTE 12: NON-CURRENT ASSETS - PROPERTY, PLANT AND EQUIPMENT

	Land and buildings \$'000	Plant and equipment \$'000	Leasehold improvements \$'000	Total \$'000
At 1 July 2017				
Cost or fair value	954	3,424	2,375	6,753
Accumulated depreciation	(511)	(2,898)	(731)	(4,140)
Net book amount	443	526	1,644	2,613
Year ended 30 June 2018				
Opening net book amount	443	526	1,644	2,613
Exchange differences	-	4	27	31
Revaluation surplus	-	21	(11)	10
Additions	-	831	-	831
Assets included in a disposal group classified as for sale and other disposals	-	(11)	-	(11)
Depreciation charge	(2)	(677)	(418)	(1,097)
Closing net book amount	441	694	1,242	2,377
At 30 June 2018				
Cost or fair value	954	3,834	2,404	7,192
Accumulated depreciation	(513)	(3,140)	(1,162)	(4,815)
Net book amount	441	694	1,242	2,377
Year ended 30 June 2019				
Opening net book amount	441	694	1,242	2,377
Exchange differences	-	(21)	11	(10)
Revaluation surplus	-	28	1	29
Additions	-	703	-	703
Disposals	-	(8)	-	(8)
Depreciation charge	(2)	(533)	(394)	(929)
Closing net book amount	439	863	860	2,162
At 30 June 2019				
Cost or fair value	954	4,393	2,457	7,804
Accumulated depreciation	(515)	(3,530)	(1,597)	(5,642)
Net book amount	439	863	860	2,162

NOTE 13: NON-CURRENT ASSETS – INTANGIBLE ASSETS

	Certification trademarks \$'000	Website development costs \$'000	Total \$'000
At 1 July 2017			
Cost	10,000	-	10,000
Accumulated amortisation and impairment	-	-	-
Net book amount	10,000	-	10,000
Year ended 30 June 2018			
Opening net book amount	10,000	-	10,000
Additions	-	1,578	1,578
Amortisation charge	-	-	-
Closing net book amount	10,000	1,578	11,578
At 30 June 2018			
Cost	10,000	1,578	11,578
Accumulated amortisation and impairment	-	-	-
Net book amount	10,000	1,578	11,578
Year ended 30 June 2019			
Opening net book amount	10,000	1,578	11,578
Additions	-	668	668
Amortisation charge	-	-	-
Closing net book amount	10,000	2,246	12,246
At 30 June 2019			
Cost	10,000	2,246	12,246
Accumulated amortisation and impairment	-	-	-
Net book amount	10,000	2,246	12,246

A value of \$10,000,000 is allocated to the Woolmark certification and ordinary trademarks and, based on a review of the current operations to date and intentions for future use, the directors are satisfied that no impairment of the carrying value has arisen since acquisition.

The Woolmark certification and trademarks, with an indefinite expected useful life, are expected to generate cash flows over an indefinite period of time.

The directors are committed to providing market research to support the profile of the certification and the trademarks.

The directors strive to build the reputation of the Woolmark certification and trademarks to consolidate its brand recognition globally.

NOTE 14: NON-CURRENT ASSETS - OTHER ASSETS

	Consolidated	
	2019 \$'000	2018 \$'000
Lease deposits	849	632

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 15: CURRENT LIABILITIES - TRADE AND OTHER PAYABLES

	Consolidated	
	2019	2018
	\$'000	\$'000
Trade payables	4,936	3,242
Other payables	4,083	3,760
Project payables and accruals	1,953	1,807
	<u>10,972</u>	<u>8,809</u>

NOTE 16: CURRENT LIABILITIES - DEFERRED INCOME

	Consolidated	
	2019	2018
	\$'000	\$'000
Unearned license income	6,985	7,094
Unearned sub-lease income	25	203
	<u>7,010</u>	<u>7,297</u>

NOTE 17: NON-CURRENT LIABILITIES - PROVISIONS

	Consolidated	
	2019	2018
	\$'000	\$'000
Long service leave	329	295

NOTE 18: NON-CURRENT LIABILITIES - OTHER

	Consolidated	
	2019	2018
	\$'000	\$'000
Lease incentives	902	1,126

NOTE 19: CONTRIBUTED EQUITY

(a) Share capital	2019	2018	2019	2018
	Shares	Shares	\$	\$
Ordinary shares - fully paid	37,462	37,462	100	100

(b) Movements in ordinary share capital

There was no movement in ordinary share capital during the year.

(c) Ordinary shares

A person has a right to one share in the Company if the Board is satisfied that their rolling wool levy or wool tax contribution is \$100 or more during the 3 previous financial years or the person is engaged in a wool producing business, as defined by the Company's constitution. This right does not entitle the shareholder to participate in any profit distributions or in any proceeds on the winding up of the entity. Where a person fails to satisfy these share criteria the share is returned to and held by the Company.

NOTE 19: CONTRIBUTED EQUITY (CONTINUED)

(d) Shareholder statistics

<i>Details</i>	30 June 2019	30 June 2018
Australian Capital Territory	74	78
New South Wales	8,167	8,466
Northern Territory	3	2
Queensland	573	606
South Australia	3,657	3,786
Tasmania	644	653
Victoria	5,134	5,338
Western Australia	3,478	3,545
	21,730	22,474

NOTE 20: RESERVES AND RETAINED EARNINGS

	Consolidated	
	2019	2018
	\$'000	\$'000
(a) Other reserves		
Foreign currency translation	1,489	1,588
Movements:		
Foreign currency translation		
Balance 1 July	1,588	1,497
Currency translation differences arising during the year	(99)	91
Balance 30 June	1,489	1,588

Exchange differences arising on translation of the foreign controlled entity are recognised in other comprehensive income as described in note 1(c) and accumulated in a separate reserve within equity. The cumulative amount is reclassified to profit or loss when the net investment is disposed of.

	Consolidated	
	2019	2018
	\$'000	\$'000
(b) Retained earnings		
Retained surplus at the beginning of the financial year	120,342	104,885
Net surplus attributable to the owners of Australian Wool Innovation Limited	1,876	15,457
Retained surplus at the end of the financial year	122,218	120,342

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 21: KEY MANAGEMENT PERSONNEL DISCLOSURES

	Consolidated	
	2019	2018
(a) Key management personnel remuneration	\$	\$
Non-executive directors		
Short-term employee benefits	666,562	636,829
Post-employment benefits	63,323	60,004
	729,885	696,833
Other key management personnel		
Short-term employee benefits	2,253,542	2,146,386
Post-employment benefits	192,331	203,906
Termination benefits	-	63,799
	2,445,873	2,414,091

The key management personnel of Australian Wool Innovation Limited includes those executives who have the authority and responsibility for offices of the company, either directly or indirectly.

Remuneration includes salaries, wages, superannuation and other employee provisions paid, payable or provided to or on behalf of Australian Wool Innovation Limited.

(b) Remuneration principles and policies

(i) Directors' fees

All directors are non executive, and fees and payments to directors reflect the demands which are made on, and the responsibilities of, the directors. All directors' fee payments are reviewed by the Board. The Chair's fees are determined independently to the fees of directors based on comparative roles in the external market. Both the Chair and non executive directors receive additional fees for their membership on committees.

(ii) Executive employment contracts

Remuneration and other terms of employment for the Executive Management Team are formalised in employment contracts. These employment contracts state a remuneration package (which is calculated on a total cost to the Group basis). None of these employment contracts include share options or termination notice period in excess of six months.

(c) Details of remuneration

(i) Non executive Directors of Australian Wool Innovation Limited

2019 Name	Short-term employee benefits		Post-employment benefits	Total
	Directors' base fees paid	Committee fees paid	Superannuation	
	\$	\$	\$	\$
Ms C Garnsey	123,834	21,202	13,778	158,814
Dr M L Sheil	81,384	10,645	8,743	100,772
Mr J Laurie	62,503	10,905	6,974	80,382
Mr D Macdonald	62,503	10,670	6,951	80,124
Mr W B Merriman	90,499	26,433	11,109	128,041
Mr J Morgan	62,503	17,700	7,619	87,822
Mr D A A Webster	62,503	23,278	8,149	93,930
Total	545,729	120,833	63,323	729,885

NOTE 21: KEY MANAGEMENT PERSONNEL DISCLOSURES (CONTINUED)

(c) Details of remuneration (continued)

(i) Non executive Directors of Australian Wool Innovation Limited (continued)

2018 Name	Short-term employee benefits		Post-employment benefits	Total \$
	Directors' base fees paid \$	Committee fees paid \$	Superannuation \$	
Ms C Garnsey	75,524	8,661	7,503	91,688
Dr M L Sheil	62,503	3,255	6,247	72,005
Mr P Cocking	26,043	5,860	3,031	34,934
Mr J Laurie	62,503	15,625	7,422	85,550
Mr D Macdonald	38,717	3,255	3,987	45,959
Mr W B Merriman	140,632	21,876	15,438	177,946
Mr J Morgan	62,503	20,313	7,868	90,684
Mr D A A Webster	62,503	27,056	8,508	98,067
Total	530,928	105,901	60,004	696,833

(d) Other key management personnel

Mr S McCullough	Chief Executive Officer
Ms T Marshall	Chief Financial Officer
Mr J Story	Company Secretary
Ms J Davies	General Manager - Processing Innovation & Education Extension
Mr S Feighan	General Manager - Woolgrower Services
Mr S Ford	General Manager - Western Hemisphere
Ms D Giorgiutti	Group Manager - Human Resources
Mr N Gosse	General Manager - Operations
Ms J Littlejohn	General Manager - Research
Mr J Roberts	General Manager - Eastern Hemisphere

NOTE 22: REMUNERATION OF AUDITORS

During the year the following fees were paid or payable for services provided by the auditor/s of the parent entity, its related practices and non-related audit firms:

	Consolidated	
	2019 \$	2018 \$
(a) Audit services		
Audit fees - domestic - HLB Mann Judd	97,850	95,000
Audit fees - international - HLB Mann Judd affiliates	101,118	65,304
Audit fees - international - Non HLB Mann Judd	-	39,530
Total remuneration for audit and other assurance services	198,968	199,834
(b) Non-audit services		
Tax compliance - HLB Mann Judd	47,996	17,024
Tax compliance - Non HLB Mann Judd	64,576	65,500
Advisory services - Non HLB Mann Judd	67,867	71,971
Total remuneration of non-audit services	180,439	154,495
Total remuneration	379,407	354,329

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 23: COMMITMENTS

(i) Research, development and marketing

	Consolidated	
	2019	2018
	\$'000	\$'000
Commitments payable in relation to research, development and marketing	22,988	27,705

(ii) Non-cancellable operating leases

	Consolidated	
	2019	2018
	\$'000	\$'000
Commitments for minimum lease payments in relation to non-cancellable operating leases are payable as follows:		
Within one year	2,357	2,045
Later than one year but not later than five years	5,241	3,143
	7,598	5,188

The group leases various offices under non-cancellable operating leases expiring within two to eight years. The leases have varying terms, escalation clauses and renewal rights. On renewal, the terms of the leases are renegotiated.

(iii) Forward exchange contracts

	Consolidated	
	2019	2018
	\$'000	\$'000
Commitments payable in relation to forward exchange contracts	16,021	13,036

The group treasury policy stipulates the parameters to protect known foreign currency exposures via forward exchange contracts.

NOTE 24: RELATED PARTY TRANSACTIONS

(a) Parent entities

The parent entity of the Group is Australian Wool Innovation Limited.

(b) Directors

The names of persons who were directors of the company at any time are as follows: C Garnsey, M L Sheil, J Laurie, D Macdonald, W B Merriman, J Morgan and D A A Webster.

(c) Subsidiaries

Interests in subsidiaries are set out in note 25.

(d) Remuneration

Disclosures relating to directors and key management personnel remuneration are set out in note 21.

(e) Other transactions with directors and key management personnel or entities related to them

(i) Loan transactions and balances

There were no loan transactions or balances with directors and key management personnel or entities related to them during the year ended 30 June 2019.

(ii) Other transactions and balances

No director, or director related entity entered into a contract or had any other transactions other than normal terms and conditions with Australian Wool Innovation Limited during the year ended 30 June 2019.

NOTE 24: RELATED PARTY TRANSACTIONS (CONTINUED)

(f) Transactions with other related parties

The following transactions occurred with related parties:

	Consolidated	
	2019	2018
	\$	\$
<i>Sale of goods and services</i>		
Sale of services relating to marketing and wool testing activities to key management personnel of the entity*	7,094	10,268
<i>Purchases of goods</i>		
Purchases of goods and services relating to marketing and wool testing activities from key management personnel of the entity*	826,933	573,045

*For the period in which they held a key management personnel position.

(g) Outstanding balances arising from sales or purchases of services

The following balances are outstanding at the end of the reporting year in relation to transactions with related parties:

	Consolidated	
	2019	2018
	\$	\$
Current receivables (sales of goods and services)		
Key management personnel of the entity	7,094	9,721
Current payables (purchase of goods)		
Key management personnel of the entity	73,610	16,653

NOTE 25: CONTROLLED ENTITIES

The consolidated financial statements incorporate the assets, liabilities and results of the following principal subsidiaries in accordance with the accounting policy described in note 1(b):

Name of entity	Country of incorporation	Class of shares	Equity holding	
			2019	2018
			%	%
Subsidiaries controlled by Australian Wool Innovation Limited:				
Woolmark Holdings Pty Limited	Australia	Ordinary	100	100
Woolshare Nominees Pty Limited	Australia	Ordinary	100	100
WoolQ Pty Ltd	Australia	Ordinary	100	-
Subsidiaries controlled by Woolmark Holdings Pty Limited:				
The Woolmark Company Pty Limited	Australia	Ordinary	100	100
Australian Merino Pty Limited	Australia	Ordinary	100	100
Digibale Pty Limited	Australia	Ordinary	100	100
Subsidiaries controlled by The Woolmark Company Pty Limited:				
Woolmark International Pty Ltd	England	Ordinary	100	100
IWS Nominee Company Limited	England	N/A	100	100
Woolmark (Americas) Inc.	USA	N/A	100	100
Stichting International Wool Secretariat	Netherlands	N/A	100	100
Wollsiegel Verband	Germany	N/A	100	100
Woolmark (Italy) SRL	Italy	Ordinary	100	100
The Woolmark Company (HK) Limited	Hong Kong	Ordinary	100	100
The Woolmark (Shanghai) Company Limited	China	Ordinary	100	100
Woolmark Services India Private Limited	India	Ordinary	100	100

NOTES TO THE FINANCIAL STATEMENTS

30 JUNE 2019

(CONTINUED)

NOTE 26: ECONOMIC DEPENDENCY

Australian Wool Innovation Limited is dependent upon the receipt of Wool Levy and Matching Funds from the Commonwealth Government per clause 24 of the Statutory Funding Agreement between Australian Wool Innovation Limited and The Commonwealth of Australia.

NOTE 27: EVENTS OCCURRING AFTER THE REPORTING PERIOD

There were no events occurring after the balance sheet date which are known to the company or its directors.

NOTE 28: PARENT ENTITY FINANCIAL INFORMATION

(a) Summary financial information

The individual financial statements for the parent entity show the following aggregate amounts:

	2019	2018
	\$'000	\$'000
Balance sheet		
Current assets	118,423	114,749
Non-current assets	58,065	50,965
Total assets	176,488	165,714
Current liabilities	7,188	5,622
Non-current liabilities	1,083	1,281
Total liabilities	8,271	6,903
Net assets	168,217	158,811
<i>Shareholders' equity</i>		
Retained earnings	158,811	142,036
	158,811	142,036
Profit for the year	9,406	16,775
Total comprehensive income	-	-

(b) Contingent liabilities of the parent entity

The parent entity did not have any contingent liabilities as at 30 June 2019 or 30 June 2018.

DIRECTORS' DECLARATION

30 JUNE 2019

In the directors' opinion:

- (a) the financial statements and notes set out on pages 77 to 100 are in accordance with the *Australian Charities and Not-for-profits Commission Act 2012*, including:
 - (i) complying with Accounting Standards – Reduced Disclosure Requirements and the *Australian Charities and Not-for-profits Commission Regulation 2013*; and
 - (ii) giving a true and fair view of the consolidated entity's financial position as at 30 June 2019 and of its performance for the year ended on that date, and
- (b) there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

Signed in accordance with subs 60.15(2) of the *Australian Charities and Not-for-profit Commission Regulation 2013*.

This declaration is made in accordance with a resolution of the directors.



Ms C Garnsey (Chairman)
Director

Sydney
30 August 2019

INDEPENDENT AUDITORS' REPORT

30 JUNE 2019



Independent Auditor's Report to the Members of Australian Wool Innovation Limited

Opinion

We have audited the financial report of Australian Wool Innovation Limited ("the Company") and its controlled entities ("the Group"), which comprises the consolidated balance sheet as at 30 June 2019, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the director's declaration.

In our opinion, the accompanying financial report of the Group is in accordance with Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012*, including:

- (a) giving a true and fair view of the Group's financial position as at 30 June 2019 and of its financial performance and cash flows for the year then ended; and
- (b) complying with Australian Accounting Standards – Reduced Disclosure Requirements and Division 60 of the *Australian Charities and Not-for-profits Commission Regulation 2013*.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* ("the Code") that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information Other than the Financial Report and Auditor's Report Thereon

The directors are responsible for the other information. The other information comprises the information included in the Group's annual report for the year ended 30 June 2019, but does not include the financial report and our auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Directors for the Financial Report

Management is responsible for the preparation of the financial report that gives a true and fair view in accordance with the Australian Accounting Standards – Reduced Disclosure Requirements and the *Australian Charities and Not-for-profits Commission Act 2012* and for such internal control as management determines is necessary to enable the preparation of the financial report that is free from material misstatement, whether due to fraud or error.

In preparing the financial report, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The directors are responsible for overseeing the Group's financial reporting process.

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Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

HLB Mann Judd Assurance (NSW) Pty Ltd
Chartered Accountants

Sydney, NSW
30 August 2019

S P James
Director

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APPENDICES



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PROJECT LIST 2018/19

This list contains details of AWI projects in which costs incurred during 2018/19 totalled more than \$150,000 for each project.

The cost figures (in the right-hand columns) include both contract and ancillary payments. The costs in this list represent 'external costs' to suppliers directly related to the projects and not the 'internal costs' of AWI staff who manage those projects and other operating expenses.

This project list does not form part of the audited financial reports.

MARKETING PROJECTS

Project title	Key providers*	\$ paid in 2018/19
3.1 Phillip Collaboration	3.1 Phillip Lim; Lane Crawford; Molo Design Ltd; The Society Model Management	242,050
America's Cup - Prada Luna Rossa	EL 2006 SRL; Luna Rossa Challenge SRL; Pitti Immagine DRL; STS Communication SRL	1,505,405
Bergdorf Goodman - United Nations of Merino	Bergdorf Goodman	252,341
Boston Marathon x adidas Merino T-Shirt	Backbone Group; Born & Raised LLC; Boston Globe Media Partners	467,394
Campaign for Wool	The Campaign for Wool Ltd	286,354
Care for Wool	Born & Raised LLC	1,985,778
Diane von Furstenberg - Craft with Merino	Diane von Furstenberg	177,572
Economist Films - In Fashion	The Economist Newspaper Limited	241,019
EPO - Strategic Marketing Partnership	EPO Fashion Co Ltd; Guangzhou Snail Printing Co; Shanghai Chongmai Entertainment	220,608
Farfetch Global Program	Farfetch UK Limited	166,749
Fifty Years Wool Exports to China	APAX Group; CLDR Pty Ltd; Collider CLDR Pty Ltd; Edition Hotel Shanghai; IMG Models Division of International; Sammi Gong; Shanghai Conde Nast Advertising; VeNA Video and Entertainment	2,073,938
Global Content	Airport Agency; Collider CLDR Pty Ltd; Les Corsaires SAS; PMP Print Pty Ltd; Paul Scala; Studio Days Pty Ltd	599,319
Global Media and Influencer Engagement	Albus Lumen Pty Ltd; KnitWarm Limited; Outdoor Clothing Concepts; P.E. Nation; Preveyor LLC	167,926
Global Media Investment Strategy	Astrsk LLC; Digital Luxury Group DLG; IMG Worldwide; Omnicom Media Group; OMD Group Limited; The Communications Store Ltd; The Social Beat Pty Ltd	5,422,539
Global PR Agencies 2019	Activation Group; Carfrae Consulting LLC; Eco-Age; NAC Group Pty Ltd; Smith - Petersen SRL; The Communications Store Ltd; Outside PR	1,663,949
Green Carpet Award 2018-19	Camera Moda SRL Unipersonale	238,988
International Fibre Advocacy	R. Peter Ackroyd Ltd	280,284
International Woolmark Prize 2018/19	Brandon Maxwell; OBO London Limited; Colovos LLC; Palmer Trading Co; The Communications Store Ltd	3,999,972
Italian Fashion Chamber	Camera Moda SRL Unipersonale	242,193
Italian Industry & Strategic Planning	Fabrizio Servente	438,184
Jacquemus Men + Women SS19	Jacquemus SAS	214,574
Marketing and Business Development Consultancy	Entente Agency Pty Ltd; MS Grace Pty Ltd	158,025
Media Monitoring	Cognitive Platform Pty Ltd; DMR Group SRL; iSentia Pty Ltd; Japan Information Service Inc; The Television Consultancy; Tribe Dynamics	297,858
Nagnata Circular Knit Active Range	Nagnata Pty Ltd	154,412
Net-a-Porter Editorial Collaboration	Net a Porter	179,353

*The key providers indicated for each project are listed in alphabetical order. The list of providers is not necessarily a complete list of all providers for the project.

MARKETING PROJECTS (continued)

Project title	Key providers*	\$ paid in 2018/19
PARIS Fashion Week	Media Presse TV	222,421
Saint James – Fifty Years Anniversary	BEL'RP; Tricots Saint James; We Are Social SAS	238,200
Shaun the Sheep	Aardman Animations Limited; 11 Worldwide Limited; Feref limited,	190,544
Strategic Marketing Consultancy Services	April SRL; Born & Raised LLC; Les Corsaires SAS; TBWA Sydney Pty Ltd; 11 Worldwide Limited	169,960
Takeo Kikuchi AW18 & SS19 Merino Wool Campaigns	Explorers Tokyo Co Ltd; Hey-Sign GmbH, Initial Inc; Krypton Inc; UUM Co Ltd	185,952
Tim Coppens Collaboration	Tim Coppens; 3Stthree LLC	222,227
Tokyu Plaza Ginza Christmas Campaign	Tokyu Agency Inc	214,397
Venice Gondoliers Product Placement	Comune Di Venezia; Cantiere Crea SRL; Marco Martini & C SAS	174,545
Vogue Fashion Night Out – Japan	Conde Nast Japan; Edelman Japan	220,396
Woolmark Performance Challenge	Bambra Press; L'Ecole de la Maille de Paris; Salina Janzan; Three60 Media Pty Ltd; The Icehouse Pty Ltd	266,931
World Surf League	Association of Surfing Professional; Lauren Sims Creative	182,970
Zadig & Voltaire France-Japan Activation	We Are Social SAS; PR TIMES Inc; ZV Japon; Zadig & Voltaire	293,771

SHEEP PRODUCTION PROJECTS

Project title	Key providers*	\$ paid in 2018/19
Are you Feedbase Fit? Start with Soils	Charles Sturt University	150,045
Artificial Intelligence in Wool Production	NeXtgen Agri	256,000
Australian Pastures Genebank 2019	Primary Industries and Regions SA	143,034
Autonomous Remote Predation Detection	CQUniversity Australia	156,000
AWI Smart Tag Development	Jinghon Electronics Limited; Kosalapov Iurii Aleksanrovich; Ningbo XinRong New Energy Technology Co Ltd; Shenzhen Heng Yu Xin Mechanical Technology Co Ltd; Zaozhuang Hofa Technology Co; Glyn Limited; WT Microelectronics Singapore	280,596
Comparative Analysis of Wool & Other Fibres in LCA	Integrity Ag and Environment Pty Ltd	150,561
Fully Automated Wool Harvesting	Robo Shear Pty Ltd	464,820
Global Use Phase Survey for Apparel	ACNielsen Research Pty Ltd	275,093
Improving Control of Predators: Supporting 4Ps	NSW Department of Primary Industries, Orange	125,000
Improving Drought Resilience through Cluster Fencing	Soils for Life; Vanguard Business Services	292,294
Improving Economic Evaluation of MLP project	Murdoch University	371,045
Informed Development of a Flystrike Vaccine	The University of Melbourne	678,000
Lifetime Ewe Management 7	Rural Industries Skill Training Inc	555,530
Lifetime Productivity (AMSEA) Project	Australian Merino Sire Evaluation	995,975

*The key providers indicated for each project are listed in alphabetical order. The list of providers is not necessarily a complete list of all providers for the project

SHEEP PRODUCTION PROJECTS (continued)

Project title	Key providers*	\$ paid in 2018/19
Merino Lifetime Productivity	Australian Merino Sire Evaluation; Department of Planning, Industry & Environment; Joan Lloyd Consulting Pty Ltd; MerinoLink Limited; Murdoch University; The University of Adelaide Research Services	295,900
Merino Lifetime Productivity – Drought Feeding MLP 2018/19	CSIRO; Temora Wool Trading; NSW Department of Primary Industries, Orange	348,646
Merino Lifetime Productivity – Genetic Eval Prod Efficiency	CSIRO	181,522
New Chemicals for Sheep Blowfly Control	CSIRO; Uniquest Pty Ltd	350,000
No More Gaps with Superior Shrub Systems	Meat & Livestock Australia	150,000
Optimising Lamb Survival Through Density	Department of Transport; Department of Jobs, Precincts & Regions	219,522
RHDV2 Product Registration - Stage 1	Centre for Invasive Species Solutions	150,988
Strategic Optimisation of Rabbit Biocontrol	Centre for Invasive Species Solutions	150,988
Understanding and Prevention of Shearer Injuries	The University of Melbourne	174,695
Wild Dog Coordination	AgForce Queensland Farmers Ltd; David Andrew Worsley; Department of Environment, Land, Water and Planning (Vic); Meja Hannah Aldrich; NSW Farmers Association	948,078
Wild Dog On Ground Activities	Centre for Invasive Species Solutions; East Gippsland Landcare Network Inc; Meja Hannah Aldrich; Deddick River Landcare Group; Clifton Cluster Incorporated; Cogoon Cluster Group Inc; Glenaladale Landcare Group; Gwymac Incorporated; Local Lands Services Office; Neabul Wallum Cluster Association; NSW Farmers Association; Shire Of Esperance; Warwick Gates Pty Ltd; West Midlands Group; WesTrac Pty Ltd	1,474,322
Wool.com Digital Platform	Levo Digital Pty Ltd	150,000
Wool Life Cycle Analysis	AgResearch Ltd; Integrity Ag Services Pty Ltd; Integrity Ag and Environment Pty Ltd; Oslo Metropolitan University	329,632
Vaccine for Control of Flystrike	CSIRO	150,780

WOOLGROWER SERVICES PROJECTS

Project title	Key providers*	\$ paid in 2018/19
BestWool BestLamb 2018-20	Department of Jobs, Precincts & Regions	225,000
Beyond the Bale 2018/19	Brand Solutions Pty Ltd; D & D Mailing Services; Newstyle Printing Co Pty Ltd	350,801
Global Brand Tracking	ACNielsen Research Pty Ltd	150,000
Global Market Intelligence	Euromonitor International; The Business of Fashion Ltd; WGSN Ltd; The Future Laboratory Ltd UK; World Textile Information Network	172,611
Novice Schools & Workshops	Ryan Bowden; Shear Jitsu Limited	181,574
In Shed Shearer and Wool Handler Training	Brian Anthony Sullivan; Cartwright Terry Shearing World; Joshua Stanley Hull; Rylington Park Management Company Inc; Rural Industries Skill Training Inc; SCAA Shearer Woolhandler Training Inc; The Trustee for The Hosie Family Trust; Walker Shearing Pty Ltd; TAFE SA	1,676,107
It's Ewe Time 2018 & 2019	Meat & Livestock Australia	195,193
Leading Sheep 2018-21	Department of Agriculture & Fisheries	187,960
Major Shows and Special Wool Events	Exponet; Harry the Hirer; Hamilton Pastoral & Agricultural Society Inc; Royal Agricultural Society of NSW	204,419

WOOLGROWER SERVICES PROJECTS (continued)

Project title	Key providers*	\$ paid in 2018/19
National Merino Challenge	Adelaide Expo Hire; BRALCA.com - BF & FL Watts; Royal Agricultural Society Of NSW; Australian Public Address	304,140
Regional Engagement Events	Australian Sheep Breeders Assoc; Dubbo Ram Sale Association; Fairfax Media Pty Limited; Inetol Enterprises Limited; Premium Fulfilment Services Pty Ltd; Royal Agricultural Society of Western Australia Incorporated; Wagin Agricultural Society Inc; Vicon Transfers	240,021
Shearer & Wool Handler Industry Competitions 2018-19	Sports Shear Australia Qld Association Inc; Sport Shear Australia (NSW) Inc; Sports Shear Australia Victoria; Sports Shear Tasmania Inc; Western Australia Competition Shearing Association	243,710
Sheep Connect NSW 2016-2019	Megan Rogers Consulting Pty Ltd	180,704
Sheep Connect SA 2018-20	Primary Industries and Regions SA	200,000
Stakeholder Advertorial Campaign	Australian Geographic Holding Pty Ltd; Fairfax Media Pty Limited; News Pty Limited,	395,495
The Sheep's Back 2018-20	The Sheep's Back Network	210,000
Trade & Supply Chain Facilitation	Ausfine Pty Ltd; Scott Daniel Carmody; Sentdale Pty Ltd; Talman Pty Ltd	249,929
WoolPoll 2018	Cox Inall Communications; D & D Mailing Services; Link Market Services Ltd; Newstyle Printing Co Pty Ltd; Resolve Communications Co; Sydney Lawrie	546,032

PROCESSING INNOVATION & EDUCATION EXTENSION PROJECTS

Project title	Key providers*	\$ paid in 2018/19
Education & Extension Packages	Accademia Di Costume E Di Moda SRL; Ari Kuchar; Bond Factory SRL; Deutscher Fachverlag GmbH; Fashion Council Germany; Hey-Sign GmbH; Hiroki Watanabe; Novotel Gangnam; Premium Fulfilment Services Pty Ltd; Studio Frowijn; The Korea Textile News; The Mills Limited; Texselect; Start From Zero Ltd; Stephanie Bess Waterman	186,860
Emerging Markets	Dr Tran Van Quyen; Infoaid Partners; Nguyen Van Hung; Nguyen Nhat Duy	219,096
Global Student Seminars, Workshops & Sponsorships	Carruthers Associates; Compass Group B&I Hospitality; Dalya Turizm; Fondaz Biella Master Fibre Nobili; Kettlewell Consulting; King's College London; Making Event; Monash University; Parsons The New School of Design; Texselect	261,127
Global Trade Fairs 2018-19	Fiera Milano SPA; ITMA Services NV; Marco Martini & C. SAS; Messe Munchen GmbH; Messe Frankfurt (HK) Ltd; Premiere Vision SA; S.i.tex SpA; Protein One Pty Limited; Well Link Consultants Ltd	1,466,642
Process Development Innovation	Byborre Lab BV; Jadeboard 2015 Limited; Kniteracy Limited; Shanghai Rongyou Touzi Guanli Limited; Zhejiang Xinao Textiles Inc	198,089
Product Development Innovation	Binotti Angelo; Indhoue Limited; JJ Nel Production; Shanghai Rongyou Touzi Guanli Limited; Zhejiang Xinao Textiles Inc	249,979
Sports & Active Innovation 2019	Richard Goodstein Inc	189,038
Supply Chain Technical Panel	Carruthers Associates; Kettlewell Consulting; Myrtlewood Pastoral Pty Ltd; Zhang Jianyu	234,843
The Wool Lab 2018-19	Litocart SRL; Riccardo Rami Studio SRL; Serena Campelli	1,098,998

*The key providers indicated for each project are listed in alphabetical order. The list of providers is not necessarily a complete list of all providers for the project.

PROCESSING INNOVATION & EDUCATION EXTENSION PROJECTS (continued)

Project title	Key providers*	\$ paid in 2018/19
Trade Advertising	Ari Kuchar; Byborre Lab BV; Deutscher Fachverlag GmbH; EMAP Publishing Ltd; Fashion post corporation; International Trade Publications; Journal du Textile; Three60 Media Pty Ltd; The Business of Fashion Ltd; World Textile Information Network Ltd; World Trades Publishing Ltd	161,908
Trade Content & Imagery Production	Ningbo Zooly Paper Prodcuts Co; Three60 Media Pty Ltd	249,000
Wool4School Global	AZWEB-Traduzioni SAS, Conde Nast India Pvt Ltd; Francesca Paola Dodi; Fcf Forniture Cine Foto SRL; Gengo, Inc; Good Decision International Limited; IMG Relaince Ltd; Jacqui Howells; Jodi Monro; Jonathan Ward; Jolyon Mason; Katrina Wheaton-Penniall; Linda Adam; Morrison Media Services Pty Ltd; Rebecca Smith; The Design & Technology Association; The Education Company Ltd; The Icehouse Pty Ltd; Toast Events Private Limited; Vocational Training Council; Vitale Barberis Canonico SPA	431,135
Woolmark Learning Centre	Colin Mcdowell; Hot Tin Roof Communications Pty Ltd; Protein One Pty Limited	275,495

SUPPORT PROJECTS

Project title	Key providers*	\$ paid in 2018/19
Business Development	Born & Raised LLC; Colin Mcdowell; Ciragan Sarayi ve Isletmeleri; Fashion Council Germany; Humanseven; INCO; Invisible North; Japan Fashion Organisation; Maria Dolores Naharro de Marti; Sammi Gong; Scanlan Wools Pty Ltd; Tricots Saint James; The American Projects LLC; The Conde Nast Publications Ltd	673,459
Measurement & Evaluation New framework	Business Generation Pty Ltd; David James Collins; Prospecta Australia Pty Ltd	213,111
Measurement & Evaluation Project Assessments	AgSTAR Projects; Fiftyfive5 Pty Ltd; Intuitive Solutions Pty Ltd	151,258
Review of Performance Implementation	Cato & Clegg Partners Pty Ltd; Levo Digital Pty Ltd; Mathieu Robert Locke Blake	249,499
Wool Traceability - Intrinsic Properties	Oritain Australia Pty Ltd	150,000
WoolQ Development	EpiServer Inc; Jyron Lazo; Levo Digital Pty Ltd; William Wilson	1,009,953

DIGITAL PROJECTS

Project title	Key providers*	\$ paid in 2018/19
Care Campaign Digital Marketing	Born & Raised LLC	233,575
Chinese Social Media Support	Digital Luxury Group DLG (Shanghai)	183,007
Digital Development & Maintenance	Levo Digital Pty Ltd; Protein One Pty Limited; WDCi Group Pty Ltd	260,595
Digital Infrastructure - Hosting & Software	Creative Folks Pty Limited; EpiServer Inc; Levo Digital Pty Ltd; Lcubed; Qualtrics LLC; Siteimprove Australia Pty Ltd	196,334
Digital Infrastructure - Resources	Levo Digital Pty Ltd	180,486
Digital Innovation	Augmented Reality Experts Pty Ltd; Augmented Reality Investments; Asiance; LinkedIn Singapore Pte Ltd; Protein One Pty Limited; Silver Wheel Consulting; Torrisi Mattia	393,291
Digital Marketing Platform	Engage Australia; Marketo EMEA Limited	168,522
Global Digital Initiatives	Significance Systems	176,856
Online Promotion	Facebook Ireland; Google Australia Pty Ltd	181,477
Social Media Management	We Are Social Pty Ltd	395,703

REPORT ON COMPLIANCE WITH THE SFA

As a demonstration of AWI's transparency and good governance, AWI is including in this annual report, the report below by HLB Mann Judd regarding AWI's compliance with the Statutory Funding Agreement between the Commonwealth of Australia and AWI, and the efficacy of AWI's accounting systems, processes and controls during the 2018/19 financial year.



AUSTRALIAN WOOL INNOVATION LIMITED
ABN 12 095 165 558

AUDIT REPORT ON COMPLIANCE WITH THE SFA

To the Directors of Australian Wool Innovation Limited

Report on compliance with the Statutory Funding Agreement

We have performed assurance procedures with regards to the compliance and operating effectiveness of Australian Wool Innovation Limited ("the Company") with the requirements of section 25 (Management of Funds) and 26 (Application of the Funds) of the Statutory Funding Agreement dated 26 October 2016 (the "Agreement") between the Commonwealth of Australia (the "Commonwealth") and the Company, as measured by the criteria outlined in Sections A and B below.

Use of Report

This report has been prepared for the Directors of Australian Wool Innovation Limited in accordance with the Agreement. We disclaim any assumption of responsibility for any reliance on this report to any persons or users other than the directors of Australian Wool Innovation Limited, or for any purpose other than that for which it was prepared.

A. Reasonable Assurance on Compliance with the Agreement

Respective Responsibilities

Management of the Company are responsible for compliance with the Agreement as measured by clauses 25 and 26 of the Agreement. Our responsibility is to express a conclusion on compliance with the Agreement as measured by the clauses 25 and 26 of the Agreement, in all material respects.

Our audit has been conducted in accordance with applicable Standards on Assurance Engagements (ASAE 3100 Compliance Engagements) to provide reasonable assurance that Australian Wool Innovation Limited has complied with the Agreement as measured by the criteria in clauses 25 and 26 of the Agreement for the year ended 30 June 2019.

Our procedures included examining, on a sample basis, information to provide evidence supporting the compliance with clauses 25 and 26 of the Agreement. These procedures have been undertaken to form a conclusion as to whether Australian Wool Innovation Limited has complied in all material respects, with the Agreement, as measured by clauses 25 and 26 of the Agreement for the period from 1 July 2018 to 30 June 2019.

Inherent Limitations

Because of the inherent limitations of any internal control framework, it is possible that fraud, error or non compliance may occur and not be detected. An audit is not designed to detect all instances of non compliance with the Agreement as measured by clauses 25 and 26 of the Agreement, as an audit is not performed continuously throughout the period and the audit procedures performed in respect of compliance with the Agreement as measured by clauses 25 and 26 of the Agreement are undertaken on a test basis. The audit conclusion expressed in this report has been formed on the above basis.

Opinion

In our opinion, Australian Wool Innovation Limited has complied, in all material respects, with Sections 25 and 26 of the Agreement for the period from 1 July 2018 to 30 June 2019.

hlb.com.au

HLB Mann Judd Assurance (NSW) Pty Ltd ABN 96 153 077 215

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B. Limited assurance regarding operating effectiveness of accounting systems, processes and controls

Respective Responsibilities

Management of the Company are responsible for the efficacy of the accounting systems, processes and controls to comply with paragraph 25.1 of the Agreement. Our responsibility is to express a conclusion regarding the operating effectiveness of the accounting systems, procedures and controls in accordance with the requirements of paragraph 25.1 of the Agreement.

Our review has been conducted in accordance with applicable Standards on Assurance Engagements (ASAE 3000 Assurance Engagements Other than Audits or Reviews of Historical Financial Information) to provide limited assurance that Australian Wool Innovation Limited has complied with the Agreement as measured by paragraph 25.1 of the Agreement. Our procedures included examining, on a sample basis, information to provide evidence supporting the operating effectiveness of the accounting systems, processes and controls with paragraph 25.1 of the Agreement. These procedures have been undertaken to form a conclusion, that nothing has come to our attention that causes us to believe that the systems, processes and controls related to the management of funds were not operating effectively, in all material respects, in accordance with the requirements of paragraph 25.1 of the Agreement for the period from 1 July 2018 to 30 June 2019.

Inherent Limitations

Because of the inherent limitations of any internal control framework, it is possible that fraud, error or non compliance may occur and not be detected.

A review is not designed to detect all weaknesses in operating effectiveness as measured by paragraph 25.1 of the Agreement as it is not performed continuously throughout the period and tests performed are on a sample basis. Also, a review does not provide all the evidence that would be required in an audit, thus the level of assurance provided is less than given in an audit. We have not performed an audit and accordingly, we do not express an audit opinion.

Any projection of the evaluation of the effectiveness of accounting systems, processes or controls to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions or that the degree of compliance with them may deteriorate.

Conclusion

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the accounting systems, processes and controls of Australian Wool Innovation Limited related to the management of funds, were not operating effectively, in all material respects, in accordance with the requirements of paragraph 25.1 of the Agreement for the period from 1 July 2018 to 30 June 2019.

HLB Mann Judd Assurance (NSW) Pty Ltd
Chartered Accountants

S P James
Director

Sydney, NSW
30 August 2019

hlb.com.au

HLB Mann Judd Assurance (NSW) Pty Ltd ABN 96 153 077 215

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Australian Wool Innovation Limited

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AWI also has local representatives and marketing agents in the following countries and regions:

- Czech Republic/Slovakia
- Northern Europe
- Poland
- Slovenia/Croatia/Bosnia/Herzegovina/Serbia/Macedonia/Montenegro

Share Registry

Link Market Services
1800 113 373 (free call within Australia)

Auditor

HLB Mann Judd
Level 19
207 Kent Street
Sydney NSW 2000

Connecting with AWI:

Information on AWI activities and products are available via publications, events and online.

AWI Helpline 1800 070 099
(free call within Australia)

- Web: wool.com
- Email: info@wool.com
- The Yarn podcast: wool.com/podcast
- twitter.com/woolinnovation
- youtube.com/awiwoolproduction
- Instagram/BeyondTheBale
- *Beyond the Bale* magazine online: <http://beyondthebale.wool.com>

AWI produces several free e-newsletters:

- Weekly wool market review
- Daily and weekly price report (via SMS)
- Monthly AWI woolgrowers' e-newsletter
- *Beyond the Bale* e-newsletter
- WOOL e-newsletter (textiles and fashion)

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Limited