

Vision: the challenge for 2030	Themes: milestones to achieve vision	Strategy: plan to achieve milestones	Action: actions implementing plan	Priority	Time frame
Increased on farm profitability	Increased productivity and reduced input costs	Refined animal husbandry	Research and development of lice control **cross reference with genetics strategy Immediate results worm test on farm Footrot vaccine Fly centric research/ biological control Chemical usage: identified but not explored ** cross reference with labour efficiency strategies	High High High High	Long Short Short Long
		Labour efficiency improvements	<p><i>Wool shearing:</i> Research into alternative fibre cutting mechanisms (wavelengths) Portable/ mobile shearing infrastructure: revisit previous R&D in light of current technologies Shearing ergonomics: Upright shearing platforms</p> <p><i>Wool harvesting:</i> Identify endogenous chemicals of regulation of defleecing Identify genetic components of fleece shedding</p> <p><i>Animal husbandry:</i> Develop vaccine for blow flies targeting L1-L3 stages Parasite vaccines Whole of life vaccines Immunocastration Identify permanent topical defleecing agents (fly strike prevention) **cross reference to fly control strategy Virtual fencing/ satellite control of sheep movements linked to electronic sheep identification Sheep behavioural pattern, movement patterns and sheep taste preferences (relating to taste of drenches)</p>	High High Commercial interest High High High Low High	Short Short Commercial interest Long Long Medium Long Medium Medium

	Genetic tool development and uptake	<p>Development of snp chip codes research, validation and commercialisation</p> <p>Research and development of mothering ability heritability and measurement methods</p> <p>Research and development of feed efficiency traits</p> <p>Research and development of lice resistance traits **cross reference with animal husbandry improvements strategy</p> <p>Research and development of footrot resistance traits</p> <p>Research and development of temperament traits</p> <p>Use of fly genome project to identify opportunities for intervention</p> <p>Research and development of sheep resistance to flies</p> <p>Development of on farm genetic marker test</p>	High High High High	Short Short Long Short Short
	Feed efficiency	Research and develop ASBVs for feed efficiency	High	Short
	Reproductive efficiency	<p>*Cross reference with genetics and mortality strategies</p> <p>Extension and adoption on farm of reproductive efficiency traits and best practice animal husbandry to improve reproductive efficiency</p>	Medium	Medium
	Reduced on farm mortality	<p>Lowering mortality rates through targeted extension of environmental risk factors for mortality</p> <p>Identification and quantification of gains from addressing minor identified risk factors, prior to investment in research</p> <p>Immune system boost: identify immune system key regulators and cost effective supplementation</p> <p>Feed supplementation (minerals, energy, protein, vitamins) for identified targeted situations and seasonal conditions including in periods of climate stress</p> <p>Defined indicator toolkit for identifying mortality risk (condition score at different gestation times, body score, growth rates, weaning rates, weaning growth rates, birth weights)</p> <p>Fox control options</p>	High High High	Short Short-med
	Adaptable pasture systems	<p>Pasture genomics research to improve species and adaptability addressing climate adaptation and complementarity with mixed farming systems</p> <p>NPKS use efficiency (soil/ supplement) though through pasture genomics and investigating interaction with soil microfauna and flora, other minerals and additives</p> <p>**cross check with agronomist</p> <p>Accuracy measuring dry matter/ protein/ mineral components of pastures on farm adapting existing tests (rapid on farm) or technology advancements in infra red spectroscopy</p> <p>Low cost rabbit control</p>	High High Low-med	Short Long Long

		Learn from other industries	Adapting and extrapolation via literature reviews, research searches, remote technologies, general productivity measures, genetic advantages, crop and climate interaction modelling, feed efficiency from high production industries (such as dairy)		
		Whole farm measurement and monitoring	**compared with dairy industry daily measurements ** cross reference with pastures strategy, ** cross reference with animal husbandry improvements strategy		
Sharing in the value chain at low risk	Effective, efficient and open communication supply chains ** check terminology vertical integration?	Accurate supply chain intelligence	Establish and facilitate dialogue both up and down the supply line, between the growers and retailers/ consumers/ processors by distance or in person, to encourage through sector understanding of constraints, opportunities and early identification of credence characteristics to enable rapid response	High	Short
		Managing risk of sharing in value chain	Communication of alternative wool selling systems and their risks Benefit/ cost analysis of on farm storage of wool bales to reduce handling and storage costs	Commercial interest Low	Commercial interest Long
		Reduce steps of wool handling in supply chain	In shed sampling and testing ** cross reference with Streamline objective in shed measurements strategy		
Consumer confidence in wool products	Meet market demands for product integrity and quality	Develop objective in shed measurements	Certification of in shed sampling and development of in shed testing for fleece characteristics Certification of in shed bale identification (electronic/ DNA/ alternative) ** cross reference with Reduce steps of wool handling in supply chain strategy		
		Assess and address credence characteristics	Identify benefits associated with delivering and verifying credence characteristics on farm Establish and facilitate supply chain dialogue over verifying credence characteristics on farm without traceability post farm gate (such as wool blending) Traceability post farm gate	High High Commercial interest	Short Short Commercial interest
Consumer confidence in the wool farming system	Recognised environmental and farming system credentials	Farming sustainability	Qualify environmental impacts of farming systems Prove farm management systems compliment natural environments Quantify benefits of on farm management impacts beyond farm boundaries Extension of farming systems environmental impacts to wider community **cross reference with credence characteristics strategy		
		Addressing climate variability	Increased accuracy of modelling over 12 month predictions ** cross reference to pastures strategy and on farm mortality strategy Decision support for seasonal management of pasture through modelling **cross	High	Short

			reference learn from other industries strategy		
		Identify carbon baseline	Quantify Australian carbon footprint of segments (in wool enterprise, in fleece, in product) Compare Australian carbon footprint with European data Research to support industries position on policy issues: not explored		Long
		Identify water, energy and chemical use baselines	On farm energy production for national grid: not explored Water, energy and chemical use comparisons with other fibres: not explored		
Awareness and adoption of wool industry messages	Effective communications with industry and the wider community	Information distribution through targeted communication topics, timing and content	Targeted industry extension focusing on animal welfare Timing of workshops to maximise exposure Develop relationship with multipliers to deliver messages (private consultants)		
		Information adaptation	Maintain investment in research extension and demonstration sites for local adaptation		