## Almond

## STRATEGIC INVESTMENT PLAN 2022-2026

## **AT A GLANCE**

The overarching strategic intent of the almond Strategic Investment Plan (SIP) is to embrace innovation to maintain and strengthen profitable growth in export and domestic markets with sustainable and efficient production and processing of consistent quality almonds.

This abbreviated version of the almond SIP provides details on the outcomes, strategies and key performance indicators for the industry for the 5-year period of the SIP. More information is provided in the SIP full document, which is available at www.horticulture.com.au/almond/.

OUTCOME	STRATEGIES	KPIs		
Industry supply, production and sustainability				
Outcome 1: The Australian almond industry has increased profitability, efficiency and sustainability through innovative research and development (R&D) focusing on an integrated approach to plant improvement, orchard productivity, soil health, water-use efficiency, pollination, integrated pest and disease management (IPDM) and emerging technologies.	<ol> <li>Develop and evaluate superior scion varieties and rootstock varieties suitable to current and future climates and production systems (Horizon 2 and Horizon 3), and evaluate superior rootstock varieties and maintain high- health mother trees for varieties</li> </ol>	<ul> <li>Demonstration sites with superior scion and rootstock varieties</li> <li>Availability of new scion varieties suitable for current and future Australian conditions with superior traits</li> <li>New knowledge on the performance of superior scion and rootstock varieties under Australian conditions</li> <li>Almond variety true-to-type, high-health mother trees maintained</li> </ul>		





OUTCOME	STRATEGIES	KPIs
Industry supply, production and	sustainability	
Outcome 1: (continued) The Australian almond industry has increased profitability, efficiency and sustainability through innovative R&D focusing on an integrated approach to plant improvement, orchard productivity, soil health, water-use efficiency, pollination, IPDM and emerging technologies.	2. Support further efficiencies in Horizon 1 orchards and intensification of Horizon 2 and Horizon 3 orchards to better understand the integration of soil health, nutrition, tree architecture, plant physiology and orchard design	<ul> <li>New knowledge for Horizon 2 and Horizon 3 production systems are available for early adopters</li> <li>Delivery of variety x rootstock management guidelines to optimise wate and nutrient input, ensure long-term productivity, minimise pest and disease and tree failure, and enhance water-use efficiency</li> </ul>
	<ol> <li>Identify options to improve water efficiency and supply, and promote healthy soils though covered cropping/ mixed cropping, inter-row plantings, organic amendments, and waste stream management</li> </ol>	<ul> <li>Increased water-use efficiency t/ML</li> </ul>
	<ol> <li>Support pollination security through robust honey bee health, pest and disease mitigation, and investigating alternative mechanical and crop solutions</li> </ol>	<ul> <li>Optimal orchard layouts identified that maximise honey bee pollination</li> <li>Contribution to the National Bee Pest Surveillance Program</li> </ul>
		<ul> <li>Improved access to high-health hives the are free of endemic and exotic honey be pests of commercial importance</li> </ul>
		<ul> <li>Understanding of the impact of self-fertil almond varieties on honey bee pollination dependence</li> </ul>
	5. Continue to develop, enhance and implement almond industry IPDM options and strategies concentrating on practices that have the most impact on productivity and almond quality	<ul> <li>Developed control methods and strategies for key pests of importance developed</li> </ul>
		<ul> <li>Development of new knowledge on key pests and diseases of almonds, particularly trunk pathogens</li> </ul>
		<ul> <li>Development of new knowledge on biologicals for pest and disease management</li> </ul>
		• Development of resources from the integrated pest management (IPM) and integrated disease management (IDM) programs

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OUTCOME	STRATEGIES	KPIs
Industry supply, production and	l sustainability	
Outcome 1: (continued) The Australian almond industry has increased profitability, efficiency and sustainability through innovative R&D focusing on an integrated approach to plant improvement, orchard productivity, soil health, water-use efficiency, pollination, IPDM and emerging technologies.	6. Utilise relevant emerging technologies to improve production efficiency, harvest and postharvest systems and support the move from a ground-based recovery operation to integrated 'shake and catch', and product dehydration and storage	<ul> <li>Availability of next generation harvest and postharvest management technology</li> <li>Feasible mechanisation options for harvest and postharvest systems adopted in commercial orchard systems</li> <li>Improved moisture management for postharvest and during storage</li> <li>No identification of biological or physical contamination of nuts</li> </ul>
	7. Improve resilience to biosecurity threats by enhancing rapid diagnostic and surveillance capacity and capability for high priority pests and diseases	<ul> <li>Development and implementation of up-to-date tree nut industry biosecurity plans, and biosecurity incident standard operating procedure</li> <li>Development of an Owner Reimbursement Cost framework developed in conjunction with PHA</li> <li>Adoption of sustainable chemical options (e.g., organic, inorganic, biological, etc.) and Maximum Residue Limits (MRLs) not exceeded for key markets</li> </ul>
	8. Enhance the understanding of the impacts of climate change on almond production system, including defining the almond industry greenhouse gas emissions footprint, and evaluating industry options for offsetting greenhouse gas impacts	<ul> <li>Development of almond industry greenhouse gas emission footprint</li> <li>Development of options for managing almond industry greenhouse gas mitigation</li> </ul>
	9. Prioritise the major crop protection gaps through a Strategic Agrichemical Review Process (SARP)*	<ul> <li>Coordinated industry priority setting with a clear outlook of gaps and risks in existing pest control options</li> <li>Industry priority needs published and shared with stakeholders, including registrants</li> </ul>
	10. Provide regulatory support and co-ordination for crop protection regulatory activities with the potential to impact plant protection product access, both in Australia and internationally*	Regulatory Risk Assessments maintained
	<ol> <li>Generate residue, efficacy and crop safety data to support applications to the Australian Pesticides and Veterinary Medicines Authority (APVMA) that seeks to gain, maintain or broaden access to priority uses for label registrations and/or minor use permits for crop protection needs*</li> </ol>	<ul> <li>Data to support applications to the APVMA and the establishment of MRLs</li> </ul>

OUTCOME	STRATEGIES	KPIs
Demand creation	,	
Outcome 2: Demand creation supports the Australian almond industry to develop existing and future domestic and international markets.	<ol> <li>Inform health professionals and foodservice operators about the positive and distinctive health and nutrition attributes of Australian almonds</li> </ol>	Health research outcomes that link     almond consumption to improved human     health communicated to health and     foodservice professionals
	<ol> <li>Prioritise and manage risks to enhance the industry's reputation as a reliable supplier of superior quality, safe and responsibly-grown produce</li> </ol>	• Development of a current almond export plan to guide industry export initiatives
	<ol> <li>Collaborate with government and other industries to improve technical market access for current markets, and access to new, high value markets</li> </ol>	<ul> <li>Market access solutions for identified priority emerging export market opportunities</li> <li>Development of an almond sustainability</li> </ul>
		framework that highlights industry sustainability practices
	4. Facilitate Australian almond exports through market research and sharing insights with firms across Australian almond supply chains	<ul> <li>Development of an almond export plan to guide industry export initiatives</li> </ul>
	5. Educate and engage targeted trade stakeholders in established and emerging markets globally	<ul> <li>Sales growth of Australian almonds in targeted markets globally</li> </ul>
		<ul> <li>Positive influence on buying attitudes of Importers, traders and distributors</li> </ul>
		<ul> <li>Positive influence on the purchase of Australian almonds by targeted food manufacturers and retailers</li> </ul>
Extension and capability		
Outcome 3: Improved capability and an innovative culture in the Australian almond industry maximises investments in productivity and demand.	<ol> <li>Deliver extension and communication capabilities and business insights to support positive change in the areas of productivity and demand</li> </ol>	<ul> <li>Establishment of a baseline and then demonstrate an increased share of industry (ha) with positive change in knowledge, attitude, skills and aspiration (KASA), practice and impact in targeted high priority areas (e.g., IPDM, biosecurity, soil and water management)</li> </ul>
	2. Provide opportunities for the required levels of engagement across the almond industry to innovate through trusted relationships	<ul> <li>Demonstrated growth in cooperation within industry and across industries leading to business and industry innovations (i.e., survey data)</li> </ul>
	3. Strengthen industry skills and leadership through targeted training, leadership development and a career pathway program for the almond industry	<ul> <li>Increased participation in industry leadership initiatives</li> </ul>
		<ul> <li>Increased availability of suitable staff for industry</li> </ul>
		<ul> <li>Enhanced transition of agricultural science graduates to positions in the almond industry</li> </ul>



OUTCOME	STRATEGIES	KPIs
Business insights		
Outcome 4: The Australian almond industry is more profitable through informed decision-making using consumer knowledge and tracking, trade data, production statistics and forecasting, and independent reviews.	<ol> <li>Enable demand-led alignment and product-positioning across domestic and overseas supply chains through market research and insights on consumer attitudes towards quality and other attributes*</li> </ol>	<ul> <li>Development of a consumer insights strategy</li> <li>Evidence that consumer insights inform strategic market engagement</li> <li>Availability of new consumer knowledge</li> </ul>
	<ol> <li>Use trade data to guide ongoing export development opportunities*</li> </ol>	<ul> <li>An interpretation of supply and demand balance considering increasing supply from California, Australia and Spain</li> <li>Quantitative and qualitative research on emerging almond export markets</li> </ul>
		• Fundamental and up-to-date quantitative and qualitative domestic market research
	<ol> <li>Identify priorities and performance with increasing industry productivity and profitability through industry production benchmarking and monitoring</li> </ol>	<ul> <li>Almond industry statistics and data collection – covering 2016-2021</li> <li>Almond industry data that records the Australian almond industry's performance with respect to energy use, carbon footprint, carbon sequestration and water-use efficiency using guides developed by the Californian almond industry that will, once collected, assist with the marketing of Australian almonds</li> </ul>
	<ol> <li>Develop in-season almond production forecasts that support industry strategic market planning strategies in domestic and export markets</li> </ol>	<ul> <li>Australian almond plantings database/ world planting trends</li> <li>Annual international supply and demand data sets</li> </ul>

\* Foundational investments provide data and information that underpin the delivery of other SIP outcome areas and will be aligned to this strategy. Foundational investment areas include:

- Consumer behavioural data
- Consumer usage and attitudes, and brand health tracking data
- Impact assessments
- Trade data
- Crop protectant data.

View the almond SIP full document and find more information on the Almond Fund at www.horticulture.com.au/almond/

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