



Australian Avocado Sustainability Strategy

November 2025



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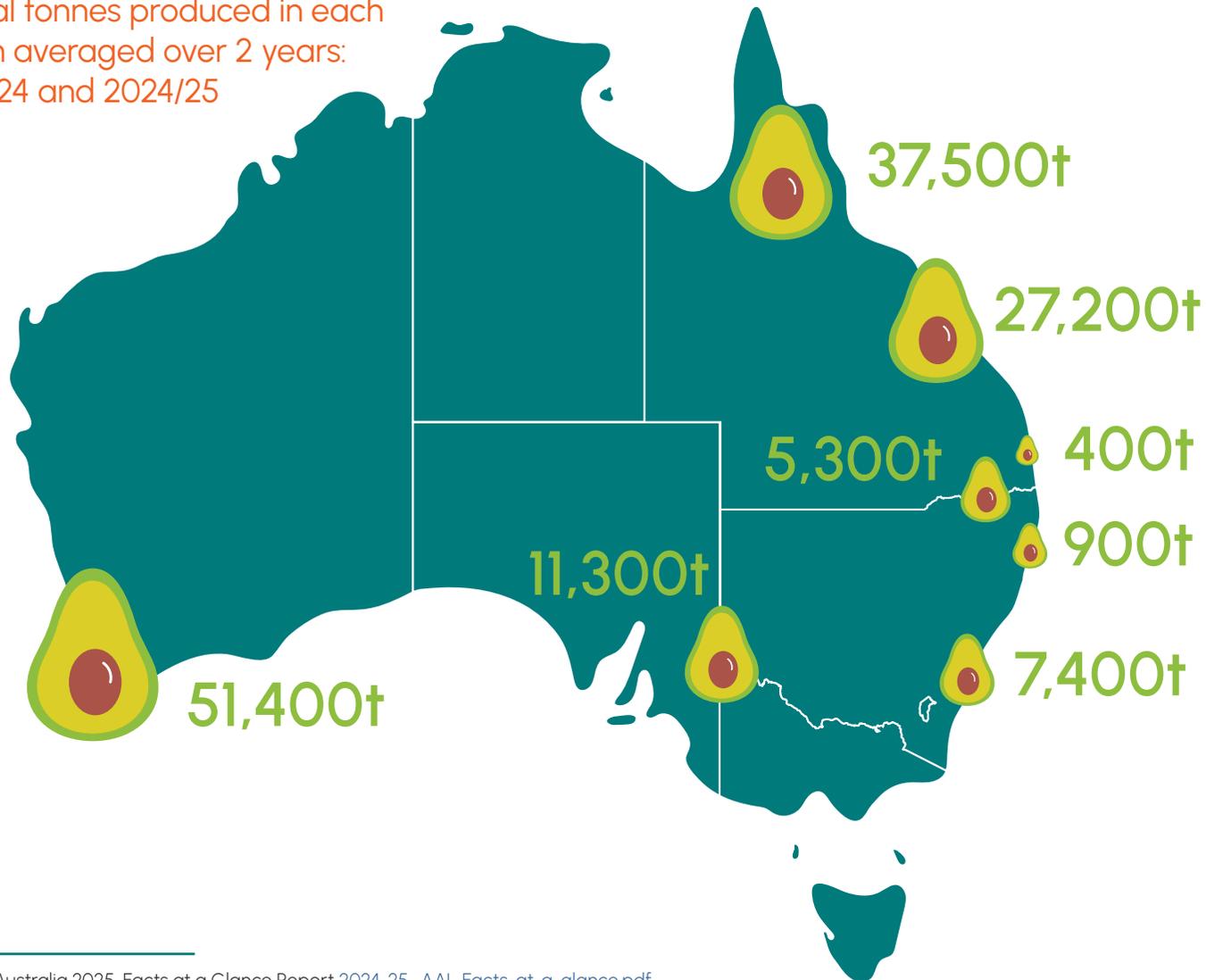
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About the Australian avocado industry

The Australian avocado industry is a dynamic and progressive industry that has seen significant production increases and strong domestic market growth over the last ten years. Australia's diverse climate allows avocados to be produced and supplied to markets year-round, with key production regions situated in North, South and Central Queensland, Central New South Wales, Tamborine Northern Rivers, Sunshine Coast, Western Australia and the Tri-state area¹.

Annual tonnes produced in each region averaged over 2 years: 2023/24 and 2024/25



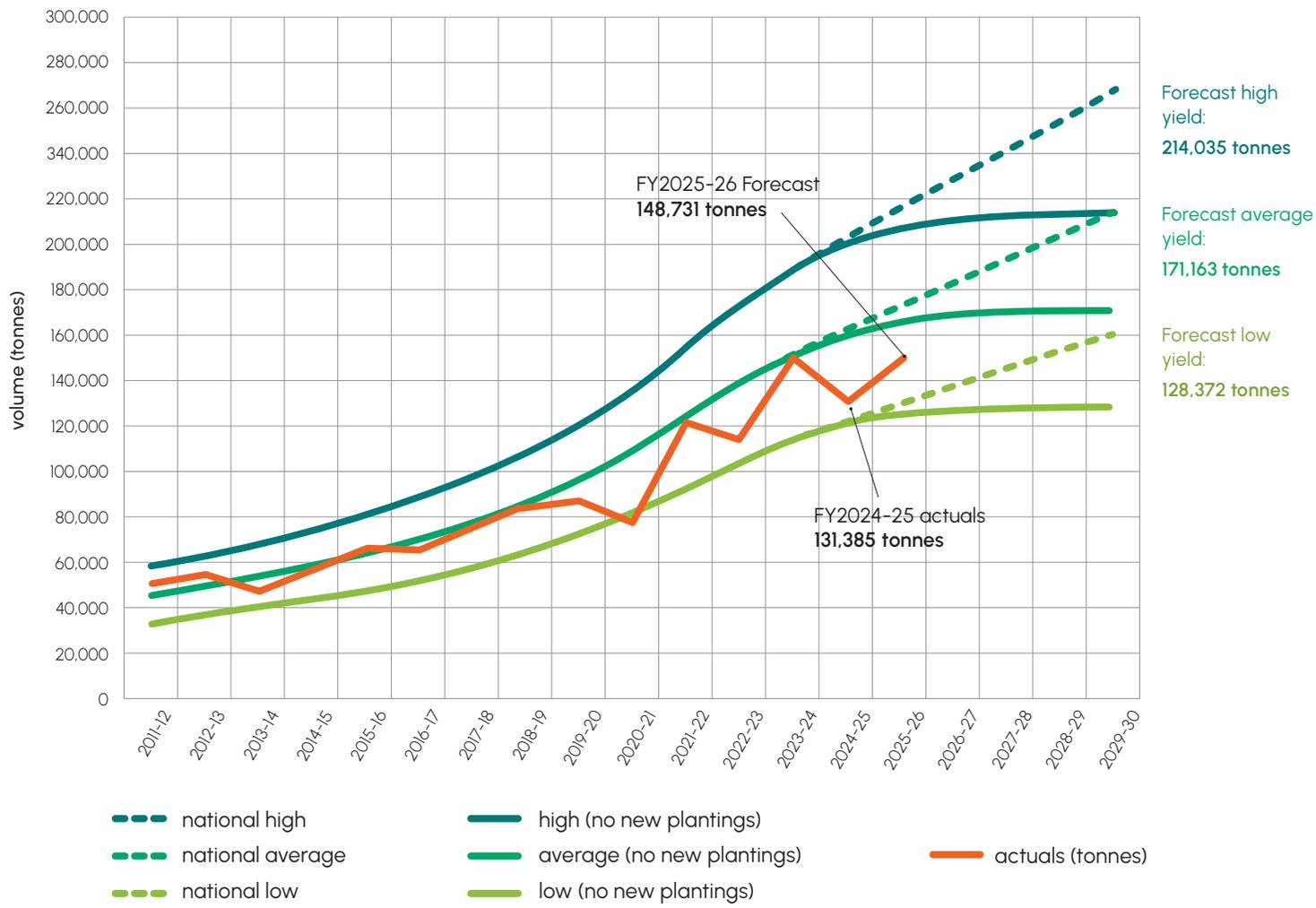
¹ Avocados Australia 2025, Facts at a Glance Report 2024-25_AAL-Facts-at-a-glance.pdf





Over the past decade, the Australian avocado industry has experienced significant growth, with production forecasts to expand to around 170,000 tonnes per year by 2026 based on average production modelling with the assumption of no new tree plantings. Queensland is currently the largest production region, accounting for an average of 62% total production over the last 3 years. Western Australia is the second largest production region, accounting for an average of 36% total production over the last 3 years².

Australian avocado production model 2012-2030 (tonnes)³

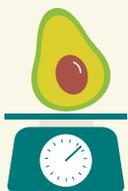


^{2,3} Avocados Australia 2025, Facts at a Glance Report 2024-25_AAL-Facts-at-a-glance.pdf

Market environment

In 2024–25, approximately 690 businesses produced 131,385 tonnes of avocados in Australia, with a gross value of \$794 million.

Avocado production and value (2024-25)



131,385
tonnes



23.9 million
trays



\$794 million
gross value of
production

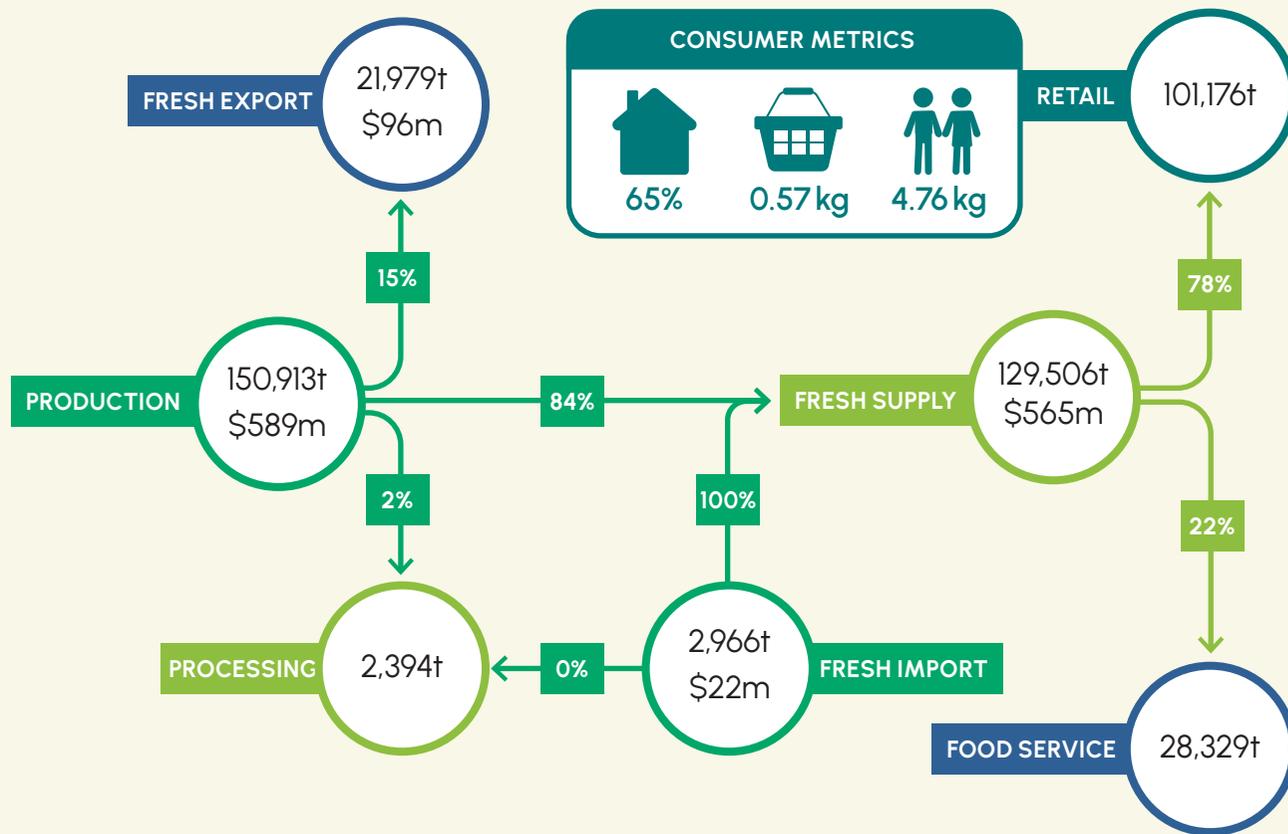


\$1.34 billion
domestic value



\$86.7 million
export value

Avocado supply chain & consumer metrics (year ending June 2024)



In 2023-24 the Australian domestic market consumed 84% of total avocados produced in Australia, with a total market value of \$842 million⁴. Domestic retail accounts for 78% of the domestic market volume, followed by food service at 22%. Export markets are growing, with export markets consuming 15% of total avocados produced in Australia in 2023-24 and a total market value of \$96m. Australia's top export markets are Hong Kong, Singapore, Malaysia. Volumes are growing into Japan and India and the industry is waiting for market access to China.

⁴ Hort Stats Handbook 2024, Hort Innovation | Australian Horticulture Statistics Handbook 2023/24

Operating environment

The operating environment for Australian avocado producers is shaped by a complex mix of environmental, economic, social, technological, political, and legal factors, all of which interact with the industry's sustainability goals, objectives and capacity.

Australian avocado producers must navigate challenges such as water availability, climate variability, and biosecurity risks, while also responding to economic pressures from fluctuating market prices and highly competitive markets. At the same time, shifting consumer expectations around ethical sourcing, sustainable packaging, and reduced carbon footprints push the industry to adopt more transparent and responsible practices.

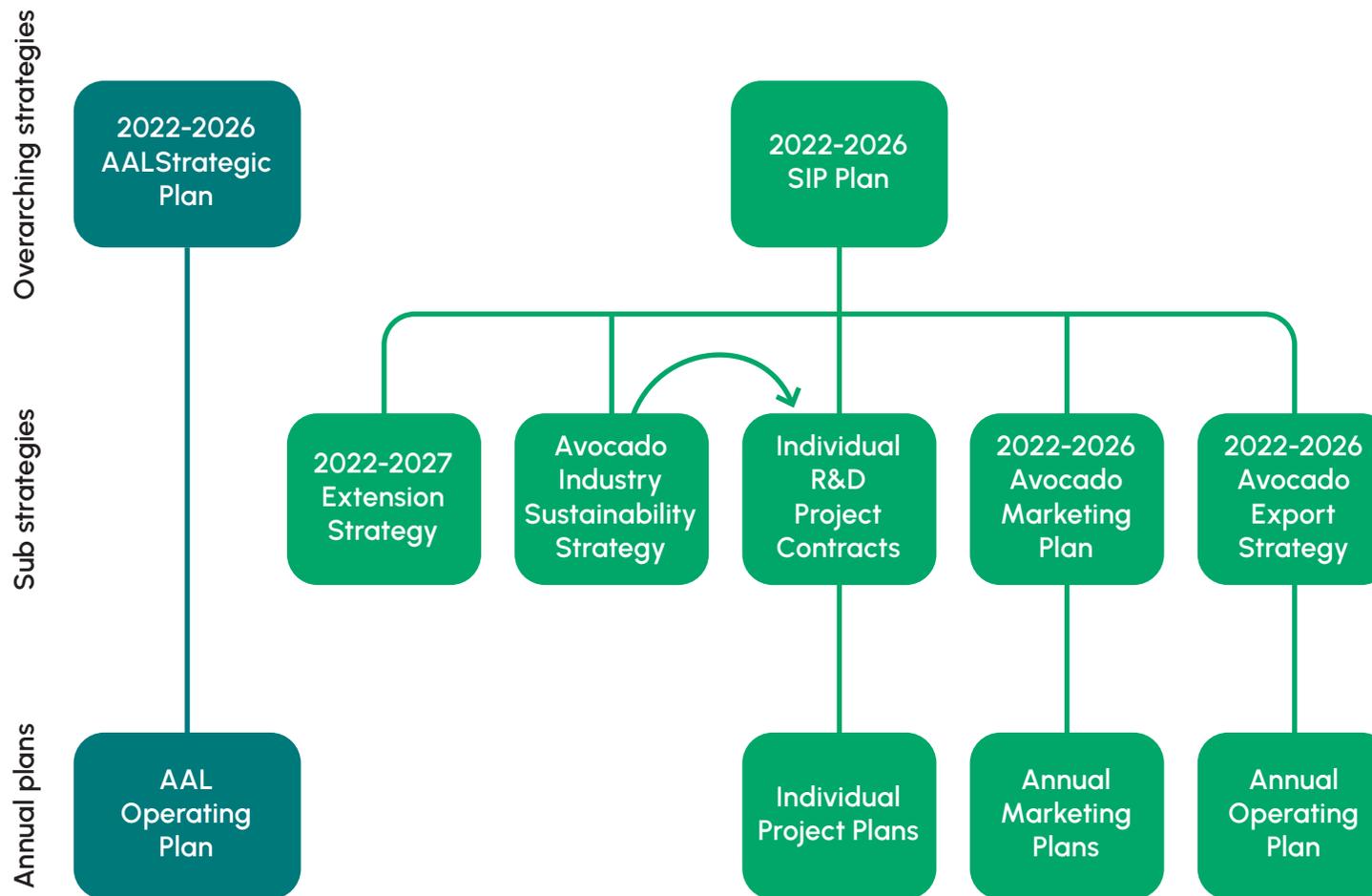
Government policy and regulatory frameworks, including environmental standards, trade agreements, and labour laws, further influence production decisions. Together, these factors not only determine the short-term profitability of avocado farming but also shape the industry's ability to achieve long-term social, environmental and economical sustainability.

The PESTLE model (right) details the key factors influencing the operating environment for avocado producers, with regard to sustainability goals and reporting.

<p>Political</p> 	<ul style="list-style-type: none"> · National policy direction toward net zero emissions, including the Agriculture and Land sector plan supporting Australia's Net Zero Plan · Government funding and levy investments supporting RD&E in sustainable production · Trade diplomacy and market access conditions linked to sustainability standards in export markets (such as EU Green Deal, deforestation-free imports) · Increasing emphasis on alignment with UN Sustainable Development Goals (SDGs) in government, Australian Agriculture Sustainability Framework and RDC reporting frameworks
<p>Economic</p> 	<ul style="list-style-type: none"> · Rapid production growth and risk of domestic oversupply driving reliance on export market development where sustainability credentials are a differentiator · High input and compliance costs for sustainability improvements (such as irrigation efficiency, renewable energy, labour certification) · Retailer procurement standards influencing farm-gate access and pricing, particularly on emissions, waste, and ethical sourcing · Potential long-term productivity and cost benefits from improved water, soil, and energy efficiency
<p>Social</p> 	<ul style="list-style-type: none"> · Strong consumer expectations for sustainable and ethically produced food – in 2024 55% of Australians considered sustainability when buying produce · Growing scrutiny of labour rights and modern slavery risks in horticulture, increasing reputational exposure · Need to maintain social licence to operate through responsible water use, biodiversity management and community engagement · Industry workforce diversification and inclusion challenges, with reliance on migrant and PALM workers requiring fair employment and cultural safety
<p>Technological</p> 	<ul style="list-style-type: none"> · Growing adoption of precision agriculture, soil and water monitoring technologies improving sustainability metrics · Development of life cycle assessment (LCA) tools to quantify emissions and water use · Potential for digital traceability and QR code systems to link sustainability data with provenance and food safety · Emerging automation and renewable energy technologies reducing labour and emissions intensity
<p>Legal</p> 	<ul style="list-style-type: none"> · Introduction of mandatory climate-related financial disclosure requirements (2024–27) for large and medium agribusinesses and indirect reporting pressures on smaller suppliers · Enforcement of <i>Work Health and Safety Act 2011</i> and <i>Fair Work Act 2009</i>, including compliance with minimum wages and safe conditions · Strengthening of <i>Modern Slavery Act 2018</i> obligations and oversight by the new Anti-Slavery Commissioner · Environmental obligations under the <i>Environmental Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)
<p>Environmental</p> 	<ul style="list-style-type: none"> · Increased climate variability posing risks to yield, fruit quality, and regional suitability · Rising water scarcity and competition among sectors, requiring improved efficiency and alternative sourcing such as recycled water · Ongoing risk of biosecurity threats and pest incursions exacerbated by climate change · Need to maintain and demonstrate biodiversity, soil health and pollinator protection as part of credible sustainability performance

Growing a sustainable future for the Australian avocado industry

The Australian avocado industry is committed to growing a sustainable future for consumers, customers and producers. Forecasts indicate that Australian production will achieve 171,000 tonnes by 2029-30⁵. To support the industry achieving this sustainable future, a number of industry strategies exist and interact with each other. Areas identified for investment in this Strategy will feed into the R&D investment ideation and contracting process (as outlined in figure below).



⁵ Avocados Australia 2025, Facts at a Glance Report 2024-25_AAL-Facts-at-a-glance.pdf



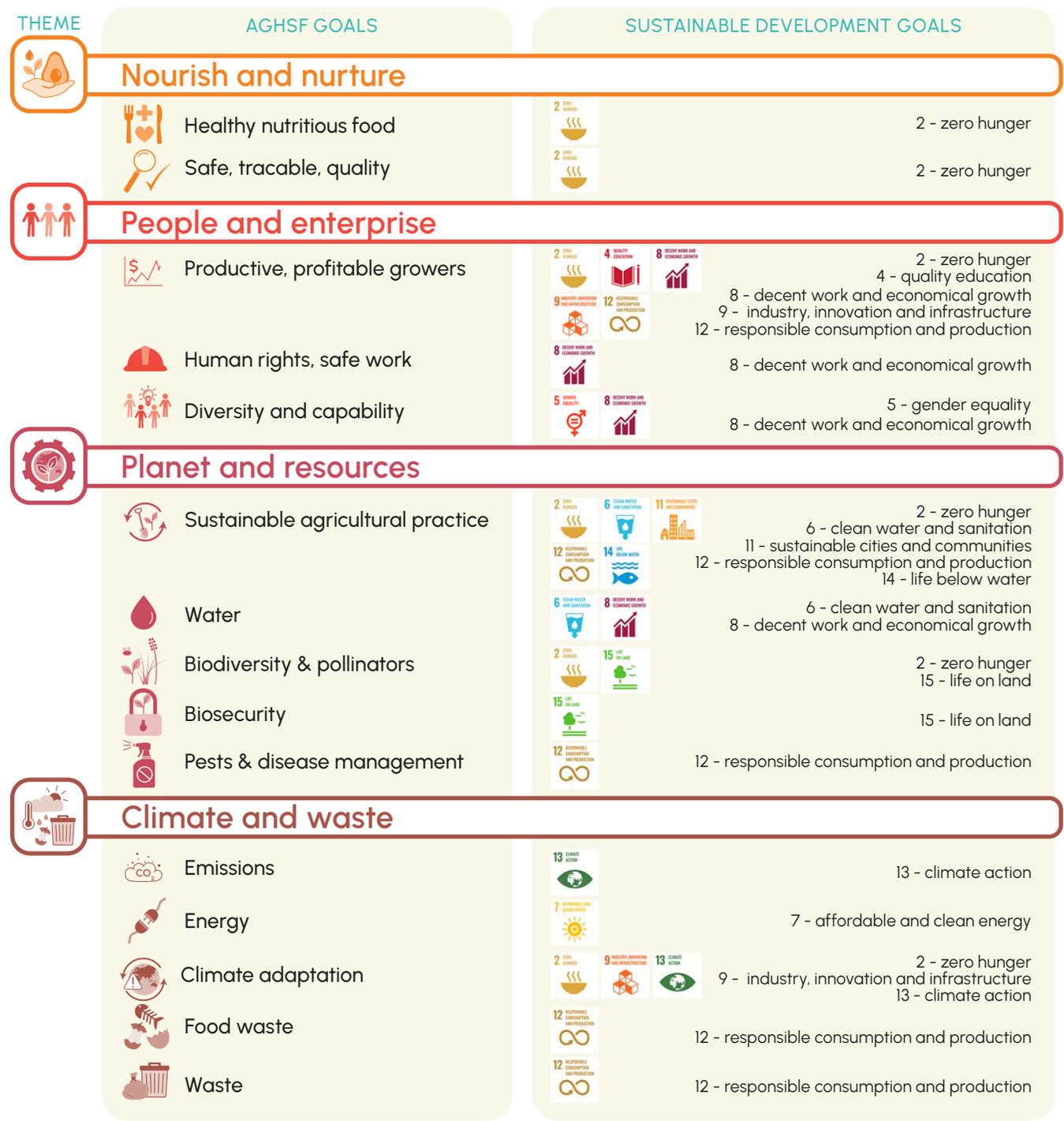
The intention of this Strategy is to:

- Provide the avocado industry with an overview of current status and potential priorities to improve the sustainability of the industry/ businesses
- Provide the avocado industry with an understanding of the potential environmental, social and market impacts, including environmental, social and governance (ESG) requirements
- Identify risks and vulnerabilities of the industry
- Inform the avocado industry of future strategic industry investments (including future R&D requirements).

Due to Australia's unique climate, approaches to sustainability need to be practical and consider climate and market dynamics faced by the industry. It is acknowledged that 'Sustainability' can have different interpretations to various stakeholders. Recognising and considering the various definitions across current frameworks, the Australian avocado industry defines sustainability as:

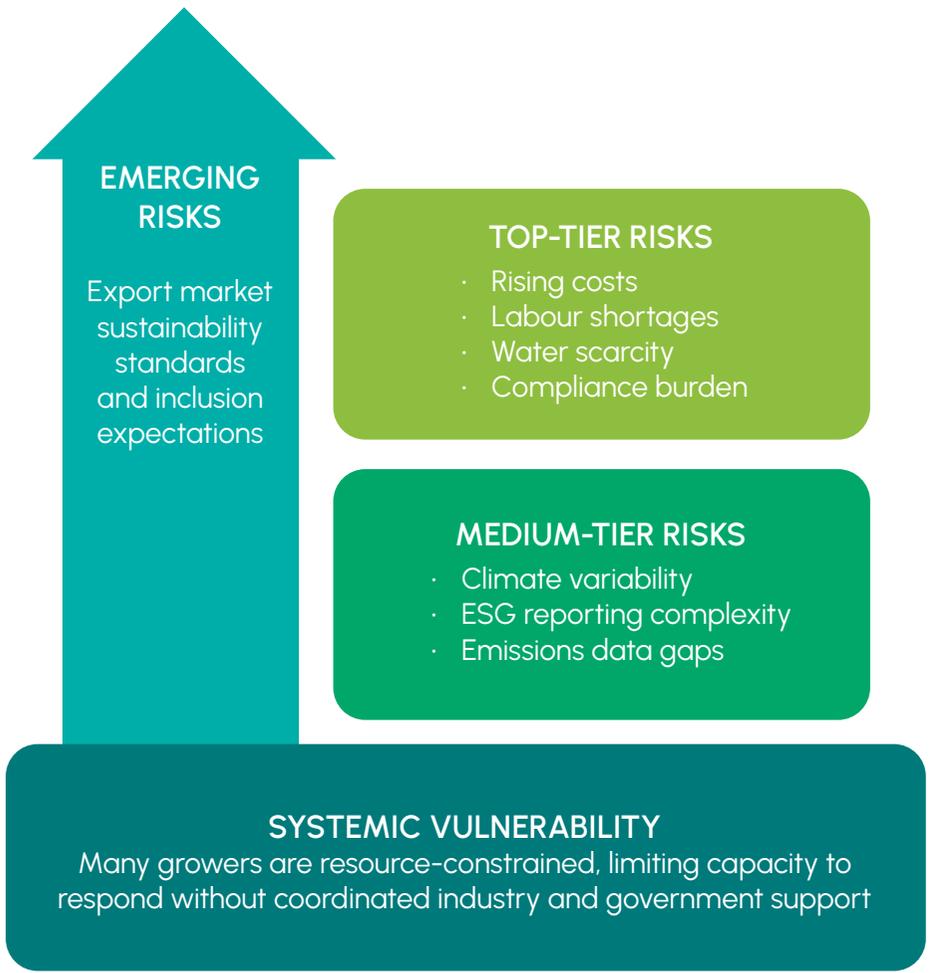
The economic, social, environmental resilience of the industry and the operating environment, to deliver a consistent supply of high-quality Australian avocados to consumers now and into the future.

Underpinning the Australian avocado industry's definition of sustainability are four key sustainability themes which align to the [Australian Agriculture Sustainability Framework \(AASF\)](#) and the [Australian-Grown Horticulture Sustainability Framework \(AGHSF\)](#). The sustainability themes, the AGSF goals and their alignment to the Sustainable Development Goals (SDGs) are shown in the figure right.



Risks to sustainability

Risks to the future sustainability of the Australian avocado industry identified during consultation with key stakeholders are shown in figure below.



Drivers of sustainability reporting

Global drivers for sustainability reporting

The Food and Agriculture Organisation of the United Nations (FAO)⁶ has a global vision for sustainable food and agriculture (SFA) as essential for meeting the needs of present and future generations, while ensuring profitability, environmental health, and social and economic equity.

The Global Reporting Initiative (GRI)'s standards are designed to be used by organisations to report their impacts on the economy, the environment, and society. GRI's globally recognised framework for sustainability reporting guided the materiality assessment underpinning the [Australian-Grown Horticulture Sustainability Framework](#).

The United States (US), countries within the European Union (EU) and the United Kingdom (UK) are among the world's top importers of avocados and share a strong strategic focus on improving sustainability, which is enacted through legislation, policy and industry organisation strategies and plans. While these top importers do not currently comprise significant markets for Australian avocados, their significant influence can serve to set benchmarks for environmental and social standards that increasingly shape global and domestic certification schemes, consumer expectations and retailer procurement policies.

The United States, countries within the European Union and the United Kingdom are among the world's top importers of avocados and share a strong strategic focus on improving sustainability...



⁶ Food and Agriculture Organisations of the United Nations (2025) "Sustainable Food and Agriculture", URL: <https://www.fao.org/sustainability/en>

Domestic drivers for sustainability reporting

Domestically, national and state policy and regulatory requirements also exert strong influence in setting standards for sustainability in agriculture. Key policies, strategies and regulations guiding sustainability include:

- [Australia's Net Zero Plan](#), includes an Agriculture and Land Sector Plan to support Australia's transition to net zero greenhouse gas emissions by 2050.⁷
- [National mandatory climate-related financial disclosures](#) have recently been introduced and apply to very large companies, requiring them to report on climate-related risks and management as well as their scope 1, 2 and 3 emissions.⁸ The requirements will be phased in for medium to large businesses over time. Smaller producers may experience indirect impacts as retailers and financiers may request information on farm-level emissions and climate risk management as part of their financial reporting:
<https://standards.aasb.gov.au/aasb-s2-sep-2024>
- The [Australian Fresh Produce Alliance \(AFPA\) Common Greenhouse Gas Accounting Framework](#) provides a consistent approach for measuring and reporting emissions across the fresh produce sector. It aligns with international standards and enables growers, packers, and supply chain partners to calculate and report their scope 1, 2 and 3 emissions using comparable methods. The framework helps businesses understand key emissions sources, identify reduction opportunities, and meet emerging retailer and investor reporting expectations. More information is available at:
<https://freshproduce.org.au/resources/>
- The [National Food Waste Strategy \(2017\)](#) adopts a circular economy approach with the aim of halving food waste by 2030.⁹ It includes priorities that target food waste in production, processing, distribution, retail and consumption. This is supported by the National Waste Policy Action Plan (2024)¹⁰ and Australia's Circular Economy Framework (2024)¹¹ describing where Australia must focus its efforts to transition to a safe circular economy.

- The [National Soil Strategy \(2021\)](#) sets out long-term soil management goals that encompass soil health, innovation and knowledge building.¹²
- [Australia's Climate Change Bill 2022](#) outlines Australia's greenhouse gas emissions reduction targets of a 43% reduction from 2005 levels by 2030 and net zero by 2050.
- The [Environmental Protection and Biodiversity Conservation Act 1999](#) and regulations are Australia's main national environmental legislation and apply to agricultural activities where they are likely to impact matters of national environmental significance, for example nationally threatened species.¹³
- The [Work Health and Safety Act 2011](#) sets out requirements for employers to provide a safe working environment (including physical and psychological safety) and the [Fair Work Act 2009](#) regulates worker entitlements. Together they govern workers' safety and rights at a national level.



⁷ Department of Climate Change, Energy, the Environment and Water (2025) Net Zero, URL: <https://www.dcceew.gov.au/climate-change/emissions-reduction/net-zero>

⁸ Rabobank (2025) How Australia's climate-related financial disclosures could impact agriculture, URL: <https://www.rabobank.com.au/media-releases/2025/how-australias-climate-related-financial-disclosures-could-impact-agriculture-industry-report>

⁹ Commonwealth of Australia (2017) National Food Waste Strategy: Halving Australia's food waste by 2030, URL: <https://www.dcceew.gov.au/sites/default/files/documents/national-food-waste-strategy.pdf>

¹⁰ <https://www.dcceew.gov.au/environment/protection/waste/publications/national-waste-policy-action-plan>

¹¹ <https://www.dcceew.gov.au/environment/protection/circular-economy/framework>

¹² Commonwealth of Australia (2021) National Soil Strategy, URL: <https://www.agriculture.gov.au/sites/default/files/documents/national-soil-strategy.pdf>

¹³ Department of Climate Change, Energy, the Environment and Water (2025) Environment Protection and Biodiversity Conservation Act 1999, URL: <https://www.dcceew.gov.au/environment/epbc>

Sustainability strategy on a page

Following industry consultation and review of available literature we have developed a sustainability strategy for the avocado industry. The themes, goals and indicators are based on those in the 2023/24 Australian-Grown Horticulture Sustainability Framework (AGHSF), targeted to what is relevant and appropriate for the avocado industry.

Vision

The avocado industry is prosperous and profitable, producing food to nourish people, contributing to thriving communities and protecting our environment.

Themes and goals

THEME 1

Nourish and nurture

AGHSF GOAL

- Healthy nutritious food**
- Safe, tracable, quality**

AVOCADO OBJECTIVE

- Increase consumption of avocados to provide a healthier more nutritious diet
- Educate consumers on the health benefits of avocados
- Produce consistent quality avocados for domestic and global consumers
- Deliver safe and traceable avocados to consumers

THEME 3

Planet and resources

AGHSF GOAL

- Sustainable agricultural practice**
- Water**
- Biodiversity & pollinators**
- Biosecurity**
- Pest & disease management**

AVOCADO OBJECTIVE

- Improve sustainable management of soil, nutrients and chemicals
- Ensure responsible and efficient use of water
- Manage biodiversity sustainably
- Manage biosecurity risks from pest and disease incursions into regions and Australia
- Ensure responsible management of pests, weeds and diseases

THEME 2

People and enterprise

AGHSF GOAL

- Productive, profitable growers**
- Human rights, safe work**
- Diversity & capability**

AVOCADO OBJECTIVE

- Enhance productivity and profitability of Australian avocado growers
- Provide ethical, fair and safe workplaces
- Attract and retain motivated staff

THEME 4

Climate and waste

AGHSF GOAL

- Energy**
- Emissions**
- Climate adaptation**
- Food waste**
- Waste**

AVOCADO OBJECTIVE

- Ensure energy is used efficiently, with an increased proportion from renewable sources
- Minimise greenhouse gas emissions
- Manage the risks of climate change and build resilience
- Minimise food waste in the production system
- Minimise on farm and packaging waste

Performance at a glance

Nourish and nurture



Avocados are a nutrient-dense fruit that play an important role in a healthy diet, contributing 15 different nutrients and phytonutrients.¹⁴

Australian avocado consumption in 2024/25 was 4.74 kg per person.¹⁵

Planet and resources



86% of growers participating in the Avocado Benchmarking Project monitor soil moisture. Top performing farms produce 2,117 kg of avocados per ML/ha of water used.¹⁷

Current estimates of the carbon footprint of Australian avocados sit between 0.3 and 0.7 kg CO₂-eq/kg avocado at farm gate without packaging.¹⁸ This is within the range reported internationally for avocado.



People and enterprise

The avocado industry generates significant economic value and employment with a gross value of production of \$794 million in 2024/25.¹⁶



Climate and waste

Compared with other food products, fruits and vegetables in general have very low greenhouse gas (GHG) emissions intensity per kilogram.¹⁹



¹⁴ Lisa Yates and Nicole Senior (2022) Avocado: Substantiation of Nutrition and Health Claims

¹⁵ Avocados Australia (2025) Facts at a Glance for the Australian avocado industry – 2024/25

¹⁶ Avocados Australia 2025, Facts at a Glance Report [2024-25_AAL-Facts-at-a-glance.pdf](#)

¹⁷ RMCG (2024) Avocado Benchmarking National Report – Production season ending 2023

¹⁸ Department of Primary Industries and Regional Development (WA) (2023) Life Cycle Assessment of Avocado Production in Western Australia

¹⁹ Clune et al, 2017, Journal of Cleaner Production, 140, 766-783

Summary of actions

AGHSF GOAL	AVOCADO OBJECTIVE	ACTIONS
 Theme 1: Nourish and nurture		
Healthy nutritious food 	Increase consumption of avocados to provide a healthier more nutritious diet	<ul style="list-style-type: none"> · Continue to invest into initiatives that drive availability and consumption of Australian avocados in domestic and export markets · Explore grant funding and partnerships to promote avocados as part of a healthy and nutritious diet
	Educate consumers on the health benefits of avocados	<ul style="list-style-type: none"> · Continue to educate consumers on the health benefits of avocados directly through the levy funded consumer marketing campaign · Ensure the substantiation of the Nutritional Health claims report remains up to date with research and legislative developments
Safe, traceable, quality 	Produce consistent quality avocados for domestic and global consumers	<ul style="list-style-type: none"> · Continue to invest in industry activities that support producing consistent quality avocados for domestic and global consumers · Maintain and improve fruit quality in domestic and international markets
	Deliver safe and traceable avocados to consumers	<ul style="list-style-type: none"> · Map current traceability systems and identify opportunities to enhance existing systems through the inclusion of sustainability data
 Theme 2: People and enterprise		
Productive, profitable growers 	Enhance productivity and profitability of Australian avocado growers	<ul style="list-style-type: none"> · Maintain investment into RD&E that supports grower productivity and profitability · Ensure growers have access to relevant benchmarking metrics to assist them in evaluating their productivity and profitability
Human rights, safe work 	Provide ethical, fair and safe workplaces	<ul style="list-style-type: none"> · Maintain and communicate up to date WHS information for growers · Promote WHS professional development opportunities to industry
Diversity and capability 	Attract and retain motivated staff	<ul style="list-style-type: none"> · Develop and implement programs that facilitate worker entry into the avocado industry · Provide and promote opportunities for professional development of industry members · Develop digital training and upskilling modules for growers and farm workers to build confidence in using farm technology

AGHSF GOAL	AVOCADO OBJECTIVE	ACTIONS
 Theme 3: Planet and resources		
Sustainable agricultural practice 	Improve sustainable management of soil, nutrients and chemicals	<ul style="list-style-type: none"> Continue to invest into R,D & E that supports adoption of sustainable management of soil, nutrients and chemicals amongst growers
Water 	Ensure responsible and efficient use of water	<ul style="list-style-type: none"> Conduct further research to understand the drivers behind the wide discrepancies in irrigation efficiencies, e.g. grower surveys investigating knowledge, specific practices and barriers to adoption
Biodiversity and pollinators 	Manage biodiversity sustainably	<ul style="list-style-type: none"> Develop industry-specific biodiversity practice guidelines Continue research, development and extension activities that support biodiversity and pollination
Biosecurity 	Manage biosecurity risks from pest and disease incursions into regions and Australia	<ul style="list-style-type: none"> Maintain existing biosecurity measures including activities under the Avocado Industry Biosecurity Strategy 2022 – 2026 (AV21002) and obligations under the EPPRD
Pest and disease management 	Ensure responsible management of pests, weeds and diseases	<ul style="list-style-type: none"> Maintain existing measures to responsibly manage pests, weeds and diseases including activities under Avocado Industry Biosecurity Strategy 2022 – 2026 (AV21002) and the Avocado industry development and extension project (AV23010) strategy
 Theme 4: Climate and waste		
Emissions 	Minimise greenhouse gas emissions	<ul style="list-style-type: none"> Seek solutions to minimising CO₂e, especially in irrigation electricity use and fertiliser use
Energy 	Ensure energy is used efficiently, with an increased proportion from renewable sources	<ul style="list-style-type: none"> An up-to-date energy audit for avocado production and supply chains could assess efficiency and renewable energy use, identify energy savings opportunities and estimate potential emissions reductions. This could then feed into the creation of decision-support tools for growers including return on investment calculators, technology comparisons and grants guides. Support increased adoption of best practice irrigation and fertiliser application through: <ul style="list-style-type: none"> » Irrigation system scheduling and maintenance » Renewable energy use » Optimising fertiliser application » Enhancing soil health » Using Enhanced Efficiency Fertilisers
Climate adaptation 	Manage the risks of climate change and build resilience	<ul style="list-style-type: none"> Support growers in accessing existing resources and tools to understand climate-related risks and preparedness needs and develop adaptation strategies Assess the need for additional support to assist the avocado industry with adaption and resilience to climate variability and natural disasters
Food waste 	Minimise food waste in the production system	<ul style="list-style-type: none"> Support value-adding sectors for low grade avocados Continue to invest in initiatives that improve the quality of Australian avocados and reduce waste within the supply chain
Waste 	Minimise on farm and packaging waste	<ul style="list-style-type: none"> Identify cost-effective and practical solutions to minimise packaging waste

Sustainability themes



THEME 1

Nourish and nurture

Background

Each year, Australia produces high quality avocados to nourish people around Australia and the world. Consumption of Australian avocados in domestic and export markets has been growing and continues to remain a key priority for the industry. This is underpinned by extensive research and development work undertaken by the industry to improve fruit quality and ensure the safety of Australian avocados.

The health benefits of avocados are well-established, broad and compelling²⁰. The Australian avocado industry has invested into research that substantiates the nutrition and health claims of avocados. To ensure consumers and industry can have accurate scientific data of the health benefits of avocados. Research and commitment to quality ensures that avocados are part of a healthy diet, and present a nourishing, plant-based substitute for spreads high in saturated fat.

Delivering safe, high quality and traceable Australian avocados is a priority for the Australian avocado industry. Australian agriculture, has a reputation for producing some of the highest quality products in the world, governed by well-established legislative regulations and industry standards. Further, horticulture specific industry quality and traceability systems exist to support the Australian avocado industry meet this objective. These systems are often independently verified on an individual business level at an annual frequency, achieving global best practice.

Objectives



Healthy nutritious food

- Increase consumption of avocados to provide a healthier more nutritious diet
- Educate consumers on the health benefits of avocados



Safe, traceable, quality

- Produce consistent quality avocados for domestic and global consumers
- Deliver safe and traceable avocados to consumers

Levy funded industry initiatives

- AV20003** Educating health professionals on the nutrition and health benefits of avocados
- MT21004** Consumer behavioural retail data
- MT23201** Consumer usage and attitude tracking 2023/24
- AH12016** Partnering fresh produce with retail: quality assurance harmonisation
- AH14015** QA Harmonisation – Implementation
- AV08022** Avocado Quality Monitoring via Library Tray System
- AV08017** Avocado Supply Chain Education Materials
- AV15004** Avocado Data Management and Quality Innovation and Extension Program
- AV14000** Achieving more consistent yields of quality fruit in the Australian Avocado Industry
- AV17005** Avocado industry development and extension
- AV18000** Implementing Best Practice of Avocado fruit management and handling practices
- AV22011** Monitoring avocado supply chain quality
- AV24015** Avocado international retail quality benchmarking
- PH16002** Avocado Minor Use Program
- AV20004** Avocado Market Access & Trade Development
- AM21000** Serviced Supply Chains Phase 2
- AV23003** Avocado Market Access and Trade Development Project 2024-2029
- AV23007** Avocado Retail Education F24
- AV23016** Long-term sustainability of avocado production in Australia
- AV23017** Pest and disease management for the avocado industry
- AV23023** Avocado Industry Residue Survey
- MT24008** Regulatory support and response coordination (pesticides)
- AV24009** Renew Sensory Research for Hass and Shepard Avocados
- AV23023** Avocado Industry Residue Study
- AV24011** Optimising avocado yield with region-specific canopy management

²⁰ Australian Avocados (2022). Avocado Nutrition and Health: Reviewing the Scientific Evidence. Hort Innovation. https://www.australianavocados.com.au/wp-content/uploads/2022/07/Avo_Health_Report_2022_Online.pdf

Relevant legislation

- Food Standards Australia New Zealand Act 1991 (Cth)
- Australia New Zealand Food Standards Code
- Agricultural and Veterinary Chemicals Code Act 1994 (Cth)
- State and Territory Food Acts

Additional investments

- Hazard Analysis and Critical Control Points Certification
- Global Food Safety Initiative Certification
- Harmonised Australian Retailer Produce Scheme Certification
- Ethical Sourcing Standards
- Safe Chemical Handling Certifications



Nourish and nurture



HEALTHY AND NUTRITIOUS FOOD

Increase consumption of avocados to provide a healthier more nutritious diet

Current status

The current domestic consumption of avocados is 4.94kg/per capita and growing year on year. Domestic consumption (kg/per capita) has grown by 100% since 2013.

The Australian avocado industry invests in research, development, extension and marketing initiatives which aim to support consumer access, awareness and consumption of high-quality avocados, as part of a nutritious diet.

Performance metrics

- Consumption per capita (kg/per capita)

Data sources

- Avocados Australia Annual Facts at a Glance Reports
- [Hort Innovation Avocado Fund](#)

Actions

1. Continue to invest into initiatives that drive availability and consumption of Australian avocados in domestic and export markets
2. Explore grant funding and partnerships to promote avocados as part of a healthy and nutritious diet



HEALTHY AND NUTRITIOUS FOOD

Educate consumers on the health benefits of avocados

Current status

The Australian avocado industry has conducted research to substantiate the health claims of avocados against the nutritional profile of the product, Australian dietary guidelines and relevant legislation to underpin consumer education on the health benefits of avocados. This information is used to educate consumers on the health benefits of avocados, as part of the industry's marketing program.

The Australian avocado industry has also conducted a systematic literature review summarising global research on avocado health benefits and nutrition. This research underpins the industry's [digital hub](#) for health professionals providing easy access to avocado nutrition research and resources. This information is further extended via roundtable discussions, electronic direct mail, farm tours and engagement with global research centers.

Performance metrics

- Level of investment (\$) into consumer education

Data sources

- Educating health professionals on the nutrition and health benefits of avocados (AV20003)
- [Substantiation of Nutritional and Health Claims Report 2022](#)
- [Health Professionals - Australian Avocados](#)

Actions

1. Continue to educate consumers on the health benefits of avocados directly through the levy funded consumer marketing campaign
2. Ensure the substantiation of the Nutritional Health claims report remains up to date with research and legislative developments

Nourish and nurture



SAFE, TRACEABLE, QUALITY

Produce consistent quality avocados for domestic and global consumers

Current status

The Australian avocado industry has set the target of 90% of retail fruit meeting an industry standard of <10% internal defects. Fruit quality is influenced by many factors, including climatic conditions.

The Australian avocado industry invests over \$8 million annually into research, development and extension activities aimed to support improving the consistency of supply and quality of Australian avocados.

As part of this portfolio of investments, the industry undertakes retail quality monitoring programs both in domestic and export markets to monitor and empower improved fruit quality. Monitoring reports are communicated back to growers with images and measured defects.

Performance metrics

- Fruit (%) at retail meeting industry standard of <10% internal defects

Data sources

- [Retail quality - Avocados Australia](#)
- [Industry snapshot - Avocados Australia](#)

Actions

1. Continue to invest in industry activities that support producing consistent quality avocados for domestic and global consumers
2. Maintain and improve fruit quality in domestic and international markets



Nourish and nurture



SAFE, TRACEABLE, QUALITY

Deliver safe and traceable avocados to consumers

Current status

The Australian avocado industry is committed to delivering safe and traceable avocados to consumers domestically and internationally.

Australian avocado producers are required to adhere to legislation that governs the safe production of food, including the [Food Standards Code Legislation Workplace Health & Safety Act \(2011\)](#). Furthermore, Australian avocado producers often comply with the following additional market-driven certification standards:

- HACCP Certification
- Global Food Safety Initiative Certification
- Ethical Sourcing Certifications
- Safe handling of chemicals certification.

These systems are often independently verified on an individual business level at an annual frequency, achieving global best practice.

The Australian avocado industry implements traceability systems that are compliant with the [Food Standards Code legislation | Food Standards Australia New Zealand](#). Furthermore, many producers also implement traceability systems such as applying GSI databars. Traceability systems are often verified on an individual business level at an annual frequency with mock recall exercises.

The safe handling of chemicals on farm is legislated by the *Agricultural and Veterinary Chemicals Code Act 1994* (Cth) and maximum residue limits are conducted in accordance to the *Food Standards Australia New Zealand Act 1991* (Cth). All Australian growers and supply chain stakeholders must adhere to these legislative instruments.

Performance metrics

- Number of product recalls/year
- Certification to relevant standards

Data sources

- [Avocado Industry Benchmarking 2022-2027 \(AV22004\)](#)
- [ACCC Product Safety](#)
- Freshcare Certification
- HARPS Certification
- GSI Databars

Actions

1. Map current traceability systems and identify opportunities to enhance existing systems through the inclusion of sustainability data

THEME 2



People and enterprise

Background

Avocado production is a significant employer in regional communities and contributor to Australia's economy. The avocado industry demonstrates this through its increasing gross value of production, which more than doubled from \$313 million in the 2013/14 financial year to \$649 million in 2023/24. The Australian avocado industry employed 1,822 full-time equivalent employees in 2020-21 and this is projected to grow by 27% by 2029-30 to 2,2315 full-time equivalents²¹.

Supporting and enhancing the productivity and profitability of avocado growers remains a key industry priority, as reflected in the Avocado Strategic Investment Planⁱⁱ and the Avocado Industry Extension Strategy. Research, technology and innovation are essential to the ongoing productivity and profitability of growers.

People are core to avocado production. Ethical and fair employment and supply chain arrangements are valued by both workers and producers. Alongside producers and their families, people are employed in a diverse range of roles from seasonal harvest and pruning labour through to permanent and skilled positions including operations pruning management, agronomy, propagation, grafting, packing, marketing, agritourism, logistics, freight, technology and research. There are many varied and dynamic career pathways.

Objectives



Productive, profitable growers

Enhance productivity and profitability of Australian avocado growers



Human rights, safe work

Provide ethical, fair and safe workplaces



Diversity and capability

Attract and retain motivated staff

Levy funded industry initiatives

- AV13003** Australian Avocado Industry Benchmarking Program
- AV22004** Avocado industry benchmarking
- MT21010** Economic Contributions of Australian Horticulture
- HA24004** Factors driving horticulture productivity
- AV17006** Avocado Industry capacity building - WA
- MT22003** Nuffield scholarships
- AV23010** Avocado Industry Development and Extension Project

Relevant legislation

- *Workplace Health & Safety Act (2011)*
- *Fair Work Act 2009*

Additional investments

- Ethical Sourcing Certification
- [Avocado Industry WHS Resources](#)



²¹ Centre for International Economics, 2023, Economic contribution of Australian horticulture, [CIE hort contribution final report June 2023](#)



PRODUCTIVE, PROFITABLE GROWERS

Enhance productivity and profitability of Australian avocado growers

Current status

The gross value of production in 2024/25 is \$794 AUD million and the farmgate value is \$719 AUD million. The avocado industry benchmarks cost of production and this information is made available to growers.

Avocados Australia has identified optimising the operating environment to support a sustainable and profitable industry, as a key priority²². To achieve this the organisation has implemented a number of strategies to be implemented and reported on as part the Avocados Australia Strategic Plan 2022-2026, these include:

1. Proactively influence the legislation and regulation that affects the industry
2. Using innovative solutions to manage the risks and operation challenges affecting growers
3. Measuring and reporting key metrics that support business and industry planning
4. Supporting a consistent, reliable, productive labour force.

Performance metrics

- Gross value of production
- Cost of Production
- Market Pricing
- Marketable yield as a % of harvested yield

Data sources

- [Avocado Industry Benchmarking 2022-2027 \(AV22004\)](#)
- [Avocados Australia Annual Reports](#)
- [Avocados Australia Best Practice Resource](#)

Actions

1. Maintain investment into RD&E that supports grower productivity and profitability
2. Ensure growers have access to relevant benchmarking metrics to assist them in evaluating their productivity and profitability

²² Avocados Australia 2022, 2022-26 AAL Strat Plan_Industry



HUMAN RIGHTS, SAFE WORK

Provide ethical, fair and safe workplaces

Current status

All businesses operating in the avocado supply chain are required to provide ethical, fair and safe workplaces. The *Fair Work Act 2009* is Australia's primary workplace relations law. It sets out the rights, responsibilities, and protections for most employees and employers in the national workplace relations system. Furthermore, under the model Work Health and Safety Act, businesses have a duty to ensure, so far as is reasonably practicable, the health and safety of workers at work. They must maintain equipment, identify hazards, assess risks and implement control measures to mitigate risks. Workers must be provided with adequate training and business must consult with workers on matters affecting WHS. There are significant penalties for breaches of these laws.

The [Fair Work Ombudsman's 2025 Horticulture Compliance Report](#) found 80% of non-compliant employers were labour hire providers²³.

Additionally, many avocado businesses also comply with ethical supply chain standards such as SEDEX or Fair Farms and undergo compliance verification through audit pathways by an accredited and independent certification body.

Avocados Australia has a range of resources to promote [best practice WHS](#) for avocado growers and others in the industry and picker and packer training videos are available in the Best Practice Resource.

Performance metrics

- % industry serious injury or deaths reported on farm.
- % of industry with reported *Fair Work Act* breaches.

Data sources

- [Horticulture compliance report](#)
- [Fair Farms](#)
- [SEDEX](#)

Actions

1. Maintain investment into RD&E that supports grower productivity and profitability
2. Ensure growers have access to relevant benchmarking metrics to assist them in evaluating their productivity and profitability

²³ Fair work Ombudsman 2025, [Horticulture compliance report](#)

²⁴ Centre for International Economics, 2023, Economic contribution of Australian horticulture. [CIE hort contribution final report June 2023](#)

People and enterprise



DIVERSITY AND CAPABILITY

Attract and retain motivated staff

Current status

Avocado production is a significant employer in regional communities and contributor to Australia's economy. Labour availability and consistency remains a key challenge for many producers. The Australian avocado industry employed 1,822 full-time equivalent employees in 2020-21 and this is projected to grow by 27% by 2029-30 to 2,2315 full-time equivalents²⁴.

The Avocado industry invests into attracting, retaining and developing motivated staff via projects such as [Avocado Industry Development and Extension Project](#) and sponsoring [Nuffield scholarships](#) and promoting external development opportunities through the National Avocado Industry Communications Program.

Performance metrics

- Number of people employed in industry
- Demonstration of industry investment into attracting and retaining motivated staff

Data sources

- [Economic Contribution of Horticulture Report 2023](#)

Actions

1. Develop and implement programs that facilitate worker entry into the avocado industry
2. Provide and promote opportunities for professional development of industry members
3. Develop digital training and upskilling modules for growers and farm workers to build confidence in using farm technology



THEME 3

Planet and resources

Background

Avocado production is intrinsically linked with its natural environment requiring healthy soils and reliable water supplies for production. Producers work to reduce their impact on the environment through a range of good practices such as irrigation monitoring and scheduling, integrated pest and disease management, nutrient budgeting, improving soil health and protecting downstream environments.

Australia's island location and strong biosecurity programs are vital to prevent the incursion of new pests and diseases that may impact avocados or pollinators. The avocado industry has developed a Biosecurity Plan²⁵ and works with Plant Health Australia through the Emergency Plant Pest Response Deed to monitor and respond to biosecurity threats and incursions. As of 2023, most growers surveyed in the benchmarking study actively manage weeds, diseases, pests and feral animals.

Objectives



Sustainable agricultural practices

Improve sustainable management of soil, nutrients and chemicals



Water

Ensure responsible and efficient use of water



Biodiversity and pollinators

Manage biodiversity sustainably



Biosecurity

Manage biosecurity risks from pest and disease incursions into regions and Australia



Pest and disease management

Ensure responsible management of pests, weeds and diseases

Levy funded industry initiatives

- AV19000 Investigation into citrus blossom bug
- PH16002 Managing flies for crop pollination
- AV17006 Avocado industry minor use program
- HA19007 PBRI Phase 2 (Biosecurity research initiative)
- MT20007 Regulatory support and response coordination (pesticides)
- AV21002 Avocado industry biosecurity strategy 2022–2026
- AV21003a Avocado industry biosecurity capacity and capability building: phase II
- AV21003b Environmental DNA technologies for rapid detection and identification of avocado priority pests
- AV21005 Growing robust avocados
- AV21006 Advancing the delivery of national mapping applications and tools
- MT21008 National Bee Pest Surveillance Program: Transition Program
- MT21007 Improving fruit and banana spotting bug control
- AV22002 Study to review automation opportunities within the avocado production system
- ST22003 Generation of data for pesticide permit applications in horticulture 2022
- PH22004 Supporting the health and expansion of the Australian stingless bee industry
- AV22004 Avocado Industry Benchmarking 2022-2027
- ST22004 Generation of data for pesticide permit applications in horticulture 2022
- AV22008 Evaluation of irradiation as a postharvest phytosanitary measure for
- MT23001 Australian avocados
- AS23005 Strategic Agrichemical Review Process (SARP) 2023 updates
- AS23006 Using AI and ML to improve weather forecasting
- AV23016 Digital remote monitoring to improve horticulture production and environmental performance
- AV23017 Industry level Life cycle Assessment (LCA) of Australian Avocado production
- AV23023 Pest and disease management for the avocado industry
- AV24008 Avocado Industry Residue Survey
- AV21006 Carbohydrate management in avocado production systems
- AV23013 Advancing the delivery of national mapping applications and tools
- PH19007 Improving avocado irrigation efficiency and effectiveness in Australia
- eDNA analysis of plant-pollinator relationships to improve Hass avocado production in south-west Western Australia
- AV21003 Environmental DNA technologies for rapid detection and identification of avocado priority pests
- T22008 Capturing the real and potential benefits and costs of on-farm biosecurity measures

²⁵ Avocados Australia 2025, Industry Biosecurity

Relevant legislation

- *Agricultural and Veterinary Chemicals Code Act 1994* (Agvet Code)
- *Industrial Chemicals Environmental Management (Register) Act 2021*
- *Pesticides Act 1999* (New South Wales)
- *Agricultural and Veterinary Chemicals (Control of Use) Act 1992* (Victoria)
- *Chemical Usage (Agricultural and Veterinary) Control Act 1988* (Queensland)
- *Health (Pesticides) Regulations 2011 & Agriculture and Related Resources Protection Act 1976* (Western Australia)
- *Agricultural and Veterinary Chemicals (Control of Use) Act 1995* (Tasmania)
- *Agricultural and Veterinary Chemicals (Control of Use) Act 2004* (Northern Territory)
- *Controlled Substances Act 1984* (SA)
- AQF3 Chemical Accreditation (Chemical Handling)
- National Environment Protection Measure (NB: vary between state and territories)

Additional investments

- Freshcare Environmental Certification (optional)
- Hort 360 Certification

^{26, 27} RMCG (2024), Avocado Benchmarking National Report – Production season ending 2023. Hort Innovation.

Planet and resources



SUSTAINABLE AGRICULTURAL PRACTICES

Improve sustainable management of soil, nutrients and chemicals

Current status

The Australian avocado industry invests heavily into improving the sustainable management of soil, nutrients and chemicals through extensive research, development and extension activities. The industry continues to invest into the maintenance of the Best Practice Resource, which provides growers with the latest technical information on the sustainable management of soil, nutrients and chemicals.

As part of the industry Avocado industry development and extension project regionally relevant information will be extended out to growers across disease management, nutrition management, pest management, irregular and alternate bearing, irrigation management, and propagation practices through a range of strategies including face-to-face events, masterclasses, practical workshops, technical content, and effective communication through a technical newsletter.

The Avocado Benchmarking National Report 2023 found that 92% of growers in the sample group conduct soil testing at least every two years, with almost half of all growers (46%) testing yearly²⁶. Only 8% of growers indicated they do not conduct any soil analysis, and almost one quarter (23%) test twice a year or more. For crop husbandry practices, the report indicated that 34% of the sample group apply mulch at least once per year, and 27% apply it less often than once per year²⁷. A further 27% only apply slashed interrow and pruning debris to the rootzone, and 13% do not undertake any of these practices.

In 2023, over three quarters (77%) of avocado growers in the Avocado Benchmarking National Report sample reported conducting leaf tissue or leaf sap analysis to inform nutrition management at least once a year (54%) or more frequently (23%). Respondents who did not conduct any leaf or sap analysis made up 8% of the sample. Fertiliser application methods in order of preference were fertigation (92%), solid application (77%) and foliar application (62%), with many respondents using a combination of methods.

Furthermore, Australian growers are required to obtain AQF3 Chemical Accreditation (Chemical Handling) to purchase and use Schedule 7 (S7) "restricted" agricultural and veterinary chemicals (herbicides, pesticides, etc.) and to meet Work Health and Safety and environmental compliance requirements.

Performance metrics

- % growers actively managing soil, nutrient and chemical efficiency with document plans.

Data sources

- Avocado Industry Benchmarking 2022-2027 (AV22004)
- Avocado industry development and extension project (AV23010)
- Monitoring and Evaluation Reports
- Avocados Australia Best Practice Resource

Actions

1. Continue to invest into R, D & E that supports adoption of sustainable management of soil, nutrients and chemicals amongst growers



WATER

Ensure responsible and efficient use of water

Current status

Australian avocado producers have to adhere to state and territory legislation governing the responsible and efficient use of water. This is further supported nationally by the *Water Act (2007)* and the National Water Initiative (2004).

Water use efficiency is a key sustainability focus area for growers and for industry RD&E. Further, best practice irrigation management is a key practice change area in the Avocado industry development and extension project. Beyond this, the industry benchmarks water use to support improved efficiency. Further, extension activities focus on driving awareness of advances in irrigation that increase efficiency and knowledge in the use of plant and soil monitoring equipment.

The Australian avocado industry is currently undertaking a project on [Improving avocado irrigation efficiency and effectiveness in Australia \(AV23013\)](#). This project will enable Australian avocado growers to make better informed decisions about their irrigation management, leading to improved profitability, efficiency and sustainability. This will include the development of regional best practice recommendations for water use and efficiency and productivity.

The Avocado Benchmarking National Report 2023 found that the majority (86%) of growers monitor soil moisture to inform irrigation management. Active use of irrigation monitoring tools was also linked to improved profitability among the sample group. Total irrigated water use was an average of 7.8 ML/ha. The most profitable farms experienced a much higher water use efficiency (2,117 kg avocados per ML/ha) than the least profitable (1,200 kg avocados per ML/ha).

Current research suggests that most of the water footprint (82 – 97%) of avocados stems from on-farm irrigation, with upstream supply chain water use being very low. The 2023 Benchmarking National Report found that while the majority of growers (86%) monitor soil moisture to inform irrigation management, irrigation efficiency varied dramatically among growers and the most profitable growers experienced almost twice the yield per megalitre of irrigation water used than the least profitable. Best practice irrigation management is a critical practice change area identified in the Avocado Industry Extension Strategy, demonstrating that the industry is aware and driven to enhance water efficiency, productivity and grower resilience.

Performance metrics

- % growers actively managing water efficiency.
- Regional specific irrigation benchmarks (tonnes/ML)

Data sources

- [Improving avocado irrigation efficiency and effectiveness in Australia \(AV23013\)](#)
- [Avocado Industry Benchmarking 2022-2027 \(AV22004\)](#)
- Avocado industry development and extension project (AV23010)
- Monitoring & Evaluation Reports

Actions

1. Conduct further research to understand the drivers behind the wide discrepancies in irrigation efficiencies, e.g. grower surveys investigating knowledge, specific practices and barriers to adoption



BIODIVERSITY AND POLLINATORS

Manage biodiversity sustainably

Current status

A key strategy of the Avocado Strategic Investment Plan is to 'enhance crop pollination and resilience through improved pollination security and understanding of avocado crop pollination requirements'.

The [Avocado Industry Extension Strategy](#) aims to enhance the efficacy of pollination by improving grower understanding of how to maximise pollination events, reducing broad spectrum pyrethroid use and promoting pollinator diversity.

The Australian avocado industry has also invested funds to explore the potential of using flies as alternative crop pollinators, including assessing the effectiveness of specific species in pollinating avocado, as part of managing flies for crop pollination (PHI6002) project.

Performance metrics

- % growers undertaking activities that encourage biodiversity
- Pollination services match demand

Data sources

- [Avocado Industry Benchmarking 2022-2027](#) (AV22004)
- Avocado industry development and extension project (AV23010)
- Monitoring & Evaluation Reports
- [eDNA analysis of plant-pollinator relationships to improve Hass avocado production in south-west Western Australia](#) (PHI9007)
- Managing flies for crop pollination (PHI6002)

Actions

1. Include measures of biodiversity protection and improvement practices in grower benchmarking studies or surveys and include education about the benefits of biodiversity in extension programs
2. Develop industry-specific biodiversity practice guidelines
3. Research and quantify the links between healthy biodiversity and production benefits, for example pest regulation by beneficial insects, pollination services, soil health and erosion control

Planet and resources



PEST AND DISEASE MANAGEMENT

Ensure responsible management of pests, weeds and diseases

Current status

The Biosecurity Plan for the avocado industry presents a framework to coordinate biosecurity activities and investment for the avocado industry and address biosecurity strengths and weaknesses. Developed by [Plant Health Australia](#), biosecurity experts and industry representatives, the Plan aims to help industry, government and stakeholders to better prepare for and respond to incursions of significant pests.

The Australian avocado industry continues to invest heavily into R&D to improve pest and disease management through a range of levy-funded activity.

The Avocado Benchmarking National Report 2023, found that all respondents actively manage invasive weeds, and the majority (67%) actively manage feral animals. In terms of diseases, the majority of respondents undertake management for anthracnose at least once per year (85%) and almost half (46%) manage the disease more than 10 times per year.

Performance metrics

- % growers that actively manage pests, weeds and diseases

Data sources

- [Avocado Industry Biosecurity Strategy 2022 – 2026](#) (AV21002)
- [Avocado Industry Benchmarking 2022-2027](#) (AV22004)
- [Avocados Australia - Biosecurity](#)
- [Avocados Australia Best Practice Resource](#)
- [Environmental DNA technologies for rapid detection and identification of avocado priority pests](#) (AV21003)

Actions

1. Maintain existing measures to responsibly manage pests, weeds and diseases including activities under [Avocado Industry Biosecurity Strategy 2022 – 2026](#) (AV21002) and the Avocado industry development and extension project (AV23010) strategy



BIOSECURITY

Manage biosecurity risks from pest and disease incursions into regions and Australia

Current status

Each Australian state and territory has its own biosecurity and plant and animal health legislation which the Australian avocado industry must adhere to, in addition to the primary national legislation - *Biosecurity Act 2015* (cth).

Avocados Australia represents the Australian avocado industry on all national biosecurity matters and is an active member of [Plant Health Australia](#) (PHA), the national coordinator of the government-industry partnership for plant biosecurity in Australia. Avocados Australia is also a signatory to the national Emergence Plant Pest Response Deed and acts on behalf of the Australian avocado industry under this deed.

The avocado industry has developed a Biosecurity Plan²⁸ and the Orchard Biosecurity Manual for the Avocado Industry. Annual benchmarking of the industry's biosecurity practices will take place annually from 2022-2026 and be reported by Avocados Australia under Avocado Industry Biosecurity Strategy 2022 – 2026 (AV21002).

An important part of orchard biosecurity is clean planting material. Avocados Australia maintains the Avocado Nursery Voluntary Accreditation Scheme (ANVAS), which aims to ensure grower access to high-quality planting material from accredited nurseries. For details on ANVAS, [click here](#).

The Australian avocado industry is currently contributing to the Varroa mite response plan and the Torres Strait Fruit Fly Response Plan. Further to this, Avocados Australia, on behalf of the industry, is actively involved in the response plans for Polyphagous Shot Hole Borer and the Red Dwarfed Honey Bee.

The Australian avocado industry has also established the National Tree Crop map under the Advancing the delivery of national mapping applications and tools (AV21006) project to assist the industry's response to biosecurity threats and outbreaks. Further to this, the industry has invested in developing environmental DNA (eDNA) technologies for the rapid detection and identification of priority pests.

As of 2023, most growers surveyed in the benchmarking study actively manage weeds, diseases, pests and feral animals and 27.14% of growers surveyed have a written biosecurity plan.

Performance metrics

- Industry Biosecurity strategy being actively managed
- % producers with Biosecurity Plan

Data sources

- [Avocado Industry Biosecurity Strategy 2022 – 2026](#) (AV21002)
- [Avocado Industry Benchmarking 2022-2027](#) (AV22004)
- [Avocados Australia - Biosecurity](#)
- [Avocados Australia Best Practice Resource](#)
- [Environmental DNA technologies for rapid detection and identification of avocado priority pests](#) (AV21003)

Actions

1. Maintain existing biosecurity measures including activities under [Avocado Industry Biosecurity Strategy 2022 – 2026](#) (AV21002) and obligations under the EPPRD

²⁸ Avocados Australia (2020). Biosecurity Plan for the Avocado Industry. Plant Health Australia. <https://avocado.org.au/wp-content/uploads/2020/03/Avocado-Biosecurity-Plan-v3.0.pdf>



THEME 4

Climate and waste

Background

Climate change, greenhouse gas emissions reduction and managing climate risk are a significant focus worldwide. Many partners within the avocado supply chain have committed to reducing emissions. The major sources of emissions during production are electricity used to power irrigation and the use of fertilisers. Renewable energy is helping to reduce this impact. Climatic extremes and natural disasters can have devastating impacts on avocado production. Production systems are adapting to be more resilient in a changing climate, for example by enhancing irrigation efficiency, implementing soil conservation practices and diversifying avocado rootstock varieties.

Objectives



Energy

Ensure energy is used efficiently, with an increased proportion from renewable sources



Emissions

Minimise greenhouse gas emissions



Climate adaptation

Manage the risks of climate change and build resilience



Food waste

Minimise food waste in the production system



Waste

Minimise on farm and packaging waste

Levy funded industry initiatives

- AM21000 Serviced Supply Chains II
- AV21005 Growing robust avocados
- AV22011 Monitoring avocado supply chain quality
- AV23015 Industry level life cycle assessment (LCA) of Australian avocado production
- AV24004 Causes and management of avocado ridging, netting and stretch marking
- AV22004 Avocado Industry Benchmarking 2022-2027

Relevant legislation

- *Climate Change Act 2022* (Cth)
- *The Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Bill 2024* (Cth) – Mandatory climate-related financial disclosures
- *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth)
- *Climate Change (Net Zero Future) Act 2023* (NSW)

Additional investments

- [Farm Business Resilience Program](#)





ENERGY

Ensure energy is used efficiently, with an increased proportion from renewable sources

Current status

The [Avocado Industry Benchmarking 2022-2027](#) (AV22004), provides the industry an understanding of energy efficiency for benchmarking purposes. Further, the [Industry level life cycle assessment \(LCA\) of Australian avocado production](#) (AV23015) quantifies the contribution of energy use to emissions.

A previous environmental stocktake conducted by the Australian avocado industry found that only around half of growers considered energy efficiency when purchasing new equipment, and few growers at the time were using renewable energy. Due to dramatic changes in technology, infrastructure and energy markets since the release of this report, it is probable that behaviours around energy efficiency and the use of renewable sources have since changed.

Performance metrics

- Energy use per kg avocados produced
- % growers who implement energy efficiency practices

Data sources

- [Avocado Industry Benchmarking 2022-2027](#) (AV22004)
- [Industry level life cycle assessment \(LCA\) of Australian avocado production](#) (AV23015)

Actions

1. An up-to-date energy audit for avocado production and supply chains could assess efficiency and renewable energy use, identify energy savings opportunities and estimate potential emissions reductions. This could then feed into the creation of decision-support tools for growers including return on investment calculators, technology comparisons and grants guides.
2. Support increased adoption of best practice irrigation and fertiliser application through:
 - » Irrigation system scheduling and maintenance
 - » Renewable energy use
 - » Optimising fertiliser application
 - » Enhancing soil health
 - » Using Enhanced Efficiency Fertilisers

Climate and waste



EMISSIONS

Minimise greenhouse gas emissions

Current status

Compared with other food products, fruits and vegetables in general have very low greenhouse gas (GHG) emissions intensity per kilogram (kg) of avocados (carbon footprint)²⁹.

The Australian avocado industry has conducted an environmental life cycle assessment of Australian avocado production, focusing on greenhouse gas (GHG) emissions (carbon footprint) and water use / water scarcity impacts (water footprint) under project [Industry level life cycle assessment \(LCA\) of Australian avocado production](#) (AV23015)

Initial results from this research show the carbon footprint of Australian avocados sits between 0.3-0.7 kg of carbon dioxide equivalent (CO₂e) per kg of avocados, according to an ongoing lifecycle assessment (LCA) (AV23015). Packaging contributes a further 0.07-0.25 kg CO₂e. The strongest sources of emissions in avocado production are from electricity used to power irrigation and the use of fertilisers. Further results from the current LCA will be important for planning a pathway forward for reducing emissions and targeting actions toward the highest-impact stages of the supply chain.

Performance metrics

- CO₂-e per kg of avocados

Data sources

- [Avocado Industry Benchmarking 2022-2027](#) (AV22004)
- [Industry level life cycle assessment \(LCA\) of Australian avocado production](#) (AV23015)

Actions

1. Seek solutions to minimising CO₂-e, especially in irrigation electricity use and fertiliser use

²⁹ Clune et al, 2017, Journal of Cleaner Production, 140, 766-783



CLIMATE ADAPTATION

Manage the risks of climate change and build resilience

Current status

In recent years, Australia has experienced warmer conditions alongside reduced winter rainfall, creating considerable challenges for farmers. However, the long-term implications of climate change for agricultural enterprises are still uncertain³⁰.

The Australian avocado industry is committed to overcoming the challenges climate variability presents to yield and quality consistency of our product. This is demonstrated through a number of levy-funded industry projects.

In addition to avocado industry levy investments, the [Farm Business Resilience Program](#) support Australian farmers manage farm risks including climate risk and manage natural resources effectively³¹.

Performance metrics

- % growers with a climate risk assessment and management strategy

Data sources

- [Avocado Industry Benchmarking 2022-2027 \(AV22004\)](#)
- [Farm Business Resilience Programs](#)

Actions

1. Support growers in accessing existing resources and tools to understand climate-related risks and preparedness needs and develop adaptation strategies
2. Assess the need for additional support to assist the avocado industry with adaption and resilience to climate variability and natural disasters



FOOD WASTE

Minimise food waste in the production system

Current status

The Australian avocado industry is focussed on minimising waste and maximising efficiency throughout the supply chain. This is demonstrated through several industry projects aimed at improving fruit quality in the production system and broader supply chain. Further the Australian industry continues to invest into management of the Best Practice Resource and extension to support growers improve quality and reduce waste on farm.

A number of value-adding avenues exist for Australian growers including process avocado and avocado oil. In addition, many suppliers within the Australian avocado supply chain regularly donate out of specification produce to charities such as Foodbank.

Performance metrics

- % fruit meeting Premium and Class one grade quality standards
- % growers with a waste management plan

Data sources

- [Avocado Industry Benchmarking 2022-2027 \(AV22004\)](#)
- [Avocado supply chain quality monitoring project \(AV22011\)](#)
- [Avocados Australia Best Practice Resource](#)
- [Avocado industry development and extension project \(AV23010\)](#)
- [Horticulture-Sector-Action-Plan_SUMMARY.pdf](#)

Actions

1. Support value-adding sectors for low grade avocados
2. Continue to invest in initiatives that improve the quality of Australian Avocados and reduce waste within the supply chain

³⁰ ABARES 2022, [Climate change impacts and adaptation on Australian farms - DAFF](#)

³¹ Department of Agriculture, Fisheries and Forestry 2025, ['Farm Business Resilience Program - DAFF'](#)



Climate and waste



WASTE

Minimise on farm and packaging waste

Current status

The Australian Avocado industry identifies the need for sustainable packaging solutions and identifies APCO as the peak industry body for Business-to-Consumer (B2C) packaging guidance.

Many Australian avocado packers are already using recyclable packaging such as recyclable cardboard trays and liners.

An opportunity exists to explore alternative sustainable packaging designs for pre-packed avocados and co-branded initiatives in the future.

Performance metrics

- % of packaging that is recyclable, compostable or reusable

Data sources

- Australian Packaging Covenant Organisation (APCO) (Education & promotion)
- [Horticulture-Sector-Action-Plan_SUMMARY.pdf](#)

Actions

1. Identify cost-effective and practical solutions to minimise packaging waste

Conclusion

This strategy gives the Australian avocado industry a clear, coordinated pathway to demonstrate sustainability while staying profitable and competitive. It aligns environmental, social and economic goals under a common framework, making it easier for the industry to demonstrate its sustainability. Continued investment in research, innovation and practical training will help lift on-farm efficiency, reduce emissions and improve resilience to climate and market pressures. Streamlined compliance and stronger partnerships will reduce duplication, build confidence and share solutions across the sector.

Ultimately, the Australian Avocado Sustainability Strategy positions the industry to prove its credentials, strengthen market access and ensure long-term viability through clear actions and credible data to demonstrate their sustainability performance.



Appendix: Potential partners

Strong partnerships and collaboration will be key to maximising the outcomes of the strategy. Strategic partners can expand the expertise and resources available to progress strategy goals, and mutual benefits can be realised by leveraging concurrent work. Potential partners the avocado industry could collaborate with to deliver the sustainability strategy are provided in the table below.

GOAL	POTENTIAL PARTNERS	FIELD
 Theme 1: Nourish and nurture		
Healthy Nutritious food 	Heart Foundation Australia	Research and education
	Nutrition Australia	Research and education
	Healthy Food Partnership	Education and promotion
Safe, traceable, quality 	Australian Agricultural Traceability Alliance	Research and technology
	GSI Australia	Technology
	FreshChain Australia	Technology
 Theme 2: People and enterprise		
Productive, profitable growers 	Commonwealth Scientific and Industrial Research Organisation (CSIRO)	Research
	Australian Government Department of Agriculture, Fisheries and Forestry	Research
	Food Agility Cooperative Research Centre (CRC)	Research
Human rights, safe work 	Fair Farms	Certification / education / extension
	Sedex	Supply chain and retail
	Australian Government Department of Employment and Workplace Relations	Workforce development
Diversity and capability 	Regional TAFEs and universities	Education and extension
	Primary Industries Education Foundation Australia (PIEFA)	Education and extension

GOAL	POTENTIAL PARTNER	FIELD
 Theme 3: Planet and Resources		
Sustainable agricultural practice 	Natural Resource Management Regions in key avocado-growing areas	Research and technology
	Australian Government Department of Agriculture, Fisheries and Forestry	Technology
	Soils for Life	Technology
Water 	CSIRO	Research
	SWAN Systems	Technology
Biodiversity and pollinators 	When Bee Foundation and Bee Friendly Farming program	Extension and education
	World Wide Fund for Nature	Extension and education
	Greening Australia	Extension and education
	Natural Resource Management Regions in key avocado-growing areas	Extension and funding
Biosecurity Pest and disease management  	Plant Health Australia	Research
	State biosecurity agencies	Research
	Australian Government Department of Agriculture, Fisheries and Forestry	Research and funding
 Theme 4: Climate and Waste		
Emissions 	Zero Net Emissions Agriculture CRC	Research and technology
	CSIRO	Research
Energy 	Energy Smart Farming	Extension and education
	Australian Alliance for Energy Productivity	Education and technology
Climate adaptation 	CSIRO	Research
	Australian Government Department of Agriculture, Fisheries and Forestry	Research and funding
Food waste 	End Food Waste CRC	Research and technology
Waste 	Australian Packaging Covenant Organisation (APCO)	Research and promotion

¹ Australian Avocados (2022). Avocado Nutrition and Health: Reviewing the Scientific Evidence. Hort Innovation. <https://www.australianavocados.com.au/health-professional/avocado-health-nutrition-report-2022>

² <https://www.horticulture.com.au/globalassets/hort-innovation/levy-fund-financial-and-management-documents/sip-2022-2026-pdfs/hort-innovation-sip-2022-26-avocado.pdf>

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