Table grape

STRATEGIC INVESTMENT PLAN

2017-2021

Hort Innovation
Strategic levy investment

TABLE GRAPE FUND

Content

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Introduction

This Strategic Investment Plan (SIP) is the roadmap that helps guide Hort Innovation's oversight and management of individual levy industry investment programs. The SIP lays the foundation for decision making in levy investments and represents the balanced interest of the particular industry from which the levy is collected. The very important function of the SIP is to make sure that levy investment decisions align with industry priorities.

Hort Innovation is the not-for-profit, grower-owned research and development (R&D) and marketing company for Australia's $9 billion horticulture Industry.

As part of the role Hort Innovation plays as the industry services body for Australian horticulture, the organisation is tasked by the Australian Government with working alongside industry to produce a strategic plan for investment of levies in industry R&D and marketing activities.

Each individual levy industry investment strategy also speaks to the future growth and sustainability of the Australian horticulture industry, as a whole. The SIPs are produced under the umbrella of the Hort Innovation Strategic Plan, which takes a whole of industry view in setting its direction, as it considers broader agriculture government priorities for the advancement of Australian horticulture.

The process of preparing this SIP was managed by Hort Innovation and facilitated in partnership with the Industry Representative Body and the Strategic Investment Advisory Panel (SIAP). Independent consultants were engaged to run the consultation process, to gather the advice from stakeholders impartially and produce a plan against which the table grape industry can be confident of its strategic intent.

Hort Innovation has valued the support, advice, time and commitment of all stakeholders that contributed to producing this SIP, especially table grape growers.

The table grape SIP

Producers in the table grape industry pay levies to the Department of Agriculture and Water Resources (DAWR), which is responsible for the collection, administration and disbursement of levies and charges on behalf of Australian agricultural industries.

Agricultural levies and charges are imposed on primary producers by government at the request of industry to collectively fund R&D, marketing, biosecurity and residue-testing programs.

Levy is payable on table grapes that are produced in Australia and sold by the producer. The levy rate on table grapes is 1 cent per kilogram.

Hort Innovation manages the table grape levy funds which are directed to the investment in the table grape R&D (50 per cent of collected levies) and marketing program (50 per cent of collected levies). In 2015/16 total table grape levy receipts were approximately $1.78 million; $892,000 of R&D levies and $892,000 of marketing levies.

Hort Innovation has developed this SIP to assist in strategically investing the collected table grape levy funds in the priority areas identified and agreed by the table grape industry.

This plan represents the Australian table grape industry's collective view of its R&D and marketing needs over the next five years (2017 to 2021). This plan has been developed in consultation with Australian table grape levy payers through direct consultation and workshops with Hort Innovation's table grape SIAP.

The process to develop this plan is fully described in ***Appendix 1***. The people consulted in the preparation of the plan are listed in ***Appendix 2*** and the documents referred to are listed in ***Appendix 4***.

The table grape SIAP has responsibility for providing strategic investment advice to Hort Innovation. Both Hort Innovation and the panel will be guided by the strategic investment priorities identified within this plan. For more information on the table grape SIAP constituency please visit Hort Innovation's website at www.horticulture.com.au.

Table grape

STRATEGIC INVESTMENT PLAN 2017-2021

AT A GLANCE

POTENTIAL IMPACT OF THIS PLAN

$92.5 Million

Based on an estimated investment of $11.3 million over the next five years

OUTCOMES	STRATEGIES
Increased demand for Australian table grapes by strengthening and developing domestic and export market opportunities that will improve industry viability and sustainability	Identify and develop new and existing export market opportunities
	Identify and develop new and existing domestic market opportunities
	Support demand-building activities in export and domestic markets through the provision of accurate and timely market research and strong collaboration with other horticulture products and agencies
Demand-building strategies and increased prices for Australian table grapes supported by improvements in product quality	Establish practices to enhance product quality throughout the value chain
	Examine opportunities to evaluate new and improved public varieties

OUTCOMES	STRATEGIES
Production efficiency improved and biosecurity threats mitigated by growers applying knowledge, skills and tools	Undertake R&D and extension to develop and promulgate improvements in productivity and efficiency across the value chain
	Safeguard the Australian table grape industry from future biosecurity risks
	Develop a comprehensive production forecasting system
Improved capability across the industry to implement improvements in supply and quality	Enhance skills and capacity to support current future industry needs
	Ensure growers and other members of the value chain are fully aware of industry developments

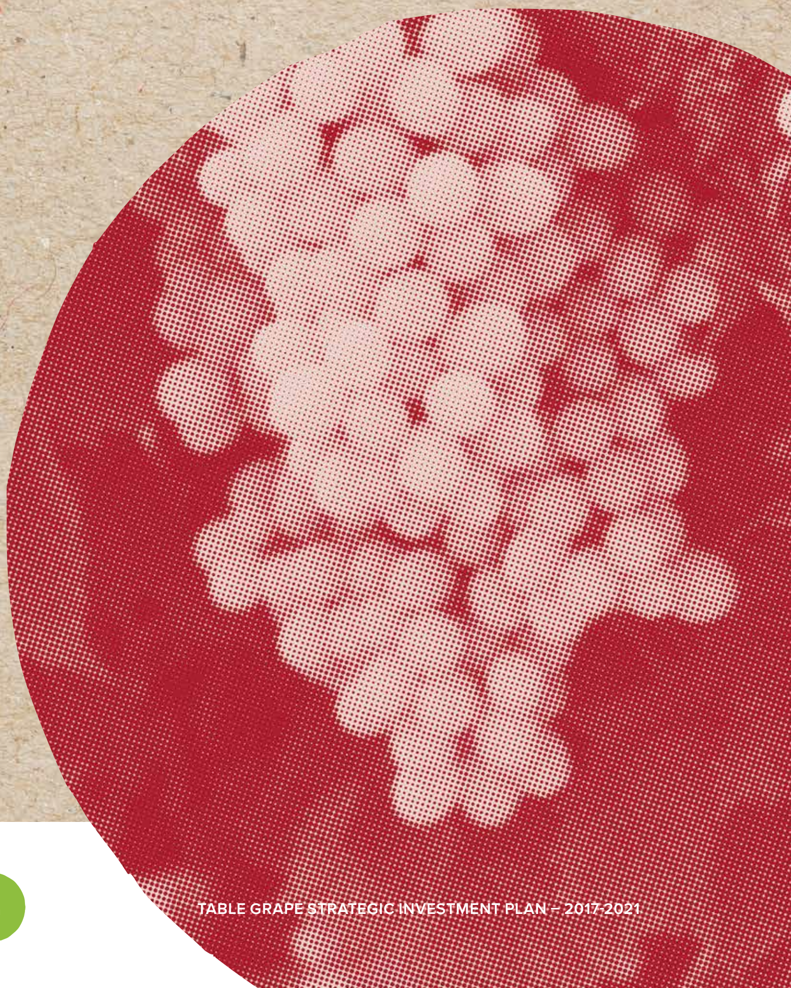


Table grape

STRATEGIC INVESTMENT PLAN 2017-2021 AT A GLANCE

Major opportunities

- Capability to produce premium export-quality grapes that exceed international competition capabilities
- Strong international product recognition of Australian table grapes
- Increasing demand for imported grapes in international markets where Australia has a competitive advantage
- Enhanced import protocols in some export markets
- Enhanced quality focus domestically, especially for early-season fruit
- Build on successful programs such as 'Innogrape' for the broad benefit of industry.

Major challenges

- Lack of industry cohesion
- Increasing climate variability and reduced access to water
- Increasing supply of imported table grapes
- Biosecurity risks and loss of pest-free area (PFA) status in some areas
- Significant focus on a (relatively) small number of export markets
- Industry production expansion is heavily reliant on one variety (Crimson Seedless) for one market (China)
- Complex protocols for export
- Lack of better performing varieties
- Lack of industry data
- High cost of production
- Inconsistent product quality
- Oversupply at peak season in the domestic market.

Industry size and production distribution

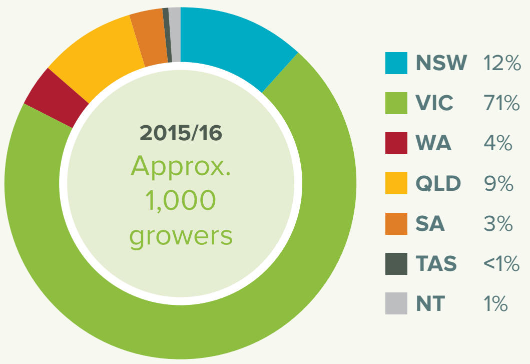
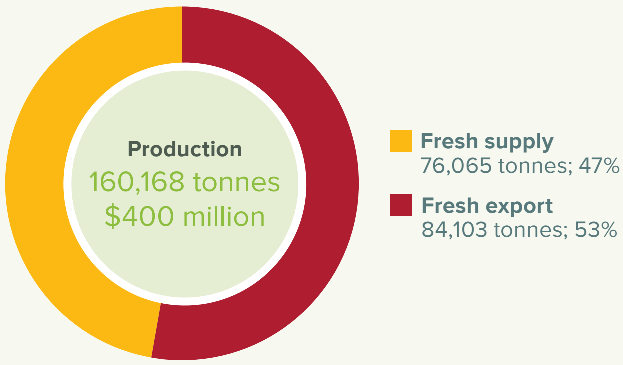
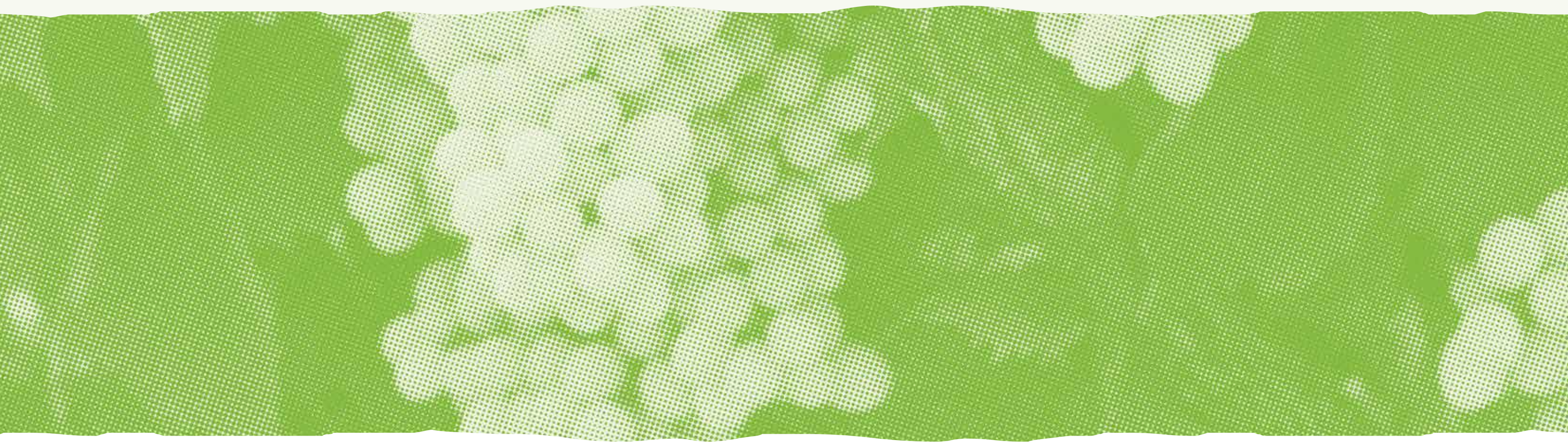


Table grape supply chain and value 2014/15





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SECTION ONE

Context

The Australian table grape industry

Production

Australia produced a total of 178,000 tonnes of table grape in 2015/16 (***Figure 1***, as estimated from levy income), valued at $541 million. This made 2015/16 the best year for the industry for volume and value of production in 12 years.

Figure 1: Table grape production
(Source: Horticulture Australia Limited/Hort Innovation levy data)

Figure 2: Table grape growing regions *(Source: ATGA)*

The industry produced and sold 57 per cent more table grapes in 2015/16 than in 2011/12 and it grew by 90 per cent in value over that period. During that time, production levels varied, especially because of seasonal conditions. For example, 2010/11 was a very wet season with significant flooding.

Australian table grape industry	2011/12	2015/16	Increase
Production volume in tonnes (minimum)	113,756	178,391	57%
Estimated farm-gate value in AUD	$284,390,000	$540,821,000	90%

- The production volume has been calculated as a minimum production figure as it does not account for levy leakages (if any). This calculation uses total levy income data per year provided by Hort Innovation.
- Industry value is based on the estimated average farm-gate price per kilogram: 2011/12 at $2.50 per kilogram; 2015/16 at $2.60 per kilogram for domestic and $3.30 per kilogram for exports.[1]

This substantial growth in the industry is due to a significant increase in export trade to high-value markets. For the same reason, the industry expects continued growth in future years.

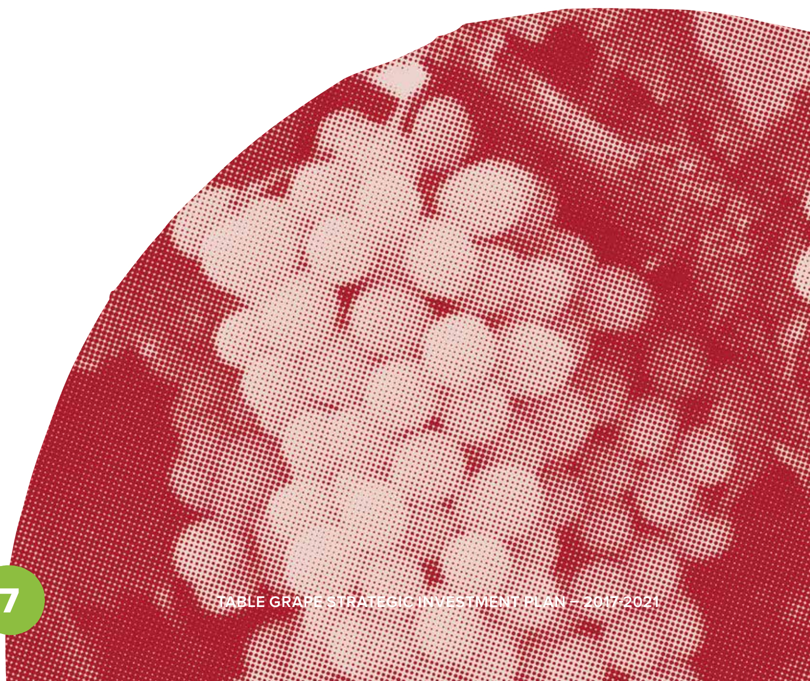
Table grapes are grown in most states of Australia. Please see ***Figure 2***[2] for a more detailed map of the growing regions.

There are an estimated 1,000 table grape growers in Australia, the majority of which are small- to medium-sized family-owned enterprises, with a few large growers.

Sunraysia is Australia's largest table grape growing region, producing an estimated 80 per cent of total production. With the exception of one, all large growers have a presence in Sunraysia.

Vine yield varies depending on the growing region. In Sunraysia, growers harvest an average yield of 20 to 25 kilograms per vine, while Queensland has a yield of 5 to 10 kilograms, and Western Australia, 20 kilograms[3].

There are an estimated 80 growers in Western Australia and 20 growers in Queensland. Two of the seven major growers have table grape production located in Emerald, Queensland.



1 ATGA estimates
2 Source: ATGA
3 Source: Estimated by growers and confirmed by ATGA

Figure 3: Major table grape varieties

Export varieties	Seeds	Nov	Dec	Jan	Feb	Mar	Apr	May
Dawn Seedless (WA only)			●	●	●	●	●	
Menindee Seedless		●	●	●	●			
Thompson Seedless				●	●	●	●	●
Crimson Seedless					●	●	●	●
Flame Seedless		●	●	●	●	●		
Ralli Seedless				●	●			
Red Globe	✓		●	●	●	●	●	●
Autumn Royal				●	●	●		
Sugrathirteen (MIDNIGHT BEAUTY®brand)			●	●	●			

Major export varieties in **bold**.

Varieties

Australian table grapes are generally available from October/November to May. ***Figure 3*** shows the major varieties and their seasonality.[4]

Most of the major varieties, both public and proprietary, are grown in Sunraysia. Strong export opportunities have been driving the shift to Crimson Seedless and expansion of plantings is expected through this variety.

Early-season grapes are predominantly grown in Queensland and Western Australia. Harvest is from late October into early January. Queensland mainly grows Menindee Seedless grapes, with Flame Seedless volumes not far behind. There are also some plantings of Sugrathirteen (MIDNIGHT BEAUTY®brand) and Red Globe. In Western Australia, Dawn Seedless, Crimson, Red Globe and Sugrathirtyfive (AUTUMNCRISP®brand) are major varieties grown.

Although Crimson Seedless can be challenging to grow, among countries producing table grapes, Australia is better positioned to supply the best quality Crimson Seedless to export markets. This fact presents an opportunity that the industry has taken to expand its export business. To ensure its advantage in this niche market, Australia needs to continuously improve the quality of its predominant export variety. Crimson Seedless is notorious for its colour issues, and sufficient investment is needed to improve this quality attribute.

Menindee Seedless is another major variety grown in most regions. Its shelf life and capacity to travel well are significant challenges for growers wanting to export this variety. Improvement in Menindee Seedless attributes could provide another opportunity for more growers to export.

Growers are always in search of new varieties. A long-term, national CSIRO breeding program that ended in 2012 did not deliver any significant commercial outcome. Due to high investment requirements, there are no plans to further invest in developing new varieties. Instead, evaluation of some of the best existing material from the concluded CSIRO project is ongoing.

Publicly available varieties are limited around the world. A large and growing proportion of varieties planted in Australia are proprietary. Worldwide, it is expected that most, if not all, new varieties will be sourced from private table grape breeders. Small growers in Queensland are challenged in successfully growing some proprietary varieties and need better training from commercial breeders.

Pest management

An interstate quarantine program is in place to prevent the introduction or spread of pests in and around the country. Movement of fruit, vegetables, plants, flowers, plant products and soil are restricted, and state government-managed protocols are strictly enforced. Protocol conditions are determined by each state government and may differ between jurisdictions. Growers believe the harmonisation of these Interstate Certification Assurance (ICA) conditions across the country would be beneficial.

Fruit fly

A major biosecurity concern for the national industry is the management of fruit fly: Queensland Fruit Fly (Qfly) in the eastern states and Mediterranean Fruit Fly (Medfly) in Western Australia.

4 http://www.australiangrapes.com.au/growing-regions/

The Qfly problem in most of the eastern states is shared across over 20 horticulture industries including citrus, summerfruit, cherry, avocado as well as table grape. The Greater Sunraysia Area and Riverland were internationally recognised PFAs in earlier years but have since lost their status. In 2016, China officially recognised Riverina as fruit fly free. PFA status allows growers in the area to export their fruit without the need to undertake costly fruit fly pre-harvest and postharvest protocol treatments. Most growers are aware of the importance of, and are diligent in, following fruit fly management practices but most residents and town visitors are not. With Qfly prevalent in town centres, residential areas and where there is an influx of travelling visitors, Qfly control is a challenge for the industry.

In a Greater Sunraysia Qfly management program, the Victorian government has brought table grape, summerfruit and citrus growers together to address the issue. Growers in this region contribute to funding the program through a separate levy. Baiting programs are in place in relevant towns in Victoria and Queensland, but funding, residential trap installation and monitoring are a challenge. Western Australia has its own pest management program for Medfly.

Birds

Birds such as lorikeets are a pest that growers in Queensland and Western Australia are specifically concerned with. Growers need more information on how to manage these vertebrate pests.

Chemical access

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is the Australian Government regulator of agricultural and veterinary chemical products. Registration of all agricultural and veterinary chemical products into the Australian marketplace is done through APVMA. Each chemical or pesticide (for example, insecticide, herbicide, fungicide, plant growth regulator and miticide) is registered for a specific use pattern. In the absence of the necessary registration, APVMA may, in the case of minor uses, issue a temporary permit to a grower, group of growers, industry group where it is applied for. It is a costly and onerous process.

Access to the necessary chemical options is a major issue for the industry. Some widely used chemicals, such as dimethoate and fenthion, have been deregistered for use on table grapes following chemical reviews that required changes in regulatory requirements. These chemical reviews are the result of new scientific information becoming available after the active constituent has been approved or a product has been registered (by the APVMA), suggesting a change in the risk to human health, the environment, animal or crop safety, or trade. In some instances, after deregistration, alternative registered chemicals are either limited or not available.

Horticulture Australia Limited (HAL) conducted a Strategic Agrichemical Research Priorities (SARP) in consultation with the table grape industry in 2008. A SARP is a chemical gap analysis that includes: a desktop audit and industry liaison; assessment of the importance of the diseases, insects and weeds (plant pests) that can affect that particular industry; evaluation of the availability and effectiveness of the current available fungicides, insecticides and herbicides (pesticides) to control the plant pests; and determination of any gaps in the pest control strategy to identifiy suitable new or other pesticides to fill the gaps. A review of the table grape Strategic Agrichemical Review Process (SARP), which is critically important given the changes in the pesticide landscape, including changes in export Maximum Residue Levels (MRLs), loss of older chemicals, and access to newer ones, commenced in 2016 and is expected to be completed in 2017.

Quality assurance

Early-season fruit traditionally has had quality issues due to immature fruit harvest. Harvesting of early-season fruit is driven by the high prices obtained at the start of the varietal season.

Western Australian growers adhere to a legislated maturity standards program that they support and fund through a separate levy. As an effective program in Western Australia, it is a model that has been evaluated for national implementation. Due to legislative requirements and lack of support from many growers and state governments, this program has not been replicated nor expanded to the rest of the country.

The table grape industry, with the Australian Table Grape Association (ATGA), has a current project to engage with major retail chains (Woolworths, Coles, Aldi and IGA) in regular dialogue, specifically to address quality issues. An outcome of these discussions has been the establishment of on-farm and in-store maturity testing programs respectively for early-season fruit in Queensland and Sunraysia. These programs have been conducted each year since 2013. Data results are shared with the retail chains to ensure quality standards are followed and monitored. The base of voluntary grower participation is slowly increasing with testing regimes being refined. To date, several Emerald growers participate in the on-farm testing program while selected Woolworths, Coles and Aldi stores are participating in the in-store program.

Other on-farm practices

The industry sees the need to continuously work on best practices involving:

- Rootstocks
- Irrigation
- Maximum yield per vine while maintaining high fruit quality standards
- Climate/temperature conditions
- Timing of pruning, use of protective covers, spray application and the like.

Figure 4: Australian table grape export vs domestic markets

(Source: Horticulture Australia Limited/Hort Innovation levy data)

Harvest and postharvest

The lack of labour, in both quality and quantity, is a major industry concern just as it is in various horticulture industries. In Queensland, Emerald growers do not see it as an issue while those from St George, Sunraysia and Western Australia do. The Queensland Department of Agriculture and Fisheries (QDAF) is encouraging St George farms to plant other fruits, such as blueberries and mandarins, to have a wider harvest season. This will provide incentives for pickers to live locally and develop their skills. By having access to the same pickers each year, the quality (and surety) of labour would be improved.

With the increase in production as well as export volumes, various harvest and postharvest requirements should be closely monitored. Any deficiency in these areas of logistics would provide problems for the industry in future:

- Chilling/packing facilities
- Domestic transport services
- Shipping containers and routes for both sea and air.

Table grape markets

The Australian table grape industry is growing substantially, with improved market options. In the years leading up to 2011/12, intense pressure of oversupply in the domestic market reduced prices, especially at peak season, April to May. With a robust export trade, this pressure has now eased.

While the domestic market remains the single largest market for the industry, 62 per cent of production in 2015/16 was sold in 35 other markets. The Australian table grape industry is now achieving market diversity.[5] ***Figure 4*** shows growth trends of the domestic and export markets.

This outcome has provided growers with higher average prices in domestic and export markets.

Export market

In global markets, Australian table grapes are known for their premium quality. Though not a large player in the global scene, Australia competes, not in volume or price, but in quality within the southern hemisphere season.

While the global table grape export trade remains flat at an average of four million tonnes, with a compound annual growth rate (CAGR) of minus one per cent, Australian exports have grown significantly with a CAGR of 34 per cent (see ***Figure 5***)[6]. Australia exported 110,000 tonnes in 2015/16, which was 170 per cent more than in 2011/12.

Figure 6 shows that 62 per cent of table grapes produced in Australia were exported in 2015/16. In four years (2012 to 2016), exports reached an average of 56 per cent of production, already superseding industry targets of 45 per cent by 2016/17[7].

5 Figures for export are well known while domestic market is calculated by default and could be considerably higher
6 Based on analysis of ITC/UN Comtrade data by Oliver & Doam
7 *Australian Table Grape Strategic Investment Plan 2012-2017*, HAL/ATGA, Oliver & Doam, June 2012.

Figure 5: Table grape export trends
(Source: ITC/UN Comtrade)

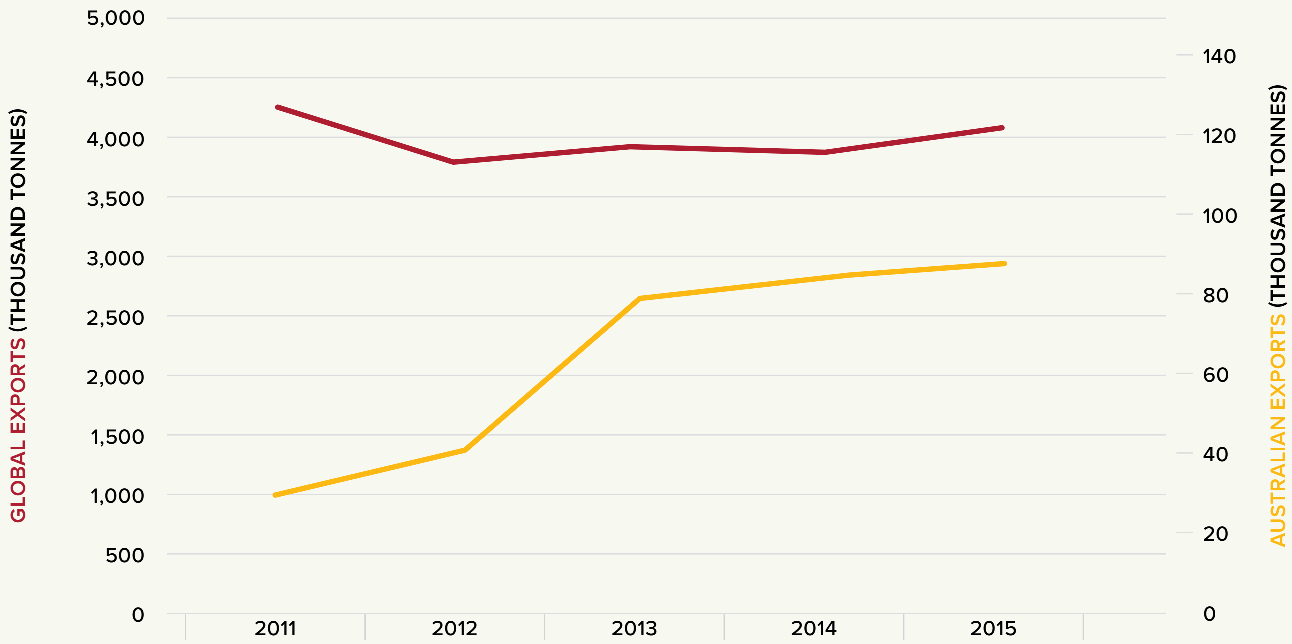


Figure 6: Exports and domestic market as a percentage of table grape production
(Source: Horticulture Australia Limited/Hort Innovation levy data)

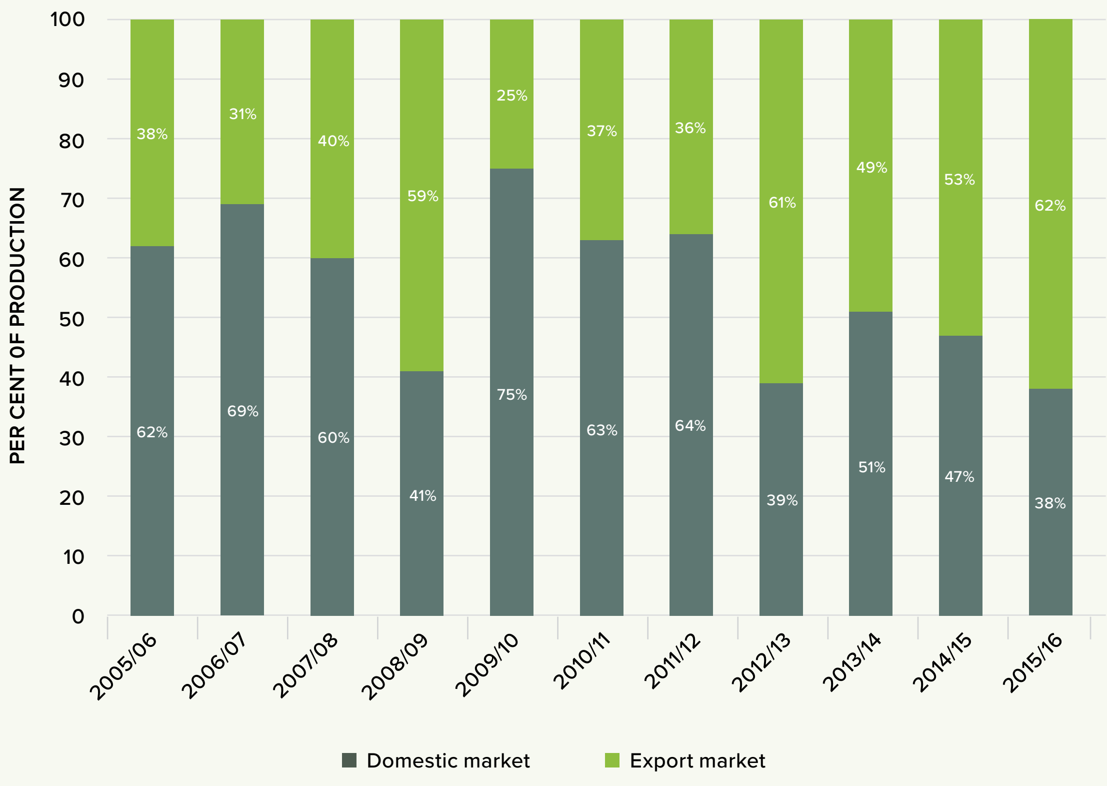
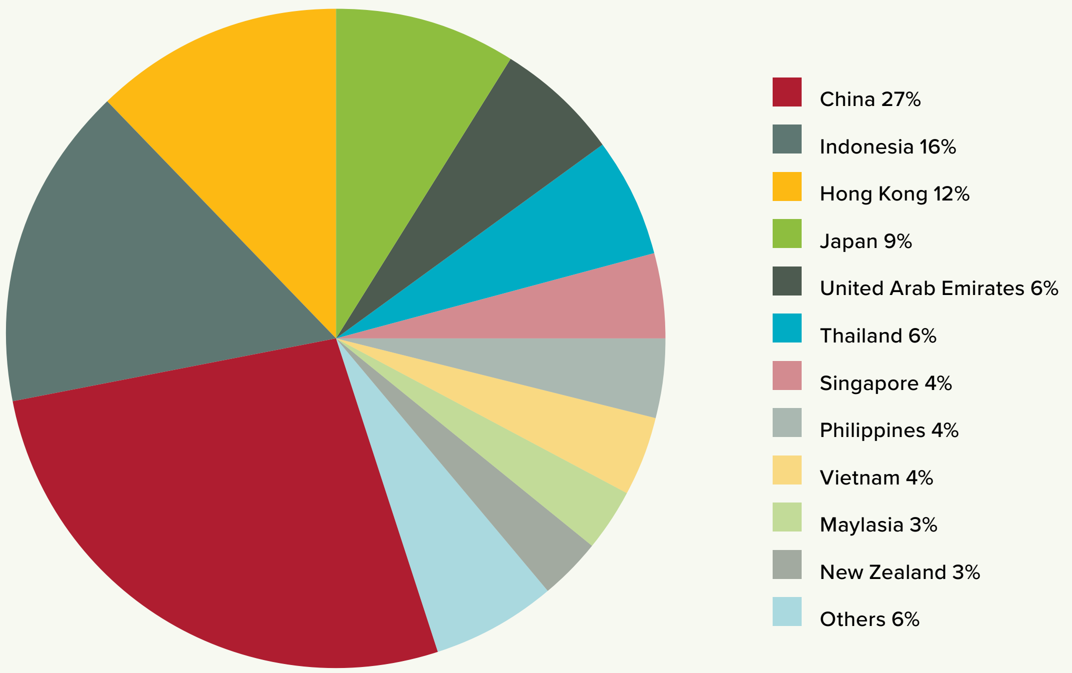


Figure 7: Australian table grape export markets *(Source: Global Trade Atlas)*



The growth in exports is attributed to access to new markets, such as China, Japan and the Philippines, as well as increased trade in existing markets, such as Indonesia and the United Arab Emirates. Key export markets are shown in ***Figure 7.***

In 2012, ATGA launched an export registration system for key protocol markets, such as China, Japan, South Korea and Vietnam. In coordination with the DAWR, ATGA receives registration applications from growers, exporters and other export facilities that are interested in exporting to these countries. Training workshops are provided to ensure that all stakeholders are aware of the necessary import protocols of each market. Strict compliance is essential to maintain access in these markets. Audits by DAWR are conducted for approval to export. This export registration system has since been adapted by other industries, such as summerfruit, apple and pear.

The majority of the export registrants are from the Sunraysia region. Until recently, there had been 'limited' interest from Queensland and Western Australia growers. The next phase for these regions is to participate in the registration process should they seriously consider exports.

The uptake for exports among Queensland growers has yet to be realised as they face the following export disadvantages:

- Menindee Seedless, a major variety in this region, is not commonly exported and has not been extensively trialled in export markets
- Menindee Seedless shelf-life is shorter than other varieties and is understood not to travel well by sea
- Air shipments may be the better alternative – although more costly, lead-time from farm to plate is shorter
- Controlled markets may require cold treatment that would need a holding period. Commercially viable airfreight protocols have yet to be issued by some key export markets
- On-shore cold treatment would require dedicated cooling facilities that would be quarantined for the length of the holding period. There are very limited cooling facilities available to small farmers in Queensland
- Queensland will need high-value markets to provide comparable returns to the prices they enjoy in the domestic market
- There are major on-farm challenges in growing the current, common export varieties in Queensland
- Queensland growers look at exports opportunistically. For Queensland growers to be export-ready, extensive preparatory training and a culture shift towards export commitments are essential.

Vietnam is currently the only controlled market that accepts irradiation. Brisbane has an irradiation facility that would allow Queensland to air freight table grapes to this market. Other markets that Queensland could consider are United Arab Emirates, Hong Kong, Singapore and Malaysia.
The Australian Government, with industry, would have to negotiate for more markets to accept irradiation as an option to cold treatment.

The industry has never been as confident and strong as it is now with new market access gained during the last four years. The export landscape has dramatically improved in a short period of time. Export is driving an upsurge of new plantings and a shift to Crimson Seedless for growers selling into China. With this expansion, it is essential that the industry works harder in gaining a deeper understanding of current trends in international markets, global competition and industry capacity to ensure long-term growth. To further fuel the momentum of increased exports, the following may need to be evaluated and considered:

- Conduct export promotions to build consumer awareness in key markets that could deliver more growth
- Develop other markets for Crimson Seedless to reduce dependency on the Chinese market
- Increase export demand and improve access for all varieties grown in Australia
- Maintain markets that accept diverse product quality standards to spread risks due to fluctuations in production performance in future seasons
- Improve protocols (sea and air) to existing markets
- Increase export capability of growers in regions that traditionally supply the domestic market and can supply early-season fruit to export markets.

Priorities in improving export market opportunities for the national industry include:

1. Market access improvement, market development and consumer promotions

Table 2: Table grape export programs by market

Export markets	Improved market access, improved protocols, trade network, government relations	Market development trade shows, inbound/outbound missions, training program, trade network, government relations	Consumer promotions
United States	X		
China	X	X	
Japan[8]	X	X	X
South Korea[9]	X	X	X
Thailand	X	X	
Vietnam	X	X	X
Philippines	X	X	X
Indonesia	X	X	X
Malaysia		X	X
United Arab Emirates	X	X	
New Zealand	X		
Canada	X		

2. Protocol improvement:

- » **Use of irradiation as an alternative to cold treatment and to improve airfreight opportunities**
- » **Use of methyl bromide fumigation as an alternative to cold treatment and to improve airfreight opportunities**
- » **Use of ventilated cartons and vented/slithered liners to reduce required cooling time and avoid double handling**
- » **Tolerance for insects of minimal importance**
- » **Cold treatment temperature standards of 1 to 3 degrees in 12 to 14 days across all markets.**

3. Improvement of fruit fly management and reinstating PFA status in Riverland and Sunraysia as well as recognition of PFA status by all export markets.[10]

Export provides the industry potential to increase – it has a well-prepared export strategic plan and its annual revision is essential.

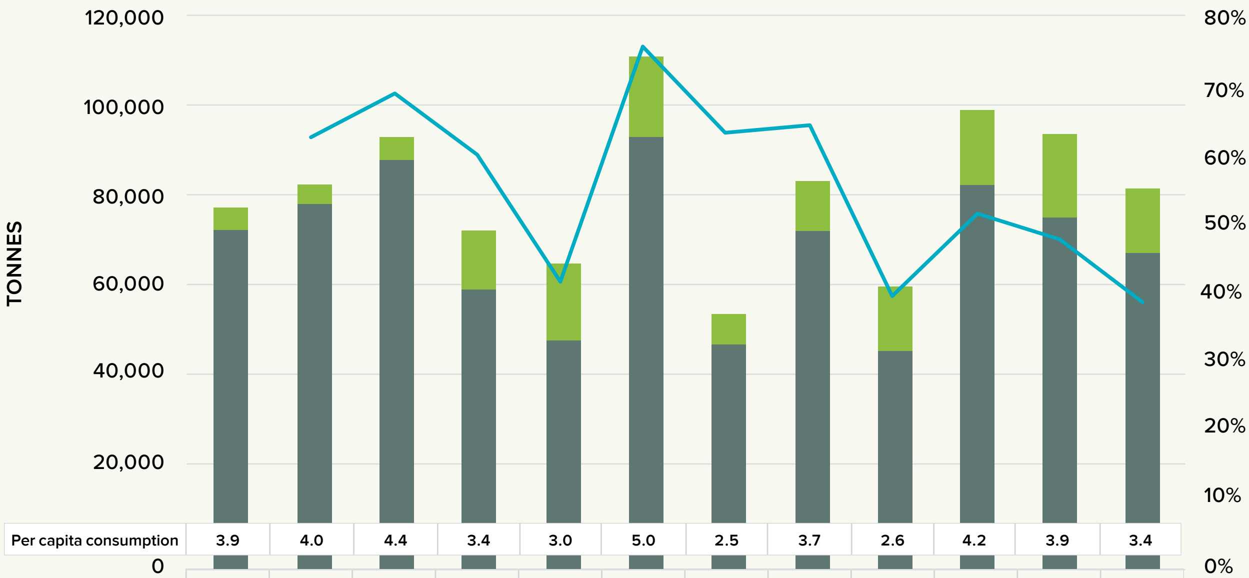
8 Japan's intake of global imported table grapes has been at a plateau for the last four years. With Australia's current market share at almost 50 per cent, any incremental increase in trade may ambitiously be a maximum 10,000 tonnes.

9 The industry will ideally see South Korean trade improve as duties decrease over time.

10 China has recently recognised Riverland as fruit fly free.

Figure 8: Domestic market supply and per capita consumption

(Source: Horticulture Australia Limited/Hort Innovation levy data)



	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Per capita consumption	3.9	4.0	4.4	3.4	3.0	5.0	2.5	3.7	2.6	4.2	3.9	3.4
Imported	4,435	4,528	4,804	12,111	16,596	17,076	6,351	10,743	14,568	15,859	17,766	13,764
Local	73,276	79,167	88,615	60,854	49,493	93,855	48,839	72,943	46,672	83,436	76.065	68,384
Local % of production		62%	69%	60%	41%	75%	63%	64%	39%	51%	47%	38%

■ Local ■ Imported ■ Local percentage of production

Domestic market

Large retail chains are the main outlets for Australian table grapes. Coles and Woolworths account for 66 per cent of table grape retail trade; IGA, ALDI and other supermarkets have 18 per cent; while non-supermarkets, such as fresh produce shops, take the lowest share of 16 per cent[11]. The major chains are supplied by the larger growers. With the wholesale and independent retail market rapidly losing market share, as reported by growers, small growers are dependent on their larger counterparts to sell their fruit. The dominance of a handful of large retail chains in the domestic market allows them to set pre-harvest requirements, quality standards, packaging requirements and price. Growers have identified bunch bag packaging, farm identification codes for traceability and on-farm chemical treatment for various pests such as spiders as more costs they have had to absorb in supplying the domestic market.

Outside South America, Australia is one of the highest per capita consumption markets in the world, similar to that of the United States. Historically, the domestic market consumed as much as the industry supplied, though prices fluctuated significantly due to volume of supply. Australia's per capita consumption has been directly influenced by market supply, as shown in ***Figure 8***[12]. With table grape production increasing, the domestic market may not absorb future supply volumes should export trade drastically fall. In the domestic market, growers prioritise higher prices over higher sales volumes.

Table grape imports are an increasing concern for early-season growers. Australia is a significant importer from the Unites States from June to December. Although import volumes have not grown significantly, a prolonged American grape season into December in recent years has placed imports in direct competition with Australian product. There are efforts among retail chains to prioritise domestic fruit over imported but this practice is inconsistent. Displays of American fruit are sometimes mislabelled as Australian, and the quality of American end-of-season fruit has not been ideal. Retail chains need to fill up their shelves puts pressure on the industry to harvest early and/or risk the continuous flow of American imports. This is a challenge the industry faces in maintaining consistent fruit quality standards in the domestic market.

11 Market share covers Australian and imported table grapes sold in Australia. Hort Innovation calculation based in part on Nielsen Homescan Service for the Table Grape category (client defined) for the year ending 01/10/2016. Copyright © 2016, The Nielsen Company

12 Per capita consumption is based on (Production data based on levies collected minus GTA Export Stats) plus GTA Import Stats divided by ABS Population data for the year.

In addition, Western Australian growers are feeling the pressure of the impending influx of eastern state fruit into the Western Australian market. Larger Western Australian growers are now looking to export to other markets to spread their risks.

The domestic market situation has changed in the last four years. It is essential that a table grape domestic marketing plan be developed to further strengthen the domestic market while complementing the industry's export business.

Industry data

The Australian table grape industry has limited industry data due in part to the fragmented nature of the industry. This is caused by lack of trust among growers in sharing basic information such as production area and plantings per variety, annual production, expected yield rate and price. Unlike other horticulture industries where a few players produce the most, the greater part of table grape production is spread across many small- to medium-sized growers. At present, expansion of plantings is focused on Crimson Seedless. Without the necessary intelligence, there is a high risk in future of an oversupply of this variety while neglecting to build capacity to supply other varieties. Some horticulture industries, including almond, citrus and macadamia, have comprehensive industry data on productions levels and other industry parameters. Sensible forecasting models on industry supply capability would be a challenge without the necessary production data.

Export data by variety and market is also essential for understanding the current capabilities of supplying specific market requirements[13]. Real-time data is as important in understanding the supply and demand dynamics of a market.

It is essential for the industry to build its data intelligence to help the whole of industry and individual growers make well-informed decisions.

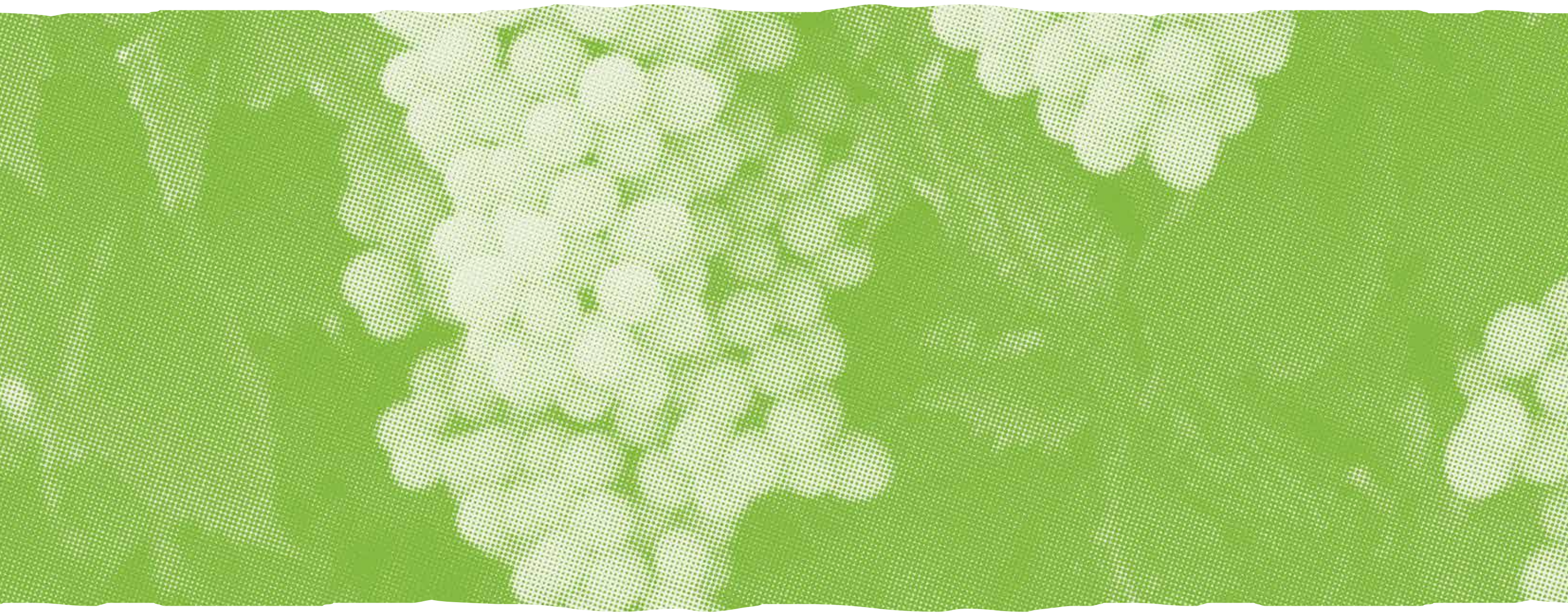
The following sources of industry data intelligence could be considered:

- Export-related data captured in the industry's Export Registration System
- Australian Customs
- Levy Collections Agency
- Independent data collection from growers, through industry support surveys/processes (Note: Consider pilot testing in Queensland and Western Australia).

Existing market intelligence includes:

1. Nielsen Homescan reports on general domestic market performance
2. Market intelligence reports form project MT14006
3. Guangzhou market reports as received by ATGA.

With a heavy reliance on the export trade, the industry will need to build more in-depth market intelligence on the domestic market as well as key export markets that currently, and may potentially, deliver higher volumes of trade for Australia. This area should be further evaluated when updating the industry's Strategic Export and Domestic Marketing Plans.

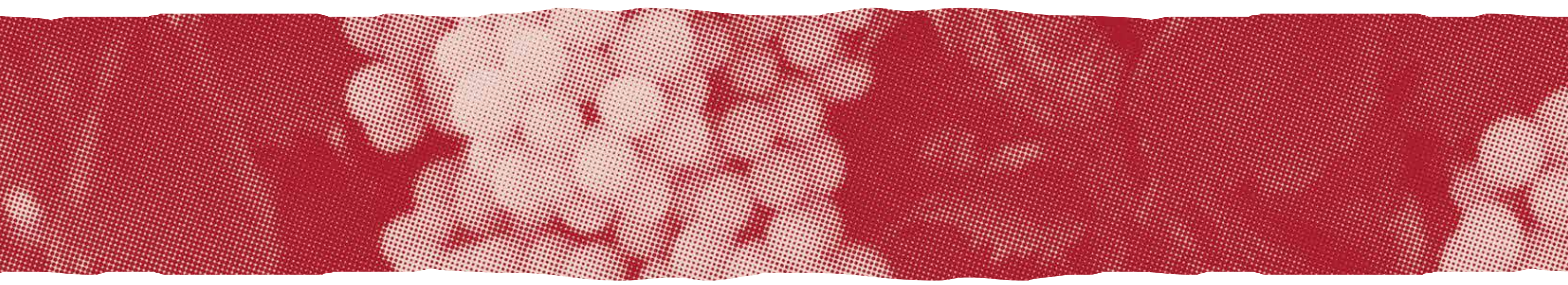


13 Refer to Business Case 1 of the *Australian Table Grape Export Strategic Plan 2014–2019*.

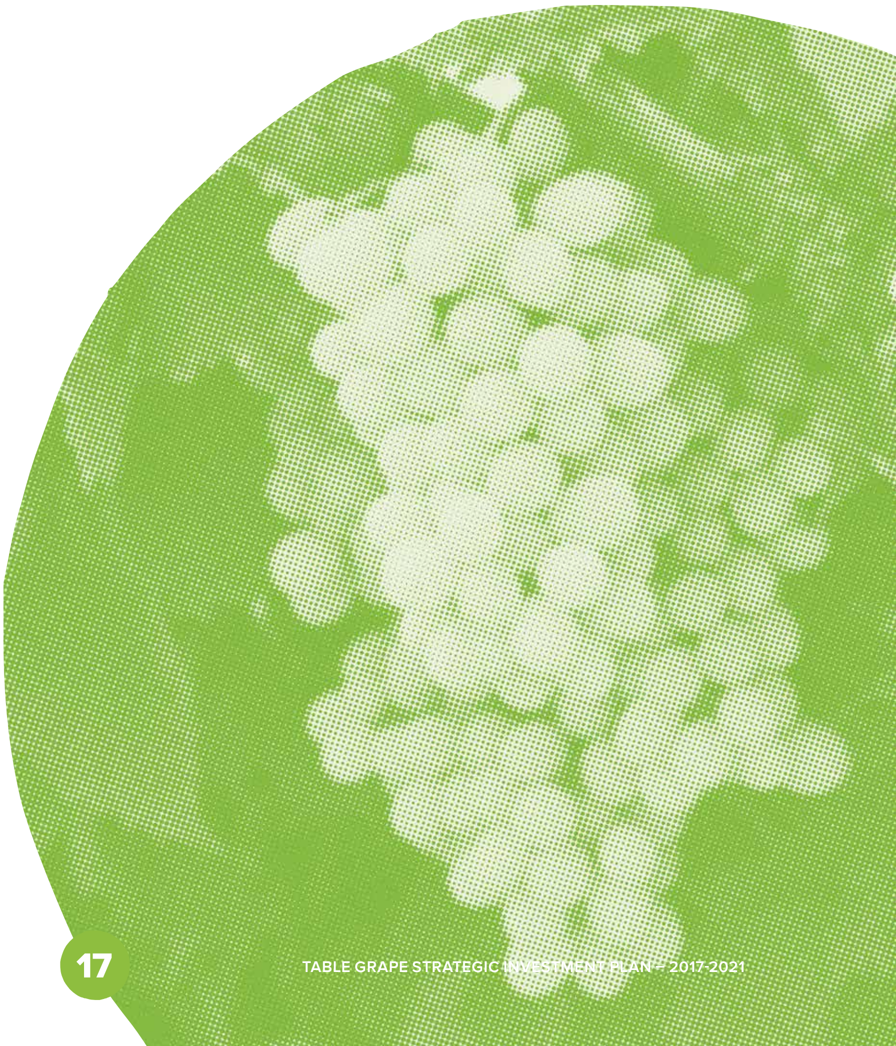
Operating environment

During the table grape SIAP consultation, an analysis of the industry’s strengths, weaknesses, opportunities and threats (SWOT) identified key themes. It should be noted that while this SWOT analysis is nationally orientated, certain elements within the following table can be regionally specific. For example, issues about exporting may be more relevant for Sunraysia growers, while issues about early-season production may be more relevant for Queensland and Western Australian growers.

The table grape industry	
Strengths	• Significant export markets and strong demand • Capability to produce premium export-quality grapes that exceed international competition capabilities • Strong international product recognition of Australia and Australian grapes (high-quality, sweetness, clean-green, safe) • Strongly supported industry body with significant expertise in working collaboratively, especially in export market development • Broad range of communication and extension products to keep growers informed • ‘Now! In Season’ marketing campaign • Works collaboratively with other public (federal and state) and private organisations/agencies • A significant increase in the export focus of many growers who have undertaken ‘export ready’ training • Strong next-generation grower uptake • Strong representation in monitoring and addressing market access/maintenance issues, including having proper scientific documentation for protocol requirements
Weaknesses	• Lack of industry cohesion: fragmented industry; no sharing of information among growers; lack of industry data restricts market development • Significant focus on a (relatively) small number of export markets • Industry production expansion is heavily reliant on one variety (Crimson Seedless) for one market (China) • Complex protocols/MRLs making it difficult for growers to understand • Lack of better performing varieties, such as variable climatic changes, competition, pest and disease pressure, eating quality and shelf-life (and no breeding program) • Lack of data intelligence on production, capability, markets • Over-exuberance when seeking to secure/expand specific markets (for example, Japan late-season quality) • High cost of production • Labour: lack of skilled labour at key times; high costs; and manual picking, sorting and packing can result in human error • Lack of national food standard for both domestic and export markets, that is, using internationally recognised product integrity standards – quality assurance, food safety • Potential oversupply at peak season in the domestic market • Inconsistent product quality, poor handling and display in large retail chains



The table grape industry	
Opportunities	• Increasing demand for imported grapes among markets where Australia has a competitive advantage, such as short geographical distance to growth markets • Grow export markets further, especially by building on the strength of Australia's product position • Ability to collaborate with other Australian horticultural industries and organisations • Enhance import protocols in several markets, including China, Southeast Asia, Middle East and North Asia (see *Australian Table Grape Export Strategic Plan 2014–2019*) • New registered (crop or pest) treatments • Enhanced quality focus domestically, especially early-season fruit • Develop the export capability of growers currently not exporting or exporting on a limited scale • Build on successful programs such as Innogrape for the broad benefit of industry
Threats	• Loss of key export markets • Australia loses its premium position in export markets as other countries improve quality • Protectionist policies may increase in emerging markets • Biosecurity risks and the need for continued vigilance • Restrictions on chemical use may affect market access – limited chemical options in addressing MRL compliance • Climate variability, and reduced access to water • Increasing supply of imported table grapes and other seasonal fruit (local or imported) • Further loss of PFA status in some areas



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SECTION TWO

Table grape industry outcomes

Industry outcomes

The table grape industry aspires to become a world-class industry producing safe, clean, healthy, premium food for domestic and international consumers. The industry's objective is to become a unified industry solidly working towards producing the highest quality table grapes in the world. It also aims to ensure the best quality table grapes have a strong and consistent presence in domestic and export markets.

Overall, this SIP seeks to build on the industry's significant gains over the last five years to ensure its ongoing viability and sustainability.

OUTCOME 1

Increased demand for Australian table grapes by strengthening and developing domestic and export market opportunities that will improve industry viability and sustainability

The greatest opportunities to build demand for Australian table grapes and increase industry profitability is in expanding and maintaining markets. The industry produced and sold over 50 per cent more table grapes in 2015/16 than in 2011/12. At the same time, the industry grew by 90 per cent in value. This substantial growth in the table grape industry is due to a significant increase in export trade to high-value markets.

While forecast future production figures are not readily available, it is anticipated that given 'normal' seasonal conditions, the industry expects either maintained production or some continued growth in future years.

To ensure the future prosperity of table grape producers, it will be critically important to at least maintain, if not increase, domestic and export market demand. If it fails, supply will outstrip demand, resulting in lower prices and lower grower incomes. In addition to expected increase in domestic production, there is an anticipated increase in imports and supply of other fruits in season (local and imported).

While there has been rapid export growth in recent years to absorb increased Australian production, the focus over this SIP is not only on export markets. While export growth and prices have been very good, export markets by their very nature can be volatile (exchange rates, trade policies, phytosanitary requirements) and thus riskier. At the same time, not all Australian production is well suited to export markets. Strong export opportunities have been driving the shift to Crimson Seedless, and expansion of plantings, especially in Sunraysia, is expected with this variety. Early-season grapes, not well suited to current export markets, are predominantly grown in Queensland and Western Australia (varieties include Menindee Seedless, Flame Seedless and Dawn Seedless).

Opportunities to support this outcome include:

- Identify, develop and maintain new and existing export markets
- Identify, develop and maintain new and existing domestic market segments
- Improve protocols (sea and air) to new and existing markets
- Support demand-building by providing accurate and timely market research
- Collaborate strongly with other horticulture products and agencies.

OUTCOME 2

Demand-building strategies and increased prices for Australian table grapes supported by improvements in product quality

Australian table grapes are known for their premium quality in global markets. Though not a large player globally, Australia competes, not on volume or price, but on quality within the southern hemisphere season.

Domestic per capita consumption of table grapes is one of the highest in the world, but local production faces increased pressure from alternative fruits and potentially increasing imports.

However, despite the importance of product quality domestically (and for export), there is no national quality assurance standards program for table grapes. The major retail chains set standard specifications on their suppliers but these standards may not always be monitored. Western Australia has regulated minimum maturity standards that assure consumers of the eating quality of the grapes they buy, but there has not been strong grower or government support for similar programs in other states.

The areas where better quality product can further support demand-building strategies include:

- Enhanced quality of early-season fruit
- Collaborative quality standards programs between industry and retail outlets
- Ongoing retail chain liaison and training
- New varieties for specific markets (and better information on how to grow them)
- Improved colour attributes for Crimson Seedless.

OUTCOME 3

Production efficiency improved and biosecurity threats mitigated by growers applying knowledge, skills and tools

Table grape growers are in a highly competitive market yet they face increasing cost pressure from a range of fronts, including the cost of water, energy, fertiliser, chemicals and labour. In addition, new market requirements such as bunch bag packaging, farm identification codes for traceability, and on-farm chemical treatment for new pests such as spiders create more costs growers have had to absorb.

Biosecurity is both a positive and a negative issue. On one hand, it can help facilitate marketing into key markets. However, the cost (increasingly borne by growers) of phytosanitary programs to avoid the introduction or spreading of pests in and around the country is not insignificant.

A major biosecurity concern for the national industry is pest management of Qfly in Queensland, New South Wales and Victoria, and Medfly in Western Australia. Qfly is prevalent in the eastern states, and is shared across various horticulture industries such as citrus, summerfruit, cherry, avocado as well as table grape. The Greater Sunraysia Area and Riverland were internationally recognised PFAs in earlier years but have since lost their status. In 2016, China officially recognised Riverina as fruit fly free. PFA status allows growers in the area to export their fruit without the need to comply with fruit fly-related protocols. In some key production areas such as Sunraysia, state government and grower-funded management programs are in place.

Opportunities to support this outcome include:

- Undertaking R&D and extension to develop and promulgate improvements in on-farm productivity, including advanced systems such as automation and 'big-data'
- Undertaking R&D and extension to improve efficiency across the value chain
- Achieving chemical compliance and adherence to MRLs across entire industry
- Enhancing the national plant health biosecurity and crisis management for table grapes
- Reviewing the current SARP.

OUTCOME 4

Improved capability across the industry to implement improvements in supply and quality

The issue of human resources has two parts:

1. The ability to retain existing participants in the industry, and attract a new generation of willing participants
2. The ability to attract labour (in quality and quantity) at key times during the season.

While strong next-generation grower uptake is seen as a key strength of the industry, casual labour is a major industry concern just as it is in many other horticulture industries. In Queensland, although growers in Emerald do not see it as an issue, those from St George, Sunraysia and Western Australia do. With higher production and export volumes, various harvest and postharvest requirements are increasingly under pressure with the lack of availability of skilled labour.

Many of the outcomes sought from Outcomes 1, 2 and 3 require complex skills in horticulture and business, along with enhanced confidence (and resources) to adopt new techniques and technologies. These are crucial to a vibrant and confident table grape industry.

Important opportunities to support this outcome include industry development programs to:

- Encourage existing industry participants to enhance their skills to better address table grape industry challenges, and adopt opportunities and technologies in production, business management and export
- Encourage a new generation of highly skilled and enthused participants
- Increase export registrations
- Facilitate the two-way flow of information through the value chain.

3

SECTION THREE

Table grape industry priorities

Industry investment priorities

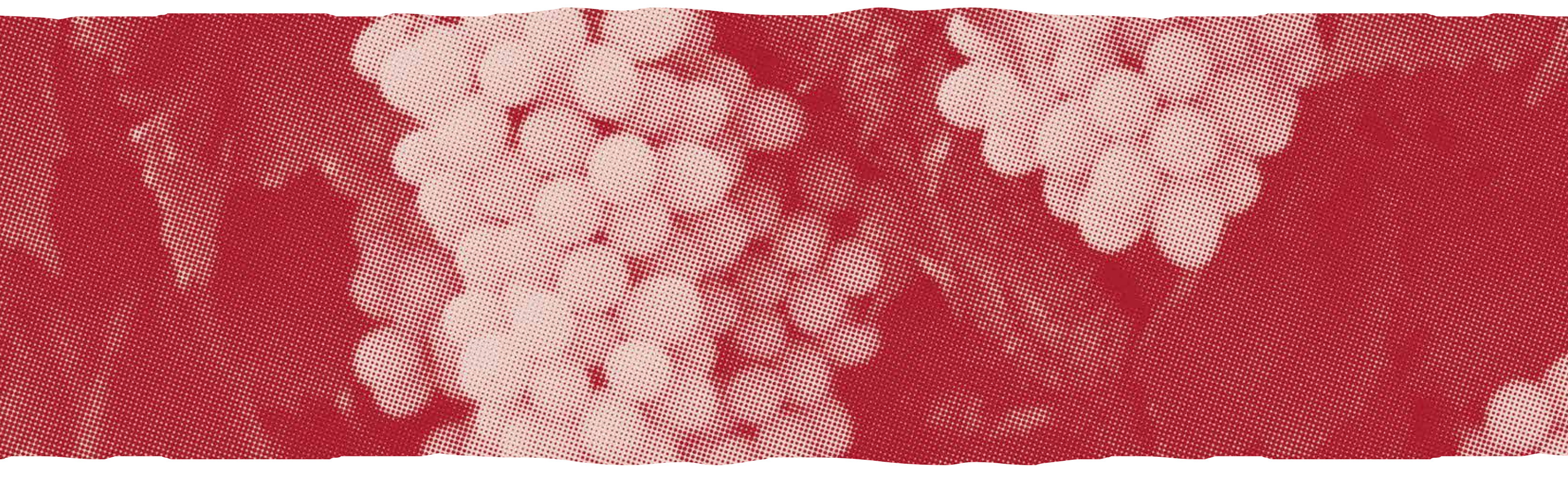
The following industry investment priorities (or strategies) have been identified by industry as those most likely to provide benefits from table grape marketing, and R&D and extension. Possible deliverables are also listed.

The overall key performance indicators (KPIs) from this plan are that by 2021 (compared to 2016) the Australian table grape industry will have:

- Maintained its market premium in export markets
- A well-developed production forecasting system, the benefits of which will be recognised by industry
- Far better collaboration with other horticultural products and agencies in areas such as:
  - **Inbound and outbound trade missions**
  - **Acceptance of methyl bromide or irradiation or endpoint freedom in key markets**
- The National Plant Health Biosecurity and Crisis Management Plan for table grapes in place and trialled effectively
- A focus on the domestic market maintained with the quality of early-season products increasing
- Protocols accepted for airfreight for the following markets: New Zealand, China, Malaysia (relying on third parties), Philippines, Thailand and India
- Quality standards (maturity standards, sugar/acid) in place
- Compliance with export protocols as a key feature.

The outcomes sought for the industry include export and domestic marketing strategies, R&D, and industry capacity-building activities. While there will be significant focus on export markets, it should be noted that further development of export markets enhances the outcomes for those table grape producers who focus largely on the domestic market. It should also be noted that for new and improved varieties (refer to Outcome 2.2).

This plan comprises four key outcomes. Each is closely linked, with Outcome 4 vitally important to achieving Outcomes 1, 2 and 3.



OUTCOME 1 – Increased demand for Australian table grapes by strengthening and developing domestic and export market opportunities that will improve industry viability and sustainability	
STRATEGIES	**POSSIBLE DELIVERABLES**
1.1 Identify and develop new and existing export market opportunities	Annual review (and progressive updating) of current export plan to maintain relevance, and continue guiding industry expansion in exports up to 2022 Market premium for Australian table grapes in export markets maintained or enhanced Improved protocols, based on new R&D, as identified by priorities in the export plan (for example, Japan: more varieties; end-treatment acceptance of methyl bromide, irradiation or endpoint freedom; protocols accepted for air-freight) New entrants to export markets have comprehensive knowledge and understanding of protocols (export registrations) Reports identifying potential returns from additional activities were extra funds available
1.2 Identify and develop new and existing domestic market opportunities	Table Grape Industry Domestic Marketing Plan established, implemented and reviewed annually (2017 to 2022) Increase in consumer satisfaction of Australian product quality, especially early-season product
1.3 Support demand-building activities in export and domestic markets through the provision of accurate and timely market research and strong collaboration with other horticulture products and agencies	Comprehensive market research data available to support demand-building programs, that is, improved retail data reports to include five-year trend analysis, considering seasonal, start, peak and end-of-season timelines Market data on consumer/trade product preferences to emphasise export-preferred varieties Availability of real-time export data Successful collaborative inbound and export-focused trade missions Benefits of collaborative programs analysed and reported

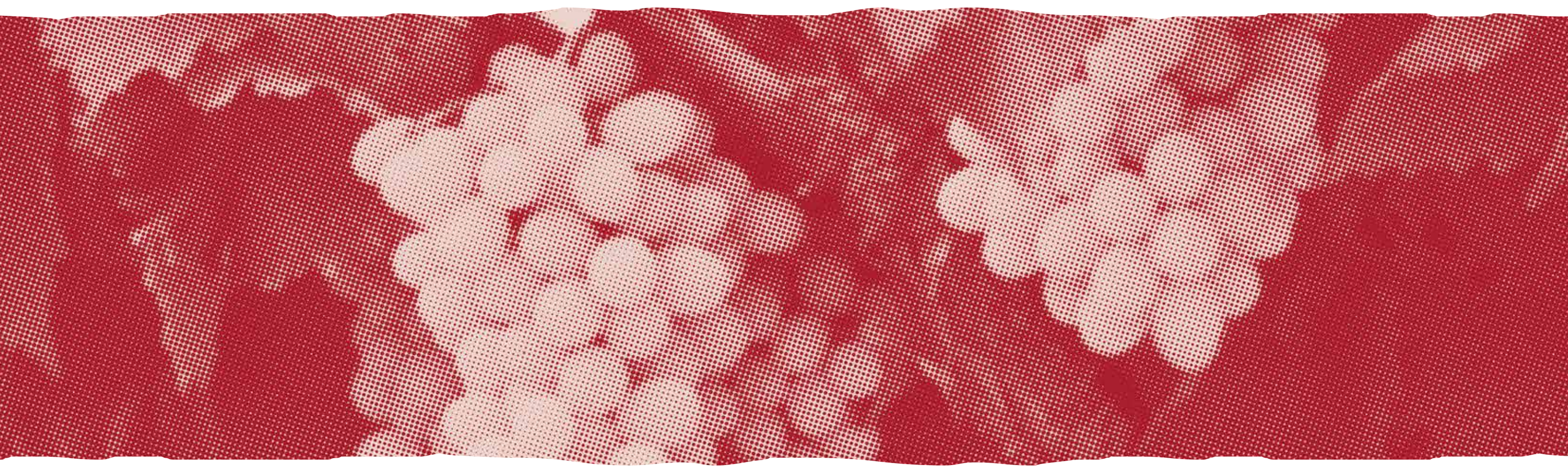
OUTCOME 2 – Demand-building strategies and increased prices for Australian table grapes supported by improvements in product quality	
STRATEGIES	**POSSIBLE DELIVERABLES**
2.1 Establish practices to enhance product quality throughout the value chain	Consumer perceptions of early-season quality have increased and repeat purchases maintained Collaborative quality standard programs in place between industry and at least two retail chains Training programs for retail chains to improve handling and display of Australian table grapes
2.2 Examine opportunities to evaluate new and improved public varieties	Evaluation of genetic material in relation to availability of new public variety(s) for Australian conditions Enhanced guidelines for growing new and/or improved public varieties Improved colour attributes for Crimson Seedless and postharvest performance/ shelf-life, such as for Menindee Seedless

OUTCOME 3 – Production efficiency improved and biosecurity threats mitigated by growers applying knowledge, skills and tools

STRATEGIES	POSSIBLE DELIVERABLES
3.1 Undertake R&D and extension to develop and promulgate improvements in productivity and efficiency across the value chain	Harvest and compile existing information on best practices, that is, source existing information New/updated information on latest research results; improvements in productivity and efficiency across the value chain, including advanced on-farm systems, product handling and packaging, all evaluated and processed to suit Australian conditions Extension program for updated best practice (refer to Deliverable 4.1)
3.2 Safeguard the Australian table grape industry from future biosecurity risks	Up-to-date database on chemical usage requirements per market (includes guidelines on practical application for the Australian industry) Extension program for chemical use practice requirements (refer to Deliverable 4.1) Active participation in the review of the Viticulture Biosecurity Plan Industry compliance with Viticulture Biosecurity Plan
3.3 Develop a comprehensive production forecasting system	Comprehensive production forecasting system in place (note: this may need to be implemented in stages and may include various sources of information, such as Sunrise 21 and *The Vine* magazine)

OUTCOME 4 – Improved capability across the industry to implement improvements in supply and quality

STRATEGIES	POSSIBLE DELIVERABLES
4.1 Enhance skills and capacity to support current and future industry needs	Effective extension program: communications, training, monitoring of uptake, measurement and evaluation and grower feedback; coverage to include the following: » **Up-to-date best practices (refer to Deliverable 3.1)** » **Updated chemical use per market (refer to Deliverable 3.2)** » **Export training** » **Other R&D outcomes** Support industry succession planning and training activities

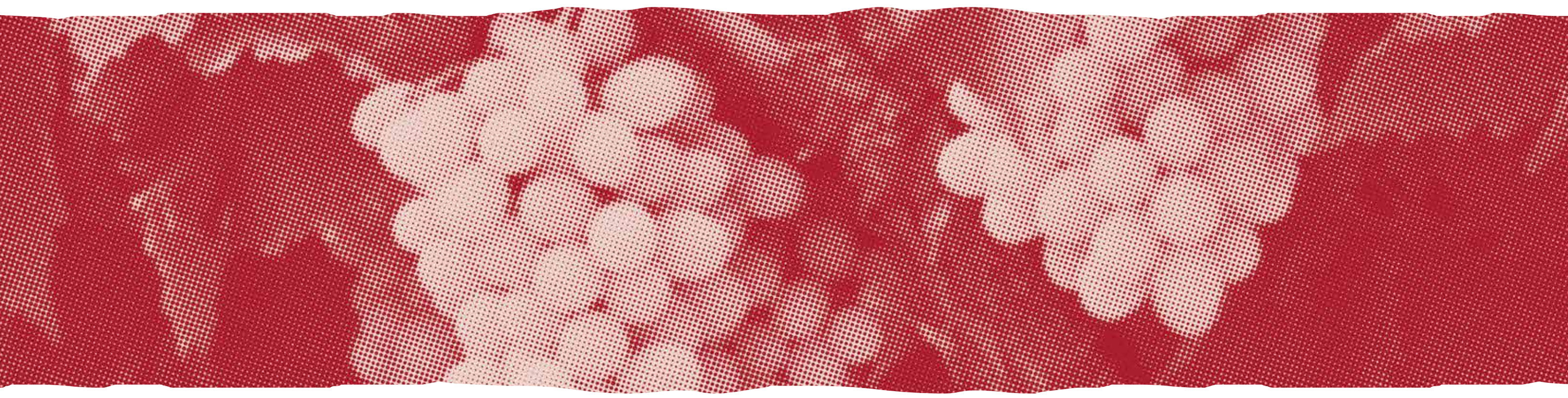


Aligning to Hort Innovation investment priorities

In establishing investment priorities, Hort Innovation analysed both historical and current levy and co-investment portfolios and priorities. From this analysis we identified eleven cross-sectoral investment themes. We consolidated these themes further and considered their alignment with the Australian Government's Rural RD&E Priorities and National Science and Research Priorities, to arrive at five investment priorities outlined in ***Figure 9*** below. ***Figure 9*** also shows how each cross-sectoral investment theme relates to the five investment priorities.

Figure 9: Hort Innovation's investment priorities

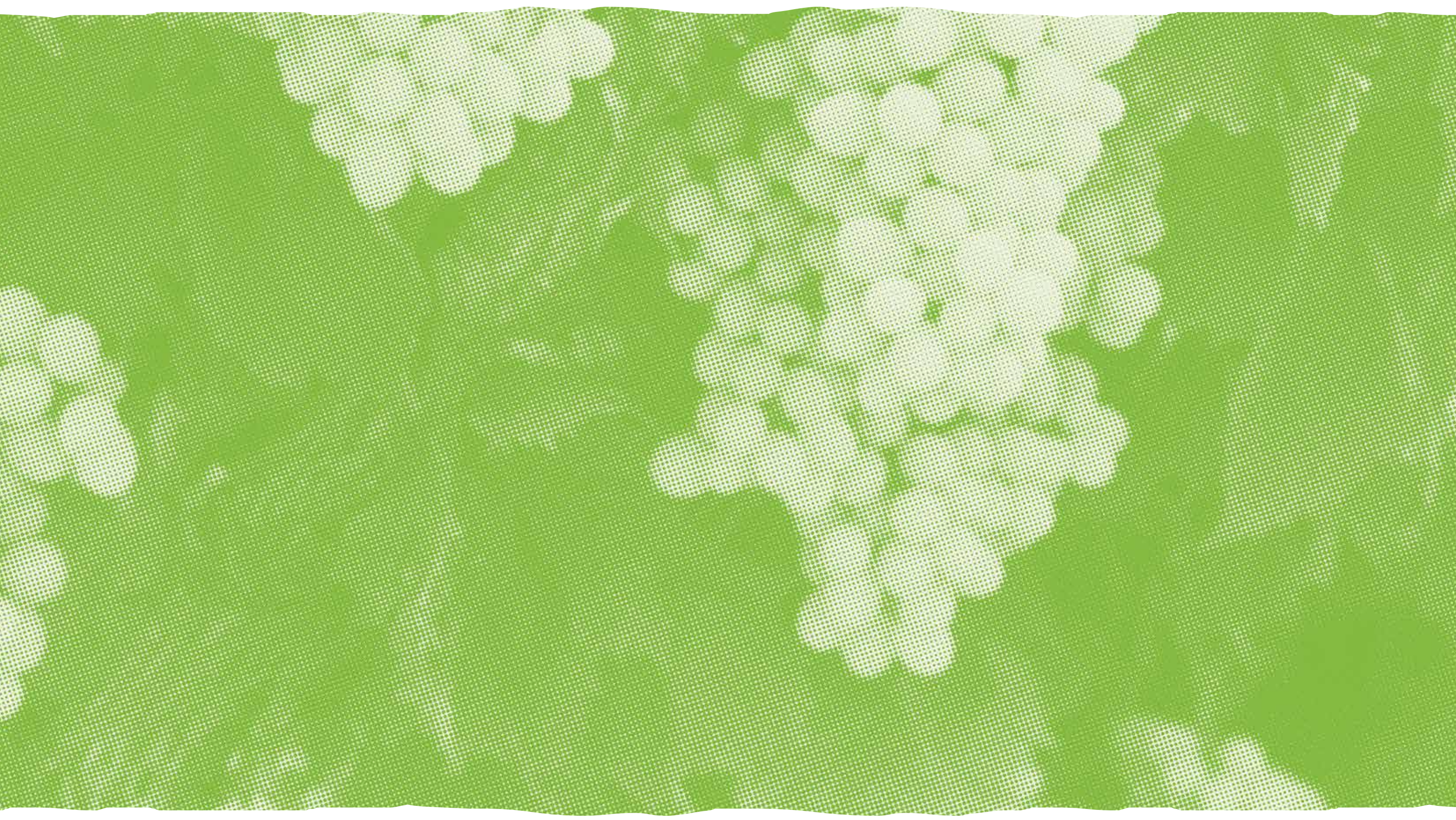
Pest and disease management Crop production Sustainability	**Support** industry efficiency and sustainability	Invest in R&D, extension and marketing activities that deliver crop production, pest and disease management sustainability improvements and address the everyday needs of industry.
Novel technologies	**Improve** productivity of the supply chain through innovative technologies	Discover, develop and deploy innovative technologies to increase international and domestic competitive advantage and profitability for growers.
Data insights Industry development	**Grow** the horticulture value chain capacity	Grow the capacity of the industry by driving grower and supply chain capabilities and delivering industry and market intelligence.
Domestic market development International market development, market access and trade Product integrity	**Drive** long-term domestic and export growth	Ensure produce is of the highest quality, and drive market growth through strategically targeting new and expanding export opportunities, and stimulating domestic market growth.
Corporate services Strategic drive	**Lead** strategically to enhance the development of the Australian horticulture industry through operational excellence	Deliver operational excellence that provides investor satisfaction and tangible returns by creating and managing high priority investments as a result of collaboration with growers and other investment partners.



The alignment of table grape SIP outcomes to the Hort Innovation investment priorities and, as a consequence, the Australian Government's Rural RD&E Priorities and National Science and Research Priorities is shown in ***Table 3***.

Table 3: Alignment of table grape SIP outcomes to Hort Innovation investment priorities

Hort Innovation investment priorities	Table grape SIP outcomes
Support industry efficiency and sustainability	Production efficiency improved and biosecurity threats mitigated by growers applying knowledge, skills and tools Improved capability across the industry to implement improvements in supply and quality
Improve productivity of the supply chain	Production efficiency improved and biosecurity threats mitigated by growers applying knowledge, skills and tools
Grow the horticulture value chain capacity	Improved capability across the industry to implement improvements in supply and quality
Drive long-term domestic and export growth	Increased demand for Australian table grapes by strengthening and developing domestic and export market opportunities that will improve industry viability and sustainability Demand-building strategies and increased prices for Australian table grapes supported by improvements in product quality
Lead strategically to enhance the development of the Australian horticulture industry through operational excellence	Enabler



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SECTION FOUR

Table grape industry monitoring and evaluation

Table grape SIP monitoring, evaluation and reporting

A SIP program logic and monitoring and evaluation (M&E) plan has been developed for the table grape SIP. These are informed by the Hort Innovation Organisational Evaluation Framework. The logic maps a series of expected consequences of SIP investment. The M&E plan shows the performance measures to demonstrate progress against the SIP and the data to be collected. Progress against the SIP will be reported in Hort Innovation publications and at industry SIAP meetings.

The SIP outcomes and strategies will be used to inform investments in individual projects to deliver the SIP. The results of M&E will be used to reflect on the results of investments and in decision-making. Hort Innovation will facilitate the regular review of SIPs to ensure they remain relevant to industry.

Table grape SIP logic

An indicative table grape SIP program logic is shown in ***Figure 10***. The logic is based on the Hort Innovation SIP logic hierarchy (***Appendix 3***). The shaded boxes are not fully explicit in the strategy but necessary conditions for the achievement of expected outcomes.

Figure 10: Table grape SIP logic

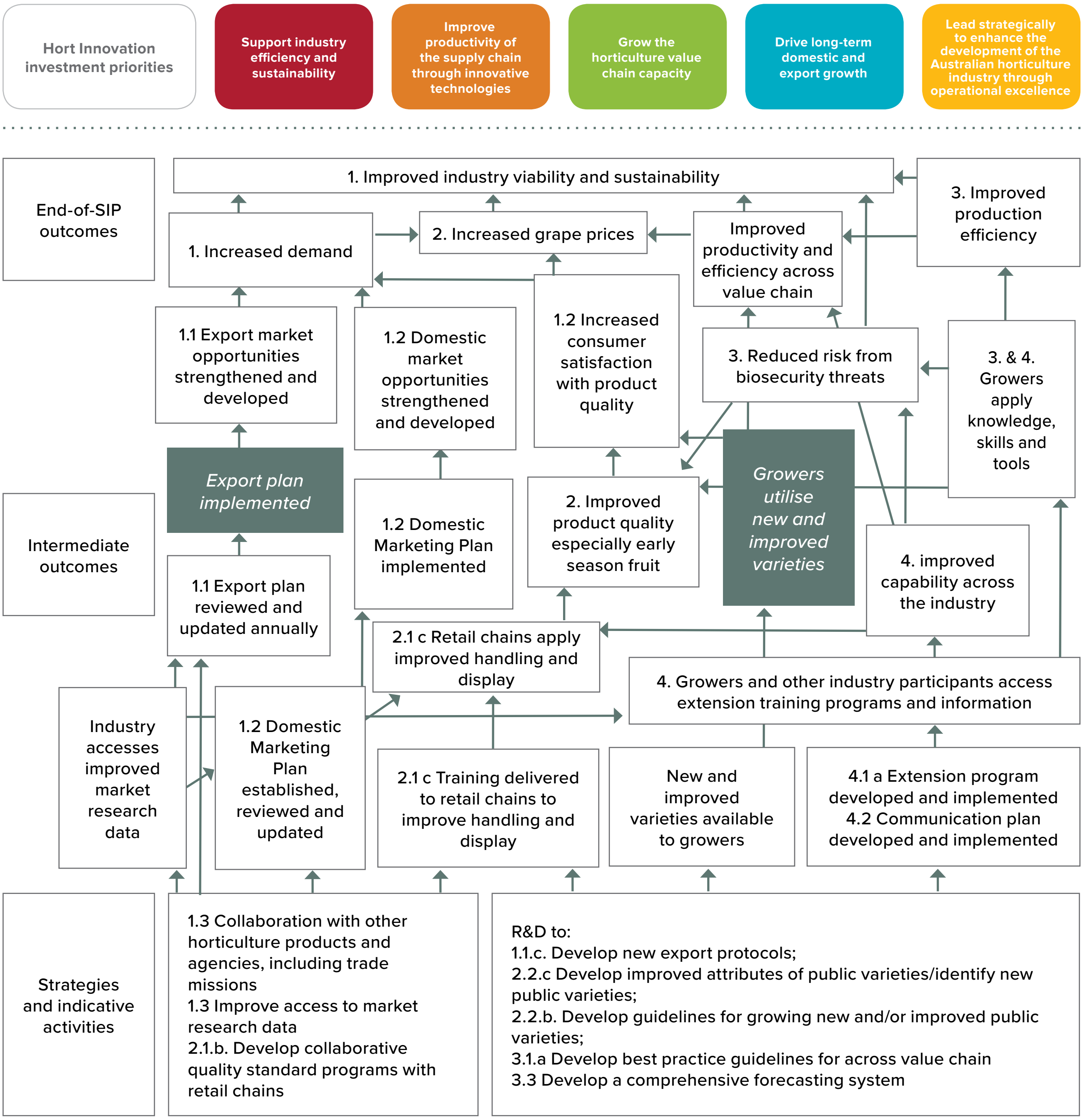


Table grape SIP M&E plan

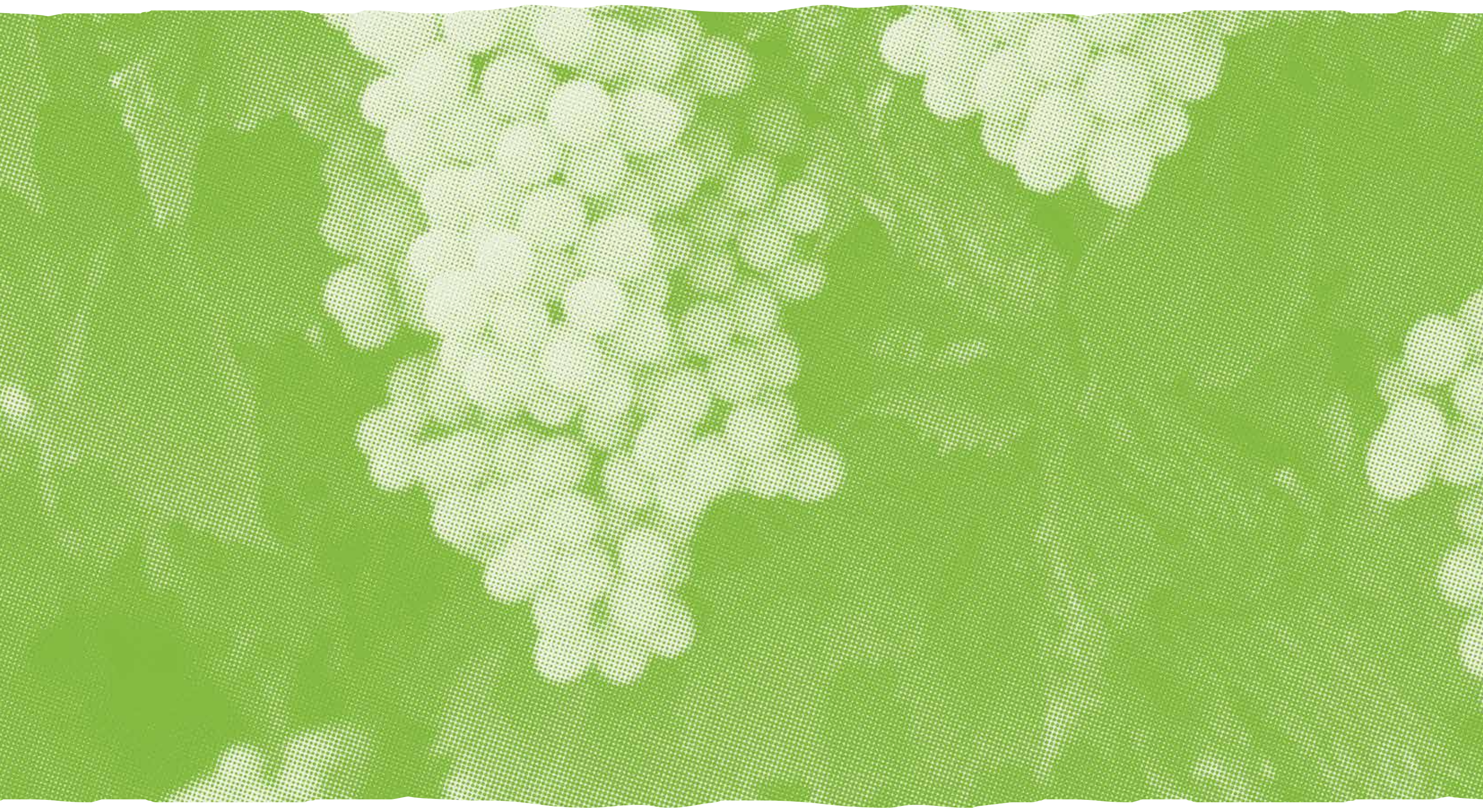
The table grape SIP M&E plan is shown in *Table 4*. The table includes KPIs and data collection methods both at a macro/industry (trend) level and at more specific SIP level/s.

Table 4: Monitoring and evaluation plan for the table grape SIP

Outcomes	Strategies	KPIs	Data collection methods and sources
OUTCOME 1: Increased demand for Australian table grapes by strengthening and developing domestic and export market opportunities that will improve industry viability and sustainability	1.1 Identify and develop new and existing export market opportunities	1. Up-to-date export plan 2. Evidence of new export markets 3. Evidence of an increase in export volume/ value 4. Market premium for Australian table grapes in export markets maintained (with an initial benchmark to be established) 5. Improved protocols with at least two countries (for example, Japan: more varieties; end-treatment acceptance of methyl bromide, irradiation or endpoint freedom; protocols accepted for air-freight) 6. Evidence that new entrants to export markets have been trained and registered	• Plan • Industry • Global Trade Atlas data • Price data in export markets (periodical survey) • DAWR report • Number of new growers trained and export registered
	1.2 Identify and develop new and existing domestic market opportunities	1. Table Grape Industry Domestic Marketing Plan (2017–2021); evidence of plan implementation and achievement of outcomes/targets (for example, reach and volume) 2. Evidence of an increase in consumer satisfaction of Australian product quality, especially early-season product 3. Continue on-farm pre-harvest maturity testing	• Domestic Marketing Plan and M&E • Retail data and consumer attitudinal research • ATGA test results
	1.3 Support demand-building activities in export and domestic market through the provision of accurate and timely (preferably weekly) market research and strong collaboration with other horticulture products and agencies	1. Evidence of activities to communicate comprehensive and timely (weekly) market research 2. Evidence of participation in inbound and export focused trade missions 3. Evidence of benefits of collaborative programs having been analysed and reported	• Availability of 'in-market' research information for all export markets • Industry survey and feedback on use of market research data • Research reports on trade missions • Results of impact assessment (benefit cost analysis) of collaborative programs

Outcomes	Strategies	KPIs	Data collection methods and sources
OUTCOME 2: **Demand-building strategies and increased prices for Australian table grapes supported by improvements in product quality**	2.1 Establish practices to enhance product quality throughout the value chain	1. Improved consumer perceptions of early-season quality 2. Collaborative quality standard programs in place between industry and at least two retail chains	• Consumer attitudinal research • Quality standard program report
	2.2 Examine opportunities to evaluate new and improved varieties	1. Evaluation of CSIRO material completed 2. New public varieties for Australian conditions available 3. Guidelines for growing new public varieties enhanced 4. Improved colour and postharvest attributes for specific varieties	• Research reports on number of new varieties released and level of adoption • Feedback from industry on uptake of growing guidelines • Research reports on changes in colour/postharvest attributes
OUTCOME 3: **Production efficiency improved and biosecurity threats mitigated by growers applying knowledge, skills and tools**	3.1 Undertake R&D and extension to develop and promulgate improvements in productivity and efficiency across the value chain	1. New technology/knowledge to improve on-farm productivity 2. Updated research/information guidelines for production, chemical use and export 3. Evidence of dissemination of guidelines and research information 4. Evidence of improved access and adoption by growers of best management practices 5. Evidence of increased efficiency of production (yield/input)	• Research reports and distribution • Grower survey • Benchmarking studies
	3.2 Safeguard the Australian table grape industry from future risks	1. Up-to-date database on chemical use requirements per market 2. Evidence of grower participation in extension program for chemical usage practice requirements; evidence of a change in knowledge 3. Evidence of industry compliance with the Viticulture Biosecurity Plan	• Research reports – chemical use requirements per market • Grower feedback on extension events
	3.3 Develop a comprehensive production forecasting system	1. Comprehensive production forecasting system in place 2. Industry rates the value of the data produced as good or very good	• Forecasting research reports • Grower/industry survey

Outcomes	Strategies	KPIs	Data collection methods and sources
OUTCOME 4: Improved capability across the industry to implement improvements in supply and quality	4.1 Enhance skills and capacity to support current and future industry needs – permanent and casual	1. Targets for industry skills and capability 2. Attendance at extension events and level of satisfaction 3. Change in KASA (knowledge, attitudes, skills and aspirations) as a result of attending extension/training events 4. Access to and take-up of leadership and professional development programs, including internships 5. Number of growers undertaking export registrations 6. Ability to access skilled staff	• Grower/industry survey • Number of supported positions • Number of export registrations • Grower/industry surveys
	4.2 Ensure growers and other members of the value chain are fully aware of industry developments (through communication channels such as *The Vine* magazine, ATGA website, e-newsletters and social media)	1. Communication plan developed and successfully implemented 2. Increased confidence of growers in the positioning of the Australian table grape industry and access to information on best practice/R&D outcomes 3. Majority of producers are satisfied or very satisfied with their knowledge of industry developments about this SIP	• Communication research reports and M&E • Grower/industry surveys • Grower surveys

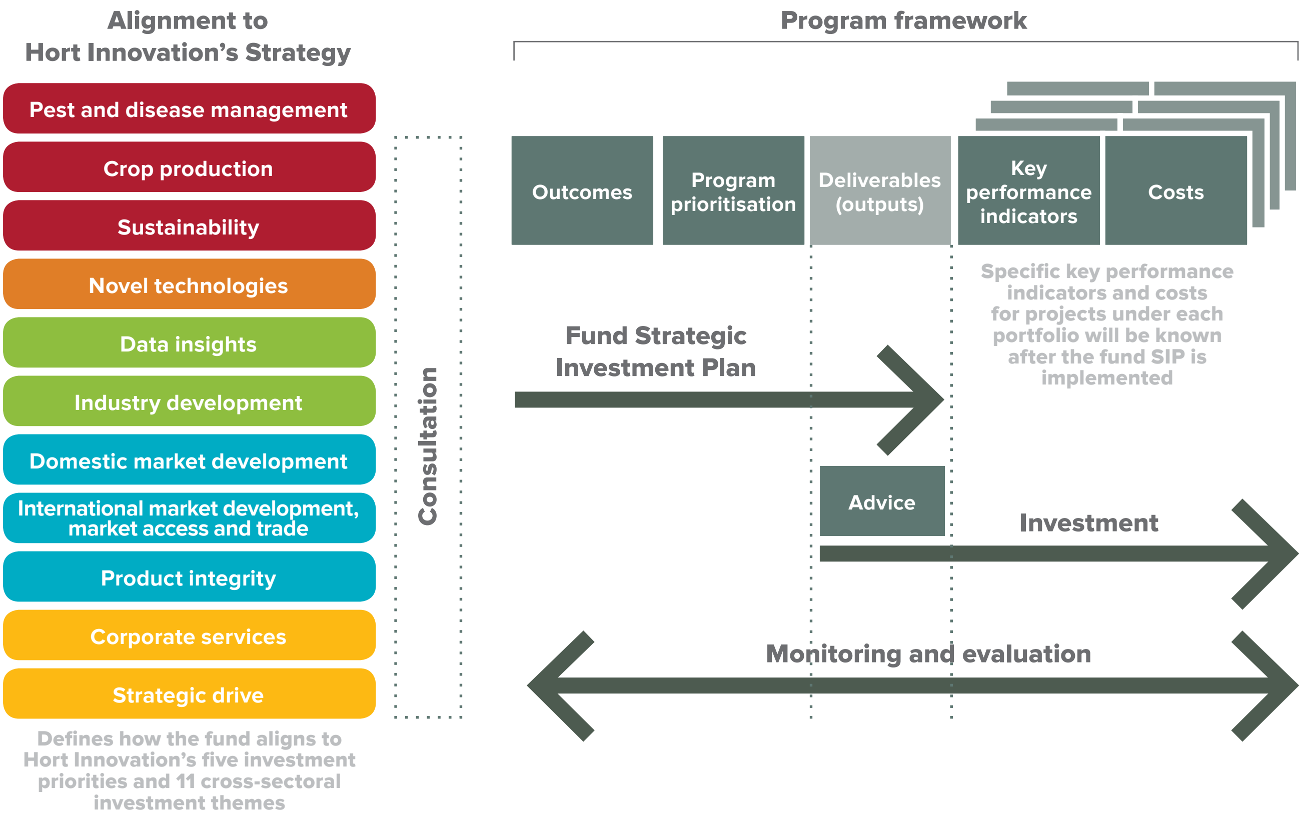


Reporting

The Program Framework in ***Figure 11*** is the mechanism that links Hort Innovation's strategy and investment priorities to the investment process through the industry SIP. SIPs assist Hort Innovation to prioritise and implement the specific industry R&D, extension and marketing programs.

Hort Innovation will use dynamic reporting against our monitoring and evaluation framework to report on investment progress. The contribution of investments to each industry outcome will be reported regularly, including through Industry Annual Reports, Hort Innovation's Annual Report and Hort Innovation's Annual Operating Plan.

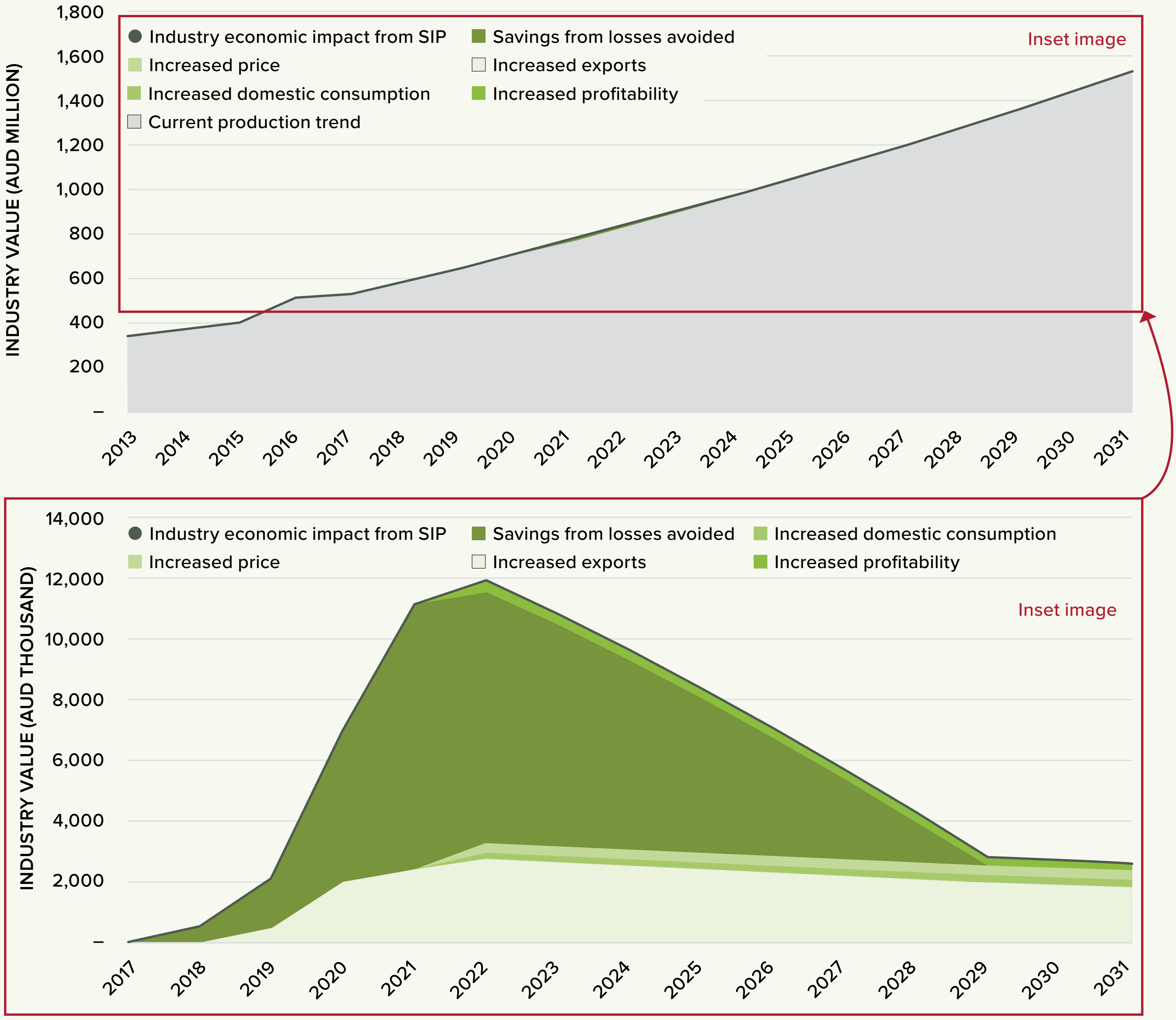
Figure 11: Hort Innovation's program framework



SECTION FIVE

Impact assessment

Figure 12: Economic benefit from investment in the table grape SIP



An independent assessment of the potential economic impacts from investment into the table grape SIP indicated a positive return on investment for the industry (***Figure 12***). The anticipated investment of $11.31 million over the next five years in R&D, extension and marketing activities is expected to generate $92.50 million in net benefits for the industry, representing a benefit cost ratio of 8.18 times to growers and service providers along the value chain.

The assessment draws from a wide range of available data sources, and projects economic impacts over a 15-year period starting from 2016/17. A five per cent discount rate has been applied and all values are adjusted for inflation and presented in 2016/17 dollar terms. The assessment takes a highly conservative approach and the presented figures have been adjusted to account for risks associated with achieving research outputs, expected adoption and impacts.

Table 5 provides a summary of the impacts assessed for the SIP, their corresponding outcomes, net economic benefits and benefit cost ratio.

Table 5: Overview of impacts assessed and alignment with SIP outcomes

Outcome	Expected deliverables	Anticipated SIP investment (over five years)	Net benefits (over 15 years)	Benefit cost ratio
OUTCOME 1: Increased demand for Australian table grapes by strengthening and developing domestic and export market opportunities that will improve industry viability and sustainability	Annual review of current export plan; improved protocols; reports identifying potential returns from additional activities were extra funds available; comprehensive market research data; real-time export data; successful collaborative inbound and export focused trade missions	$2,261,753	$29,019,107	12.83
	Table Grape Industry Domestic Marketing Plan established, implemented and annually reviewed (2017 to 2022); comprehensive market research data available to support demand building	$2,261,753	$2,874,75	1.27
OUTCOME 2: Demand-building strategies and increased prices for Australian table grapes supported by improvements in product quality	Consumer perceptions of early-season quality have increased and repeat purchases maintained; collaborative quality standard programs in place; training programs for retail chains to improve handling and display of Australian table grapes; evaluation of CSIRO material and enhanced guidelines for growing new and/or improved public varieties; improved colour attributes for Crimson Seedless and postharvest performance/shelf-life for Menindee Seedless	$2,261,753	$4,199,553	1.86
OUTCOME 3: Production efficiency improved and biosecurity threats mitigated by growers applying knowledge, skills and tools	Harvest and compile existing information on best practices; information on latest research results; extension program for updated best; comprehensive production forecasting system	$2,261,753	$3,847,686	1.70
	Database on chemical usage requirements per market; extension program for chemical usage practice requirements; active participation in the review of the Viticulture Biosecurity Plan; industry compliance of the Viticulture Biosecurity Plan	$2,261,753	$52,557,209	23.24
OUTCOME 4: Improved capability across the industry to implement improvements in supply and quality	Communications, training, monitoring of uptake, measurement and evaluation and grower feedback; support for industry succession planning	Incorporated in above outcomes	Incorporated in above outcomes	Incorporated in above outcomes

The quantified impacts associated with Outcome 1:

- Increased exports, driven from securing two new markets of similar potential to the Japanese market
- Increased domestic consumption.

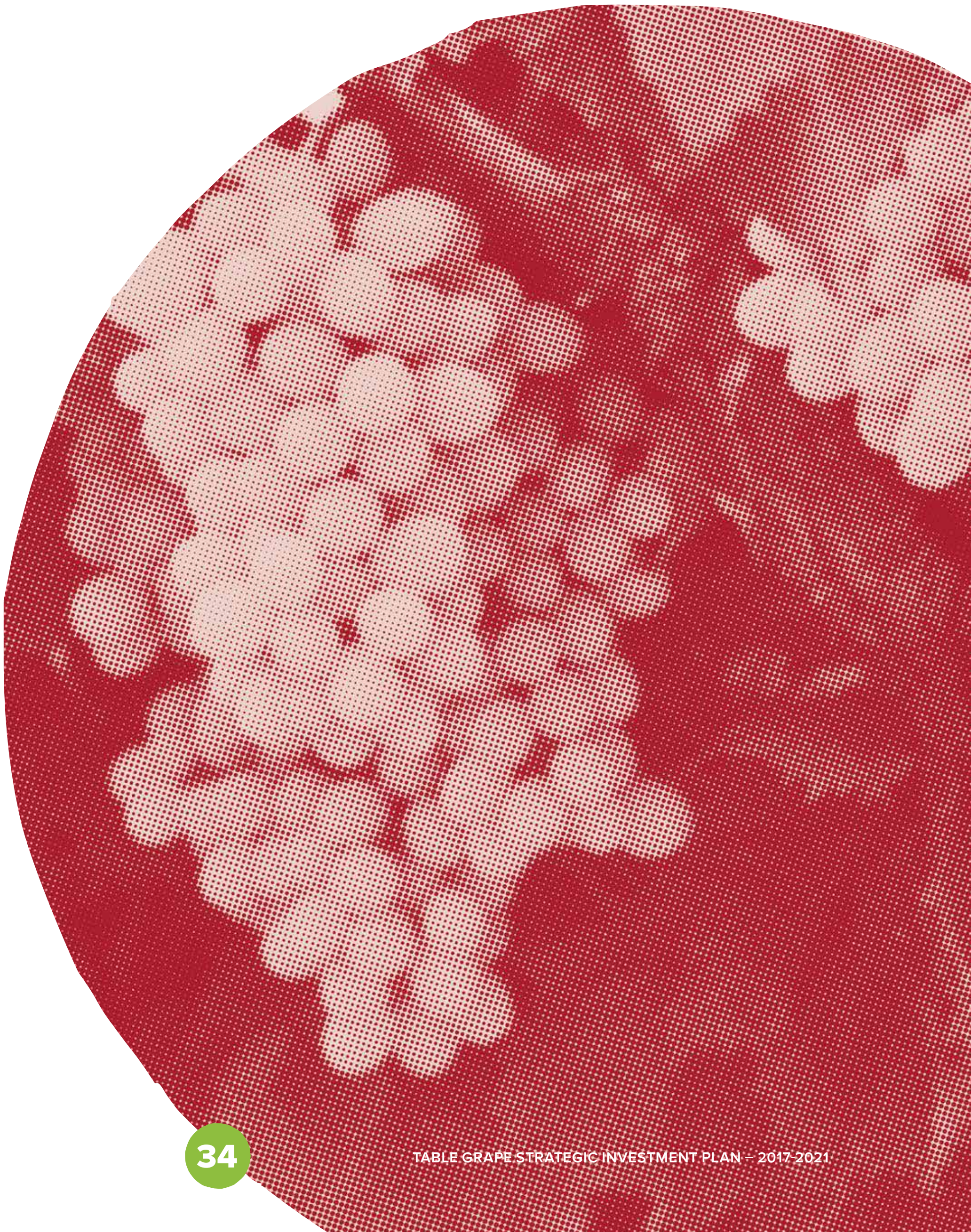
The quantified impact associated with Outcome 2:

- Increased prices, in the domestic and export markets, driven by higher quality products.

The quantified impacts associated with Outcome 3 include:

- Decreased production costs from implementing, for example, integrated pest management, resulting in deceased spend on chemicals
- Risk management strategies related to pest and disease management resulting in losses avoided, and maintaining current yields.

The quantified impacts associated with Outcome 4, including improved industry data and training, are assessed to support the adoption and implementation of R&D and marketing from Outcomes 1 to 3 and thus contribute to the delivery of all quantified impacts.



SECTION SIX

6

Risk management

The purpose of this risk section is to highlight any unique or specific risks that qualify the SIP. This is not intended to be an exhaustive risk review of the industry risks that are, in part, considered in the SWOT. This is also not reflective of the general investment risks that will be considered in the project investment process.

Risk	Mitigation strategy
1. Available funds may limit ability to achieve desired outcomes	• Undertake only those activities with greatest potential • Do not over-promise likely impact of SIP
2. Many of the outcomes desired by industry are focused on marketing, but marketing (especially consumer marketing, both domestically and internationally) is expensive	• Identify any R&D or extension activities that will help underpin industry marketing activities • Focus on trade marketing rather than consumer marketing

APPENDIX 1: Process to develop this plan

The process for the development of this SIP was as follows:

- Review of the previous strategic plan and numerous reference documents (domestic and international)
- Preparation of table grape industry SIP discussion paper
- SIP focus session at table grape SIAP meeting
- Widespread industry consultation
- Synthesis and development of a draft SIP, including analysis of potential industry impact and M&E plan
- Circulation of draft SIP to SIAP and, subsequently, to industry more broadly for feedback
- Revision of draft SIP to final version.

APPENDIX 2: People consulted

The following individuals were consulted during the development of this SIP (and their assistance is gratefully acknowledged).

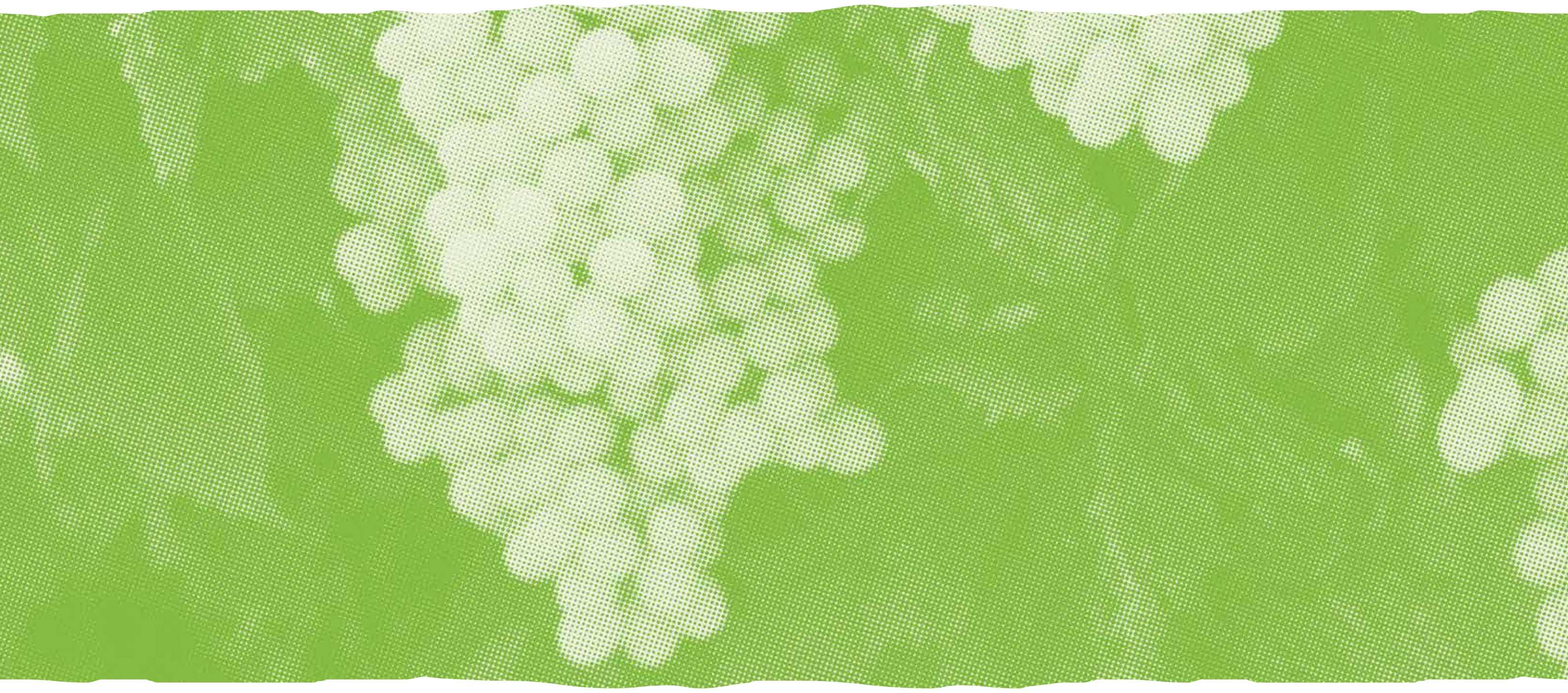
Brian Charles	Table grape SIAP member
Roger Fahl	Table grape SIAP member
Mark Krstic	Table grape SIAP member
Brendan Larkin	Table grape SIAP member
Richard Lomman	Table grape SIAP member
Enrique Rossi	Table grape SIAP member
Jeff Scott	Table grape SIAP member
Domenic Sergi	Table grape SIAP member
Stuart Burgess	Hort Innovation
Brad Wells	Hort Innovation
Lisa Troy	Hort Innovation
Bruce Tomkins	National Horticultural Research Network

In addition to consultation with the table grape industry SIAP and informal discussions with industry members, the following groups and individuals attended workshops or face-to-face meetings at: Swan Valley WA, Carnarvon WA, Mildura VIC and surrounds, Yanco NSW, Griffith NSW, St George QLD, Emerald QLD. Their assistance is gratefully acknowledged:

Darryl Trease
Nick Bligh
Stephen Dever
David Oag
Neville Crook
John Staier
Glen Pearmine
Ross Cordoma
Michael Lanteri
Joseph Lanteri
Charlie Costa
Colin Egan
Rocky Giofrelle
Dominique Moras
Sam Sergi
David Blanket
ATGA Board Members: • Nick Muraka • Jeremy Boyd • Joe Garreffa • David Agg • Barry Penderson • John de Luca

APPENDIX 3: Logic hierarchy

Vision	To grow the future of Australia's horticulture industries	Common for all Investment
Mission	Increased profitability of Australia's horticulture industries Increased productivity of Australia's horticulture industries Increased global competitiveness of Australia's horticulture industries	Common for all Investment
Hort Innovation end-of-strategy outcomes	Support industry efficiency and sustainability Improve productivity of the supply chain Grow the horticulture value chain capacity Drive long-term domestic and export growth Lead strategically	Common for all Investment
End-of-SIP outcomes	*The industry-specific outcomes of the SIP. The final desired result of SIP investment but may be achieved after the SIP time-frame. SIP investment may be just one contributing factor to the achievement of these outcomes. For example, incremental productivity, profitability and competitiveness improvements stimulated through R&D, changes in consumer awareness, marketing campaign reach and influence and increased recognition of Australian horticulture products.*	SIP specific
SIP intermediate outcomes	*Short- to medium-term changes brought about through the SIP, which will support the achievement of end-of-SIP outcomes. For example, practice changes, adoption, changes in grower knowledge, attitudes, skills and aspirations (KASA) and marketing reach.*	SIP specific
SIP activities and outputs	*What is directly delivered by the SIP (R&D, extension and marketing activities and outputs, for example, products and services, and events and engagement) across the 11 horticulture cross-sectoral investment themes: Pest and Disease Management, Crop Production, Sustainability Improvements, Novel Technologies, Data Insights,Industry Development, Product Integrity, International Market Development, Market Access and Trade, Domestic Market Development, Strategic Drive and Corporate Services.*	SIP specific
Foundational activities	*Preliminary or preparatory activities that are conducted before and during SIP delivery. Includes industry processes, infrastructure and resources that enable the SIP to be developed and delivered. Includes SIP planning, consultation, advisory meetings etc.*	



APPENDIX 4: Reference documents

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