

PIRSA

Primary Industries in South Australia Fast Facts



© Government of South Australia 2020

DISCLAIMER

PIRSA and its employees do not warrant or make any representation regarding the use, or results of the use, of the information contained herein as regards to its correctness, accuracy, reliability and currency or otherwise. PIRSA and its employees expressly disclaim all liability or responsibility to any person using the information or advice.

Primary Industries and Regions SA (PIRSA)
Level 14, 25 Grenfell Street , Adelaide SA 5000
GPO Box 1671, Adelaide SA 5001
T +61 8 8226 0995

Contents

Message from the Minister	4
What sets us apart	5
Field crops	6
Meat and livestock	8
Wine	10
Seafood	12
Horticulture	14
Dairy	16
Forestry	18

Message from the Minister



South Australia's agriculture, food, wine, seafood and forestry industries play a vital role in driving the state's economy and form an integral part of our identity.

These industries, in particular, are at

the heart of South Australia's regional communities, which produce outstanding food, wine and fibre goods, for domestic and international markets.

This booklet provides a comprehensive summary of the industries' strengths and the reasons why South Australia is internationally renowned as a source of high quality produce.

It puts a spotlight on our primary industries from our field crops, high-quality meat and livestock, fresh seafood, abundant horticulture, dairy products, forestry and our world-class wines – the latter reflecting our status as a Great Wine Capital of the World.

What makes this state such as an exceptional producer is our strong biosecurity. For example, South Australia is one of the few places in the world free from the vine-destroying pest, phylloxera – meaning many of our wines are produced from vines that date back more than 160 years. South Australia is also the only mainland Australian state with a fruit fly free status, meaning our fresh fruit and vegetables from this region can be shipped without treatment.

Each year, we contribute over \$5 million in funding to keep pests out of South Australia, through a range of prevention, detection and eradication measures.

Our primary producers are collaborative, innovative, productive, competitive and market driven.

The South Australian Research and Development Institute provides leading edge applied research and development and is greatly valued by both industry and government.

Whether you are an importer, a retailer, an industry investor or a passionate enthusiast of fresh products and exceptional wine, through this booklet you will discover why South Australia has a growing reputation for producing premium food and beverages.

Tim Whetstone MP
Minister for Primary Industries
and Regional Development



What sets us apart

South Australia's primary industries are a vital part of the state's economy. Grains, livestock, horticulture, wine, seafood, forests and dairy sectors are significant contributors to the state's exports. In 2018-19, South Australia's gross food and wine revenue totalled \$20.4 billion.

South Australia's production of quality food and wine is supported by a commitment to a strong biosecurity regime.

South Australia remains the only Australian mainland state that is fruit fly free, which protects the state's commercial production of fruit and vegetables. In 2018-19, the estimated farmgate value of the state's horticultural produce vulnerable to fruit fly was \$1.3 billion.

Our fruit fly free status supports South Australian horticultural producers in accessing lucrative export markets – such as citrus and almond export markets in China, Japan and New Zealand, worth about \$140 million (total of almonds and citrus exports to those three countries in 2018-19).

South Australia is one of the few places in the world that is free of the grape vine destroying pest phylloxera, and produces about 80 per cent of Australia's premium wine from some of the oldest vines in the world.

This puts us in an advantageous position which is supported by Adelaide / South Australia's membership to the prestigious Great Wine Capitals Global Network.

The state's food businesses adhere to the highest standards, thanks to legislation, monitoring, compliance and education across the three levels of government in Australia.

Food safety in South Australia is regulated by the *Food Act 2001*, which ensures food for sale is safe and suitable for human consumption, supported through routine inspections of food processing facilities and advice and educational materials.

Customers and importers can buy our food with confidence knowing they can trust it is high quality, safe to eat and sustainably produced.

South Australia has a system of water planning, allocation and management to ensure quality is maintained and use is sustainable to benefit our primary producers.



Field Crops

South Australia's production of grain is sustainable, almost entirely rain fed with minimal inputs of fertilisers and chemicals.

Achieving around 2 per cent annual increase in grain yields over the past 30 years, South Australian production system practices maintain minimal impact on the clean soils and water of the natural resource base.

South Australia's regions including the Eyre and Yorke peninsulas, Northern agricultural districts, the Mallee and South East are renowned for quality grains while the Yorke Peninsula is considered one of Australia's prime barley growing areas.

The industry is a significant employer in the production, baking, milling, cereal manufacturing and malt and beverage sectors.

State of the art, world class research and development facilities can be found at the University of Adelaide's Waite Campus in plant breeding and plant functional genomics targeting improved plant performance and quality suited to end use grain products. The Minnipa Research Centre on the Eyre Peninsula is a nationally recognised dryland farming research hub.

The research in South Australia is governed and co-funded by local grain grower investment from the South Australian Grain Industry Trust and the national funding body, the Grains Research and Development Corporation (GRDC). This ensures the research and development is connected to the requirements of processors and preferences of consumers.

There are significant opportunities to expand the exports of bulk wheat, particularly to South East Asia.

The South Australian grain industry is developing a Grain Industry Blueprint to 2030 that will map out opportunities and plan the strategies for the industry to achieve growth. The Blueprint is being developed by industry under the lead of Grain Producers SA.

In 2018-19

Wheat

3.2

million tonnes produced

165

thousand tonnes processed per year

3500

farms

Barley

1.7

million tonnes produced

150

thousand tonnes processed per year

3500

farms

Pulses

395

thousand tonnes produced

30

thousand tonnes processed per year

1500

farms

Oilseeds

279

thousand tonnes produced

5

thousand tonnes processed per year

1500

farms

Key facts:

- In 2018-19, the field crops industry produced 5.8 million tonnes of grain, with a total farmgate value of \$1.9 billion.
- The state's 10-year average is about 8 million tonnes.
- About 40% of the state's grain is exported internationally to around 35 countries.
- About 4 million hectares of crop is sown annually, producing wheat, barley, canola, lentils, oats, peas, beans, lupins and chickpeas.
- State-of-the-art, world class research and development facilities can be found at the University of Adelaide's Waite Campus in plant breeding and plant functional genomics.

Top three field crops export destinations (BY VALUE):

Egypt, Belgium and Bangladesh



40% of South Australia's grain harvest is exported to 45 countries around the world.



State of the art, world class research and development facilities can be found at the University of Adelaide's Waite Campus in South Australia.



Meat and livestock

Beef and dairy cattle, sheep, pigs, chickens, turkeys, goats, alpacas, deer, rabbits, buffalo and bees are among the species farmed over much of South Australia for meat, wool, hides, milk, eggs and honey.

Sheep are South Australia's most widespread livestock species, farmed throughout the pastoral, cereal and high rainfall regions.

There are almost one million beef cattle in South Australia, which are widely distributed from the north of the state to the south eastern pastures.

South Australia also has 66,000 dairy cows that in 2018-19, which produced more than 496 million litres of milk.

Pigs and poultry are more centrally located in regions offering water, grain, feed-mills and processing plants, as well as affordable, less populated areas close to transport routes. The state also provides significant volumes of fresh pork and chicken meat to eastern Australia.

Chicken meat and processing is the fastest growing livestock industry in South Australia.

South Australia leads the country in the development of the wild harvest meat industries, with camels processed for export markets and kangaroos processed for both Australian and overseas destinations. The state is a strong exporter of beef, sheep meat, kangaroo products and wool, with Asian markets increasing over recent years, particularly in China. The sheep and beef industries each have robust plans for increasing productivity, with the development of the South Australian Sheep Industry Blueprint and the South Australian Beef Industry Blueprint.

There are many investment opportunities in all aspects of animal production in South Australia. There is also increasing investment in meat processing facilities, with further opportunities available across the state.

In 2018-19

Beef

433

thousand head produced

226

thousand head processed

2700

farms

Chicken

127

million birds produced

127

million birds processed

80

farms

Sheep & Lambs

5

million head produced

3.7

million head processed

5200

farms

Pork

853

thousand head produced

1.3

million head processed

260

farms

Wool

54

million kilograms produced

10

million kilograms processed

5200

farms

Key facts:

- In 2018-19, South Australian livestock industries contributed approximately \$4.5 billion to state revenue, or about 30% of total agriculture, food and wine industry revenue.
- The state's 11.8 million sheep represent about 16% of the national flock.
- South Australia is Australia's largest pig processor, processing about 1.3 million pigs annually – a quarter of Australia's tally.
- The state also has 66,000 dairy cows that in 2018-19 produced 496 million litres of milk.
- South Australia produced 20.9 million dozen eggs in 2018-19.

Top three meat and livestock export destinations (BY VALUE):

USA, China and South Korea

South Australia produced

20.9 MILLION DOZEN EGGS

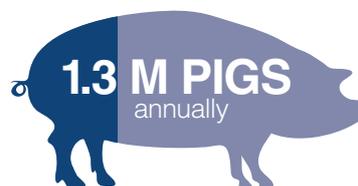
in 2018-19



South Australia is Australia's

LARGEST PIG PROCESSOR

processing around

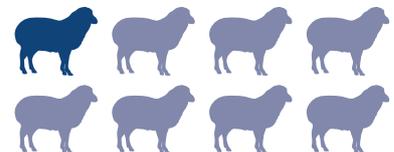


A quarter of Australia's tally

The state's

11.8 MILLION

sheep represent around 16% of the national flock





Wine

South Australia's wine industry is internationally renowned for producing premium wines, with the state exporting to more than 100 countries.

Adelaide, South Australia, is part of the prestigious Great Wine Capitals Global Network, joining a group of international cities whose wine regions are recognised as significant economic and cultural assets.

It is also one of the few places in the world that is free of the vine destroying pest phylloxera, which is the key reason why the state is home to such old vines. The state's clean water, air and soil, combined with optimal climate and innovative winemaking has seen South Australia's vineyards thrive. The clean environment ensures these areas produce world-class wines, in a range of varieties.

More than half of Australia's great wines, as classified by Langton's, Australia's leading fine wine auction site, come from South Australia.

From the wine regions of Barossa Valley, McLaren Vale, Langhorne Creek and Adelaide Hills, through to the Clare Valley, Coonawarra and the Riverland, South Australian wine is recognised for its superior quality and taste.

South Australia produces a higher proportion of flagship and premium wine than other Australian states, and the national wine industry organisations, major wine education and research and development institutions all have their headquarters here, providing leadership in winemaking and viticulture intellect and expertise. This long history of excellence in grape and wine research is delivering a competitive advantage. Further investment to attract talented and skilled people to South Australia's wine industry is vital to ensure tomorrow's researchers and industry leaders continue to emerge.

South Australian winemakers are embracing alternate varieties that are best matched with the local climate and are lighter in style.

Managing biosecurity threats is a major priority, with expertise and leadership from Vinehealth Australia a key part of protecting the industry for future generations.

South Australia is well placed to capitalise on the demand for premium wine that is produced in a clean and sustainable environment.

In 2018-19

Red

476
thousand tonnes

337
thousand litres

White

293
thousand tonnes

207
thousand litres

Top three wine export destinations (BY VALUE):
China, UK and USA



of Australia's premium wines are produced in South Australia



3,400+
grape growers

18
wine regions

720
wineries

354
cellar doors

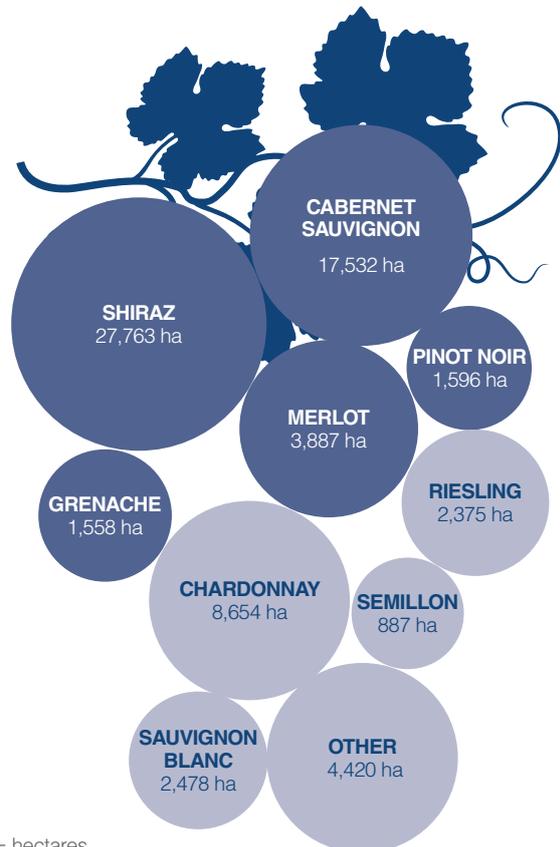
Adelaide is home to the National Wine Centre, national industry organisations, major wine education and research and development institutions.



Key facts:

- South Australia has an estimated 75,000 hectares under vine, with the state boasting some of the oldest vines in the world.
- In 2018-19, the industry produced about 769,000 tonnes of grapes valued at \$632 million.
- In 2018-19, South Australia's wine industry generated \$2.27 billion.
- In 2018-19, 544 million litres of wine was produced.
- There are 354 cellar doors in South Australia and more than 200 are within an hour's drive from Adelaide.
- Adelaide - South Australia is a member of the Great Wine Capitals Global Network, which formally recognises the state as one of the top wine destinations in the world and benchmarks against prestigious regions such as Bordeaux and the Napa Valley.
- Adelaide is home to the National Wine Centre, and all national industry representative and research bodies, including Wine Australia, the Winemakers' Federation of Australia, Australian Vignerons and the Australian Wine Research Institute.

75,500 hectares under vine



ha = hectares



Seafood

South Australia's cool, clean waters are home to some of the world's most sought after seafood including rock lobster, southern bluefin tuna, oysters, prawns and abalone.

South Australia is recognised worldwide for its robust and comprehensive policies and legislative frameworks, which ensure ecologically sustainable development in our fisheries and aquaculture sectors. Whether farmed through aquaculture production or commercially fished by one of the state's 12 wild catch fisheries, South Australia enjoys a reputation for producing top quality, sustainable seafood.

South Australia's seafood industry is crucial to many of the state's coastal towns, with species such as rock lobster on the Limestone Coast and southern bluefin tuna on the Eyre Peninsula delivering significant economic returns and employment opportunities for regional communities. Port Lincoln is home to the largest commercial fishing fleet in the Southern Hemisphere. More than 2,000 South Australians are directly employed in the seafood sector, and another almost 3,000 are employed in associated activities.

Innovation and creativity have been a hallmark of South Australia's successful seafood industry, based on an exchange of skills and cooperation between industry, scientists and government. With innovation from family companies, Australia's tuna industry was revolutionised in Port Lincoln.

It has transitioned from catching tuna as a commodity for the cannery to the highly advanced tuna farming operations in place today that produce globally sought-after sashimi-grade tuna for export.

South Australian seafood is consumed across Australia and exported to the world, with international destinations ranging from Japan for tuna and China including Hong Kong for abalone and rock lobster.

There are opportunities to grow trade into new export markets, particularly tuna into China and South Korea and oysters into new South East Asian markets. Investment attraction opportunities also exist to grow current companies or greenfield sites for current and new species.

South Australia is globally recognised for its sustainable fisheries. Spencer Gulf Prawns have been accredited by the Marine Stewardship Council (MSC) since 2011 for environmentally sustainable fishing practices. In 2018, the South Australian Sardine Fishery was accredited by the MSC in the world's leading certification and eco-labelling program for sustainable seafood. It received the highest ever assessment score for a first time assessment of any fishery in the world under this scheme.

In 2018-19

Abalone

1089 39

tonnes produced

licences

Where **Statewide**

Prawns

2400 52

tonnes produced

licences

Where **Spencer Gulf, West Coast, St Vincent's Gulf**

Southern Bluefin Tuna

8200 16

tonnes produced

licences

Where **Eyre Peninsula**

Rock Lobster

1539 243

tonnes produced

licences

Where **Statewide**

Oysters

2119 328

tonnes produced

licences

Where **Eyre Peninsula and Yorke Peninsula,
Far West Coast, Kangaroo Island**

Top three seafood export destinations (BY VALUE):

Japan, China and Hong Kong

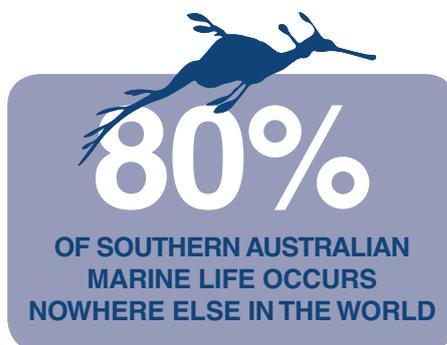
Key facts:

- The wild catch and aquaculture industries produced approximately 66,000 tonnes of seafood in 2018-19, worth \$480 million.
- Southern Bluefin Tuna is South Australia's largest single aquaculture product.



SEAFOOD CAPITAL

Port Lincoln is known as the Seafood Capital of Australia, with one of the largest fishing fleets in the Southern Hemisphere and a major centre for aquaculture development.





Horticulture

South Australia is a major producer of quality horticulture and recognised for its excellence in environmentally clean, safe and advanced agricultural production.

Tomatoes, potatoes, almonds and citrus are the largest of a vast range of fruit and vegetable crops produced in South Australia. As the biggest producer of potatoes in Australia, South Australia has more than 1,100 ha of protected cropping.

Citrus is one of the largest volumes of exported horticultural produce, with 80,000 tonnes exported in 2018-19. The state's 'fruit-fly free' status is a key selling point to overseas export markets. Almonds are South Australia's largest horticulture export and have benefited from significant investment, from major tree plantings and high global demand, through to higher prices.

The state's horticulture industry has prioritised high density orchard plantings in apples, citrus, almonds and stone fruit as an opportunity for increasing yields and automisation.

The horticulture industry and the South Australian Government are investing in high-tech, sustainable horticulture technology. These innovations include a seawater and solar fed greenhouse facility.

These initiatives will help to ensure high value greenhouse crops can be grown year-round with further opportunities available to develop sustainable

horticulture. South Australia's fruit and vegetable producers are also continually planting new varieties to meet changing consumer preferences.

Horticulture production is concentrated in regions with suitable climate, soils and water resources. The Adelaide Hills and Limestone Coast are high rainfall cool climate regions, suited for apples, pears, cherries and strawberries. The Limestone Coast also produces vegetable seeds, onions and processing potatoes.

The Riverland and Mallee has a temperate climate with sandy soils. Surface and underground water resources support production of citrus, stonefruit, almonds, olives, onions and potatoes. The Adelaide Plains is the primary vegetable production area, with in-field production of vegetables and greenhouses producing tomatoes, capsicum and cucumbers.

There are major growth opportunities for the horticulture industry, including potential investment opportunities for coordinated growing and packing facilities and increasing production through new infrastructure – particularly for citrus and almonds.

The South Australian Government is acting to grow the capacity of the Northern Adelaide Plains region to ensure the long-term viability of its horticulture industry and is proposing to deliver large volumes of affordable recycled water to the Northern Adelaide Plains through the Northern Adelaide Irrigation Scheme (NAIS).

In 2017–18

Almonds

19

thousand tonnes
produced

100

orchards

Citrus

189

thousand tonnes
produced

350

orchards

Potatoes

(fresh, processing and seed)

490

thousand tonnes
produced

100

farms

Stone Fruit

(peach, plum, nectarine and apricot)

7

thousand tonnes
produced

70

orchards

Apples

32

thousand tonnes
produced

90

orchards

Greenhouse

(tomato, capsicum and cucumber)

138

thousand tonnes
produced

1200

units

Top three horticultural export destinations

(BY VALUE): China, Japan and New Zealand

Key facts:

- Fruit, nuts and vegetables make up South Australia's horticulture industry, growing more than one million tonnes in 2018-19 and generating \$1.77 billion in revenue for the state's economy.
- South Australia is the only mainland Australian state that is fruit fly free.
- South Australia is the number 1 producer of potatoes and onions in Australia.
- The state is home to the largest climate controlled glasshouse in the Southern Hemisphere.
- South Australia is home to the world-class 60-hectare National Almond Centre of Excellence. Research at the site is focusing on the evaluation of superior almond varieties and rootstock, and the development of best practices for improved orchard, soil and water management to boost almond production and exports.
- South Australia is a world class export-oriented hub for water research.
- The Riverland Pest Free Area has been internationally recognised by a number of key export markets, including China, the United States, Thailand, Japan and New Zealand.

FRUIT FLY FREE

South Australia is the only mainland state in Australia that is fruit fly free, giving South Australian citrus strong access to international markets.



LARGEST CLIMATE CONTROLLED GLASSHOUSE

South Australia is home to the largest climate controlled glasshouse in the Southern Hemisphere.





Dairy

The South Australian dairy industry produced more than 496 million litres of milk in 2018-19 from its 66,000 cows bringing in approximately \$565 million in revenue. Food safety and quality programs are overseen by DairySafe, a statutory body acting at both farm and processing plant levels.

Most farms use pasture-based grazing systems, with medium to high levels of supplementary fodder, with more flexible and intensive feeding systems being introduced. South Australia's average milk volume produced per cow is consistently the highest in Australia, particularly in the Limestone Coast region, where about 300 million litres are produced.

About 40 per cent of South Australia's production is sold as fresh drinking milk, with the remainder manufactured into cheeses, powders, yoghurt, butter, oil and extended shelf-life milk. Many of these products are exported, mostly via interstate ports, to countries in Asia, the Middle East and Europe.

Between one third and one half of South Australia's milk is contracted to dairy processors with manufacturing bases in Victoria.

The majority of South Australian processing takes place using plants in and around Adelaide. Given the rising global demand for liquid milk and powders, particularly in Asia, opportunities exist for new processing plants for these products. Asian demand for Australian liquid milk, including extended life products, has become very strong.

High value niche products such as specialty cheeses, Italian buffalo, sheep and goat milk products, milk from small regional processors and organic and biodynamic dairy production, are becoming more popular within South Australia.

There are major opportunities for farmgate investment, particularly in cows and farms. These opportunities will increase South Australia's processing capabilities and help to satisfy demand.

The South Australian Dairy Industry Action Plan 2019-2024 aims to drive industry growth through developing premium products, increasing exports and demonstrating high animal welfare standards.

In 2018-19

Production amount

496

million litres of milk produced

66

thousand cows

300

million litres of milk produced in the limestone coast

Production type

85%

processed into drinking milk, cheese and other products

15%

exported interstate

420

million litres into cheese, powders, yoghurt, butter, oil & ext shelf-life milk

Key facts:

- South Australia has about 66,000 dairy cows which produced 496 million litres of milk in 2018-19.
- South Australia's average milk volume produced per cow is higher than the national average.
- Around 40% of the state's milk is sold as fresh drinking milk, the remainder is made into cheese, milk powder, yoghurt, butter and other products.
- South Australia's dairy industry is worth \$565 million to the state's economy.

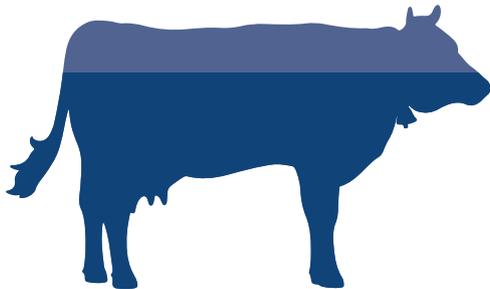
Top three dairy export destinations (BY VALUE):

China, Vietnam and New Zealand

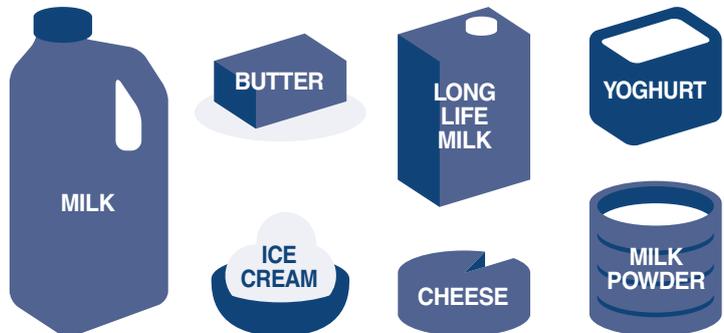
SOUTH AUSTRALIA'S

Average milk volume produced per cow

IS HIGHER THAN THE NATIONAL AVERAGE



MILK PRODUCTS MADE IN SA





Forestry

For more than a century South Australia has been a leader in forest development and management. The state's forest and wood processing industries are entirely plantation-based and no native forests are harvested.

More than \$2 billion worth of wood and paper products are produced within South Australia annually. The state's Limestone Coast region is well known for its production of forests and extensive wood processing industry, with wood harvested from plantations being used for house frame construction, infrastructure, fencing, furniture, bio-energy and household tissue papers.

Plantations in the state cover 172,000 hectares and the main species grown are radiata pine (*Pinus radiata*) and Tasmanian blue gum (*Eucalyptus globulus*).

Input into South Australia's forest and wood processing industries and overseas exports exceed more than 4 million cubic metres. All the state's major plantations have internationally recognised environmental certification, and forestry is the only primary industry sector that absorbs more carbon dioxide than it emits.

There are excellent opportunities to partner with forest industry participants to develop:

- Biomass energy generation ranging from discrete site applications to large scale regional energy production
- Manufacturing facilities to produce engineered wood products such as oriented strand board and cross laminated timber for domestic and export markets
- Advanced manufacturing facilities which utilise wood based biomass and leading technologies to produce outputs as diverse as biofuels and nanocellulose with multiple applications.

South Australia's forestry industry, which is harvested year-round, benefits from flat terrain, consistent climatic conditions and proximity to processing centres. These investment opportunities are underpinned by well-developed transport and energy infrastructure and excellent workforce capabilities.

The Green Triangle is part of one of the most productive forestry areas in Australia and is located close to manufacturers and ports.

In 2017-18

Softwood

127

thousand hectares
plantation area

3.1

million cubic metres
per year of sawlog,
pulp and logs

11

plantation owners/
management providers

20

processors into
sawnwood, panels,
posts or household
papers

Hardwood

45

thousand hectares
plantation area

1.1

million cubic metres
per year of sawlog,
pulp and logs

10

plantation owners/
management providers

Top three export destinations:

China, Malaysia and New Zealand



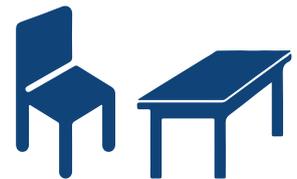
About
**8 million
trees** are planted
in South Australia every year

Key facts:

- More than 4 million cubic metres of logs were harvested from South Australian plantations in 2017-18 (13% of Australia's total).
- Australia's first commercial forests were established in South Australia in 1876. Now the state has 172,000 hectares of softwood and hardwood plantations producing a wide range of timber products for domestic use and export.
- South Australia's forest-related industries currently employ about 6 500 people directly.
- About \$2.6 billion worth of wood and paper products are produced within South Australia annually



Mount Gambier relies more heavily on forestry sector employment than many other regions and large cities in Australia, with 10% of its workforce in the industry.



Many South Australian wood products can be found in houses, in the form of framing, furniture, fencing, landscaping and household tissues.



**Carbon
626**

Up to million tonnes
of carbon sequestered



This is the equivalent to the annual greenhouse gas emissions of about 750 small-medium sized cars.

