



Green Triangle Forest Industry Strategic Plan

September 2019

Photo credit: Ockert Le Roux

The Green Triangle Forest Industries Hub

Foreword

In early 2018, the CEOs of a number of companies operating in the Green Triangle came together with a hope – that by working together in a more unified manner, our regional industry could grow, and be stronger for many generations to come.

It was a unique collaboration of nine organisations representing a cross section of the industry – large and small companies, growers and processors, softwood and hardwood, Victoria and South Australia. Together, these entities represent about 90% of the forest industry in the Green Triangle.

Late in 2018, the Federal Government announced the intention to provide funding for defined regional forest industry hubs, to facilitate and stimulate growth in the sector, in order to support the national goal of expanding the national estate by 1 billion trees.

The “network” of nine companies was successful in its application for funding and the **Green Triangle Forest Industries Hub** (GTFIH) was born in April 2019.

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Ernst & Young (EY) assisted the GTFIH in the preparation of this Strategic Plan. The views it expresses are those of the GTFIH.



The Strategic Plan



The success of the industry today is due to the foresight and decisions over 30 years ago. The GTFIH seeks to replicate and continue this momentum.

To do so, the GTFIH determined a long term industry strategic plan was needed to focus and unite the industry on key activities rather than working together on a number of discreet initiatives.

The GTFIH's prime objective is to work towards a long term vision for the industry, requiring:

- ▶ Complete utilisation of all wood fibre generated in the Green Triangle;
- ▶ The expansion of the region's forestry estate;
- ▶ The identification, creation and execution of sustainable domestic processing opportunities;
- ▶ The identification and mitigation of barriers and constraints on growth of the collective industry; and
- ▶ The completion of industry wide accelerators such as research, feasibility studies, policy advocacy and government funding application.

The ambition of this document – this **Strategic Plan** - is to craft a unifying purpose and vision and to set the path forward for the industry for the next 30 years.

Forecasts indicate a growing deficit of wood for Australia

01

Australian Supply



The Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) has stated that the plantation sector is '*fundamental to the sustainability and competitiveness of the Australian forestry sector.*' However, in the face of growing domestic demand for sawlogs, future plantation investment may not be enough with ABARES finding that by 2050:³

- ▶ Softwood plantation area will rise by only 2% (24,000 hectares).
- ▶ Hardwood plantations will fall by 10% (95,000 hectares).
- ▶ New plantation investment will be limited by existing agricultural land use.
- ▶ Domestic softwood availability will fall short of domestic demand by 3.4 million m³ in 2050.
- ▶ Imports of softwood will need to double between 2020 and 2050 to satisfy growing demand (total of 1.15 million m³ per year by 2050) or new plantations need to be established.

In the absence of any major changes, the above is a sub-optimal outcome for not only the broader forestry sector, but for Australian consumers. New drivers and actions are required to expand Australian supply.

02

Our Response



Future demand for local wood and fibre is expected to remain high for the foreseeable future. While the industry is cognisant of its long investment cycles, it is of the firm belief it can help address Australia's wood fibre challenges immediately through expanding the plantation base, prioritising local processing and manufacturing, and increasing the utilisation of all wood fibre harvested. The industry is well placed to meet this demand but external barriers exist stifling the industry's ability to expand.

The world needs more fibre

The Green Triangle is one of the rare places in the world where all the ingredients of a successful forest industry can be found.

Climate and topography makes the Green Triangle a premier location for growing and processing wood fibre, with plantation forestry being conducted in the region since the early 1900s, making it one of the oldest plantation forest estates in the world. This long history means the area is home to a proud and productive workforce with a wealth of expertise and knowledge.

The last decade has seen the regional industry go from strength to strength, delivering increased output, sustaining local communities, supporting thousands of stable, long term jobs in rural areas and investing in wood fibre processing.



The Green Triangle is operating in an environment of exponential growth. Global demand for wood fibre is expected to quadruple by 2050,¹ driven by population growth and a growing awareness of the benefits of using wood fibre in a plethora of applications. The Australian Government has committed to planting “*A Billion Trees for Jobs and Growth*” over the next decade to help meet this growing demand and to support the fight against climate change.²

The Green Triangle is best placed to meet this global need.

However, there has been no material increase in the regional softwood estate for a generation. Sustained increases in demand over the last ten years has now resulted in the regional forest estate being at full capacity.

Constrained access to crucial inputs, such as land and water, and policy uncertainty are stifling the industry’s ability to capitalise on the growth in demand for wood fibre. Without action, there will be an overall reduction in the plantation estate, having profound implications upstream and downstream of the industry, and for the broader community.

Without action now, the opportunity to build the region into a global “fibre bowl” will be lost for another generation.

Now is the time to seize the opportunity

The industry recognises that to seize the opportunity it needs to:



Secure the industry's current foundation through ensuring the regional estate can be viably replanted, and supporting the prioritisation of domestic processing and manufacturing.

The industry needs to protect and maintain its:

- ▶ Significant competitive advantage
- ▶ Existing plantation estate
- ▶ Diversity and scale of production capacity
- ▶ Deep expertise, maturity and unparalleled knowledge in optimising wood fibre



Grow the industry and ensure long term sustainability.

The industry needs to drive and succeed at:

- ▶ Growing the plantation estate to respond to increased demand
- ▶ Increasing the end value of finished products
- ▶ Improving efficiency across the value chain
- ▶ Transforming from a traditional industry into a leader of innovative fibre use
- ▶ Capitalising on the industry's potential contribution to a sustainable future, including carbon sequestration

Committing to a bright future

The industry is committed to growing regional fibre supply through planting more trees, greater utilisation of existing trees, prioritising local processing and generating a higher value product.

When considering the future, the industry:

- ▶ Firmly believes it has a significant role to play in supporting Government reach its target of planting 1 billion trees over the next decade. So much so, that it commits to 20% of the target, or 200 million additional trees in the ground by 2030 through an energised planting regime.
- ▶ Envisions further capital investment into local processing and manufacturing, meaning greater utilisation of the entire tree, and production of higher value product, meaning a 10% increase in output.
- ▶ Sees improvement in workforce productivity of 10% due to investment in processes and upskilling.
- ▶ Believes there will be increase in output volumes of local processors and manufacturers through a shift in prioritisation for local use first, exports second.

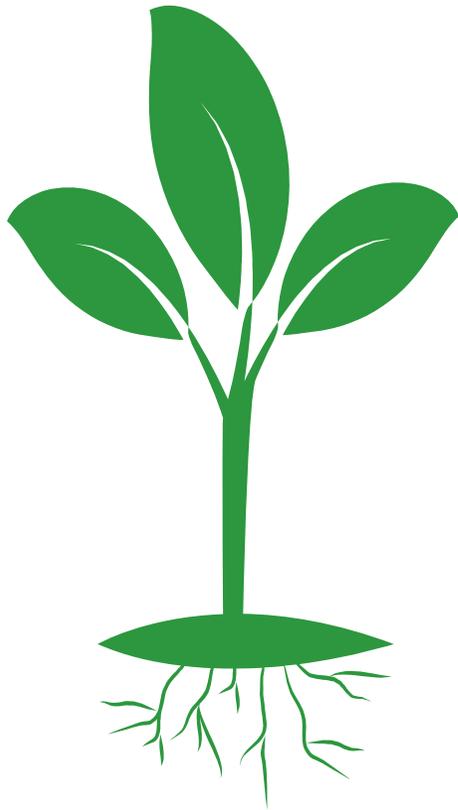


The above future state would lead to increased output of the industry resulting in an increase in economic activity.



The Strategic Plan

A bold, long term plan for a sustainable future



PURPOSE

To grow a vibrant industry, sustainable for our community for future generations.

VISION

To grow the forest estate by 200 million trees over the next decade, utilising every part of every tree we harvest.

STRATEGY

To grow the right trees, in the right place, at the right scale, with no waste, to support a world leading, local processing and manufacturing industry.

By 2030 the industry will have....

Planted:



200 million

Additional trees in the ground, a little over 150,000 new hectares

Requiring:



\$1 billion

Additional new investment in land and trees

That will drive:



100 million tonnes of CO2 equivalent

Additional sequestered over a rotation

Through:



100% utilisation

Of every part of every tree, resulting in 10% more product from a reduction in waste

That will create:



3.6 million m³

Additional output over and above current plans due to increased planting and utilisation

Needing:



10%

Increase in productivity using a future proofed workforce

With a:



Shift in prioritisation

Increased local processing and manufacturing and a shift towards higher value products

And a spend of:



\$200-\$300 million in downstream investment

Committed to improving local processing and manufacturing assets

... through focusing on four strategic pillars

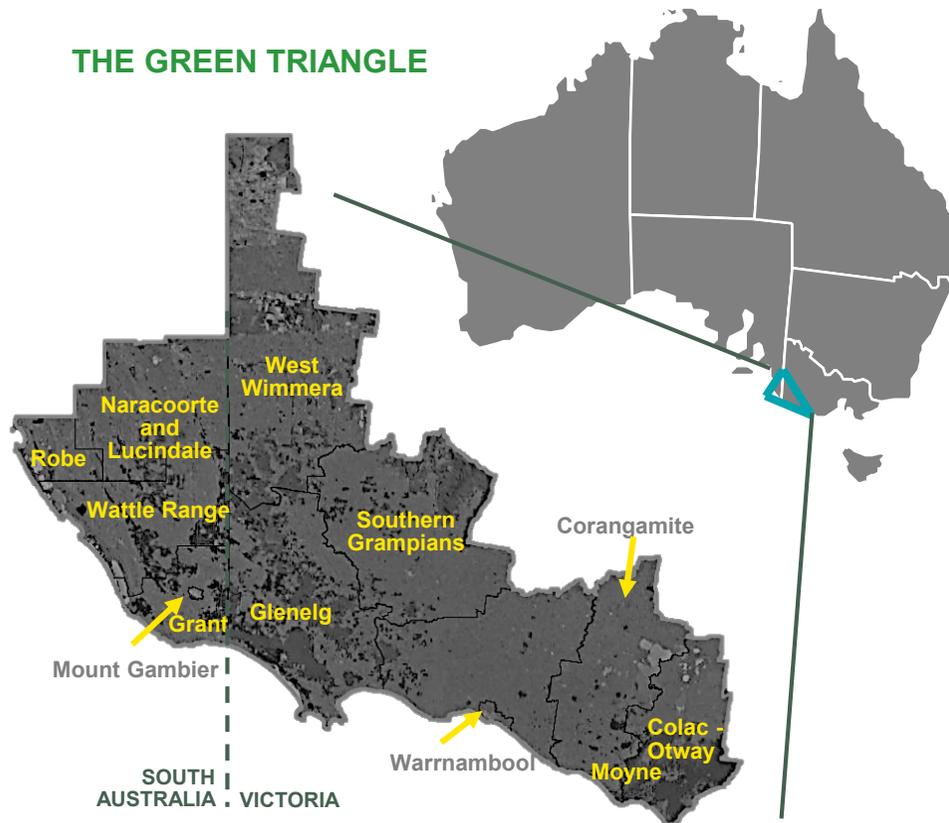
	 More trees and more local capacity	 Safe & productive workforce	 Community support	 Stewardship for future generations
Objective	Secure the Industry's competitiveness and grow the right tree, in the right place, at the right scale to meet growing demand.	Protect and future proof the workforce through attracting and retaining individuals with tomorrow's skills.	Grow and improve the community's support and knowledge of the Industry through active communication and education.	Grow and expand to deliver a waste free industry, with joint commitment to ensure continued future sustainability and carbon reduction.
Focus Areas	<ul style="list-style-type: none"> Plant 200 million trees Increase value and drive local processing and manufacturing Improve fibre utilisation Improve Industry efficiency 	<ul style="list-style-type: none"> Build tomorrow's workforce Improve workforce diversity Develop tomorrow's leaders Drive continued safety 	<ul style="list-style-type: none"> Better engagement with the broader community Positive communication and education 	<ul style="list-style-type: none"> Sustainable asset managers Support carbon reduction



Context

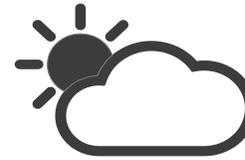
The Green Triangle is home to prime forestry land

The Green Triangle spans the border between Victoria and SA.⁴ It is home to 186,000 residents and 82,880 workers, employed disproportionately in Agriculture, Forestry and Fishing at 17% (compared to 3% nationally) and specific parts of Manufacturing at 10% (7% nationally).



The Green Triangle contains Australia's largest collective plantation and wood processing zone⁵ over an area of 6 million ha² and is better suited to harvesting and haulage than most other plantation regions in Australia.⁵ This is driven largely by its physical characteristics including:

Climate



- ▶ Ideal for growing both softwood and hardwood plantations.
- ▶ Cool wet winters and mild dry summers.
- ▶ Winter rainfall is effective with low evaporation and maximum groundwater recharge.

Topography



- ▶ Ideal access due to generally flat to undulating terrain.
- ▶ Very few slopes of significance.
- ▶ A range of soils varying in quality depending on location and influence from agricultural areas.

Two species are particularly suited to the region: **radiata pine (softwood)** and **Tasmanian blue gum (hardwood)**. These are quality species providing a range of high value products. Yet these plantations cover less than 6% of Green Triangle land.⁵

The Green Triangle supports a world class forest industry

The Green Triangle is a premier location for growing and processing wood fibre; the ultimate renewable resource, and:

Has some of Australia's best climate, topography and accessibility for plantations and wood fibre processing



Constitutes 17% of Australia's plantations, or 334,000 hectares ¹¹



Supplies \$1.5 billion in forest industry economic output – 7% of the Green's Triangle's total economic output ⁹



Supports over 3,000 workers directly in the local region, and over 4,000 indirectly ⁹



Sees under 6% of its land used by plantations ⁵



The last decade has seen the industry strengthen, delivering increased output, sustaining local communities, supporting thousands of stable, long term employment in rural areas and investing in wood fibre processing. It is:

- ▶ **Mature** – its long history means the industry is stable and well invested with all needed assets to support growth. Critically, the industry holds unparalleled expertise with the growing and processing of radiata pine and Tasmanian blue gum.
- ▶ **Diverse** – the industry spans the entire value chain in the Green Triangle. Its strength lies in the depth of its capabilities and its capacity to support the entire chain.
- ▶ **Renewable** – the crux of the industry is the Tree; an asset that can be replanted and grown in the optimal conditions of the Green Triangle to support a cyclical, and thus sustainable, industry.
- ▶ **Highly demanded** - demand for wood fibre has increased due to a multitude of reasons such as growing per capita use; desire for a versatile and environmentally friendly material; and a growing and diverse range of end uses due to advances in technology and engineered products.
- ▶ **Environmentally beneficial** - communities are realising the inherent sustainability of the industry due to its natural, recyclable, renewable and biodegradable characteristics, and carbon sequestration abilities.

The industry is the strongest it has ever been

CAPITAL INVESTMENT

Over the past ten years there has been a significant renewal of ownership of the major industry assets in the region, resulting in new, committed and long term industry players.

This has led, in part, to substantial new capital investments, such as Timberlink's recently announced investment of \$90 million in its Tarpeena sawmill.⁷

The majority of processors have further capital plans over the next five years, demonstrating the continued confidence of the industry.

Figure 9: Tarpeena sawmill⁷



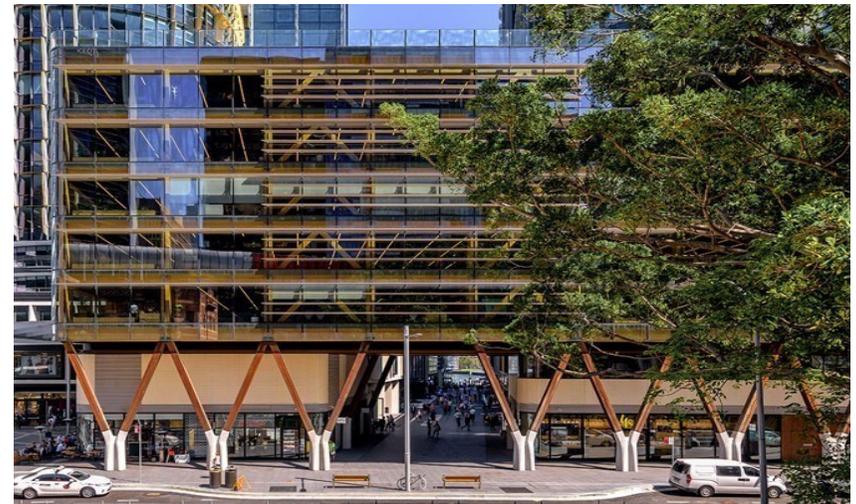
Source: Timberlink (2018)

TECHNOLOGY

Advances in building technology, changing consumption patterns and the development of new engineered wood products is opening up a range of opportunities for the use of wood fibre, translating to a growing reliance on this resource. For example:

- ▶ Biomass conversion technologies are resulting in the increased and more efficient use of wood fibre waste as a source of bioenergy.
- ▶ Development of cross-laminated timber is making the construction of entire high-rise buildings from timber a reality with the first timber commercial office building in Australia in 2017.

Figure 10: International House Sydney⁸



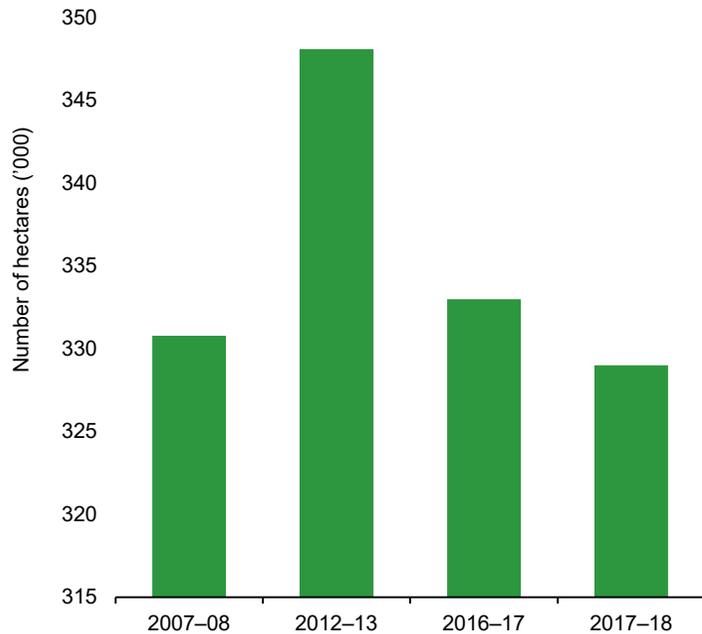
Source: Tzannes (2017)

The Green Triangle plantation estate is large but is in decline

Current

The Green Triangle possesses high quality wood fibre resources and substantial industry infrastructure. It currently contains around 330,000 hectares of plantations, a decrease on recent years but level with a decade ago.¹¹

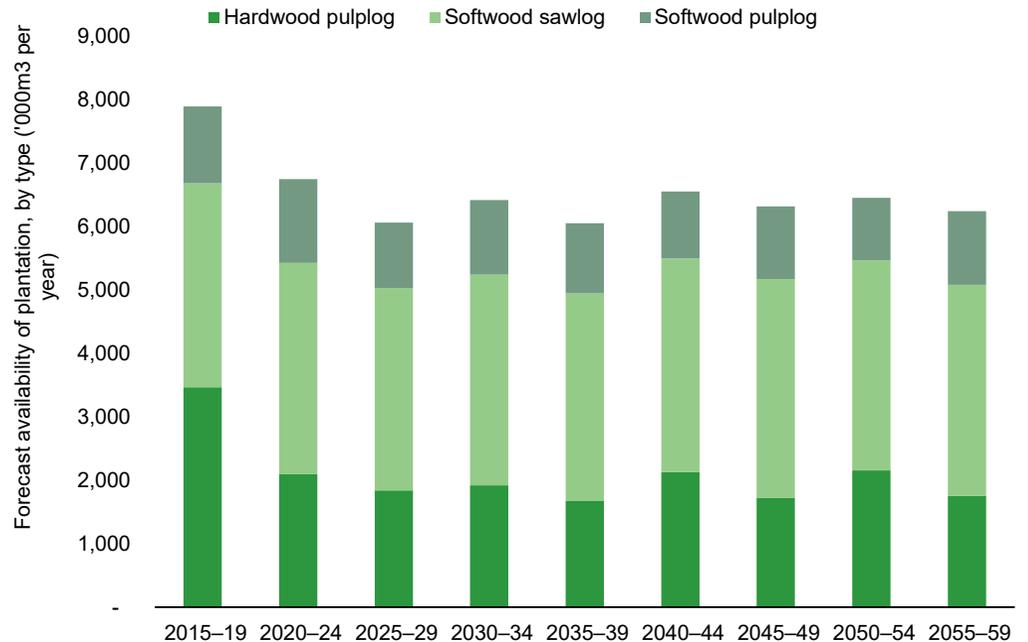
Figure 4: Green Triangle plantation area for certain years¹¹



Future

Lack of replanting and expansion in the past means an expected shortfall of wood fibre in the future. Over the next four decades, total output from the industry will see a downward trend with the volume of hardwood expected to fall from 3.5 to under 2 million m³ (or approximately 40%) and the volume of softwood expected to remain relatively flat (around 4.4 million m³).¹²

Figure 5: Forecast log supplies in the Green Triangle, 2010-2059, current conditions¹²



Wood fibre production requires simple but fundamental inputs

The Industry has the capability to grow and meet Australia's growing wood fibre demand. It is constrained however, by various barriers in the form of regulations, distorting a competitive market when compared to similar industries. To grow requires uninhibited access to the following three key inputs.



LAND & WATER

- ▶ Inability to access land due to competition from agriculture and reluctance from land owners to lease. Some perceive the time commitment of minimum 12 years to be risky. Some plantations are grown on leased land, meaning the relinquishment to the landholder after harvest.
- ▶ While sufficient water is available, strict water polices limit its use, with plantation owners facing significant uncertainty in respect of water policy.



EXPERTISE

- ▶ The industry has unrivalled expertise in terms of knowledge, and capability in growing two high quality tree species better than anywhere else in Australia.
- ▶ The maintenance of this expertise is dependent upon knowledge management and transfer, and the retention and attraction of a skilled and suited workforce.



INFRASTRUCTURE

- ▶ Road freight is the main form for transporting goods in the region. Port of Portland gives access to global markets with capacity of more than 4 million Green Metric Tonnes per annum.
- ▶ The 2016 Green Triangle Region Freight Action Plan update showed more than \$180 million was needed to make the freight network fit for purpose over the next 10 years. Road infrastructure remains a concern for the industry.¹³

The industry plays a critical role in the local economy

Economic Output Contribution

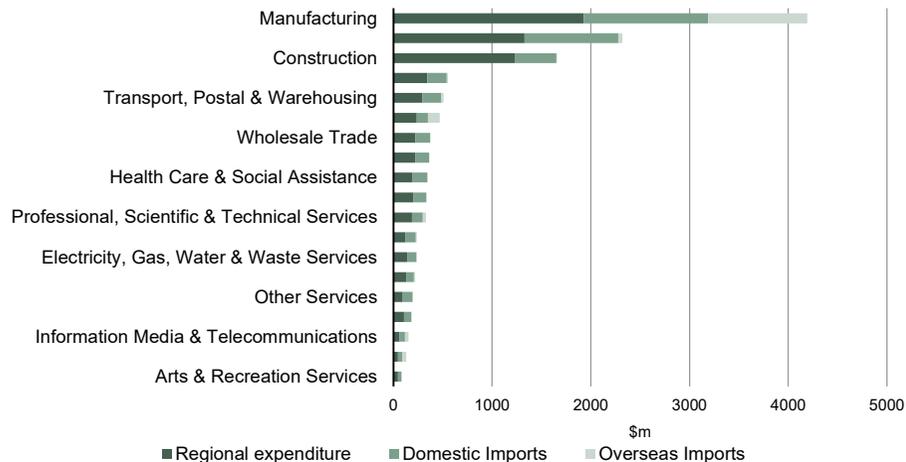
Industry is a significant driver of economic growth in the local economy being the third largest industry in the Green Triangle region with \$1,498m in direct output in 2017-18:⁹

Regional Expenditure

The industry impacts the top sectors in the Green Triangle:⁶

- ▶ Manufacturing utilises fibre to process into paper, boards, furniture etc.
- ▶ Construction uses timber to build dwellings and other structures.

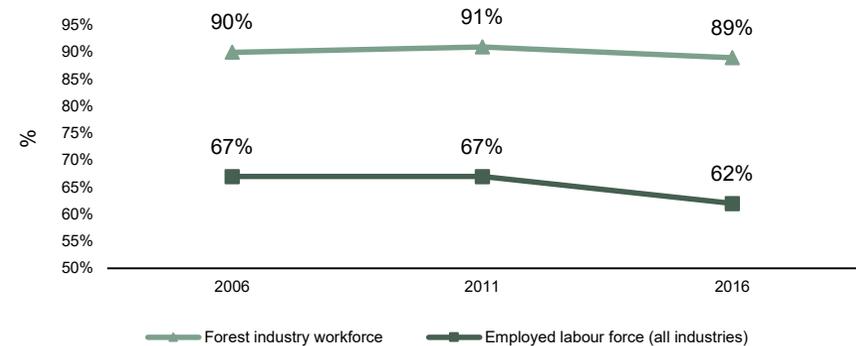
Figure 1: Regional expenditure in the Green Triangle, 2017/18



Full-time Employment

Industry has maintained full time employment at around 90%, compared to other industries at around 65%.¹⁰

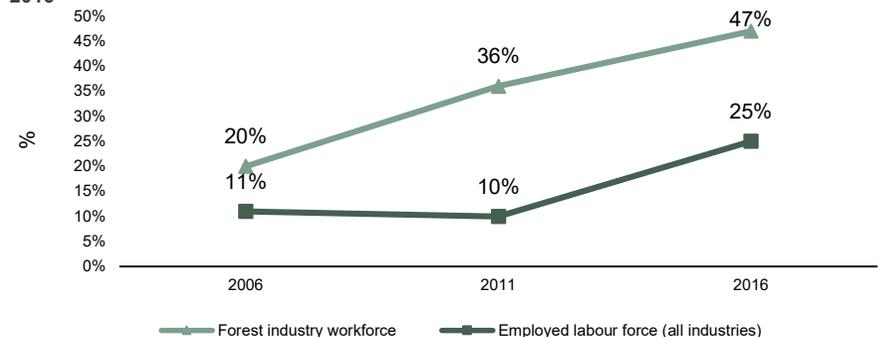
Figure 2: Proportion of the workforce employed full-time, 2006-2016



Medium to High Income Earners

Industry workers tend to earn more than others, with a rise in higher income earners over the last decade.¹⁰

Figure 3: Proportion of the workforce by income earned (>\$1299 or \$1250 per week), 2006-2016



Attracting and retaining the right people is critical

The industry's workforce is committed and loyal. This loyalty has been bred through offering a range of opportunities within a safe environment, with organisations supporting high, self imposed industry safety standards.

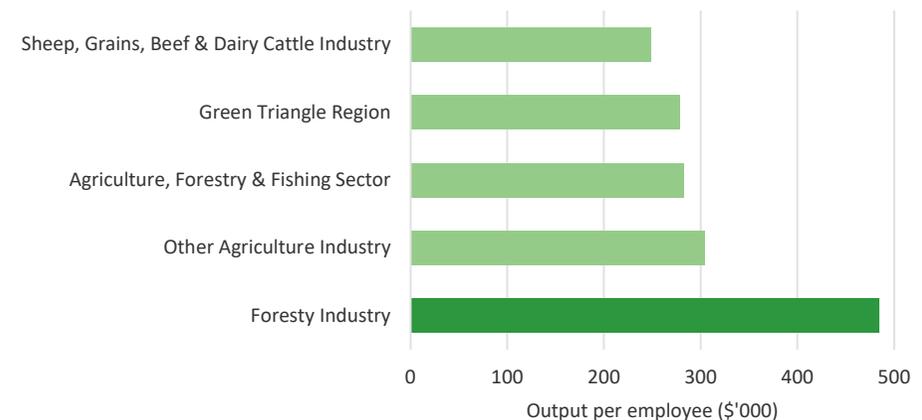
The industry though faces growing recruitment challenges. An ageing population, location challenges, and availability of skilled workers is narrowing the pool of suitable candidates. Exacerbating the workforce challenge is the need to build and upskill the workforce to be prepared for tomorrow's technology driven world.

Similar industries in the region mean there is strong competition, driving a necessity to be linked in with education institutes to ensure there is a pipeline of tomorrow's leaders, with the aptitude and desire to choose forestry as a lifelong career.

Characteristics of the current workforce include:^{6,9,14}

- ▶ Over 3,000 people directly employed
- ▶ Nearly 4,000 people indirectly employed (i.e. upstream and downstream industries).
- ▶ Recruitment is challenging given the locality of jobs
- ▶ Offers more full time employment and longer hours than other industries
- ▶ Workers tend to earn higher incomes than average for the region
- ▶ Not perceived to be a well diversified industry; only 13% of workers were female in 2017
- ▶ Significantly more productive than most other industries (refer right), producing 74% more output per employee than the average Green Triangle worker

Figure 7: Output per employee of select industries in the Green Triangle⁶



The industry is connected with its communities but misconceptions exist

The industry is embedded within many facets of the local community. It is connected to the community through not only providing jobs and products for households, but is highly visible, with towns created and supported due to the very existence of a plantation estate.

The importance of a positive, honest and fact based relationship with the community is pivotal to success.

There is strong positive public sentiment towards the industry. Communities that have a strong reliance on the industry feel that it is important and has positive impacts. 91% of respondents in South Australia stated the Industry is important to the local community, with 67% in Victoria stating this.¹⁴

Currently, interactions with the community can be characterised as:

- ▶ Independent: Each organisation has its own approach to community engagement; and
- ▶ Reactive: By reacting rather than planning, messages can be misaligned and fail to communicate effectively.

There is a need to provide education on the many advantages and realities of the forest industry.

There is recognition that industry needs to strengthen and unify its messaging.

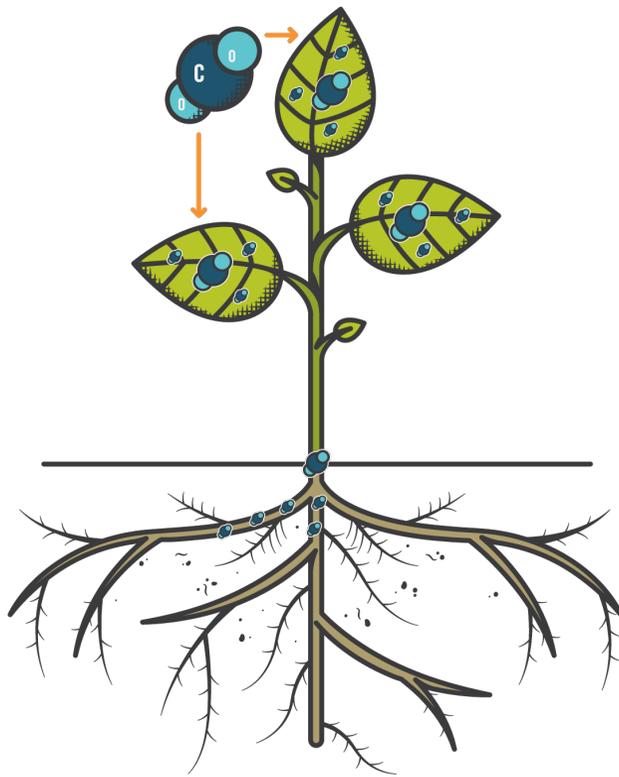
Figure 8: Response to Regional Wellbeing Survey 2016, South Australian and Victorian LGAs with a heavy dependence on the forest industry around the Green Triangle¹⁴



Telling the carbon story

Carbon sequestration

Forests play an important role in the fight against climate change. Currently, the industry has not been effective in the carbon market debate. Industry must make carbon and its role in its management a matter of priority.



Key facts

- If industry plants one billion trees over the next 10 years an additional 18 million tonnes of carbon dioxide will be sequestered per year by 2030.²
- Timber frame house stores 7.5 tonnes of carbon while steel emits 2.9 tonnes.¹⁵
- During peak growth (10-30 years) carbon sequestration is at its peak, then slows.¹⁵
- Forest industry has potential to produce a proportion of Australia's renewable energy target of 26% to 28% below 2005 levels by 2030.¹⁶
- The Australian forest industry, through carbon sequestration, offset 3.5% of total human-induced greenhouse gas emissions.



Actions

The pathway to the ideal future state

2020 - 2030

- ▶ **PRODUCTION – The sector is more productive:** This outcome can be achieved through research to improve site specific productivity of plantations, or whole of plantation initiatives (i.e. Late Age Fertiliser programs to enhance the growth rates and yield). These may optimise harvests and improve value recovery.
- ▶ **PRODUCTION – Plantation areas are expanded:** The purchase of complimentary plantation areas improves the capacity to efficiently manage the estate and to ensure that timber production is maximised from the region's planted area.
- ▶ **PROCESSORS – Mill owners provide the required capital investment:** Investment in the timber fibre processing sector has been insufficient in previous years but has recently committed capital funds to allow efficiency, mill capacity and productivity to return to appropriate levels. This will continue in the near term.
- ▶ **PROCESSORS – The timber fibre processing sector uses new, more efficient techniques:** "Cutting edge" technological developments in bioenergy maximises energy returns from burning valuable fibre. Introducing bioenergy may require replacing existing infrastructure (such as heat plant and kilns) and the addition of additional utilisation facilities (i.e. power production).
- ▶ **BOTH – The logistics process is effectively aligned with government initiatives:** Align forestry developments with key state and federal infrastructure initiatives. This includes coordination with state and federal bodies and providers of logistics services to optimise transportation efficiency.

2020 - 2040

- ▶ **PRODUCTION – Plantation areas are further expanded:** An expansion of plantation estate is required to meet the mid to long term demand for softwood wood fibre. Increases in forest resource availability should increase total output by a further 45%.
- ▶ **PRODUCTION – The sector utilises new, more efficient techniques:** New technology in forest management reduces wastage and costs. These include:
 - ▶ Investment in improved genetics, propagation and plantation management: This ensures that forests are resilient to changes in climate, pestilence and other threats.
 - ▶ Mainstreaming revenue from alternative sources such as carbon sequestration/biodiversity offsets etc. management of risk (pests, diseases, fire, regulatory (including water)).
- ▶ **PROCESSORS – Mill owners continue to provide sufficient levels of capital investment**
- ▶ **BOTH – Those directly and indirectly employed by the Industry receive adequate support:** If some jobs in the broader industry become automated, up-skilling initiatives implemented before the expected technological change will ensure that affected employees remain gainfully employed and continue to play a role in the local economy.
- ▶ **BOTH – Facilities capitalise on bioenergy –** facilities draw on energy created through bioenergy processes

2020 - 2050

- ▶ **PRODUCTION – Existing forestry areas are sufficiently protected from political instability:** Formal legislative and regulatory protections are crucial to ensuring the longevity and productivity of the Australian economy. Although designated forestry areas currently exist, they do not effectively protect organisations operating in these areas from significant adverse policy changes.
- ▶ **PRODUCTION – Plantations across Australia possess effective mechanisms to resist the effects of climate change:** Physical technologies must be complemented with legislative and regulatory instruments to maintain climate change resilience.
- ▶ **PROCESSORS – Entities are using automated processes and every ounce of fibre is being utilised:** regardless of type of processing, all organisations involved in turning wood to product are using leading edge techniques that drive productivity gains and allow for maximum value creation and use of the fibre produced.
- ▶ **BOTH – Innovative processes are the norm:** all firms capitalise on new technology using automation, drones, and data analytics to ensure supreme efficiency, productivity and overall sustainability.
- ▶ **BOTH – The broader forest industry continues to play a significant role in Australia's global economy:** The forest industry maintains or grows on its current role in the Australian economy, with respect to economic output, value added, and persons employed.

Pillar 1: More trees and more local capacity

Secure the industry's competitiveness through planting more trees, in the right place, with the entire tree processed into high quality product to meet growing demand.

Growing output in a productive manner will both increase the industry's value-add and economic contribution to the Green Triangle and bridge the wood fibre demand gap. This will be achieved by:

- ▶ Growing the number of trees in the ground.
- ▶ Increasing the value of Green Triangle products through local processing and manufacturing.
- ▶ Increasing wood fibre utilisation across the entire value chain meaning a zero waste value chain.
- ▶ Driving efficiency through economies of scale and securing inputs.

Pillar 1 Strategic Directions	Actions	Timeframe
Direction 1.1: Plant 200 million trees in the Green Triangle by 2030	<ol style="list-style-type: none"> 1. Conduct study to understand land feasibility and viable Green Triangle land suitable for plantations. 2. Undertake consultations to identify potential land available for plantations. 3. Secure adequate land through leasing and/or purchasing arrangements. 4. Drive an energised planting agenda, with 20 million trees planted per year, for 10 years. 	Short
Direction 1.2: Increase value of Green Triangle products sold and drive greater local processing and manufacturing	<ol style="list-style-type: none"> 1. Focus on products that are higher value and best use of the quality fibre generated in the Green Triangle – move up the value curve. 2. Build a Green Triangle hardwood and softwood brand through leveraging local, sustainable, ecological, and/or quality branding. 3. Commit to further capital investment to modernise processing and manufacturing facilities. 	Medium
Direction 1.3: Improve fibre utilisation / maximise fibre recovery	<ol style="list-style-type: none"> 1. Improvement in fibre captured from plantations through harvest optimisation. 2. Improvement in fibre captured from processing through zero waste policy. 3. Increase in biomass/use of bioenergy in the Green Triangle. 	Medium
Direction 1.4: Drive industry efficiency through economies of scale and securing inputs	<ol style="list-style-type: none"> 1. Increased collaboration between growers and processors. 2. Commitment to prioritise local processing and manufacturing. 3. Secure a stable water environment ensuring adequate and sustainable water availability. 4. Decrease input costs to drive value-add of forest products. 	Short

Pillar 2: Safe and productive workforce

Protect and future proof the workforce through attracting and retaining individuals with tomorrow's skills, and providing long-term careers in an attractive and safe industry.

The industry's continued success and longevity requires an evolution of the workforce to capitalise on technological developments, sustain productivity, and develop and communicate the long term career path and opportunities to attract and retain the needed talent. The Industry recognises the need to continue to offer a safe environment and drive harmony across the value chain in terms of the safety agenda and a need to rapidly improve in the near term through:

- ▶ Upskilling and developing a workforce that collectively holds the skills needed for tomorrow's technologically driven Industry.
- ▶ Improving the diversity of the workforce to broaden the labour base and take advantage of the benefits offered.
- ▶ Developing tomorrow's leaders to bring through new ideas and ensure the next safe set of hands.

Pillar 2 Strategic Directions	Actions	Timeframe
Direction 2.1: Build the workforce of tomorrow	<ol style="list-style-type: none"> 1. Identify areas of skill shortages and required needs over the next 10 years. 2. Commence Industry sponsored internship that sees a rotation through all key stages of the value chain. 3. Implement Industry wide education campaign to educate participants on the future needs of the Industry and the "skills of tomorrow". 4. Provide upskilling program and education through partnerships with Universities and TAFE centres. 5. Implement an Industry specific Certification that is recognised nationally. 6. Transition workforce from being manual based to technically advanced and encourage a broader skill base (i.e. accounting, science, management). 	Medium
Direction 2.2: Improve the Industry's diversity in all facets	<ol style="list-style-type: none"> 1. Identify, understand and define the issues in play and establish benchmarks for improvement. 2. Measure and monitor progress against established benchmarks for diversity. 3. Support AFPA's national drive for improving diversity. 4. Support mature aged workers to remain in the Industry and transition to retirement. 	Short
Direction 2.3: Secure tomorrow's leaders	<ol style="list-style-type: none"> 1. Commence education campaign to highlight the broad range of skills needed to attract new skills/talent. 2. Develop a program to accelerate middle management (mentoring program). 	Short
Direction 2.4: Continuously drive the safety agenda	<ol style="list-style-type: none"> 1. Continuously comply with, and continue to develop, the fatigue management guidelines. 2. Implement an Industry agreed set of safety standards. 3. Collect information and progress against the standards to demonstrate the self-imposed safety levels of the Industry. 4. Influence contractors and providers along the entire value chain to ensure safety of the entire forestry system and a consistent safety ethos. 	Ongoing

Pillar 3: Community support

Grow and improve the community’s support and knowledge of the Industry through active communication and education.

The Industry is a key driver of economic stability and growth in the local Green Triangle community. For this to continue, requires community support, acceptance and pride in the Industry. The community must be confident the Industry is sustainable, efficient, credible, transparent and overall, a positive attribute of the Green Triangle region.

This can be achieved by promoting a culture of positivity, sincerity and integrity with the community through:

- ▶ Proactively and cohesively engaging with the broader community.
- ▶ Conducting positive communication and education activities to share timely and accurate information with the community, and garner positive sentiment towards the Industry.

Pillar 3 Strategic Directions	Actions	Timeframe
Direction 3.1: Better engagement with the broader community	<ol style="list-style-type: none"> 1. Develop a coordinated engagement strategy entailing: <ul style="list-style-type: none"> • Consistent lead message for the Industry as a whole to ensure a unified, positive and accurate front for the Industry. • Nuanced and appropriate messaging for dissemination at the micro level. • Dissemination of communications devolved to the organisational level. 2. Develop a feedback mechanism to ascertain the impact of strategies deployed. 	Short
Direction 3.2: Conduct of positive communication and education	<ol style="list-style-type: none"> 1. Embark on a community education program to provide awareness of the benefits of forestry such as renewability, carbon capture, recreational benefits and innovative wood uses. 2. Report on Industry outcomes such as water studies, carbon plans, carbon sequestration studies, economic impact studies, certification activities, and progress/adherence to RFAs to broadcast the benefits of the Industry. 	Ongoing

Pillar 4: Stewardship for future generations

Grow and expand to deliver a waste free industry, with a commitment to ensure future sustainability and carbon reduction.

Responsible stewardship of the environment is more critical than ever to the industry's ongoing success. Sustainable forest management can build resilience and help mitigate and adapt to climate change.

In this regard, we commit to:

- ▶ Safe and sustainable use of the environment and our assets through sustainable practices, international forest certification and world class environmental management.
- ▶ Support carbon reduction and climate change mitigation to do our part in delivering a clean and prosperous future.

Pillar 4 Strategic Directions	Actions	Timeframe
Direction 4.1: Be sustainable asset managers	<ol style="list-style-type: none"> 1. Maintain compliance to the highest standard for processing and manufacturing. 2. Assist the design of robust and resilient mixed-use landscapes. 3. Collectively commit and agree to sustainable activities, best practice land management, and corporate responsibility mindsets. 4. Expand the ability to predict and manage forest water use and dynamics. 5. Industry collaboration to protect assets against external threats including fire, pest and water availability. 6. Support change in the government policy space to facilitate environmental progress of the Industry (i.e. action in regard to the Renewable Energy Target / Emissions Reduction Fund to support environmental stewardship). 	<p>Ongoing</p>
Direction 4.2: Support carbon reduction and sequestration	<ol style="list-style-type: none"> 1. Promote role of the Industry in carbon sequestration. 2. Active role in establishing a carbon price/certified carbon scheme in Australia. 3. Support the use of bioenergy to ensure entities are maximising returns from every ounce of fibre through the use of wood waste as bioenergy. 4. Commit to improving the Industry's carbon footprint. 5. Undertake study to determine carbon captured in current wood asset / climate change impact modelling through the development of a full life cycle carbon model for the Industry as a whole. 6. Communicate carbon capture benefit in investment decisions. 7. Support activities that go to forestry being recognised as an Industry beneficial to carbon reduction. 	<p>Medium</p>

Building momentum: our immediate priorities

The vision is bold.

It requires a committed and unified industry - from growers to processors to contractors, as well as the wider community.

It cannot be achieved without change, and working together. Status quo is no longer sufficient.

Yet we are in the early stages of industry collaboration.

We recognise that we need to build momentum over the next two years to grow confidence in our ability to deliver the longer term strategy.

We have therefore identified eight actions which provide a platform for future growth, which are in our collective control and which can, therefore, be achieved over the timeframe.

On their own, these actions will not deliver the vision but will be an important first step for our industry.



1. More trees, more local capacity

- a. Remove regulatory barriers to secure and grow the estate and to prioritise the domestic market.
- b. Commit \$200 - 300 million in capital investment in processing and manufacturing to support regional economic development.



2. Safe and productive workforce

- a. Consistently implement and comply with the fatigue management guidelines and identify the next industry-wide safety initiative.
- b. Develop and implement a collective Industry internship program.



3. Community support

- a. Develop a stakeholder engagement strategy based on a unified message
- b. Develop a suite of stakeholder engagement tools, starting with a Green Triangle Forest Industries website.



4. Stewardship for future generations

- a. Develop a unified position and policy setting regarding the sustainability and carbon sequestration benefits of the forest industry in the Green Triangle.
- b. Develop an Industry carbon model.

Endnotes

Sources used for the creation of this Strategic Plan are outlined below with numeric figures referenced throughout the document.

1. The World Bank. (2016) *Forests Generate Jobs and Incomes*. Available at: <https://www.worldbank.org/en/topic/forests/brief/forests-generate-jobs-and-incomes>.
2. Department of Agriculture (2018) *Growing a Better Australia – A Billion Trees for Jobs and Growth*. Australian Government.
3. Whittle, L., Lock, P. & Hug, B. (2019) *Economic potential for new plantation establishments in Australia: Outlook to 2050*. ABARES, Australian Government.
4. Downham, R. & Gavran, M. (2018) *Australia plantation statistics 2018 update*. ABARES, Australian Government.
5. Regional Development Australia (2012) *Green Triangle Forest Industry Prospects*. Available at: https://www.rdv.vic.gov.au/__data/assets/pdf_file/0006/195927/Green-Triangle-ForestIndustry-Prospects.pdf
6. REMPLAN (2018) *Economy: Green Triangle Dataset*. Based on ABS 2016 Census and ABS 2014/15 National Input Output Tables.
7. Timberlink (2018) *Timberlink is building a world class timber mill in Tarpeena* (Media Release: June 2019).
8. Tzannes (2017) *International House Sydney*. Available at: <http://tzannes.com.au/projects/international-house/>.
9. EY (2019) *The Economic Contribution of the Forestry Industry within the Green Triangle*. Ernst & Young Australia.
10. ABS (2017) *Census of Population and Housing*. Australian Government.
11. Downham, R. and Gavran, M. (2019) *Australian plantation statistics 2019 update*. ABARES, Australian Government.
12. ABARES (2019) *Data tables from Australia's State of the Forests Report 2018*. Australian Government.
13. Victoria State Government (2018) *Road Work flurry delivers for Green Triangle*. Available at: <https://transport.vic.gov.au/about/news-and-media/road-works-flurry-delivers-for-green-triangle>.
14. University of Canberra (2017) *Socio-economic impacts of the forest industry*, Green Triangle. Forest & Wood Products Australia
15. TimberNSW (2018) *Timber in the Carbon Economy*. Available at: <https://timbernsw.com.au/timber-in-the-carbon-economy/>
16. Parliament of Australia. *Renewable energy policy: retreat, renewal and revitalisation*. Available at: https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BriefingBook45p/RenewableEnergy