

**INQUIRY INTO LONG TERM SUSTAINABILITY AND
FUTURE OF THE TIMBER AND FOREST PRODUCTS
INDUSTRY**

Organisation: ForestWorks

Date Received: 4 June 2021

About ForestWorks

ForestWorks is an industry-owned not-for-profit organisation offering services to support the skills development of the forest, wood, paper, timber and furnishing industries. ForestWorks works with industry, government and the education and training sector to improve skills standards and qualifications and support the development of our industries, their people, and enterprises.

ForestWorks has a long history of working with the industry in New South Wales, as well as other States, to deliver against the priorities and directions of the forestry and timber products industry for the development of people to undertake their skilled job roles. We have for many years assisted enterprises with the ongoing process to maintain and build technically skilled workforces whilst developing the skills and capacity of people to respond to change, to adapt and innovate as a result of internal or external business or operating environment demands.

ForestWorks also manages the national FOLS program. FOLS is an industry-led skills verification program for the forest industry (harvesting and haulage sector) that supports the professionalism and safety of industry through a national electronic system of recording training and verifying currency of worker's skills.

ForestWorks has a national staff structure and engages contractors as and when required. It is overseen by a board of directors who are elected by members and contribute their industry knowledge, expertise, and time to guide the strategic directions and governance of ForestWorks.

Response to Terms of Reference

ForestWorks submission responds to the term of reference (1)(f) and (1)(h):

(f) the role of the government in addressing key economic, environmental, and social challenges to the industry, including funding and support to encourage improvements in forestry practices, training, innovation and automation, workplace health and safety, industry and employee support, land use management and forestry projects,

(h) the operation, effectiveness and outcomes of the implementation of the NSW Forestry Industry Roadmap and Bushfire Industry Recovery Package,

Recommendations

1. ForestWorks recommends that the NSW Government provide financial support or incentives for RTOs to ensure that the full range of qualifications and units of competency can be accessed by the NSW industry.
2. ForestWorks recommends that the NSW Government adopt a position in relation to the next review of the TAE Training Package which ensures that changes eliminate the barriers to formal skills development in the timber and forest products industry imposed the last time the training package was reviewed.
3. ForestWorks recommends that criteria for subsidies associated with smart and skilled be revisited for the industry to facilitate upskilling for some units of competency or specified skill sets.
4. ForestWorks recommends that the NSW Government provide support to industry efforts to attract and train key equipment operators, including log haulage drivers.

5. ForestWorks recommends that the NSW Government provide support to industry efforts to attract and train saw technicians and wood machinists.
6. ForestWorks recommends that the NSW Government provide support to develop forestry specific innovation training courses to provide local access to skills required:
 - Identify opportunities to stimulate innovative thinking
 - Develop and support a culture of innovation
 - Implement and innovation to support forestry best practice
7. ForestWorks recommends that the NSW Government adopt a position in relation to the next review of the TAE Training Package which ensures that changes eliminate the barriers to formal skills development in the timber and forest products industry imposed the last time the training package was reviewed.
8. Forestworks recommends that the NSW Government provide support to Snowy Valley workers and businesses displaced from the forest and wood products industry to formally recognise their skills and provide support to find new roles in the region.

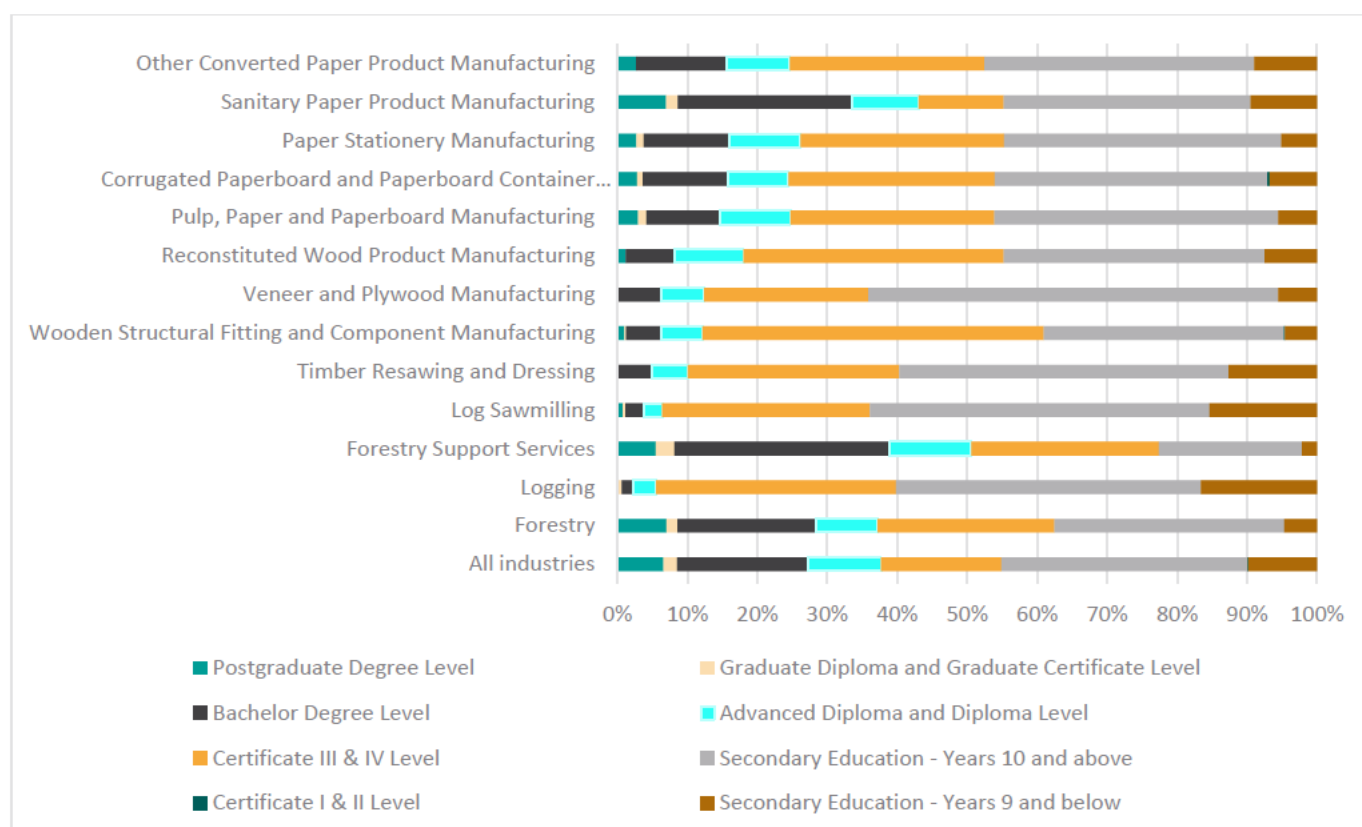
Skills and training in the timber and forest products industry in NSW

Current Skill Levels

Examining the highest levels of educational attainment at the last census (see Figure 1), it is clear that there is considerable variation in educational attainment in the industry in NSW.

The industry sectors with the highest educational attainment are Forestry, Forestry Support Services and Sanitary Paper Product Manufacturing. The sectors with the lowest levels of educational attainment are Logging, Log Sawmilling, Timber Resawing and Dressing and Veneer and Plywood Manufacturing.

Figure 1 Highest level of educational attainment, timber and forest products industry, NSW



Source: Census of Population and Housing, 2016, TableBuilder

Three sectors have a higher proportion of workers with postgraduate degrees than all NSW industries: Forestry (6.6 per cent), Forestry Support Services (5.2 per cent) and Sanitary Paper Product Manufacturing (6.4 per cent), compared to 4.6 per cent for all industries. Those same sectors have a higher proportion of Bachelor Degree level workers (18.4 per cent, 29.2 per cent and 22.9 per cent respectively, compared to 13.1 per cent for all industries) Forestry and Forestry Support Services also have a higher proportion of Graduate Diploma/Certificate level workers, 1.5 per cent and 2.5 per cent compared to 1.4 per cent for all industries.

Most sectors also have a higher proportion of workers with a Diploma or Advanced Diploma: Forestry (8.3 per cent), Forestry Support Services (11.1 per cent), Reconstituted Wood Product Manufacturing (9.4 per cent), Pulp, Paper and Paperboard Manufacturing (9.3 per cent), Corrugated Paperboard and Paperboard Container Manufacturing (8.1 per cent), Paper Stationery Manufacturing (9.6 per cent), Sanitary Paper Product Manufacturing (8.7 per cent) and Other Converted Paper Product Manufacturing (8.5 per cent).

At the Certificate III and IV level, most sectors are around double the proportion for all industries in NSW. The exception is Sanitary Paper Product Manufacturing (11.2 per cent compared to 12 per cent) due to the high level of workers with postgraduate degrees.

Nearly 4 in 10 timber and forest products industry workers in NSW have a vocational qualification. It is clear that this is an important source of skills to the industry, and it is vital to continued innovation and development.

Skills obtained in the last five years (within the VET System)

The timber and forest products industry is not an industry that relies on the VET system to produce its workforce prior to recruitment. Rather it relies on the VET system to skill and upskill its recently employed or existing workforce. It needs training to:

- Keep the workforce safe in what is inherently dangerous work;
- Be innovative in developing new sustainable products; and
- Optimise operations and functions in all areas so as to use its resources efficiently.

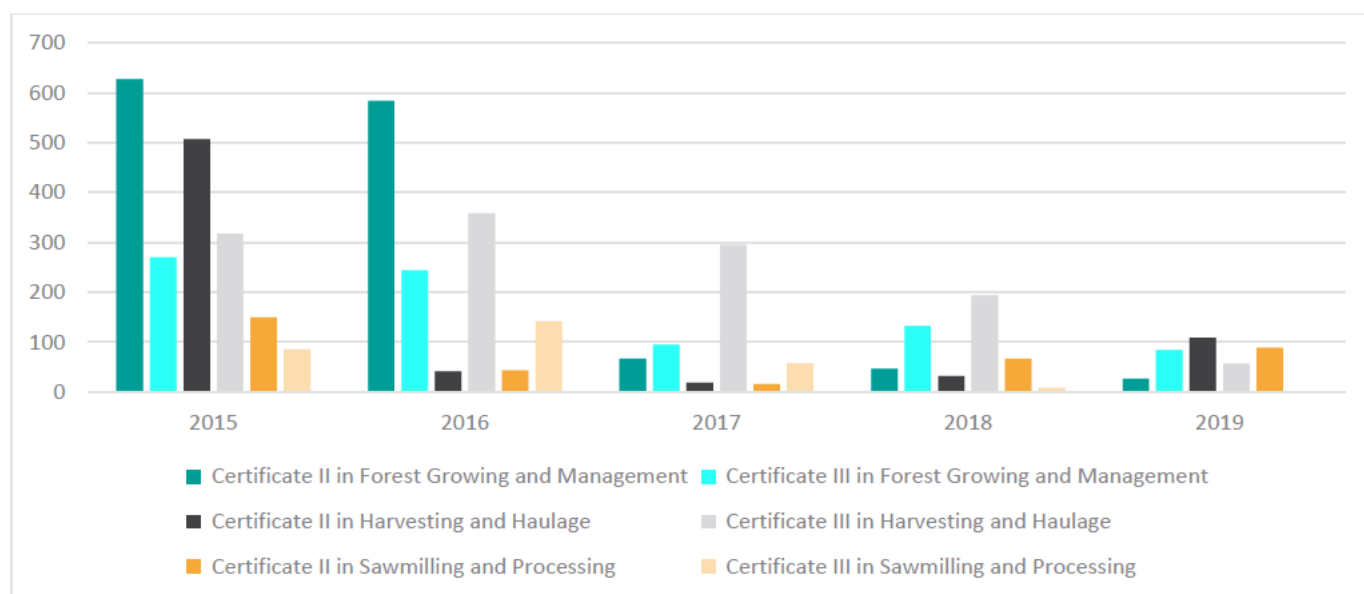
The value and benefits of VET to the industry are:

- employees have transferable skills if they choose to move between employers;
- skills held by employees are recognisable by managers and employers; and
- all parties know that the skill outcomes are consistent because they are based on an agreed standard (a unit of competency).

Access to training is critical to progress these strategies.

The number of people in the industry in NSW obtaining skills and qualifications has been declining over the last five years in all areas (see Figure 2 and Figure 3).

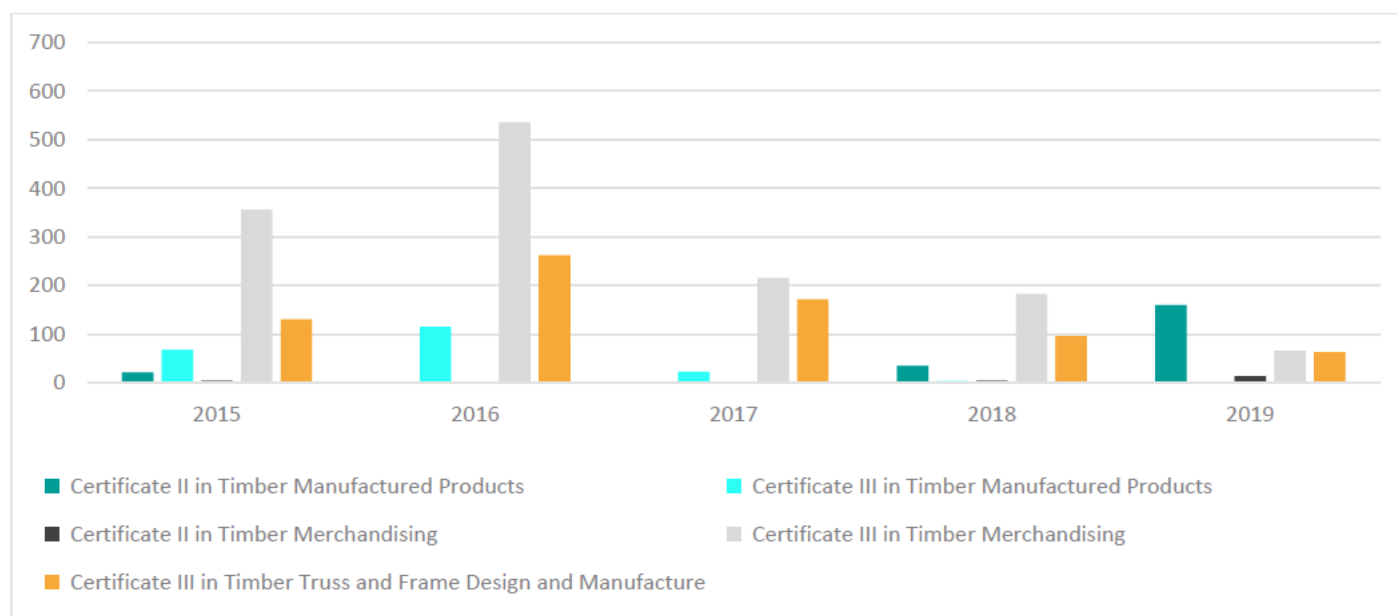
Figure 2 Enrolments in Forest Growing and Management, Harvesting and Haulage and Sawmilling and Processing, NSW, 2015-2019



Source: NCVET VOCSTATS, TVA subject enrolments

The largest number of enrolments over the period is in the Certificate II in Forest Growing and Management, followed by the Certificate III in Timber Merchandising and the Certificate III in Harvesting and Haulage. In 2019 however, the largest number of enrolments was in the Certificate II in Timber Manufactured Products (below) and the Certificate II in Harvesting and Haulage (above).

Figure 3 Enrolments in Timber Manufactured Products, Timber Merchandising and Timber Truss and Frame, NSW, 2015-2019



Source: NCVER VOCSTATS, TVA subject enrolments

Skills Sets

Australia-wide, the Forest and Wood Products Training Package is yet to see substantial enrolments in skill sets, despite industry support for them. An exception to this has been in NSW where there have been enrolments in a number of skill sets. All of the skills sets provide credit towards FWP Qualifications.

The four skill sets which have seen enrolments over the last five years are:

Skill Set for a Plantation Forest Operator: “This skill set provides that skills and knowledge required to comply with soil, water and cultural heritage protection requirements in a commercial plantation forest operation. It also provides the skills and knowledge to follow workplace safety, health and environmental procedures.”¹ The skill set includes the two core units relating to environmental care procedures and work health and safety as well as units related following cultural heritage requirements and complying with soil and water protection.

Skill Set for a Native Forest Operator: “This skill set provides the skills and knowledge required to comply with soil, water, biodiversity and cultural heritage protection requirements and apply silviculture principles in a commercial native forest operation. It also provides the skills and knowledge to follow workplace safety, health and environmental procedures.”² The skill set includes the same units as the skill set for a plantation forest operator plus two additional units: applying silviculture principles; and applying biodiversity protection principles.

Skill Set for soil and water protection (roading): This skill set provides the skills and knowledge required to implement soil and water protection procedures in a forest roading operation.”³ The units included relate to

¹ Skill set details, FWPSS00018 – Skill set for a plantation forest operator, available at <https://training.gov.au/Training/Details/FWPSS00018>

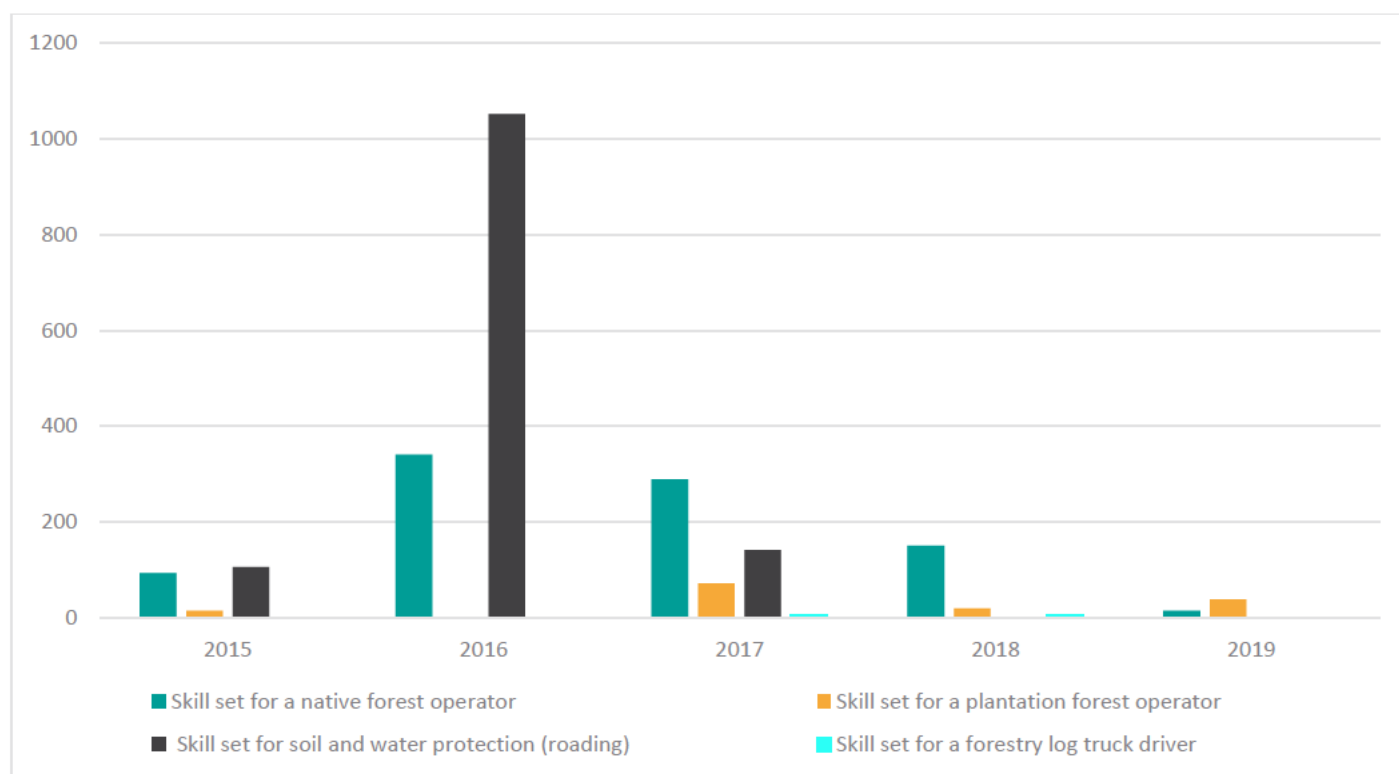
² Skill set details, FWPSS00017 – Skill set for a native forest operator, available at <https://training.gov.au/Training/Details/FWPSS00017>

³ Skill set details, FWPSS00024 – Skill set for soil and water protection (roading), available at <https://training.gov.au/Training/Details/FWPSS00024>

following environmental care procedures, complying with soil and water protection, and a unit from the Agriculture, Horticulture and Conservation and Land Management Training Package, relating to implementing erosion and sediment control measures.

Skill Set for a Forestry Log Truck Driver: “This skill set provides the skills and knowledge required to transport forestry logs using trucks while applying workplace safe, health and environmental procedures.”⁴ The skill set includes the core units related to environmental care and work health and safety, as well as a unit related to transporting forestry logs using trucks.

Figure 4 Enrolments in Skill Sets, NSW, 2015-2019



Source: NCVER VOCSTATS, TVA subject enrolments

Apprenticeships and Traineeships

There are two apprenticeships available within the Forest and Wood Products Training Package:

- Certificate III in Saw Technology
- Certificate III in Wood Machining

These are highly specialised roles within sawmills and wood processing facilities. The roles, particularly Saw Technicians (previously called Saw Doctors), are critical to the whole of the cutting process, and their job is to ensure that the saws in the facility are working effectively to produce timber to the high quality standards required.

Selection for these roles is often done internally as employers report that they like to ensure that the apprentice is committed to undertake the 3-year apprenticeship.

⁴ Skill set details, FWPSS00026 – Skill set for a forestry log truck driver, available at <https://training.gov.au/Training/Details/FWPSS00026>

With only 2 providers across the nation, many Saw Technology apprentices are required to travel interstate to access their training, normally done in block release times. One of these two providers is TAFE NSW in Tumut.

There are numerous challenges for RTOs to deliver these apprenticeships – the most significant being the need for RTOs to cover the range of placements, not only in terms of distance and time, but also in needing to maintain individualised training programs for each placement in each business.

Figure 5 Enrolments in Apprenticeships in Sawdoctoring and Woodmachining, NSW, 2015-2019

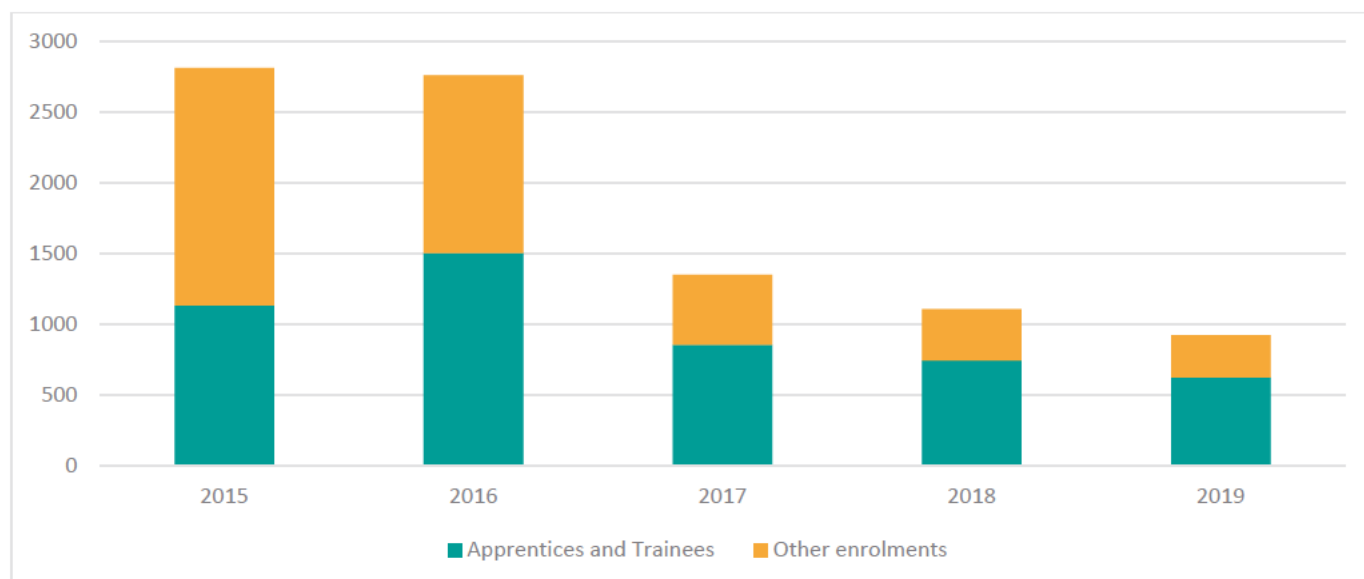


Source: NCVER VOCSTATS

Traineeships are also available for all other FWP qualifications. Theoretically, all qualifications in the Pulp and Paper Manufacturing Training Package are also available to be delivered as traineeships, however there are presently no training providers with PPM qualifications on scope.

The numbers of apprenticeships and traineeships in the industry in NSW have been declining over time.

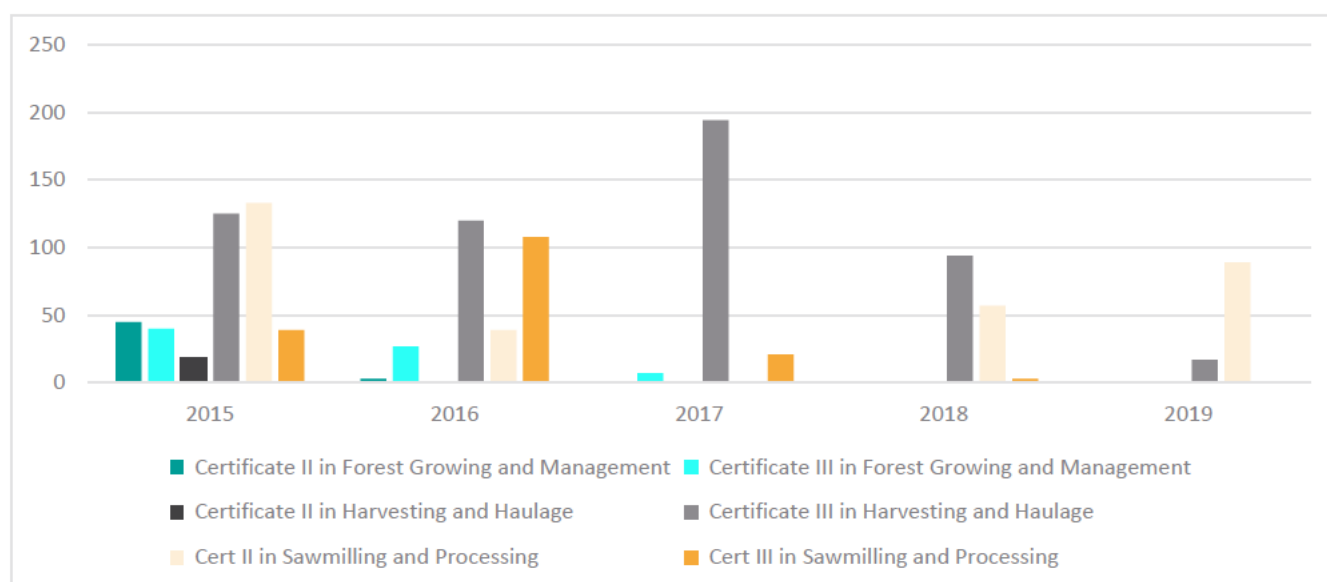
Figure 6 Apprentices and Trainees in the Forest and Wood Products Industry in NSW, 2015-2019



Source: NCVER VOCSTATS

In the *Forest Growing and Management*, *Harvesting and Haulage* and *Sawmilling and Processing* sectors, a key challenge is attracting people into the industry, particularly in regional and remote areas. Many young people leave the area to undertake further schooling or to seek alternative employment. The decline in this sector is particularly noticeable.

Figure 7 Enrolments in Traineeships in Forest Growing and Management, Harvesting and Haulage and Sawmilling and Processing, NSW, 2015-2019



Source: NCVET VOCSTATS, TVA Subject Enrolments

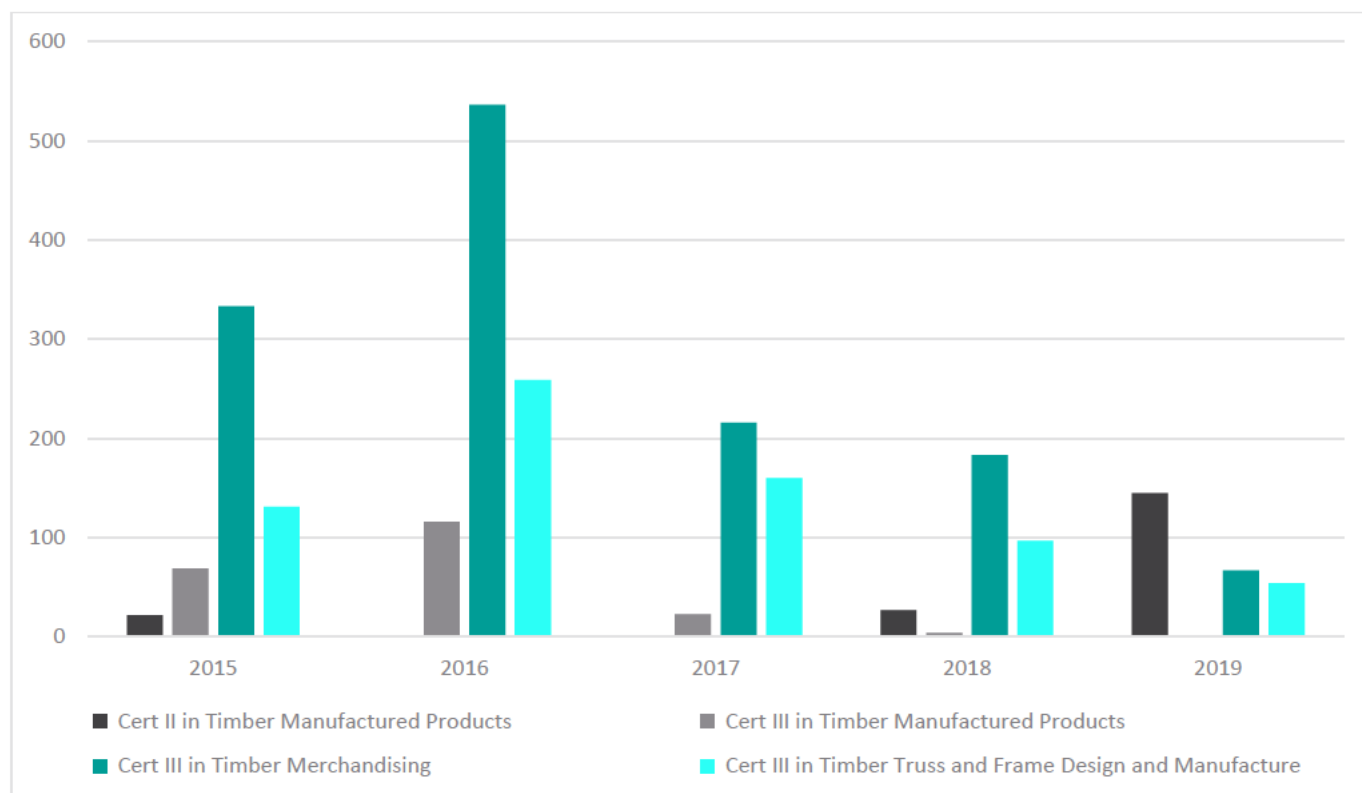
This is an issue which is not unique to NSW. Regional Forest Industry hubs across the nation are grappling with this issue. There are also industry groups working to support traineeships – a good example of this is the Arbre Forestry Hub in Tasmania whose aim is to promote careers in the industry, capture interest, and then support employment through a pre-employment training program.

Another example is LITA Training offering Certificate III in Harvesting and Haulage as traineeships in the Green Triangle area, an area bordering South Australia and south west Victoria, which grows 17% of Australia's softwood.

With the exception of the above and some other programs, the further barrier to employing trainees in these sectors is the availability of RTOs. This is canvassed in more detail below.

The *Timber Merchandising* and *Timber Product Manufacturing* sectors are less regionally based so employers are able to access a bigger pool of potential trainees. There are 2 active industry owned RTOs, Timber Training Creswick and TABMA Training, that are able to service this sector well, but the challenges for RTOs that are identified below are still relevant.

Figure 8 Enrolments in Traineeships in Timber Merchandising and Timber Product Manufacturing, NSW, 2015-2019



Source: NCVER VOCSTATS, TVA Subject Enrolments

Age of skills

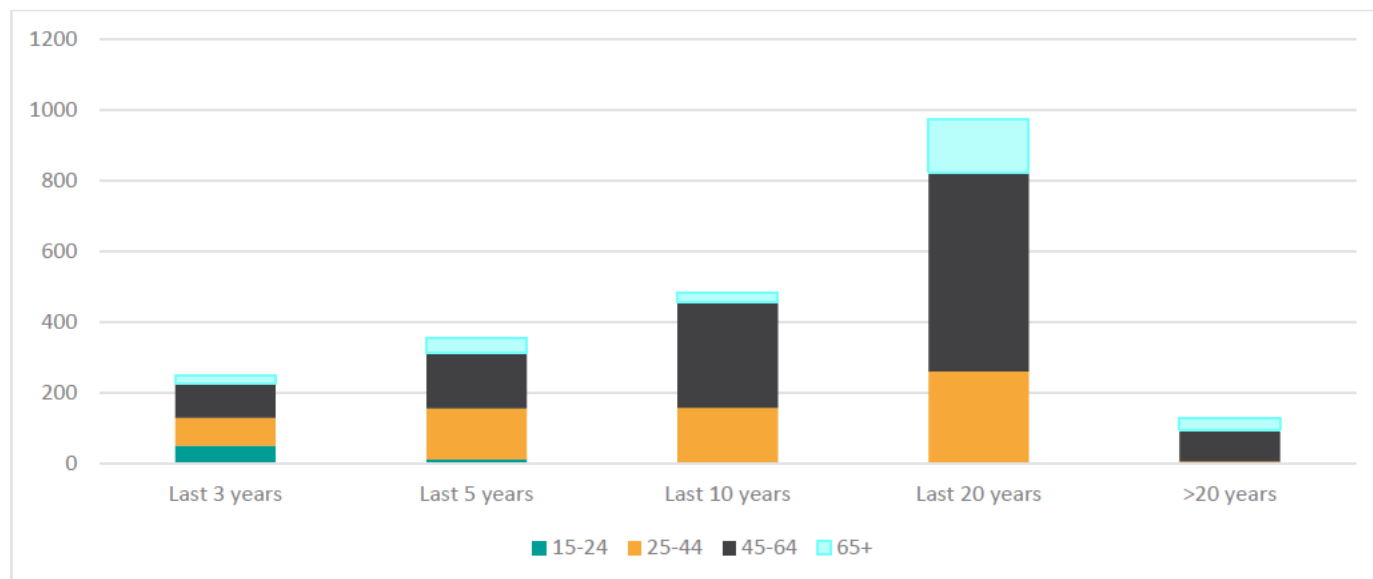
ForestWorks has been able to extract some data from the FOLS database which demonstrates one of the skills challenges for the industry. The FOLS database relates primarily to workers in the harvesting and haulage sectors. As is demonstrated below, the vast majority of skills acquired by current workers in the industry are more than a decade old. This is in part due to the age of the workforce, but even workers in the age bracket 25-44 make up a substantial proportion of the group with skills in this category.

While the FOLS system provides a means of ensuring skills are current, in that they have been used regularly since they were acquired, this does raise questions about the need for additional and updated training in some areas. For example, one third of FOLS holders have not obtained environmental care or occupational health and safety qualifications in the last decade.

Barriers to updating existing skills include the cost of training, access to training, and the availability and flexibility of RTOs in accessing updated training. Smart and Skilled does allow for funding of Part Qualifications in some priority groups or industries. This includes industries that are experiencing skills shortages (of which FWP is one) or industries undergoing economic structural change, needing to retain or upskill workers to adapt to changing markets or to remain viable. The decision for funding is made by a TSNSW regional manager based on the case presented to them. It may be that the uncertainty to funding in this instance is a disincentive for updating skills.

ForestWorks recommends that criteria for subsidies associated with smart and skilled be revisited for the industry to facilitate upskilling for some units of competency or specified skill sets.

Figure 9 When skills were acquired, by age group, NSW FOLS Holders



Source: FOLS database

Training outside of the VET system

Employers are also using non-accredited training. The industry (nationally) has indicated diverse reasons for not using nationally accredited training⁵:

- Belief that in-house training is good enough
- Perceived difficulty in navigating the VET system
- Views that national competencies are not specific to the needs of the business
- Too costly to have employees off the job to undertake training
- RTOs are unable to offer the flexibility that businesses require
- RTOs cannot attract and maintain assessors with the high degree of technical knowledge required for some areas

Non-accredited training is used to support forest certification. Australian forests and forest products are required to be certified to international standards of sustainable forest management. There are 810 Responsible Wood and FSC Chain of Custody Certificates current in Australia along with 66 Sustainable Forest Management and related certificates. Multiple staff usually hold responsibility for developing and implementing the system. It is a critical requirement of the standards that there be adequate training of those responsible for administering and implementing the requirements of them and there is obviously a wealth of expertise within industry. Whilst there are units of competency for these areas in the FWP Training Package, there are no RTOs who specialise in this area.

Non-accredited training is also used in relation to specialist equipment. The advancement in technology in the sawmilling, wood processing and engineered wood products sector often is operationalised by the introduction of extremely large pieces of equipment such as saws, CNC equipment and other machinery and manufacturing systems. Training for this machinery is normally provided by the equipment supplier, often an overseas based

⁵ ForestWorks, (2020) *Improving Enrolments project*, (unpublished)

worldwide company, by trainers that will fly in to provide training, or via virtual modes. Whilst these operations are reflected in the FWP Training Package, the training delivered is not mapped to units of competency or delivered by or in partnership with an RTO.

Industry enterprises also continue to seek out and utilise non-accredited training in the following areas:

- Leadership and management
- Production efficiency such as and including lean manufacturing
- Safety
- Mental health first aid

Skills Needs - the timber and forest products industry in NSW

Forestry Hubs

The Federal Government has provided financial support to establish three Regional Forestry Hubs in NSW as part of the National Forest Industries Plan:

- North East New South Wales;
- Central West New South Wales; and
- South West Slopes.

Each of the hubs is working with industry, state and local governments, and other key stakeholders to undertake strategic planning, technical assessments, and analyses to support growth in the forest industries in their region.

The task of attracting and employing a workforce for the industry is complex and multi-layered, and has been identified in each Regional Forestry Hubs as a strategic area of focus.

Safe and Skilled

Compliance in forestry operations is a significant driver for training.

This will in most cases be against individual units of competency that describe high risk and essential skills such as machinery operations, tree-felling and environmental care.

These requirements are specified to ensure that the workforce is:

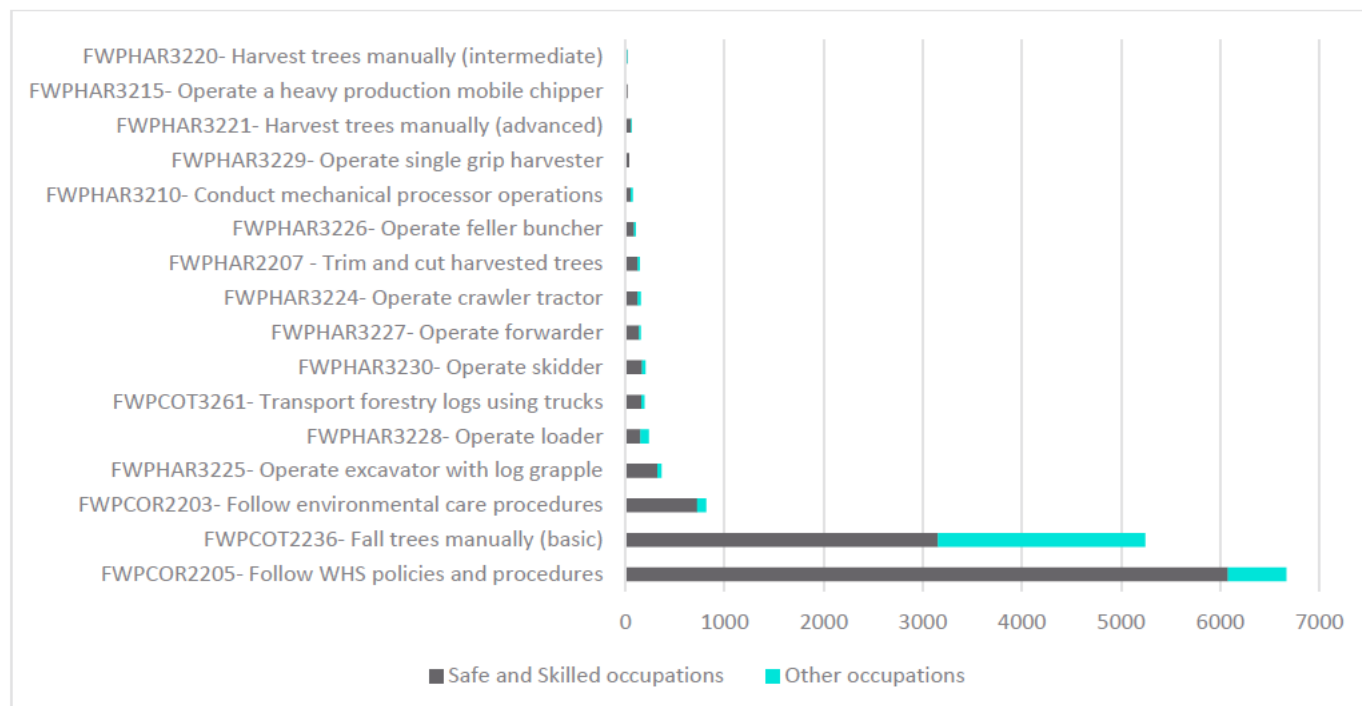
- Undertaking dangerous forestry tasks safely;
- Meeting environmental requirements; and
- Ensuring that contracted businesses have appropriately qualified operators to undertake the work.

Forest Grower members of AFPA and Contractor members of AFCA have adopted the Safe and Skilled charter, which is a commitment to workers holding a statement of attainment of approved nationally recognised units of competency when undertaking tasks involving:

- Driving heavy plant or log trucks;
- Using hand held motorised equipment; or
- Ground based workers working near heavy plant and tree falling operations.

The consequence of this is seen in enrolments in certain units of competency, see Figure 9.

Figure 10 Enrolments in Safe and Skilled Units of Competency, by Occupation, 2015-2019



Source: NCVET VOCSTATS, TVA Subject Enrolments

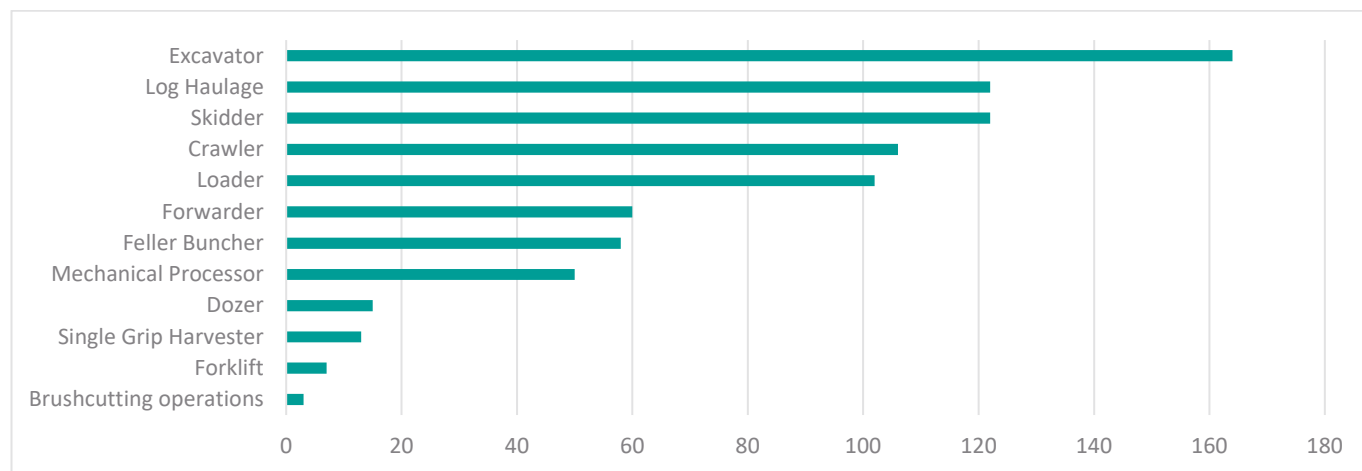
This graph also shows one of the inherent challenges of training in the industry – the small number of people performing highly specialised roles.

This is further explored in the FOLS holders data at Figure 10. Each FOLS holder had an average of 3.5 equipment units per person. The most common units were relating to excavator (70 per cent of FOLS holders), skidder and transport logs (both 52 per cent of FOLS holders). These are also the most enrolled units of competency over 2015-2019 as shown in Figure 10.

There continues to be strong demand for these key skill needs in the industry.

ForestWorks recommends that the NSW Government provide support to industry efforts to attract and train key equipment operators, including log haulage drivers.

Figure 11 FOLS Holders, Endorsed Equipment Skills, NSW, 2021



Source: FOLS database

Trades – Saw Technicians and Wood Machinists

In sawmilling and wood processing, key skills needs relate to the trades of Saw Technicians (Saw Doctors) and Wood Machinists.

People in these jobs impart unique and essential trade skills that are required to sustain the sectors operational and economic success, and by extension, the house building industry.

Australia's sawmills employ around 100 trade-qualified wood machinists and around 80 trade-qualified saw doctors. While few in number, these skilled people are critical to the operation of the industry. For example, there may be only one or two in a sawmill of 50 staff, but they ensure that sawmilling machinery is running efficiently, effectively and with exact precision. Without Saw Technicians, these sawmills would not be able to produce the 4.0 million cubic metres of sawn timber it produces each year, the majority of which is used in the domestic housing market.

These jobs have become more sophisticated over time, especially in the large sawmills. Work activities in contemporary sawmills include:

- Configuration, operation and maintenance of extra-large automated machines for cutting, planing, and profiling timber to specifications;
- Maintenance of saw blades, knives, and guides for the timber sawing machines and other applications
- Conducting inspections, testing and troubleshooting mechanical components on timber sawing machines and other equipment

There are significant challenges in attracting young people into these roles, in part as a result of outdated and incorrect perceptions of career prospects within the trade.

The impact of thin training markets is demonstrated here through there being only one RTO delivering the Wood Machinist qualification and the Saw Technology qualification. It is worth noting that another RTO is seeking to put the latest Saw Technology qualification on scope, but is constrained by the process for materials development within TAFE NSW.

ForestWorks recommends that the NSW Government provide support to industry efforts to attract and train saw technicians and wood machinists.

Firefighting Skills

One of the NSW Bushfire Inquiry recommendations was to align private and public firefighting brigades⁶. The Softwoods Working Group (operating out of Tumut/Tumbarumba) welcomed the recommendation to incorporate private forestry companies as bushfire brigades to improve the operational capacity of firefighting across the board. Companies like Hume Forests have significant resources of highly trained and skilled personnel and heavy machinery.⁷

As a result of the 2020-21 fire season, inquiries were conducted by the Federal Government⁸ and the State Governments in New South Wales⁹, Victoria¹⁰ and Queensland¹¹. There were a number of relevant findings in terms of training:

- Nationally accredited training is critically important;
- Forestry workers and their equipment are vital to bushfire preparedness and response;
- Mechanical hazard reduction is important, and will become increasingly so; and
- Incident management training requires improvement.

The industry, as represented by the Forest Management and Harvesting Industry Reference Committee, has identified a need for a review of skills related to:

- forestry skills for fire fighters; and
- fire-fighting skills for forestry operators.

Innovation Training

The Australian Office of the Chief Economist has found that “persistent innovators significantly outgrow [other businesses] in terms of sales, value added, employment and profit growth”. The Productivity Commission has found that training and innovation are associated with strong labour productivity growth.

The North East NSW Forestry Hub has identified workforce skills as a priority, including “high order and broad-based skills” to support innovation. The Government’s Forestry Industry Roadmap and North Coast Forestry Roadmap has also identified industry innovation as a key priority. The REDS for Clarence Valley and Nambucca have both identified the need to “support initiatives that drive long-term productivity and innovation in forestry industry”.

However, there is no training available locally to support industry innovation.

ForestWorks recommends that the NSW Government provide support to develop forestry specific innovation training courses to provide local access to skills required:

- **Identify opportunities to stimulate innovative thinking**

⁶ Timberbiz (2020); Softwoods group wants stronger government and private forests bushfire partnerships; <https://www.timberbiz.com.au/softwoods-group-wants-stronger-government-and-private-forests-bushfire-partnerships/>

⁷ Ibid.

⁸ Binskin, M., et al., (2020), *Royal Commission into National Natural Disaster Arrangements Report*, available at <https://naturaldisaster.royalcommission.gov.au/>, last accessed 17/12/20

⁹ Owens, D. and O’Kane, M., (2020), *Final Report of the NSW Bushfire Inquiry*, available at <https://www.dpc.nsw.gov.au/assets/dpc-nsw-gov-au/publications/NSW-Bushfire-Inquiry-1630/Final-Report-of-the-NSW-Bushfire-Inquiry.pdf>, last accessed 17/12/20

¹⁰ Inspector-General for Emergency Management (2020), *Inquiry into the 2019-20 Victorian fire season*, available at <https://www.igem.vic.gov.au/fire-season-inquiry/inquiry-reports/inquiry-phase-1>, last accessed 17/12/20

¹¹ Inspector-General Emergency Management (2020), *Queensland Bushfires Review Report 2:2019-20*, available at <https://www.igem.qld.gov.au/queensland-bushfires-review-2019-20>, last accessed 17/12/20

- Develop and support a culture of innovation
- Implement and innovation to support forestry best practice

Improving Access to Training for the Timber and Forest Products Industry in NSW

In order to access nationally accredited training three elements need to align – Registered Training Organisations with the Qualifications (and relevant units of competency) on scope; suitably qualified trainers and assessors; and appropriate materials.

Registered Training Organisations with Qualifications on Scope

There are two training packages which provide for nationally recognised qualifications for the Timber and Forest Products industry:

- FWP – Forest and Wood Products
- PPM – Pulp and Paper Manufacturing

The Forest and Wood Products Training Package provides for 19 Qualifications, from Certificate I to Advanced Diploma level. The Pulp and Paper Manufacturing Training Package provides for 7 Qualifications from Certificate II to Diploma level.

Training Package qualifications and units of competency are developed for and in consultation with industry. A rigorous process involving the Australian Industry Skills Committee (AISC) and State Training Authority determines whether the industry has demonstrated a need for the qualification or unit of competency.

The forestry qualifications and competency standards are presently being redeveloped to ensure that forestry workers have the practical and contemporary knowledge and skills to work in Australia's dynamic commercial forestry industry. Similarly, the qualifications for pulp and paper manufacturing are also being revised to reflect the evolution of industry job roles and skill requirements.

This means that training providers will need to adapt to these new training demands and build capacity to deliver the new qualifications and a significant number of new and updated competency standards.

For example, the new training package for forestry jobs will contain 29 new units of competency in forest nursery production, digital data collection and analysis, forest inventory, growth modelling, forest valuation, supply chain, forest ecology and biodiversity.

These changes will have a substantial impact on training providers and, if assistance adapting cannot be obtained, will impact the industry's ability to get training that reflects the current needs of the industry.

After the units of competency are created, there is no process for ensuring those competencies or qualifications are delivered by a Registered Training Organisation (RTO).

Before a new qualification is put on an RTO's scope, the RTO must take a number of steps:

- Development of any new learning and assessment resources, validated by the industry;
- Develop a Training and Assessment Strategy for over-arching delivery of the qualification, including industry consultation and endorsement;
- Application to ASQA to add the qualifications.

In most industries, this does not create any issues. However, the characteristics of workers in the Timber and Forest Products industry means that it is not necessarily commercial to offer all qualifications, or all units of competency. There is not a regular pipeline of enrollees because:

- The small number of employees, often operating in highly differentiated roles;
- Low attrition rates and the small number of new entrants in any given period; and
- The geographic dispersion across (predominantly) regional and remote New South Wales.

RTOs struggle to offer viable training delivery in regional areas where timber and forest products-related businesses are located. Additional costs, such as adhering to industry regulation and safety requirements and travelling to dispersed workplaces, have been prohibitive for many RTOs. As a result, there are few RTOs that have FWP qualifications on scope.

Low attrition rates in the industry contribute to the often-low volume of learners undertaking training. This means that RTOs travelling often long distances to train and assess often small cohorts of learners “on the job” (which is often the preference of both employers and employees due to the need to train on specific equipment and for production to continue) is often not viable for the RTO.

According to training.gov.au, there are 21 Registered Training Providers (RTOs) that carry at least one FWP qualification on their scope of registration. The seven RTOs that are active in NSW and the 16 qualifications they have on scope are outlined in Table 1. Neither the Advanced Diploma of Forest Industry Sustainability nor the Certificate I in Forest and Forest Products are on scope for delivery in NSW.

FWP Qualifications are funded under Smart and Skilled on the following bases:

- Entitlement Full Qualification;
- Targeted Priorities Full Qualification;
- Apprenticeship; or
- Traineeship.

All but two¹² of the FWP Qualifications on scope in NSW are funded under Smart and Skilled. Five of the seven RTOs have been endorsed by the NSW Government to deliver 12 qualifications under Smart and Skilled. These are shown in light grey in Table 1. Even though most qualifications are available to be delivered under Smart and Skilled, not all providers offer all qualifications under Smart and Skilled, and not on all bases. This is because an RTO has to apply to deliver a qualification, apprenticeship, or traineeship under Smart and Skilled.

For example, the Certificate III in Harvesting and Haulage is funded under Smart and Skilled on both an Entitlement Full Qualification Basis and as a Traineeship. It is also on scope to be delivered by five RTOs. However, only two of those RTOs are approved to deliver it under Smart and Skilled as a Traineeship, and only one is approved to deliver on an Entitlement Full Qualification Basis.

Table 1 shows the funding source for qualifications. The largest number of enrolments is in the Certificate II Forest Growing and Management but only one RTO in NSW offers the qualification (as a traineeship) using Smart and Skilled funding. The second largest number of enrolments is in the Certificate III in Timber Merchandising which is offered as a traineeship under Smart and Skilled and where all training is Government funded.

¹² FWP20216 Certificate II in Harvesting and Haulage and FWP40216 Certificate IV in Timber Processing

ForestWorks Submission

Table 1 Registered Training Organisations with FWP Qualifications on Scope in NSW, and Qualifications delivered by RTOs under Smart and Skilled

FWP Qualifications	Total National RTOs with Qualifications on Scope	Timber Training Creswick	TABMA Training (FITEC)	Southern Training Organisation Pty Ltd	Intrain National Training Academy	TAFE NSW	ABC Training & Consulting	Hive Training Solutions/Walan-Miya
	* Just because an RTO has the qualification on scope does not mean they are delivering the qualification.	Operate Nationally	Operate Nationally	Based in Eden. Mainly chainsaw training and mainly in NSW.	Very small RTO and operating locally in Southern NSW.	Operate in NSW only.	Only known to be working with Sunchip at this stage (Qld)	Operate in NSW only.
Total Qualifications on Scope*		16	12	6	4	4	2	1
FWP30216 - Cert III in Harvesting and Haulage	13					EFQ/T	T	
FWP20116 - Cert II in Forest Growing and Management	11							T
FWP30116 - Cert III in Forest Growing and Management	11							
FWP20216 - Cert II in Harvesting and Haulage	9							
FWP40116 - Cert IV in Forest Operations	5					T		
FWP20516 - Cert II in Timber Manufactured Products	4		T					
FWP30316 - Cert III in Sawmilling and Processing	4	T	T					
FWP50116 - Diploma of Forest and Forest Products	4							
FWP40216 - Cert IV in Timber Processing	3							
FWP20316 - Cert II in Sawmilling and Processing	2					EFQ/T		
FWP30516 - Cert III in Timber Manufactured Products (Job Trainer)	2		T					
FWP30616 - Cert III in Timber Merchandising superseded by	2	T	T					
FWP30620 - Cert III in Timber Building Products Supply								
FWP30716 - Cert III in Sawdoctoring superseded by	2	A				A		
FWP31019 - Cert III in Saw Technology		A						
FWP30916 - Cert III in Timber Truss and Frame Design and Manufacture superseded by	2	T	T					
FWP30920/FWP31220 - Cert III in Timber Truss or Frame Manufacture/ Timber Systems Design								
FWP40416 - Cert IV in Timber Truss and Frame Design superseded by	2		TPFQ/T					
FWP40420 - Cert IV in Timber Systems Design			TPFQ					
FWP30816 - Cert III in Woodmachining superseded by	1	A						
FWP31119 - Cert III in Wood Machining		A						

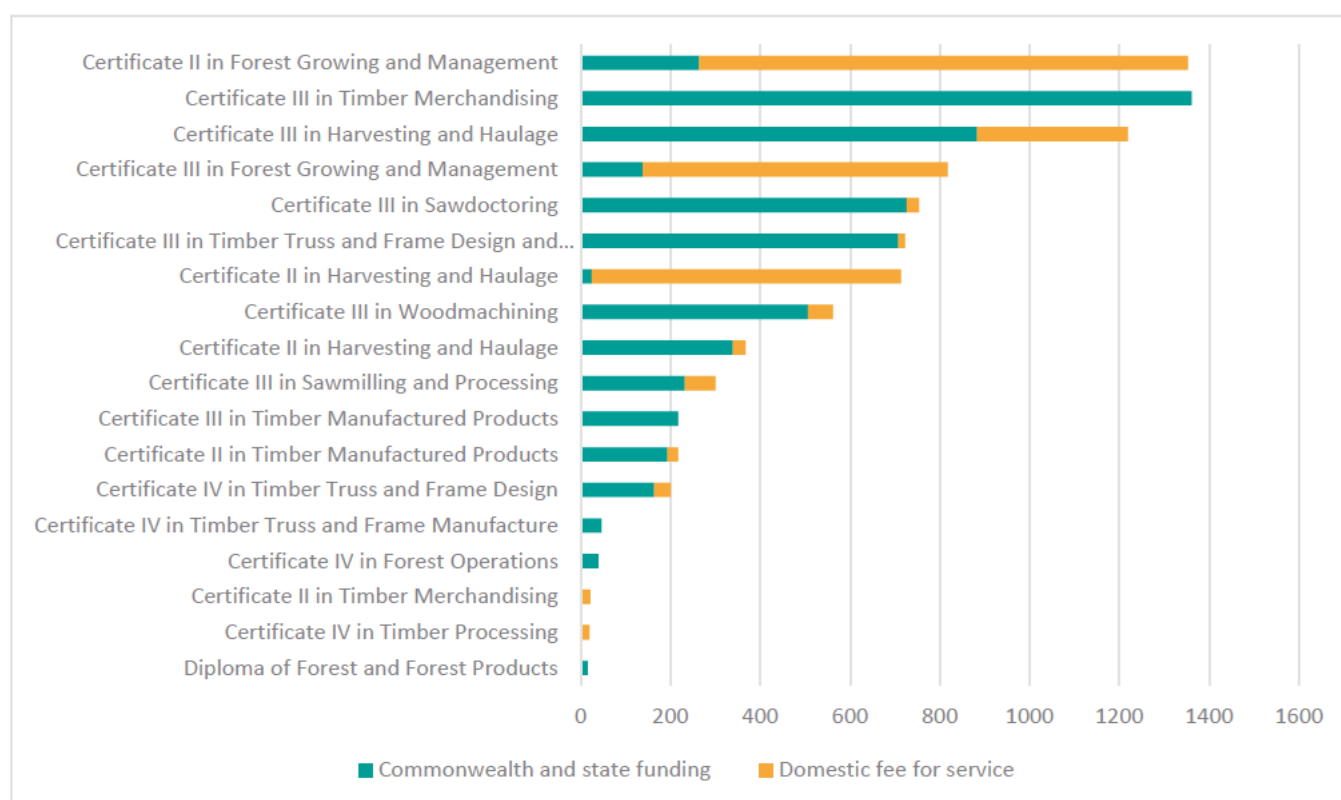
The reason for the disparity is not obvious, but it would seem that industry is missing out on access to subsidised training.

Employers (nation-wide) have cited the reasons for using un-subsidised training as:

- Learners not being eligible for government subsidised training places
- Employers believing accessing the government subsidies is too complicated
- Employers being unable to access the funding in the 3 months timeframe allowed (enrolling a student in a qualification before their probation period ends to gain the benefit from pay roll tax concessions is often not attractive to employers)
- Employers prefer accessing skill sets to make a worker job ready, where a full qualification is not necessary

RTOs (nation-wide) have reported that government subsidies have decreased in real terms from 2006 onwards, impacting their viability to deliver government funded training.

Figure 12 Number of Enrolments in FWP Qualifications by Funding Source, 2015-2019



Source: NCVET VOCSTATS, TVA subject enrolments, 2015-2019

Other qualifications may be delivered on a fee for service basis.

There are no RTOs operating in NSW (or Australia-wide) which offer qualifications under the PPM Training Package.

ForestWorks recommends that the NSW Government provide financial support or incentives for RTOs to ensure that the full range of qualifications can be accessed by the NSW industry.

Workplace trainers and assessors

One of the challenges for the Forest and Forest Products Industry in accessing nationally accredited training is the difficulty RTOs have in attracting and maintaining assessors with the high degree of technical knowledge required by the industry.¹³

Changes to the requirements for the TAE40116 Certificate IV in Training and Assessment (Training and Education) qualification in 2019, has stymied the long-used and successful model of training delivery in the Forest and Forest Products Industry.

As of 1 July 2019, a trainer and assessor must hold units of competency related to addressing adult language, literacy and numeracy skills and the design and development of assessment tools.¹⁴ That person must also have vocational competencies to the level being trained and current industry skills directly relevant to the training and assessment being provided. Someone who does not hold the required qualifications must work under the supervision of a trainer and assessor who does hold the required qualification and the vocational and industry skills.

While this may seem like an appropriate foundation for quality vocational training and education, it has had unintended consequences for industries like the timber and forest products industry.

Up until the change, RTOs partnered with workplace trainers and assessors to conduct nationally recognised training.

An RTO was able to partner with a business to set up the program, and attend the workplace regularly to provide additional learning, support and to formalise assessments. In most cases employees training would occur primarily on-the-job; with some learning, mostly soft skills such as communication and teamwork, happening off-site.

The RTO would provide expertise and support for addressing LLN and for designing and developing assessment tools. The workplace assessor was able to focus on teaching the technical skills and knowledge required to achieve the competency in specific work functions.

The benefits of the FWP Training Package being delivered through a partnership between employers, workplace trainers and assessors and an RTO were:

- it allowed the RTO to visit periodically – in a thin market the RTO cannot get to all the places they need to go because of the geographically dispersed nature of the industry;
- it allows RTOs and employers to use the enterprises' own equipment;
- it accommodates and addresses the small number and low turnover of people employed in the industry, resulting in a lack of scale;
- allows for specific training relevant to the worksite;
- encourages and provides a framework for industry experts to share their knowledge;
- it reduces the time required for the employee to be off-site.

¹³ ForestWorks, (2020) *Improving Enrolments project*, (unpublished)

¹⁴ ASQA, (2019) *Fact sheet – Meeting trainer and assessor requirements*, https://www.asqa.gov.au/sites/default/files/2020-01/FACT_SHEET_Meeting_trainer_and_assessor_requirements.pdf

The NCVET has found that “there is low support for... adding to the entry requirements to VET teaching due to the deleterious effects of the recent TAE upgrade on the VET teaching workforce, with some respondents reporting that it may have contributed to teachers exiting the system.”¹⁵

Consultations and interviews with the timber and forest products industry and RTOs servicing the industry have found that there are workplace trainers and assessors who are no longer delivering in the industry. TAFE NSW reported that they lost 15 workplace trainers and assessors that they had arrangements with, and that NSW Department of Primary Industries (DPI) had lost over 40 of their workplace trainers and assessors through individuals electing not to undergo and then maintain additional requirements under the TAE.

The previous successful model did have some risks:

- the learners and the employers need to feel that they are learning and developing skills. If the RTO is seen to be only turning up to “tick and flick” – the learner and the employer will start to question the value of the training
- workplace trainers and assessors need to ensure that their skills are up to the task. Whilst the IRCs and industry believe that the increased requirements of the TAE are overly onerous, it is also acknowledged that there is a need for trainers and assessors to possess skills in identifying language, literacy and numeracy issues and development of assessment tools, however responsibility for undertaking these should rest with the RTO overall.

However, ForestWorks view is that it would be preferable to adopt a targeted solution to addressing those risks, rather than making the TAE requirements so onerous as to preclude access to nationally accredited training.

PwC’s Skills for Australia (which is responsible for updating the TAE Training Package) put forward a proposal to the Australian Industry and Skills Committee on 20 April 2021 to review and update the TAE Training Package to “complement work already underway to develop a VET Workforce Quality Strategy”.

ForestWorks recommends that the NSW Government adopt a position in relation to the next review of the TAE Training Package which ensures that changes eliminate the barriers to formal skills development in the timber and forest products industry imposed the last time the training package was reviewed.

Training materials

The 19 Forest and Wood Products qualifications comprise 281 units of competency. The 7 Pulp and Paper Manufacturing Qualifications comprise 80 units of competency.

Before a unit of competency can be delivered to learners, the RTO requires:

- Trainers who are currently competent in the skill they are training and assessing in; trainers need to ensure they maintain currency in the skills which can involve needing to access industry placement, access to specialised machinery and significant amounts of professional development activity.
- A training and assessment strategy - a document on how the training will be delivered, over how long, classroom or field based, etc

¹⁵ Building capability and quality in VET teaching: opportunities and challenges Josie Misko National Centre for Vocational Education Research, 2020, available online @ https://www.ncver.edu.au/_data/assets/pdf_file/0033/9662271/Building_capability_and_quality_in_VET_teaching_opportunities_and_challenges.pdf

- A set of learning and assessment materials that meets ASQA requirements under the Standards for Registered Training Organisations (RTO)s
 - Learner Guide
 - Assessment Tool – which includes tasks and activities to ascertain a person’s competency and includes a tool, a marking guide and a document that maps the assessment to the unit of competency.

The above products also need to be validated by industry.

Units of competency are reviewed approximately every 3-4 years. The changes to a unit can range from minor updates to major change and cover a range of reasons:

- Incorporation of new technology;
- Changes to work functions and processes;
- Incorporation of new applicable legislation and policy related to the work function;
- to meet revised government policy on the development of units and qualifications as set out in the *Standards for Training Package Development*.

The need to update materials when the unit is updated can be a significant impost on RTOs operating in smaller industries like the timber and forest products industry. For TAFE NSW in particular, the development or update of training materials for the timber and forest products industry is in competition with the development or update of training materials for other agricultural industries. The consequences of this are that new qualifications and industry preferred units of competency can take some time to be available after they are developed.

Example: Wood Machining and Saw Technology

The industry’s apprenticeship and traineeships programs for these trades are supported by two qualifications: the Certificate III in Wood Machining and the Certificate III in Saw Technology. In 2019 these qualifications were substantially overhauled as a result of significant technological change since the previous review. 4 new units of competency were required to be developed and 48 units of competency updated as a result of these changes. For example, the new components address knowledge of sawmill operations and techniques for optimising timber output for volume and value recovery. They also cover skills in the operation of advanced technology, notably CNC machines used for grinding, tensioning, and leveling circular and band saws.

The small number of people who undertake these jobs roles in the timber processing sector and their dispersion across regional Australia; makes it challenging for RTOS to deliver these qualifications on a commercial basis.

As a result of the significant changes to the Saw Technology qualification, and the constraints on materials development within TAFE NSW, the number of RTOs with the new qualification on scope has reduced from two to one.

Impact of bushfires and potential transition issues

The softwood plantations in and around Snowy Valleys region suffered unprecedented damage as a result of the Dunns Road fire.¹⁶ Close to half of NSW softwood plantations are in this area and around a third of these plantations have been impacted by fires: 33,000 ha of Forestry Corporation NSW plantation timbers and 8,000 ha

¹⁶ Australian Forest Products Association (AFPA) 2020, *Submission to the Royal Commission Into Natural Disaster Arrangements* <https://ausfpa.com.au/wp-content/uploads/2020/04/AFPA-Royal-Commission-Submission-Final.pdf>

of private softwood plantations.¹⁷ The areas impacted range from newly established plantations that were planted within the past 12 months to mature 40-year-old trees ready for harvest.¹⁸

A significant portion of the softwood plantation estate was lost in the fires. The sustainable yield of the mature resource will be reduced by as much as 40% for the next 25 years, until the replanted forests are ready for harvest. This will have a significant impact on supply in the Region, although the precise impact will take some time to assess.¹⁹ The loss of resource flows through to harvesting and haulage contractors, sawmills and value adding plants and timber traders.²⁰

The salvage harvesting of plantations which has been taking place since the fires has disguised and delayed the impact on employment, particularly amongst harvesting and haulage contractors. Harvesting and haulage contractors have been faced with the conundrum of needing to retain their existing workforce at high activity levels to manage timber salvage, knowing that when the timber is no longer salvageable, there would be significantly reduced opportunities for employment.

Retendering has recently occurred for harvesting and haulage, with available work at about 40-50 per cent of previous volumes with a commensurate impact on employment.

The significant reduction of resources will see at least 50 direct jobs lost amongst the contracting workforce in the next 6 months. A number of contractors have been advised that their contracts are not being extended, and contracts that are being awarded are receiving significantly smaller allocations. Many contractors are facing significant debt and no employment.

The NSW and Federal Governments have provided funding under the Bushfire Industry Recovery Package to a number of processors; however, it is not clear the extent to which these will support employment given the significant loss of resource (see Figure 12). For example, Hyne has reportedly lost 40 per cent of their feedstock and while they have received funding for mill optimisation, without additional support to divert sawlogs from export markets, jobs at Hyne will be affected.²¹

Further, at this stage, no support has been provided to the harvesting haulage contractors who have been affected by the fires. Additionally, no support has been provided to harvesting and haulage contractors in the hardwood sector in the South Coast and Eden Area despite harvest levels falling to below one third of pre fire levels due to increased regulation and the impact of the fires according to evidence provided by Forestry Corporation to the NSW parliament.²²

Forestry and timber processing is the largest employing sector in the Snowy Valleys Council region and considered to be an engine industry. As a result of the fires, Snowy Valleys focus areas required restructuring including to adapt industry and industry skills; and to consider how to transition appropriately given evolving skills requirements from re-adjusting forestry industry and recovery effort. Training and remobilisation of skilled and unskilled workers in the forest and forest products industry post-fire and provides an option to adapt industry

¹⁷ Forestry Corporation NSW (a), 2020, *2020 Bushfire Recovery*, available at <https://www.forestrycorporation.com.au/operations/fire-management/2020-bushfire-recovery> last accessed 16 July 2020.

¹⁸ Forestry Corporation NSW (a), 2020, *loc. cit.*

¹⁹ Forestry Corporation NSW (b), 2020, *2020 Bushfire Recovery*, available at <https://www.forestrycorporation.com.au/operations/fire-management/2020-bushfire-recovery> last accessed 20 January 2021.

²⁰ Timber NSW, 2020, *Submission to the Royal Commission into Natural Disaster Arrangements*, available at <https://timbernsw.com.au/wp-content/uploads/2020/05/Timber-NSW-Submission-to-Royal-Commission-into-Natural-Disaster-Arrangements-April-2020-2.pdf>, last accessed 21 July 2020

²¹ Timberbiz, 2021, *Not all NSW timber industry affected by China ban*, available at <https://www.timberbiz.com.au/not-all-nsw-timber-industry-affected-by-china-ban>, last accessed 20 January 2021

²² ANSHUL CHAUDHARY, Acting Chief Executive Officer, Forestry Corporation, PORTFOLIO COMMITTEE NO. 4 - INDUSTRY Friday, 26 February 2021, 15 available at <https://www.parliament.nsw.gov.au/lcdocs/transcripts/2520/Transcript%20-%2026%20February%202021%20-%20CORRECTED%20-%20PC%204%20-%20Regional%20New%20South%20Wales%20Industry%20and%20Trade%20-%20Barilaro.pdf>

skills post-salvage. Providing skills development support for workers exiting the forest and timber industry are likely to end up in other engine industries in the region, further enhancing the regional recovery.

There are opportunities in the region in resource management, silviculture and fire and disaster prevention and preparedness, as well as Snowy 2.0 and TransGrid, but skills audits, skills recognition and upskilling are required to maximise opportunities for the industry, and to retain skills in the community.

Without intervention the effects of contraction in the industry will fall directly on forestry and timber businesses and workers and flow through the Snowy Valleys community.

Forestworks recommends that the NSW Government provide support to Snowy Valley workers and businesses displaced from the forest and wood products industry to formally recognise their skills and provide support to find new roles in the region.

Figure 13 Support to the Timber and Forest Products Industry impacted by the Bushfires

Eden's South East Fibre Exports will receive \$2,249,679 from the Commonwealth Government "to replace fire-damaged, aged and obsolete high-voltage infrastructure to ensure electricity supply to all parts of the site is reliable".¹ This is in addition to \$945,240 from the NSW Government for the power upgrade. Despite the impact of the fires, Eden has managed to export 785,000 tons of wood product in 2020, primarily salvaged plantation and native timber.¹

The Tumut-based operations of AKD NSW will receive \$5.5 million to adopt the latest technology and equipment to ensure logs are cut more efficiently and effectively. The project will deliver an 8% increase in timber recovery, generating more timber from the scarce log resource.¹ This is in addition to \$10 million for Project Corner received from the NSW Government.¹

Hyne & Son's manufacturing plant in Tumbarumba will receive \$3,508,474 to deliver better resource management practices through innovation, upgraded efficiencies and new technology to assist in offsetting an increase in manufacturing costs. ¹ This is in addition to \$2,989,522 received from the NSW Government for the Tumbarumba Mill Optimisation Project.¹

The VISY Industries Australia Tumut Mill will receive \$3,103,177 to provide significant upgrades to various parts of the mill to maintain and secure commercial mill operations in the future. ¹ This is in addition to \$10 million received from the NSW Government to "secure the future of 1,200 manufacturing jobs".¹

The NSW Government is accelerating its tree planting program to 12.5 million new trees (planted by hand) each year for eight years from 2021. Forestry Corp has expanded its nurseries to meet the increased demand. Private plantations are also increasing their planting for the next two years. This will facilitate recovery of the plantation estate.¹

With support of all levels of Government, Pentarch are establishing a briquette plant at the Allied Natural Wood Exports Eden which will produce around 8,000 tonnes of briquettes for domestic use by compressing and packaging wood processing residues. The new plant is planned to be operational by April 2021.¹