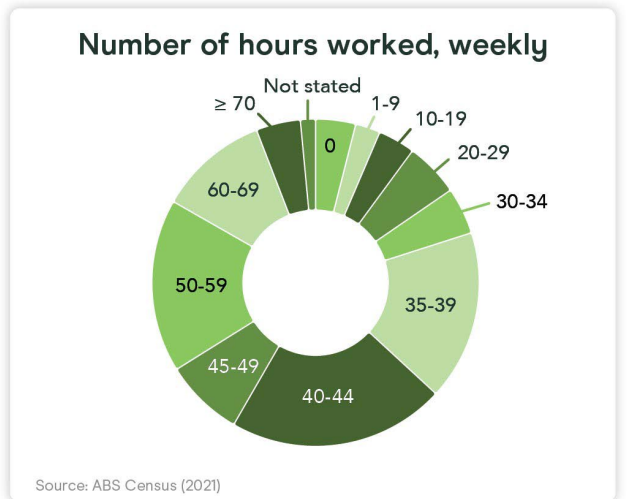
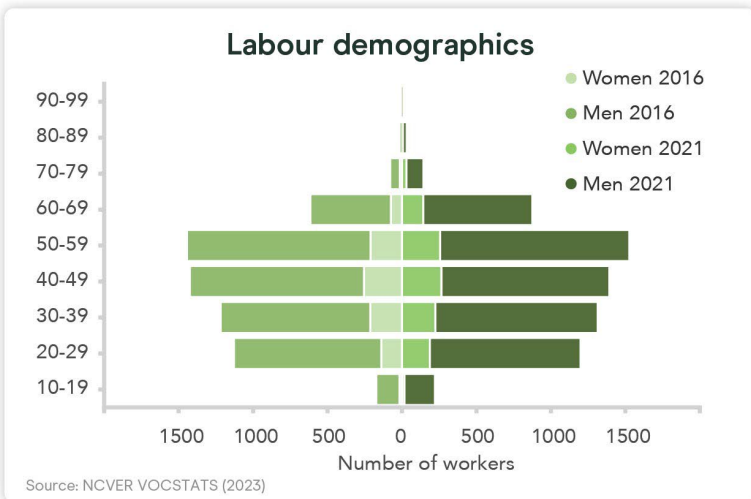
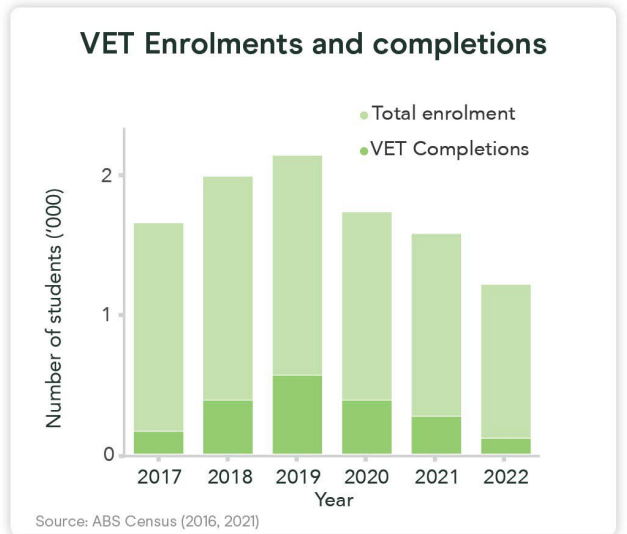
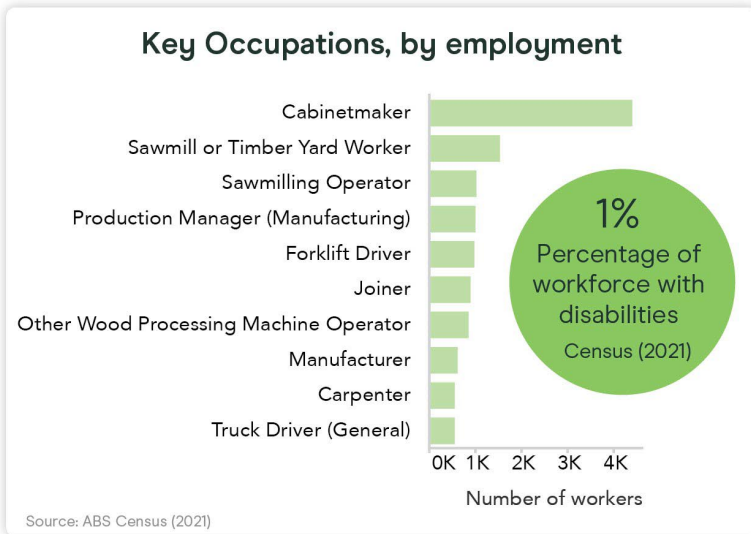
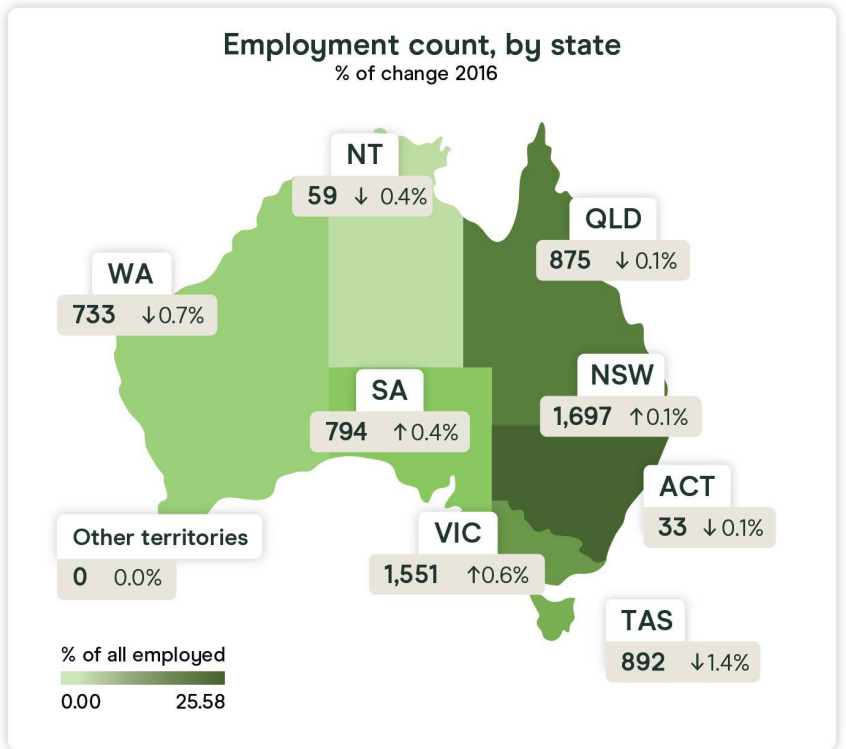


3.9. Forestry and Logging

Forestry and Logging



ANZSIC A0301, A0302



3.9.1. Industry sectors (ANZSIC Classes)

- Forestry
- Logging

Key insights from industry sector infographic and other data	Priority
Labour shortages	High
Declining enrolments in VET programs and completions	High
Lack of workforce diversity	Medium

The forestry workforce is responsible for the management of industrial plantation estates, native forests and farm forests, while logging operations fell, cut and/or hew logs into products such as railway sleepers. Expert skills are required to meet the various challenges of managing forests sustainably and mitigating the effects of disasters, such as bushfires, as well as utilising data and digital technologies to undertake planning and certification activities. Logging workers use specialist tree felling and log loading equipment, chainsaws and automated heavy machinery, including mechanical harvesters, debarking and de-limbing machines, excavators and log grab machines, forwarders and skidders.

The skills and knowledge applied by people in this specialised workforce are detailed in the National Training Register, including in the Certificates II, III, IV and Diploma of Forest Operations.

Below are examples of units of competency, which sit within these qualifications, that are unique to the skills and knowledge applied by competent workers in *Forestry and Logging*:

Unit title	Unique skills and knowledge
Conduct tree hazard assessment post-fire (FWPFIR4001)	This unit applies to individuals authorised by emergency management agencies to conduct hazard assessment of fire-affected or -damaged trees during the early stages of bushfire recovery and make recommendations on risk treatment.
Apply sustainable silviculture treatments (FWPSIL3001)	This unit applies to individuals who assess tree condition and select and apply sustainable silviculture treatments to meet environmental and production requirements in plantation and native forest settings.
Contribute to and implement a forest regeneration plan (FWPFOM5004)	This unit applies to individuals who contribute to the planning and implementation of the regeneration or revegetation of an area of forest for timber production.
Plan for and coordinate construction of log landings and snig tracks (FWPCOT4216)	This unit applies to individuals who plan for and coordinate the construction of log landings and snig tracks in a forest or farm forest setting.

3.9.2. Drivers of workforce dynamics

Labour shortages

The National Skills Commission's 2022 Skills Priority identified state-based and regional shortages in the following occupations:

- Forestry Worker
- Forester / Forest Scientist
- Logging Assistant
- Senior Aquaculture, Crop and Forestry Workers nec
- Forestry Operations Supervisor
- Tree Worker

Addressing shortages in the Forestry and Logging industries may involve actively attracting more women to the workforce. Despite a 2% rise from 2016, women accounted for only 17% of workers in 2021. Participation by First Nations peoples is increasing, rising by 1.4% between 2016 and 2021.

Native timber harvesting ending in Victoria and Western Australia

In Victoria and Western Australia, businesses across the forest and wood products value chain are preparing for native timber harvesting to be discontinued from 2024.

The 2022 Victorian Skills Plan reported on industry concerns over displaced workforce and the supply of timber in Victoria for key products into the future. The Victorian Government has published a range of support mechanisms for workers, businesses and communities.⁴⁷ This includes the Victorian Forestry Worker Support Program, delivered by ForestWorks, which will deliver support through 1:1 case management. ForestWorks will support workers in accessing training and reskilling opportunities, formalising skills through recognition of prior learning (RPL) and current competencies, finding employment (e.g. matching workers to jobs in their local area), and providing information on a range of social support initiatives.

In Western Australia, the state government will also end native timber harvesting from 2024. The decision is part of the state's upcoming Forest Management Plan 2024-33. The announcement also included \$350 million to expand Western Australia's softwood timber plantations.

While the Victorian and Western Australian state governments have committed to increase support and funding to further the development of plantation forestry, there is widespread industry concern over:

- the future supply of timber
- the impact on regional businesses across the value chain
- the impact on regional communities previously sustained by native forestry value chain operations.

Machinery and operations used in native timber harvesting are not readily interchangeable with machinery and operations used in plantation forestry, and there is concern for the impact on businesses due to the loss of investment. It is further important to identify all value chain interdependencies because of the impact that changes in one sector can have on connected sectors, including up- and downstream supply chain industries and local communities.

Challenges for workforce planning include that 'native forestry' is not identified as a unique ANZSIC Class independent of general 'forestry' and it is therefore difficult to quantify and locate the workforce being displaced and potentially in need of reskilling or upskilling. This point is discussed further in the 'data and evidence gaps' section below.

Digital and automation practices

Digital and automation practices are already firmly embedded in the forestry and logging industries. Specific technologies that have been identified as impacting employment in the sector include drones, scanners, laser scanners, cutters and finishing systems, plant genomes, block-chain applications, big data analytics, and new technologies, such as digital maps, which are changing industry skills requirements.⁴⁸

Forestry and Logging Summary

Workforce challenges

- Labour shortages.
- Workforce diversity and culture: gender disparity, ageing workforce, long working hours.
- Declining VET qualification enrolments and completions.

Key evidence gaps

- Quantifying the 'native forestry' industry workforce, especially in VIC and WA.

Workforce planning priorities

- Support and contribute to existing industry strategies and resources, notably by ForestWorks, aimed at addressing skills and labour shortages. **(2b)**
- Support industry to attract a diverse workforce to address imbalances and labour shortages. **(2d, 4b)**
- Support upskilling and re-skilling opportunities for displaced native forestry workers. **(3b)**
- Participate in reviews of the ANZSCO and ANZSIC by the Australian Bureau of Statistics (ABS). **(1a)**
- Develop nationally consistent assessment and training tools for selected qualifications in the *FWP Training Package* to support training delivery. **(3c)**
- Review three units of competency that describe the skills for manual tree felling to determine the number of trees an individual must fell in order to demonstrate competency. Solutions will consider the safety and competence of all learners, accessibility of resources, competency development and training resources. **(3a)**