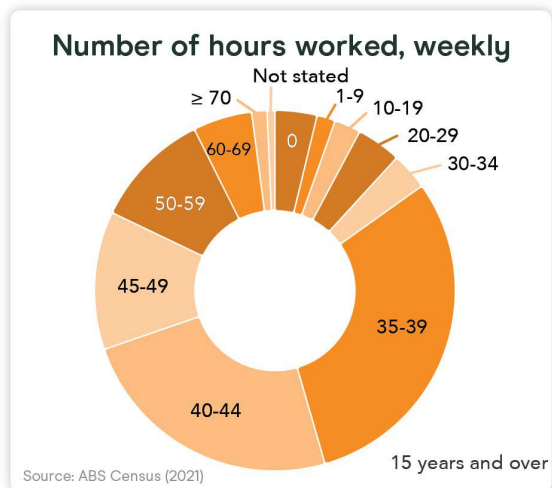
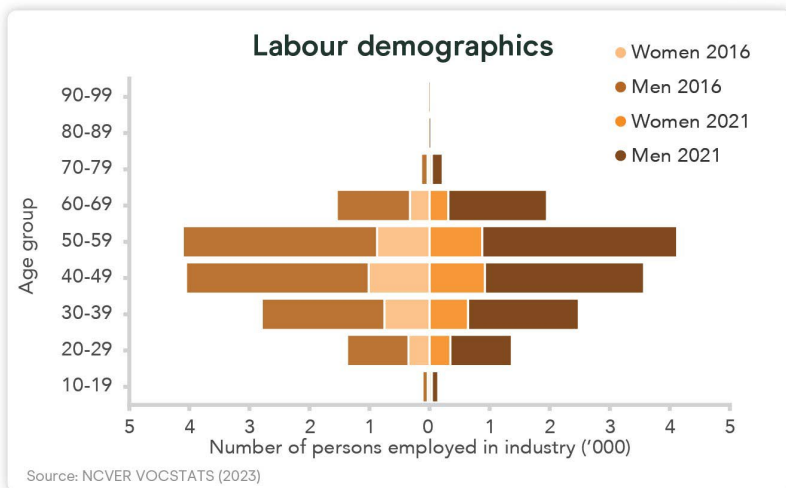
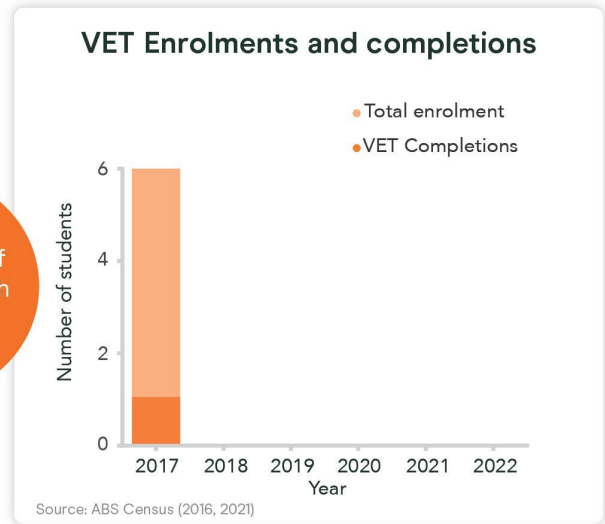
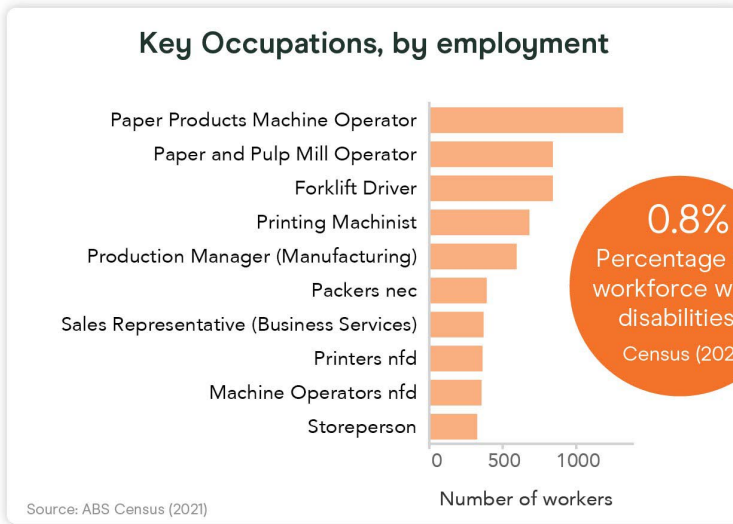
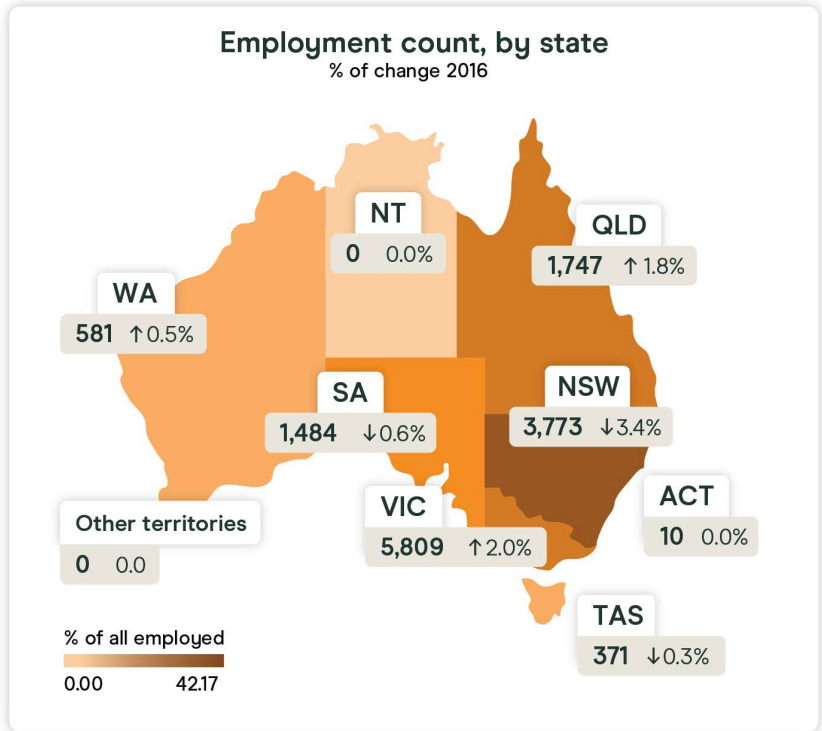


3.11. Pulp, Paper, and Converted Paper Product Manufacturing



Pulp, Paper and Converted Paper Product Manufacturing

ANZSIC A1510, A1521, A1522, A1523, A1524, A1529



3.11.1. Industry sectors (ANZSIC Classes)

- Pulp, Paper, and Paperboard Manufacturing
- Corrugated Paperboard and Paperboard Container Manufacturing
- Paper Bag Manufacturing
- Paper Stationery Manufacturing
- Sanitary Paper Product Manufacturing
- Other Converted Paper Product Manufacturing

Key insights from industry sector infographic and other data	Priority
Absence of RTOs that can deliver training	High
Labour shortages	High
Low workforce diversity	Medium

Manufacturing of Pulp, Paper and Converted Paper Products is critical for our households, offices, hospitals, food outlets and public buildings – from tissues and toilet paper, medical and sanitary products, to packaging and printing. In order to meet consumer demands for sustainability, the industry is at the forefront of circular economy practises, where the cycle of ‘make, use, dispose’ is replaced by a philosophy for ‘reusing and recycling’, which extracts maximum value from materials and resources, and largely eliminates waste. Transitioning to a circular economy involves exploiting new bioenergy and biomass opportunities.

The workforce typically specialises in one or more pulping and papermaking operations, including wet end, dry end, pulping, stock preparation and handling, chemical recovery, electrical power generation, paper finishing and converting, primary resource, steam generation, recovered fibre, and water services. Senior operators, technicians and production specialists implement production plans, provide technical advice and support to teams, and troubleshoot and rectify complex pulp and papermaking production problems relating to specialist equipment, processes, outputs and quality.

The National Training Register details qualifications corresponding to specialised job roles in this industry, including Pulp and Paper Operations (Certificates II, III and IV) and Pulp and Paper Operations Management (Diploma). Below are examples of units of competency, which sit within these qualifications, that are unique to the skills and knowledge applied by competent industry workers:

Unit title	Unique skills and knowledge
Perform steam boiler operations (PPMSTM301)	This unit applies to production operators who perform unattended steam boiler operations and respond to contingencies that occur working with complex integrated equipment and continuous operations. It describes the skills and knowledge required to prepare for, start up, stabilise and shut down systems for unattended steam boiler operations.

Perform paper finishing and converting operations (PPMFCO301)

The unit applies to production operators who perform paper finishing and converting operations in a paper manufacturing facility and respond to contingencies that occur working with complex integrated equipment and continuous operations. It describes the skills and knowledge required to prepare for, start up, stabilise and shut down systems for paper finishing and converting operations.

3.11.2. Drivers of workforce dynamics

Digital and automation practices

The Pulp, Paper, and Converted Paper Product Manufacturing industries continue to invest in automation, in some cases reducing the number of employees required. However, industry revenues are declining at a faster rate than automation-related cost savings, which is adding to the pressure on employers to reduce staff costs.⁴⁹

Training packages

In their 2022 report, the Pulp and Paper Manufacturing Industry Reference Committee (IRC) noted that employers believe that there being zero enrolments in the *PPM Training Package* is not a reflection of its quality but a lack of RTOs who can deliver relevant training flexibly while meeting specific workplace needs. The IRC attributed this partly due to the low financial viability for RTOs in continuing to offer such training when there is a relatively low workforce turnover and hence a low or inconsistent pool of new enrollees. This represents a thin training market.

Labour shortages

The National Skills Commission's 2022 Skills Priority List data shows shortages in NSW of the following occupations:

- Paper Products Machine Operator
- Paper and Pulp Mill Operator

Addressing shortages in the Pulp, Paper, and Converted Paper Product Manufacturing industries may involve actively attracting more women to the workforce. The 2021 Census showed women only accounted for 23% of this workforce, a 1% decline from 2016.

Pulp, Paper, and Converted Paper Product Manufacturing Summary

Workforce challenges

- Labour shortages.
- Workforce diversity and culture: gender disparity, ageing workforce, long working hours.
- An absence of RTOs that can deliver training.

Key evidence gaps

- Research that substantiates the extent of barriers to training delivery of PPM Training Package products.

Workforce planning priorities

- Support industry to attract a diverse workforce to address imbalances and labour shortages. **(2d, 4b)**
- Research to substantiate and strengthen evidence on the barriers to RTOs delivering training (including local challenges and opportunities). Employers will be further consulted to understand the current demand for training delivery (including through non-VET education and training pathways). This will inform strategies for building relationships and collaboration between employers and training organisations. Potential support will be provided through the development of nationally consistent training and assessment tools for selected qualifications (subject to the identification of RTOs prepared to deliver training). **(1a, 3a, 3b, 3c, 3d)**