



# Pulp and Paper Manufacturing



**From printing and packaging to sanitary products and medical supplies – Australians are reliant on the skills of the pulp and paper workforce to produce a range of essential everyday products. The necessity of a skilled pulp and paper workforce has been reinforced by the COVID-19 pandemic, which has seen high demand for items such as toilet paper, takeaway packaging and medical supplies.**

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Employs over  
30,000 people

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Over 1,630 businesses

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Contributes \$3.6 billion to  
Gross Domestic Product

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Revenue of \$17.1 billion

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Source: IBISWorld Industry Wizard, 2021

**Sustainability is a key focus for industry as it moves into the future, with a push for increased re-use and recycling in production processes. Support for skills in areas such as bio-manufacturing and recovered paper are vital, so that industry can keep up with consumer demand and preferences and make the most of the materials and resources available.**

The national skills standards and qualifications for Australia's pulp and paper manufacturing industry are overseen by the Pulp and Paper Industry Reference Committee (IRC).

## Skills Forecast

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This year's Annual Update to the IRC Skills Forecast highlighted important information about employers' use of the national PPM Pulp and Paper Manufacturing Industry Training Package, including use outside of the vocational education and training (VET) system and barriers to using the system. This information will be critical as the full training package review is completed and attention turns to encouraging uptake for formal training in the VET system. The Annual Update also reported the impact of COVID-19, industry response and developments, including shifting demand for different products.

Work to review the full training package took place during 2020-21 as part of the Pulp and Paper Manufacturing Review Project. This work is due for endorsement late in 2021, after which there will be a continuing focus on ensuring the updated training is utilised.

While COVID-19 has dramatically changed what consumers need

and want in the form of paper-based products, Australia's pulp and paper industry has responded reasonably well. There has been huge demand for products like toilet paper, takeaway packaging and medical supplies, while sales of copy paper and lightweight coated paper for catalogues and advertising have plummeted. With the surge of online shopping throughout lockdowns, there is an increase in delivery boxes and packaging in the recycling stream, which is a valuable commodity for export, particularly as the value of unsorted recovered paper rises. Industry has also had to deal with the impacts of bushfires and market supply issues on the upstream supply chain throughout 2020-21.

As demand for newsprint and other printed products continues to fall in Australia, industry is looking to diversify its products. A range of opportunities are being pursued, which will both improve the sustainability of operations and

present economic benefits. While Australia has previously exported recovered paper, government is now investing in building local capacity to produce high-value recycled products and phasing out exports. Recycled fibre-based packaging is on the rise with major supermarkets and food retailers seeking more sustainable options.

The PPM Training Package is valued by industry, although its use is informal and on-the-job, due to a lack of registered training organisations offering training. The Pulp and Paper Manufacturing Review Project aims to find a pathway to formal use of the nationally accredited training system, in consultation with industry and RTOs. It also aims to address current skills needs, including expertise for working with new and emerging technology for bioprocessing, de-inking and recovered paper processes, supporting industry's development and diversification.

# Project Work Between 2020-21

The following project was managed by Skills Impact, with support from ForestWorks, between July 2020 and June 2021.

The Pulp and Paper Manufacturing IRC oversaw the project development, as part of their responsibility to support engagement with their industry and to ensure the projects meet stakeholder needs.

The skills standards and qualifications updated as part of the following projects are expected to be endorsed by the AISC and State and Territory Ministers later in 2021.

## Pulp and Paper Manufacturing Review Project

It takes a skilled pulp and paper manufacturing workforce to produce many essential products used across households, businesses and medical environments. The importance of this industry and its expertise has been highlighted by the COVID-19 pandemic with high demands for medical and protective products, as well as packaging, tissues and toilet paper. With new technologies becoming available to support sustainability and a need to adapt to consumer preferences, innovations are occurring in bioenergy, biomass and biodegradable packaging. As a result, updated skills are required.

Thanks to the input of everyone involved in this project all qualifications, skill sets and units of competency within the PPM Pulp & Paper Manufacturing Industry Training Package have been updated and restructured to reflect current technology, terminology and processes. Consultation with registered training organisations (RTOs) has also taken place, to improve the viability of training delivery.

## Key Outcomes

- Six qualifications at Australia Qualification Framework (AQF) levels II, III and IV have been merged into three qualifications, so that there is one at each level, reflecting the common skills across papermaking and pulping, at the same time addressing the full breadth of skills required for different job roles in a pulp or paper manufacturing facility.
- The Diploma of Pulp and Paper Process Management has been reviewed and renamed the Diploma of Pulp and Paper Operations Management, with revisions made to the core units and updated elective selections.

- Seven new units have been developed to cover entry level skills for working in the industry; skills in management or oversight of operations, including the research and evaluation of emerging technologies; and skills for working with advanced de-inking operations.
- Fifty units have been reviewed to better reflect current work tasks, technology and processes.
- Twenty-three units have been merged to become 11 units that better reflect current job tasks.
- Seven units are proposed for deletion, as the skills are now covered in other units.
- Three skill sets have been developed to address emerging technologies used in production processes, including de-inking and support skills for entry into the workforce and high-level roles.
- Eight skill sets have been revised to include updated units of competency.
- Two skill sets are proposed for deletion, as these skills could be better addressed in the proposed new skill sets.

