

Modernising training units for a high tech industry



Comprising more than 13,000 businesses¹ and employing around 120,000 people,² Australia's forest and wood products industry is diverse. The sector is a valuable source of rural and regional employment, with various types of wood harvested from native forests as well as plantations, for a range of purposes—from domestic furniture to major infrastructure projects, and lots in between.

In a competitive job market, ensuring vocational training remains relevant to employers is crucial to attracting new workers, to keep the \$15.7 billion³ sector growing.

From growing the forests through to manufacturing products like furniture and flooring, sold in Australia and abroad, this diverse industry contributed \$15.7 billion to the Australian economy in 2014–15.⁴ Indeed with high demand for housing at home, and growing demand for Australian wood products abroad, this contribution is set to grow—with the volume and value of logs harvested in Australia in 2016 reaching record levels of estimated 29.5 million cubic metres valued at almost \$2.3 billion.⁵

When it comes to harvesting the timber, the process doesn't centre around axes and saws. Forest harvesting operators use complex machinery to cut it into precise logs to use as much of the wood as possible.

"Forest harvesting operators work in high-risk environments so safety is a priority,"

Stacey Gardiner, General Manager of the Australian Forest Contractors Association.

"Trees are a long term investment by the forest owner—as are the harvesting machines, which can cost upwards of \$500,000 each. Harvesting operators are responsible for maximising the value recovered from these trees, which includes minimising waste and improving efficiency," she added. Operators must have the skills to use computers on-board the logging machinery, which distinguish between various types of wood, and much, much more. Adan Taylor, General Manager of GMT Logging—a family-owned and operated harvesting business based in Imbil, Queensland—knows just how complex these on-board systems can be.

"In our operations, there are 13 different log grades to choose from. The on-board systems gather massive quantities of data about lengths and diameters to build accurate profiles of trees. This enables the machine to predict what diameter a tree will be up to three metres ahead, and decide what log combination will maximise the value recovered," said Adan.

Harvesting operators must also be able to perform preventative maintenance on their equipment, undertake quality control of log specifications, plan harvesting activity to limit stoppages for adverse weather conditions and grade logs into correct specifications.



They often work in areas without mobile phone reception and need to be able to comply with strict environmental guidelines, carry out first aid and assess risk of certain hazards.

Bringing training units up to speed with the sector

Technical skills required are generally learned 'on the job,' through employer-led and supported training on-site, with specific competencies then assessed by a registered training organisation.

"In a specialised sector like ours, employers have to attract people with a more general manufacturing background, and support them into specialist training. We don't have a pipeline of qualified harvesting operators rearing to join the industry; we're competing with other employers and industries to get the best people," said Adan.

While the sector had innovated, the vocational training units to get qualified hadn't caught up. This resulted in a disconnect between the skills employers need and the units of competency

required to obtain a nationally-recognised qualification. Offering the opportunity to get a formal, specialist qualification is key to attracting people to such a specialised and growing sector—highlighting a need for up-to-date training.

Acknowledging this need, Taylor took up the opportunity to join a Technical Advisory Committee (TAC) of industry stakeholders set up to support a review of units of competency within the Forest and Wood Products training package. This review was initiated by the Forest Management and Harvesting Industry Reference Committee (IRC), which provides advice to the Australian Industry and Skills Committee (AISC) about the skills needs of the sector.

The IRC and TAC reviewed 13 units of competency to both reflect the new job requirements and level of performance expected, and content to meet industry needs—particularly around process optimisation and the on-board computer technology. Through this process, 10 units have been improved, two units added, and, reflecting technological change, one unit deleted. As a result, the units now reflect the complexity of harvesting operations, but are also flexible enough to be tailored to workplace needs, acknowledging the varying types of wood harvested, environments, and technology used across companies. The updates also mean people already in the workforce can have their skills recognised towards a qualification.

"For GMT Logging, this means young people who undertake on the job training can have it assessed against a qualification. Units will now reflect actual operator practices and requirements, improving relevance,"

Adan Taylor, General Manager of GMT Logging

Modernised qualifications that more accurately reflect the work of harvesting operators could see more people in the sector have their skills formally recognised.

"The units will highlight just how skilled operators actually are—building recognition within the broader forestry industry," added Adan.

As technology and innovation lead to new products and processes, recognising the skills of forestry harvesting operators not only recognises their level of expertise but provides competencies that can be transferable in the future.

1. ABS, 2017, Counts of Australian Businesses, including Entries and Exits, Jun 2012 to Jun 2016

2. Australian Forest Products Association, 2015, 'A National Institute for Forest Products Innovation', http://ausfpa.com.au/wp-content/uploads/2015/11/AFPA-RD-

3. ABS, 2016, Australian Industry, 2014–15, Cat No 8155.0.

4. ABS, 2016, Australian Industry, 2014–15, Cat No 8155.0.

5. Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)

About the Australian Industry and Skills Committee (AISC)

The Australian Industry and Skills Committee (AISC) is an industry/government collaboration that advises Commonwealth and State and Territory Skills Ministers on the implementation of national vocational education and training policies, and approves nationally recognised training packages for implementation in the VET system. The AISC draws on advice from its network of Industry Reference Committees (IRCs), which are made up of people with experience, skills and knowledge of their particular sector. The IRCs work across industry to ensure their advice reflects the needs of employers.

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