Australian forest and wood products statistics
September and December quarters 2016

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Volume and value of log harvest

↑10% to 30.1 million m³ in 2015–16
↑12% to $2.3 billion in 2015–16

The volume and value of log harvest in Australia increased strongly in 2015–16, following a similarly robust performance in 2014–15.

Dwelling commencements

↑6% to 232,000 in 2015–16

This is the highest level of residential commencements recorded in Australia.

Wood-based panel production

↑7% to 1.7 million m³ in 2015–16

Production of plywood, particleboard and medium density fibreboard has increased, driven by continued growth in domestic consumption and exports.

Paper and paperboard production

↑3% to 3.2 million tonnes in 2015–16

Domestic production of paper and paperboard increased to its highest level since 2008–09.
Overview

This issue of the *Australian forest and wood products statistics* (AFWPS) includes updated 2015–16 data for key domestic indicators of forestry sector activity, including Australia’s commercial plantation estate, volume and value of logs harvested, and output and consumption of wood products. This issue also provides updated quarterly data for housing commencements and wood products trade data for the September and December quarters of 2016.

**Plantations**

Australia’s total commercial plantation area was around 1,974,770 hectares in 2015–16, an increase of 1,331 hectares (0.1 per cent) from 1,973,439 hectares in 2014–15. The total area of new plantations established in 2015–16 was 1,415 hectares, comprised entirely of softwood (radiata pine) planted in New South Wales. Around 83 hectares of Australia’s plantation estate was converted to another land use.

In 2015–16 the total area of softwood plantations was 1,036,800 hectares, an increase of around 1,400 hectares from 2014–15. Total hardwood plantation area remained relatively unchanged at around 928,300 hectares, a decrease of 66 hectares from 2014–15. Softwood plantations account for almost 53 per cent of total commercial plantation area; hardwood plantations make up the remaining 47 per cent.

In 2015–16 Victoria had the largest commercial plantation estate (423,000 hectares), followed by New South Wales (394,400 hectares) and Western Australia (383,400 hectares). Western Australia accounted for the largest proportion of hardwood plantations (30 per cent) and New South Wales had the largest share of softwood plantations (30 per cent).

Government-owned plantations accounted for 98 per cent of the new plantation establishment; the remaining 2 per cent was funded by institutional investors. Private plantation ownership remained unchanged at 1,505,200 hectares in 2015–16, representing 76.2 per cent of the total plantation estate. Public plantation ownership accounted for 20.2 per cent and jointly owned (public and private) plantations represented the remaining 3.6 per cent of the estate (Downham & Gavran 2017).

**Industry performance**

**Log harvest volume and gross value of production (2015–16)**

In 2015–16 logs harvested exceeded 30 million cubic metres for the first time, representing a 10 per cent increase from the 2014–15 log harvest. The gross value of log production also reached a record high, exceeding $2.3 billion for the first time (milldoor prices), an increase of 12 per cent from 2014–15 (Figure 1).

Total hardwood log harvest increased by 11 per cent to a record high of 13.7 million cubic metres in 2015–16, valued at almost $1.1 billion (milldoor prices). This growth was driven by increases in the volume of plantation hardwood pulplogs harvested for woodchip exports (up 18 per cent) and native hardwood sawlogs (up 10 per cent). Plantation hardwood logs now comprise over 71 per cent of total hardwood logs harvested in Australia.

Softwood log harvest also grew strongly in 2015–16, with the volume harvested increasing by 9.5 per cent to a record high of 16.3 million cubic metres. Growth in the softwood log harvest was driven primarily by increases in the volume of pulplogs harvested for woodchip exports,
domestic wood-based panel and paper and paperboard production. The volume of softwood saw and veneer logs harvested also increased by 4.6 per cent to over 10 million cubic metres in 2015–16. The value of softwood logs harvested reached a new record, increasing by 12 per cent to $1.2 billion in 2015–16.

Figure 1 Volume and value of logs harvested, 2005–06 to 2015–16

Native forest log harvest increased slightly in the 2015–16 financial year but over the past decade the volume of native hardwood logs harvested in Australia has more than halved, from 8.6 million cubic metres in 2005–06 to 4.0 million cubic metres in 2015–16. The majority of this decline occurred in Tasmania, with more modest declines in New South Wales and Victoria (Figure 2).

Figure 2 Log harvest by state, 2005–06 to 2015–16
In contrast to the modest decline in the harvest of native hardwood logs, harvests of plantation hardwood increased strongly over the past decade, increasing by almost 160 per cent to 9.8 million cubic metres in 2015–16. Growth in plantation hardwood log volumes was strongest and most consistent in Victoria, South Australia and Western Australia over this period. Tasmania experienced the strongest year on year growth in hardwood plantation harvest for 2015–16 up 57 per cent to 2.0 million cubic metres.

The softwood log harvest in Australia has fluctuated over the past decade, largely in response to changes in housing construction. Overall softwood log harvest has increased by 14 per cent to 16.3 million cubic metres over the decade to 2015–16, with strong growth in South Australia, New South Wales and Queensland more than offsetting small declines in Victoria, Tasmania and Western Australia. In 2015–16 the largest increase in softwood log harvest volumes occurred in Queensland, up by 48 per cent; South Australia also recorded an increase of 12 per cent over the same period.

**Domestic production of wood products (2015–16)**

Australia’s production of sawnwood is estimated to have remained steady in 2015–16 at around 5.1 million cubic metres. In 2015–16, estimated production of hardwood sawnwood increased for the first time since 2012–13, rising by 7.6 per cent to 675,000 cubic metres. This was due to an increase in native forest sawlogs harvested in 2015–16, which more than offset the decline in plantation hardwood sawlogs harvested. In contrast, estimated production of softwood sawnwood fell slightly by 0.6 per cent to 4.4 million cubic metres in 2015–16 from the record levels reported in 2014–15 (Figure 3).

Domestic production of wood-based panels also increased in 2015–16, with total production of plywood, particleboard and medium density fibreboard increasing by 7.2 per cent to 1.7 million cubic metres. Growth was recorded for all reported panel products in 2015–16, with production of medium density fibreboard up by 9.6 per cent, plywood up 7.7 per cent and particleboard up 5.8 per cent over the year.

Domestic production of paper and paperboard also recorded solid increases in 2015–16, increasing by 2.6 per cent to 3.2 million tonnes, the highest level since 2008–09. Production of printing and writing paper increased by 9.1 per cent to 513,000 tonnes, although this remains 23 per cent below production levels a decade earlier (2005–06). Household and sanitary paper production also increased strongly, rising by 7.0 per cent from 201,000 tonnes to 215,000 tonnes. Production of packaging and industrial paper grew by 1.4 per cent to 2.2 million tonnes in 2015–16. Partially offsetting production increases in other categories of paper and paperboard, production of newsprint fell to its lowest level since 1981–82, decreasing by 1.8 per cent to 319,000 tonnes in 2015–16.
Domestic consumption of wood products (2015–16)

Following broad increases in production of most wood products, domestic apparent consumption of most wood products also increased. Despite a consistent downward trend in consumption of hardwood sawnwood since 2005–06, apparent consumption is estimated to have increased by 37 per cent to 693,000 cubic metres in 2015–16 (Figure 4). This is a result of higher estimated domestic production of hardwood sawnwood following the higher native sawlog harvest reported in 2015–16, which more than offset lower imports of hardwood sawnwood.

In contrast, apparent consumption of softwood sawnwood is estimated to have declined by 1.6 per cent in 2015–16, to 5.0 million cubic metres. This result is consistent with the slight contraction in detached housing commencements reported in 2015–16.

Total apparent consumption of selected wood-based panel products increased by 5.3 per cent to 2.1 million cubic metres in 2015–16. This increase was underpinned by increased apparent consumption of medium density fibreboard, which increased by 8.8 per cent to 577,000 cubic metres in 2015–16, the highest level on record. Apparent consumption of particleboard increased by 4.8 per cent to 1.0 million cubic metres in 2015–16, the highest level since 2010–11. Apparent consumption of plywood also increased in 2015–16, up 2.3 per cent to 497,000 cubic metres. This growth was consistent with higher other residential commencements reported in 2015–16.

Aggregate paper and paperboard consumption increased by 1.8 per cent to 3.7 million tonnes in 2015–16. This increase was underpinned by 10 per cent growth in apparent consumption of household and sanitary paper to 353,000 tonnes in 2015–16. Apparent consumption of packaging and industrial paper also increased in 2015–16, rising 4.6 per cent to 1.7 million tonnes. Growth in consumption of these commodities was partially offset by declines in consumption of newsprint (down 1.9 per cent to 339,000 tonnes), and printing and writing paper (down 2.6 per cent to 1.3 million tonnes).
Overall apparent consumption of paper and paperboard decreased by 11 per cent over the decade to 2015–16, led by a 54 per cent and 19 per cent decline in newsprint and printing and writing paper consumption.

Figure 4 Domestic consumption of wood products, 2005–06 to 2015–16

Housing and other residential building commencements

As reported in the November 2016 issue of Australian forest and wood products statistics, house commencements fell by 0.9 per cent to 115,600 in 2015–16. The first six months of the 2016–17 financial year depict mixed results for house commencements across Australia (Figure 5). Aggregate house commencements increased by 2.2 per cent to 61,700 for the first six months of 2016–17 compared with the corresponding 2015–16 quarters.

New South Wales, Victoria and Queensland all recorded strong gains in house commencements. New South Wales recorded a 15 per cent increase to 16,800, Queensland recorded a 6.5 per cent increase to 12,700 and Victoria recorded a 4.0 per cent increase to 18,600 commencements in the first two quarters of 2016–17 compared with the corresponding 2015–16 quarters. Gains were also recorded in South Australia, a 3.3 per cent increase to 3,900 and the Australian Capital Territory, a 43 per cent increase to over 700 house commencements for the first six months of 2016–17 compared with the corresponding 2015–16 quarters. These increases more than offset declines in other jurisdictions, in particular Western Australia, which saw house commencements fall by 24 per cent to 7,700. Declines were also recorded in Tasmania (18 per cent) and Northern Territory (10 per cent) but from much lower bases.
As reported in the November 2016 issue of *Australian forest and wood products statistics*, other residential commencements (multi-unit dwellings) increased by 14 per cent in 2015–16 to 116,100.

Mixed results were reported for other residential commencements in the first half of 2016–17 with declines recorded in most jurisdictions and strong gains reported in two jurisdictions (NSW and ACT) (Figure 6). In aggregate, other residential commencements declined modestly, falling by 2.4 per cent to 56,500 in the first two quarters of 2016–17 compared with the corresponding 2015–16 quarters.

Other residential commencements fell markedly in Victoria, Queensland, Western Australia, Tasmania and the Northern Territory in the first six months of 2016–17 compared with the corresponding 2015–16 quarters. Major declines by volume were reported in Victoria, down 19 per cent to 14,100; Queensland, down 12 per cent to 11,000; and Western Australia, down 38 per cent to 2,600 commencements. Declines were also reported in Tasmania (38 per cent) and the Northern Territory (72 per cent) but from much lower bases.

Offsetting these declines was increased other residential commencements in New South Wales, which surged by 26 per cent to 24,900 commencements. Strong gains were also recorded in the Australian Capital Territory, which increased 24 per cent to 2,300 while other residential commencements in South Australia remained steady at 1,300 when compared to the corresponding 2015–16 quarters. New South Wales alone accounted for 44 per cent of all other residential commencements in Australia in the first two quarters of 2016–17.
Trade in wood products

As reported in the November 2016 issue of Australian forest and wood products statistics, Australia’s trade in wood products reached record levels in 2015–16 with total merchandise trade (imports plus exports) exceeding $8 billion for the first time.

Based on the first six months of 2016–17, the strong export performance of Australia’s wood product industries has continued into the current financial year (Figure 7). Exports increased by 7.8 per cent to $1.6 billion, from $1.5 billion in the corresponding quarters of 2015–16.

The largest contributors to this improved export performance were roundwood and woodchips. The value of roundwood log exports increased by 42 per cent to $306 million in the first six months of 2016–17, compared with the corresponding quarters in 2015–16. Over the same time frame, the value of woodchip exports increased by 6.1 per cent to $558 million. These increases more than offset declines in paper and paperboard and recovered paper exports.
In contrast to exports, imports decreased by 6.4 per cent to $2.7 billion in the first two quarters of 2016–17, compared with the corresponding quarters of 2015–16 (Figure 8). Declines were experienced in most import categories, in particular paper and paperboard which fell 8.4 per cent to $1.1 billion. These declines were partially offset by an increase in imports of wood-based panels, which rose by 15 per cent to $272 million.
References

Appendix A: Australian forest and wood products statistics, detailed tables

AFWPS summary tables

1) Overview of the Australian forestry sector

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66) Exports of secondary wood products