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ABARES

Australia's forests at a glance 2017

with data to 2015–16

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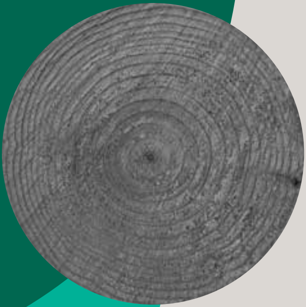
Australia's forests in summary	
Total land area	769.2 million hectares
Total forest area	124.7 million hectares
Forest area as a proportion of land area	16 per cent
Native forest area	122.6 million hectares
Forest area in nature conservation reserves	21.5 million hectares
Forest area protected for biodiversity conservation on public and private land	39.2 million hectares
Native forests available and suitable for commercial wood production	36.6 million hectares
Public native forests available and suitable for commercial wood production	7.5 million hectares
Leasehold and private native forests available and suitable for commercial wood production	29.1 million hectares
Area of commercial plantation forest	2.0 million hectares
Total log volume harvested	30.1 million m^3
Total commercial plantation log volume harvested	26.1 million m^3
Total native forest log volume harvested (including cypress pine)	4.0 million m^3

Total value of imports of wood products	$5.5 billion
Total value of exports of wood products	$3.1 billion
Major wood product imports (value)	
Paper and paperboard	$2.2 billion
Manufactured paper products	$662 million
Sawnwood	$555 million
Wood-based panels	$489 million
Major wood product exports (value)	
Paper and paperboard	$898 million
Woodchips	$1.1 billion
Sawnwood	$103 million
Wood-based panels	$66 million
Estimated number of people employed in ABS categories of forestry, logging and wood manufacturing	64,300 people
Forest product manufacturing sales and service income	$23.7 billion
Forestry and forest product manufacturing industries contribution to GDP	0.5 per cent

ABS Australian Bureau of Statistics. **GDP** Gross domestic product.
Note: Area data are as at 2011 except for commercial plantation area and total forest area, which are as at 2015–16. Harvest, economic and trade data are as at 2015–16.

Contents

National overview



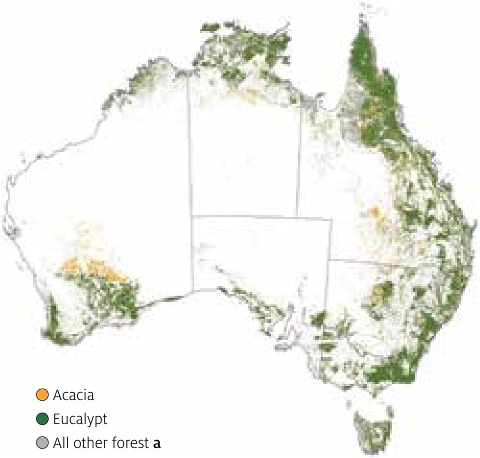
Forest area

Australia's 124.7 million hectares of forest cover about 16 per cent of the continent. This represents about 3 per cent of the world's forest area on 5 per cent of the world's land area.

Queensland has 41 per cent of Australia's forest (51.0 million hectares), New South Wales has 18 per cent (22.7 million hectares), Western Australia 15 per cent (19.2 million hectares) and the Northern Territory 12 per cent (15.2 million hectares).

A forest is an area, incorporating all living and non-living components, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding 2 metres and with existing or potential crown cover of overstorey strata equal to or greater than 20 per cent. This includes Australia's diverse native forests and plantations, regardless of age, and encompasses areas of trees that are sometimes described as woodlands.

Australia's forest cover, by main types, 2011



a Forest mapped as 'All other forest' comprises: native forest types Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native forest', and the forest categories 'Commercial plantations' and 'Other forest'.
Source: National Forest Inventory, ABARES

Australia's forest area, by jurisdiction, 2015–16

Jurisdiction	Total forest area ('000 hectares)	Proportion of national forest area (%)
New South Wales	22,683	18
Victoria	8,180	7
Queensland	51,034	41
South Australia	4,555	4
Western Australia	19,192	15
Tasmania	3,705	3
Northern Territory	15,222	12
Australian Capital Territory	137	0.1
Australia	**124,709**	**100**

Note: Totals may not tally because of rounding. Calculations assume that changes in the area of commercial plantations since 2010–11 have not involved changes in the areas of forest classified as 'Native forest' or 'Other forest'.
Sources: *Australian plantation statistics 2017 update*; *Australia's State of the Forests Report 2013*

Change in reported forest area

Australia's forest area is 124.7 million hectares. This is the most accurate figure available because Australia's National Forest Inventory now has:

- better quality data on Australia's forests
- improved resolution of forest mapping
- detailed integration of forest cover data provided by state and territory land management agencies with data sourced from a variety of remote sensing methods.

Change in forest area over time

The best measure of change in forest area over time is derived from annual data published in the Australian National Greenhouse Accounts *National Inventory Report 2015 Volume 2* (Commonwealth of Australia 2017).

The *National Inventory Report 2015 Volume 2* data are based on an approach that includes only changes resulting from human drivers such as forest clearing and plantation establishment. The data show a net increase in forest cover of 0.05 million hectares over the period 2010 to 2015. This figure does not take account of the variation in forest cover over time caused by drought, fire and disease, or the recovery or regeneration of forests after these disturbances.

Type and class of forest

Australia's forests are classified nationally into three categories: 'Native forest', 'Commercial plantations' and 'Other forest'.

Australia's 'Native forest' category is dominated by the forest types Eucalypt (74 per cent of the total forest area), Acacia (8 per cent) and Melaleuca (5 per cent), while only a small area is Rainforest (3 per cent). The primary determinants of forest type distribution are climate and soil properties, followed by fire frequency and intensity.

Over half of Australia's commercial plantation area is exotic softwood species (predominantly radiata pine); the other half is mostly native hardwood species (predominantly eucalypts).

The 'Other forest' category comprises a small area of mostly non-commercial plantations and forests of various types.

Australia’s forest area, by forest type, 2015–16

Forest type	Area (’000 hectares)	Proportion of national forest area (%)
Acacia	9,807	8
Callitris	2,136	2
Casuarina	1,288	1
Eucalypt	91,989	74
Mangrove	913	1
Melaleuca	6,302	5
Rainforest	3,598	3
Other native forest	6,547	5
Total native forest	**122,581**	**98**
Softwood	1,037	1
Hardwood	928	1
Unknown	10	0.01
Total commercial plantations	**1,975**	**2**
Other forest	**153**	**0.1**
Total forest	**124,709**	**100**

Note: Totals may not tally because of rounding. Calculations assume that changes in the area of ‘Commercial plantations’ since 2010–11 have not involved changes in the areas of forest classified as ‘Native forest’ or ‘Other forest’.
Sources: *Australian plantation statistics 2017 update; Australia’s State of the Forests Report 2013*

Native forest crown cover

Australia's native forests are classified nationally into three crown cover classes—woodland forest, open forest and closed forest—according to existing or potential crown cover. Crown cover is the proportion of ground area covered by tree canopies.

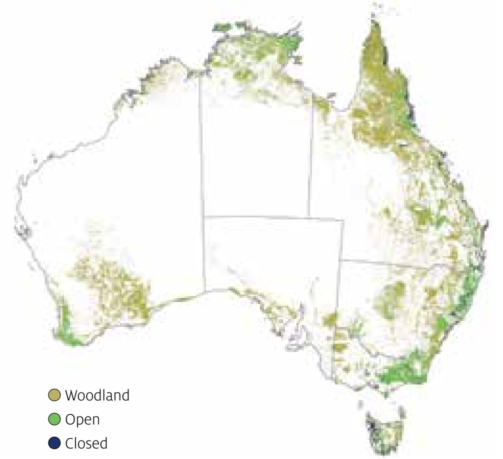
The Eucalypt forest type is the largest component of both woodland forest and open forest. The Rainforest forest type is the largest component of closed forest.

Native forest areas, by crown cover class, Australia, 2011

Crown cover class	Total ('000 hectares)
Woodland (20–50 per cent crown cover)	81,688
Open (>50–80 per cent crown cover)	33,927
Closed (>80–100 per cent crown cover)	3,810
Unknown	3,158
Total native forest	**122,581**

Note: Totals may not tally because of rounding.
Source: *Australia's State of the Forests Report 2013*

Australia's native forest cover, by crown cover class, 2011



Note: Forest mapped as 'Unknown' forest crown cover is not visible at this scale and is therefore not included in the legend.
Source: National Forest Inventory, ABARES

Native forest height

Australia's native forests are classified nationally into three height classes—low forest, medium forest and tall forest—according to existing or potential mature stand height. Most forest height data are collected in forests where wood is harvested.

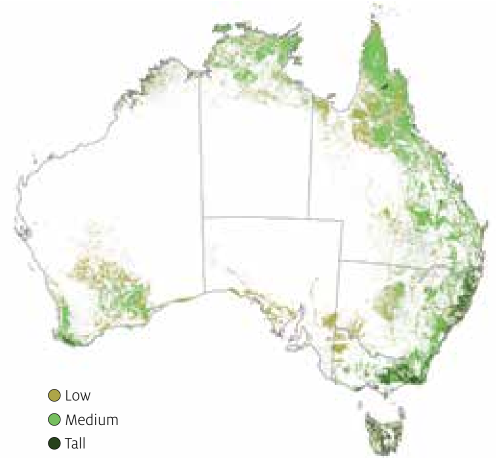
Native forest area, by height class, Australia, 2011

Height class	Total ('000 hectares)
Low (2–10 metres)	33,487
Medium (>10–30 metres)	79,992
Tall (>30 metres)	5,944
Unknown	3,158
Total native forest	**122,581**

Source: National Forest Inventory, ABARES

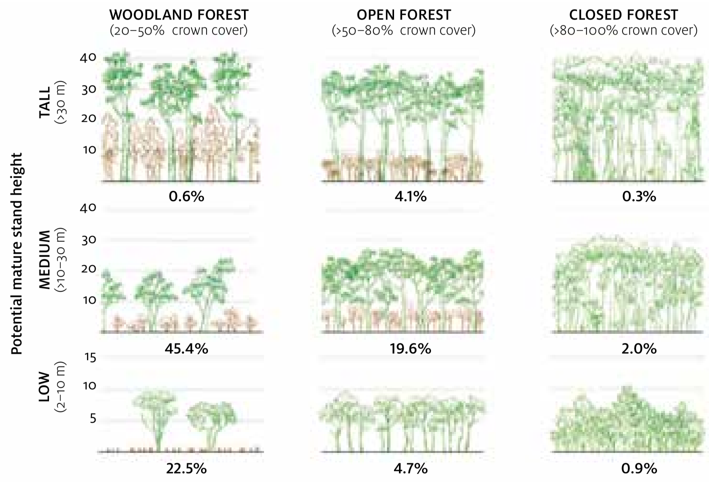
Did you know?
Woodland forests with 20–50 per cent crown cover make up two-thirds of all native forest in Australia.

Australia's native forest cover, by height class, 2011



Note: Forest mapped as 'Unknown' forest height is not visible at this scale and is therefore not included in the legend.
Source: National Forest Inventory, ABARES

Native forest crown cover and height classes, and area proportions, Australia, 2011



Note: Percentages are area proportions of each known cover class/height class combination in Australia's native forest area excluding that area for which height and cover class is unknown.
Source: *Australia's State of the Forests Report 2013*

Eucalypt mallee forest

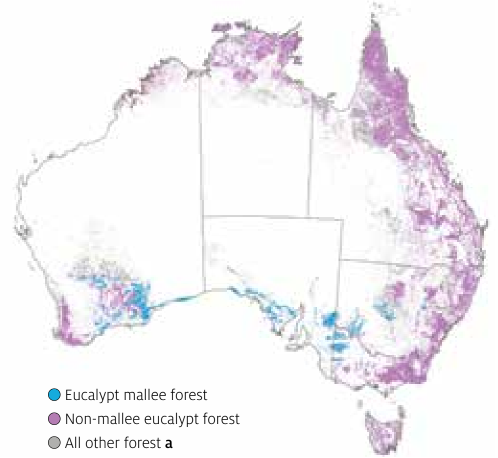
Mallee eucalypts are multi-stemmed, with stems arising from a woody base (lignotuber or mallee root). Their deep, extensive root systems can access groundwater in more arid environments.

Mallee forests generally do not exceed six metres in height and have a flattened open or woodland canopy. Most mallee forests are found in drier inland regions of southern Australia, where annual rainfall averages 250–400 millimetres.

The total area of mallee forest in Australia is 12.1 million hectares. Most mallee forests are in Western Australia (46 per cent of all mallee forests) and South Australia (30 per cent).

Did you know?
Some eucalypt species can grow in either a mallee growth form or a tree growth form, depending on environmental conditions.

Australia's eucalypt mallee and non-mallee forest, 2011



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native forest', and the forest categories 'Commercial plantations' and 'Other forest'.
Source: National Forest Inventory, ABARES

Old-growth forests

Of the 23 million hectares of forest in Australia assessed for old-growth status in the 10 Regional Forest Agreement regions, 5.0 million hectares (22 per cent) was classified as old-growth forest. In 2011 more than 73 per cent of forest classified as old-growth was in formal or informal nature conservation reserves.

Old-growth forests are ecologically mature forests where the effects of past disturbances are now negligible. These forests generally have a layered structure, with large (diameter and height) overstorey trees, a well-developed understorey of other tree species and shrubs and ecological features such as dead standing trees and large decaying and hollow logs on the forest floor.

Did you know?

Changed fire regimes, natural ageing and disease are the most significant threats to old-growth forest across all tenures.

Native forest tenure and ownership

Tenure is important in native forest management. The owner of the land (and in most cases the forest) has primary responsibility for its management. Six tenure categories are recognised nationally:

- **Multiple-use public forest—**publicly owned forest on which government agencies manage a range of forest values including wood harvesting, water supply, biodiversity conservation, recreation and environmental protection.
- **Nature conservation reserve—**publicly owned land formally reserved for conservation and recreational purposes including national parks, nature reserves, and state and territory recreation and conservation areas.
- **Other Crown land—**reserved for purposes including utilities, mining, water catchments and use by Indigenous communities.
- **Private land (including Indigenous)—**held under freehold title and typically under private ownership.
- **Leasehold forest—**Crown land held under leasehold title and generally regarded as privately managed, including land with special conditions for designated Indigenous communities.
- **Unresolved tenure—**areas of unknown tenure.

Native forest area, by tenure type, Australia, 2011

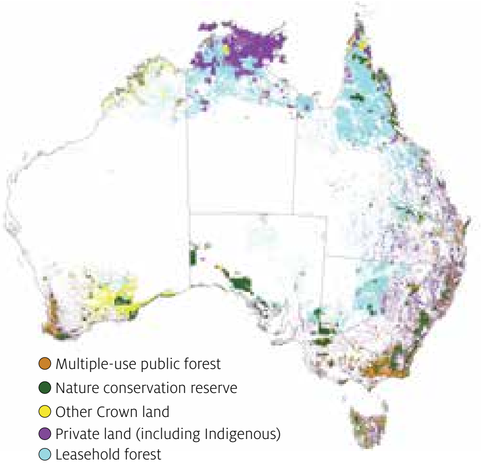
Tenure	Area ('000 hectares)	Proportion of total (%)
Multiple-use public forest	10,159	8
Nature conservation reserve	21,478	18
Other Crown land	8,146	7
Private land (including Indigenous)	33,394	27
Leasehold forest	48,533	40
Unresolved tenure	871	1
Total forest	**122,581**	**100**

Note: Totals may not tally because of rounding.
Source: *Australia's State of the Forests Report 2013*

Publicly managed forests (forests managed by government agencies) include forest under multiple-use public forest, nature conservation reserve and other Crown land tenures. Of the 122.6 million hectares of native forest in Australia, about one-third is publicly managed.

Privately managed forests include forest on private and leasehold tenures. Of the 122.6 million hectares of native forest in Australia, about two-thirds are privately managed.

Australia's forest cover, by tenure, 2011



Note: Forest mapped as 'Unresolved tenure' is not visible at this scale and is therefore not included in the legend.
Source: National Forest Inventory, ABARES

Did you know?

The highest proportion of native forest area under private management is in the Northern Territory (98 per cent) and Queensland (80 per cent), while the lowest proportion under private management is in the Australian Capital Territory (8 per cent) and Victoria (15 per cent).

Forests in reserves

Thirty-nine million hectares of Australia's native forest (32 per cent of the native forest area) is reported as protected for biodiversity conservation. This comprises areas protected in multiple-use public forests, legally covenanted private land, formal and informal nature conservation reserves and other protected areas on publicly managed land.

According to the National Reserve System—Australia's network of protected areas—nature conservation is the primary management intent for 26.4 million hectares (21 per cent of Australia's forests) (Department of the Environment 2014).

All the national native forest types in Australia (except Acacia forest) are represented in the National Reserve System at levels above the 10 per cent area proportion target recommended by the International Union for Conservation of Nature.

A total of 21.5 million hectares of Australia's forest area is on nature conservation reserve tenure, which represents 18 per cent of Australia's native forest area. This figure is lower than that listed in the National Reserve System because some reserves have a different formal tenure type, which can be either private, multiple-use public forest, leasehold or other Crown land.

Indigenous owned or managed forests

The Indigenous forest estate comprises forests owned or managed by Aboriginal and/or Torres Strait Islander peoples.

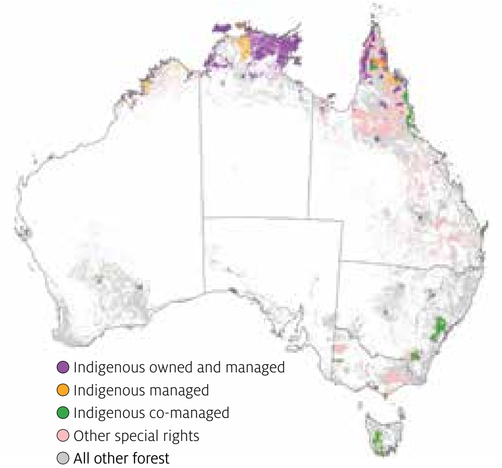
Around one-third of Australia's forests (41.1 million hectares) are under either 'Indigenous ownership and management', 'Indigenous management', 'Indigenous co-management' or 'Other special rights'.

Indigenous owned or managed forests, Australia, 2011

Category	Area ('000 hectares)
Indigenous owned and managed	13,283
Indigenous managed	3,173
Indigenous co-managed	4,759
Other special rights **a**	19,843
Total	**41,058**

a Lands subject to native title determination and active Indigenous land use agreements.
Source: Dillon et al. 2015

Forests on the Indigenous estate, Australia, 2011



Source: National Forest Inventory, ABARES

Did you know?

Of the 41.1 million hectares of forested land in the Indigenous estate, 31.2 million hectares (76 per cent) is in Queensland and the Northern Territory.

Forest certification

Forest management and chain-of-custody certification assures Australian and international buyers that the forest products they purchase originate from sustainably managed and legally harvested native forests and plantations.

Several private, accredited certification bodies conduct forest and chain-of-custody certification in Australia. They use standards developed under the Australian Forest Certification Scheme (AFCS) or the Forest Stewardship Council (FSC).

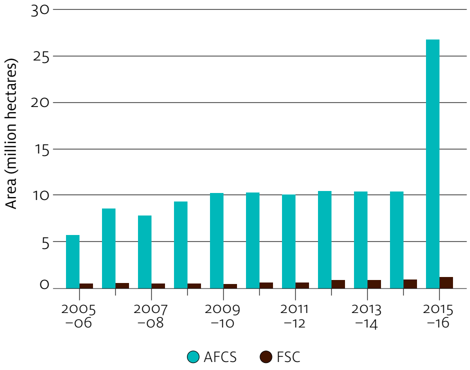
The AFCS uses the Australian Forestry Standard, which was developed by representatives of the Australian community, industry and government and is recognised under the Programme for the Endorsement of Forest Certification. The FSC uses regionally adapted interim standards that comply with its international Principles of Responsible Forest Management. An FSC Forest Stewardship Standard for Australia is currently being reviewed for approval.

Both schemes also issue chain-of-custody certificates that identify and track certified wood and wood products through the supply chain.

The total forest area under FSC forest management certification in Australia is around 1.2 million hectares. The total area of AFCS-certified native forest and commercial plantations in Australia is approximately 26.7 million hectares. Together these figures include most public native forests managed for wood production. The AFCS-certified area increased substantially in 2015–16 because of certification of additional forest areas managed by the Queensland Department of Agriculture and Fisheries (AFS 2016).

Multiple-use public forest and private forest are also managed in accordance with codes of practice. Many forest managers use environmental management systems that comply with and are independently certified to an International Organization for Standardization standard.

Area of forest for which forest management is certified, Australia, 2005–06 to 2015–16



AFCS Australian Forest Certification Scheme. **FSC** Forest Stewardship Council. Note: FSC numbers are for February 2006, March 2007, January 2008, January 2009, January 2010, January 2011, January 2012, January 2013, January 2014, July 2015 and June 2016. Some areas of forest have both AFCS and FSC certification. Sources: *Australia's State of the Forests Report 2013* for AFCS and FSC data to 2011–12; Australian Forestry Standard Limited for AFCS data for 2012–13 to 2015–16; FSC (2013, 2014, 2015, 2016) for FSC data for 2012–13 to 2015–16

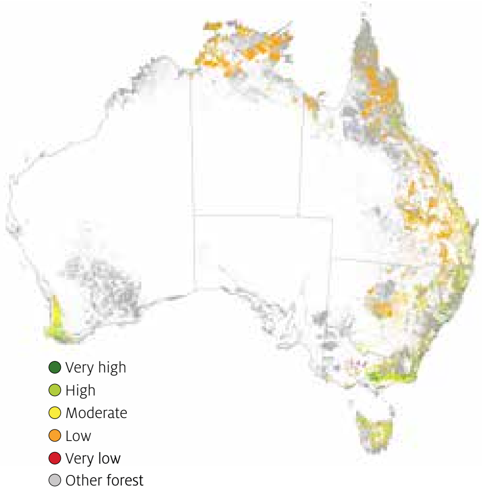
Native forest commerciality

Commerciality is a measure of expected volume yields of commercial sawlog (or veneer log or high-value equivalents) available from a forest stand over the long term, assuming good silvicultural practices are followed. Commerciality is derived from a combination of merchantability and productivity. Merchantability describes the suitability of a forest stand for commercial wood production, particularly of sawlogs, based on tree species and stand structure. Productivity describes the potential yield of sawlogs from a forest stand.

In 2011, 36.6 million hectares of native forest was both available and suitable for commercial wood production (Davey & Dunn 2014). This figure comprised 7.5 million hectares of multiple-use public forest and 29.1 million hectares of leasehold and private forests.

Of the 36.6 million hectares of available and commercial native forest, 9.8 million hectares were classed as moderate, high or very high commerciality comprising 4.7 million hectares of multiple-use public forest and 5.1 million hectares of leasehold and private forests. Much of the native forest on leasehold and private land contributes minimally to wood supply.

Commerciality of Australia's native forest, 2011



Note: Forest mapped as 'Other forest' includes forest of limited, possible or no commerciality; sandalwood; forest of unknown floristics and structure; conservation reserves where harvesting is excluded by covenant or regulation; and forests on formal nature conservation reserves, other Crown land and land of unresolved tenure. Commerciality is further restricted in the Northern Territory and northern Queensland because of accessibility and remoteness, and only limited harvesting occurs in those areas.
Source: Davey & Dunn 2014

Forests, wood products and carbon

During photosynthesis, forests absorb carbon dioxide from the atmosphere and store carbon in biomass. Forests also store carbon dioxide in forest litter and soil organic matter. A significant amount of carbon is also stored in wood products.

At the end of 2010, 13,067 million tonnes of carbon was held in Australia's forests and harvested wood products in service and in landfill (DCCEE 2012). Almost all this carbon (12,841 million tonnes; 98 per cent) was stored in living forest. In 2010, 103 million tonnes of carbon was held in wood and wood products in service, which is an increase of 14 million tonnes from 2000. A total of 123 million tonnes of carbon was held in wood and wood products in landfill in 2010, which is an increase of 13 million tonnes from 2000.

Reductions in national forest carbon stocks are caused by forest clearing for agriculture, urban or commercial development, wood harvest from production forests, and natural disturbance events such as bushfires.

Increases in carbon stocks occur in forests that are regrowing from past disturbance events such as fire or wood harvesting and following planting events, afforestation and reforestation.

Carbon stored in Australia's forest lands and harvested wood products, 2010

Carbon pool	Carbon (million tonnes)
Forests	
Production native forests **a**	2,057
Non-production native forests **a**	10,613
Plantations	171
Total	**12,841**
Harvested wood products	
Wood and wood products in service	103
Wood and wood products in landfill	123
Total	**226**

a As defined for Australia's National Greenhouse Accounts (DCCEE 2012).
Source: *Australia's State of the Forests Report 2013*

Fire

Between 2006–07 and 2010–11, the total area of forest burnt in Australia was 39.0 million hectares. Of this, unplanned fires burnt 31.6 million hectares of forest and planned fires burnt 7.4 million hectares of forest.

Fire is an important forest management tool in Australia. Planned fire is fire started in accordance with a fire management plan or planned burning programme. Planned fire is used in fire-adapted forest types for forest regeneration, to promote growth after harvest, to maintain forest health and ecological processes and to reduce fuel loads so subsequent unplanned fires can be more easily managed.

The extent and intensity of forest fires in Australia vary with latitude and with season of rainfall. In northern Australia, where conditions are generally humid, low-intensity fires often burn across large areas. In south-eastern Australia, hot, dry and windy summers often lead to high-intensity bushfires that are difficult to control. Such fires can cause loss of human life and destroy trees, livestock, buildings, fences, bridges and power lines. Bushfires can also lead to soil erosion and degrade stream water quality. The resulting natural regrowth can reduce water yields.

Total forest area burnt, by jurisdiction, Australia, 2006–07 to 2010–11

Jurisdiction	Area burnt ('000 hectares)	Proportion of total area burnt (%)
New South Wales	1,035	3
Victoria	2,511	6
Queensland	14,325	37
South Australia	1,211	3
Western Australia	4,272	11
Tasmania	179	1
Northern Territory	15,448	40
Australian Capital Territory	6	0.01
Australia	**38,985**	**100**

Note: Combined MODIS satellite and state and territory data. Data include some areas (especially in northern Australia) that were burnt more than once during the period. Totals may not tally because of rounding.
Source: *Australia's State of the Forests Report 2013*

Did you know?

The incidence of forest fire in northern Australia is limited by fuel loads, while the incidence of forest fire in southern Australia is limited by fuel dryness.

Plantation forests

Plantations are intensively managed stands of native (mainly hardwood) or exotic (mainly softwood) tree species established by regular placement of seeds or seedlings. The primary purpose of commercial plantation forestry is wood production.

Area of plantations

Australia's total commercial plantation area was around 2 million hectares in 2015–16, of which about half was softwood species (1,036,800 hectares) and half was hardwood species (928,300 hectares). Victoria had the largest total area of plantations (423,000 hectares), followed by New South Wales (394,400 hectares) and Western Australia (383,400 hectares). Western Australia had the largest area of hardwood plantations and New South Wales the largest area of softwood plantations.

Did you know?

Eighty-six per cent of Australia's total log harvest in 2015–16 was from plantation forests.

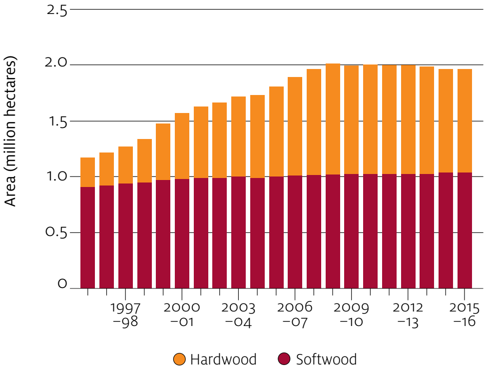
New plantations

New plantations are those established on land not previously used for plantation forestry. About 1,400 hectares of new plantation (all softwood) was established in 2015–16. This increase was partially offset by the removal of around 100 hectares of existing plantation that growers either deemed commercially unviable or did not replant at the end of their lease agreement. This resulted in a net increase in plantation area of around 1,300 hectares in 2015–16 from the previous year.

The high rate of plantation expansion from 1995–96 to 2007–08 was financed mainly by the managed investment scheme sector. The establishment of new plantations has declined from a peak of around 137,000 hectares of new plantations established in 1999–2000, to 1,400 hectares established in 2015–16.

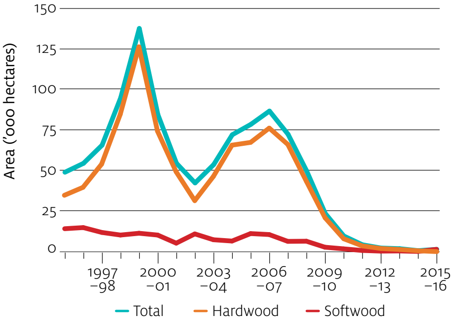
Ninety-eight per cent of new plantations established in 2015–16 were funded by governments. The remaining 2 per cent were funded by institutional investors.

Plantation area, by type, Australia, 1995–96 to 2015–16



Note: 1995–96 to 2004–05 are calendar years (1995 to 2004) and 2005–06 to 2015–16 are financial years.
Source: *Australian plantation statistics 2017 update*

New plantation areas, Australia, 1995–96 to 2015–16

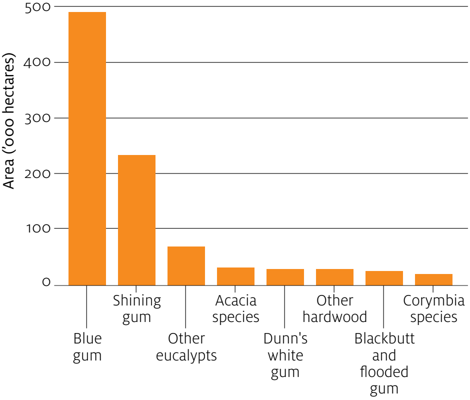


Note: 1995–96 to 2004–05 are calendar years (1995 to 2004) and 2005–06 to 2015–16 are financial years.
Source: *Australian plantation statistics 2017 update*

Plantation species

The hardwood plantation estate is dominated by blue gum (489,400 hectares, 53 per cent) and shining gum (233,800 hectares, 25 per cent), both of which are primarily managed for pulplog production. Most blue gum plantations are in Western Australia and the Green Triangle region of Victoria and South Australia, while most shining gum plantations are in Tasmania. Other regionally important hardwood species are blackbutt and flooded gum in north-east New South Wales, Dunn's white gum in north-east New South Wales and south-east Queensland, and African mahogany in the Northern Territory.

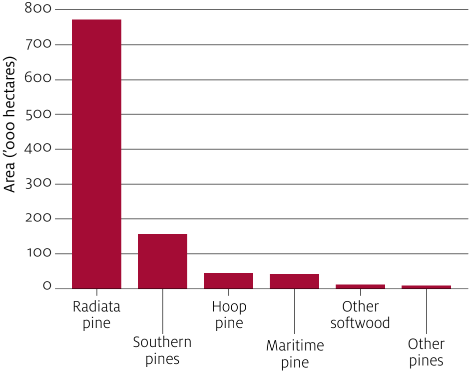
Hardwood plantation areas, by species, Australia, 2015–16



Source: *Australian plantation statistics 2017 update*

The softwood plantation estate is dominated by radiata pine (772,100 hectares, 74 per cent) and southern pines (156,400 hectares, 15 per cent), both of which are managed for sawlog production. Most radiata pine plantations are in the Murray Valley, Green Triangle, Central Tablelands and Tasmania. Most southern pine plantations are in the South East Queensland region. Other regionally important softwood species are maritime pine in Western Australia, and the native species hoop pine in the South East Queensland region.

Softwood plantation areas, by species, Australia, 2015–16



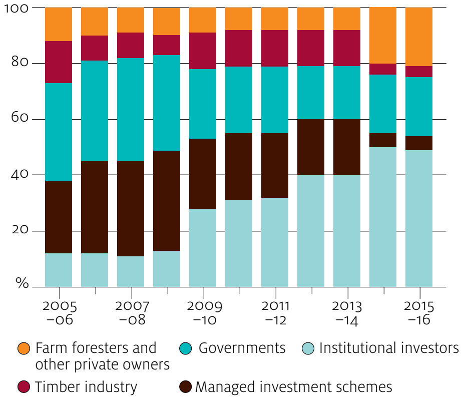
Source: *Australian plantation statistics 2017 update*

Plantation ownership

Plantation ownership has changed substantially over the past decade, with private investment managers buying rights to manage and harvest some managed investment scheme plantations and public plantations.

In 2015–16 managed investment schemes managed around 88,400 hectares (5 per cent) of Australian plantations, compared with around 730,000 hectares (36 per cent) in 2008–09.

Area proportion of plantation ownership, by owner type, Australia, 2005–06 to 2015–16



Source: *Australian plantation statistics 2017 update*

Native forest wood production

The main source of Australia's native timber and wood-based products is multiple-use public forest in New South Wales, Queensland, Tasmania, Victoria and Western Australia. Private and leasehold forests provide smaller quantities of these products, depending on markets and the objectives and goals of owners and managers.

Substantial areas of multiple-use public forest are reserved or excluded from wood production. Other areas are not suitable for harvesting because of operational or merchantability constraints.

In 2011, 36.6 million hectares of native forest was both available and suitable for commercial wood production. This figure comprised 7.5 million hectares of multiple-use public forests and 29.1 million hectares of leasehold and private forests.

When additional local restrictions to maintain and manage non-wood values are taken into account, the net harvestable area of Australia's multiple-use public native forests was 5.5 million hectares in 2011 (14 per cent of public native forests). This is a decline of 4.6 million hectares from the 10.1 million hectares that was available in 1996.

Wood is only harvested from a small portion of the net harvestable area each year (1.4 per cent nationally in 2010–11).

Net area available for harvesting and area harvested in multiple-use public native forests, by jurisdiction, Australia, 2010–11

State	Net harvestable area (hectares) a	Proportion of total public native forest available (%) b	Total harvest area (hectares)	Proportion of net harvestable area harvested (%)
New South Wales	1,229,000	16	27,484	2.2
Victoria	835,000	13	5,800	0.7
Queensland	2,030,000	22	28,200	1.4
Western Australia	848,000	7	7,390	0.9
Tasmania	563,000	23	10,490	1.9
Total	**5,505,000**	**14**	**79,364**	**1.4**

a Net area of multiple-use public native forest available for wood harvesting after excluding areas legally restricted from wood harvesting, unsuitable for wood harvesting or where wood harvesting is not commercially viable, and areas where additional local management plans or codes of practice do not permit wood harvesting. **b** Public native forest comprises the tenures multiple-use public forest, nature conservation reserve and other Crown land. Note: Harvesting of native forest is not permitted in multiple-use public native forest in the Australian Capital Territory or South Australia. The Northern Territory does not have multiple-use public native forest.
Source: *Australia's State of the Forests Report 2013*

Wood processing

Since 1999–2000 the number of hardwood sawmills has decreased by 79 per cent, from 862 mills in 1999–2000 to 182 mills in 2015–16. The number of softwood and cypress pine sawmills has decreased by 72 per cent over the same period, from 279 mills in 1999–2000 to 77 mills in 2015–16.

Softwood sawmills in 2015–16 were larger on average than they were in 1999–2000—one-third of softwood sawmills had a log input capacity greater than 100,000 cubic metres a year in 2015–16. In contrast, 96 per cent of hardwood sawmills had a log input capacity of less than 45,000 cubic metres a year in 2015–16.

In 2015–16 softwood sawmills produced an estimated 4.4 million cubic metres of sawnwood. Hardwood sawmills produced an estimated 675,000 cubic metres of sawnwood.

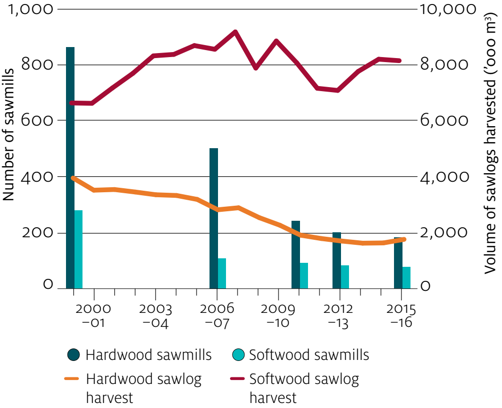
Hardwood sawmills predominantly use logs from public native forests. Smaller hardwood sawmills take a much larger proportion of their logs from private native forests than do larger hardwood sawmills.

Softwood sawmills (excluding cypress pine mills) source almost all their logs from plantation forests.

Cypress pine mills (which operate only in New South Wales and Queensland) source almost all their logs from public native forests.

Other mills produce posts and poles, wood-based panels, pulp and paper, and export logs and woodchips.

Volume of sawlogs harvested for domestic production and number of sawmills, Australia, 1999–2000 to 2015–16



Note: Softwood includes cypress pine.
Source: ABARES

Wood processors in Australia, by processing capacity, Australia, 2015–16

Type	Log input capacity (m^3/yr)	Number of mills
Hardwood	Less than 3,000	69
	3,000 to less than 15,000	63
	15,000 to less than 45,000	42
	45,000 to less than 75,000	5
	75,000 to less than 100,000	0
	More than 100,000	3
	Total hardwood	**182**
Softwood	Less than 3,000	7
	3,000 to less than 15,000	10
	15,000 to less than 45,000	15
	45,000 to less than 75,000	4
	75,000 to less than 100,000	4
	More than 100,000	20
	Total softwood	**60**
Total cypress pine		**17**
Total post and pole		**21**
Total wood-based panel		**25**
Total pulp and paperboard		**14**
Total log and woodchip export		**32**

Source: ABARES

Logs and wood products

Log harvest and domestic production

Log harvest in Australia totalled 30.1 million cubic metres in 2015–16—a 12.5 per cent increase since 2005–06. Around 2.1 million cubic metres of sawlog (including native cypress pine) and 2.0 million cubic metres of pulplogs and other logs were harvested from Australia's native forests in 2015–16. In addition, 10.0 million cubic metres of sawlogs and 6.2 million cubic metres of pulplogs and other logs were harvested from Australia's softwood plantation estate in 2015–16, and around 0.2 million cubic metres of sawlogs and around 9.6 million cubic metres of pulplogs and other logs were harvested from Australia's hardwood plantation estate.

In the decade to 2015–16 structural change in the forestry sector led to a 53.4 per cent decline in the harvest of (predominantly hardwood) native forest logs and a 158.7 per cent increase in the harvest of hardwood plantation logs (mainly pulplogs). Softwood plantations continue to supply most of Australia's sawlogs—81 per cent of Australia's total sawlog harvest in 2015–16 was from these forests.

Logs harvested, Australia, 2005–06, 2010–11 and 2015–16

Source of logs	2005-06 ’000 m³	2010-11 ’000 m³	2015-16 ’000 m³	10-year change %
Native forests				
Sawlogs and veneer logs (including cypress pine)	3,484	2,432	2,138	–38.6
Pulplogs and other logs	5,371	4,076	1,990	–63.0
Total	**8,855**	**6,508**	**4,127**	**–53.4**
Hardwood plantations				
Sawlogs and veneer logs	208	114	187	–10.2
Pulplogs and other logs	3,572	5,110	9,592	168.6
Total	**3,779**	**5,224**	**9,779**	**158.7**
Softwood plantations				
Sawlogs and veneer logs	9,105	8,806	9,986	9.7
Pulplogs and other logs	4,996	5,993	6,191	23.9
Total	**14,100**	**14,799**	**16,177**	**14.7**
Total log harvest	**26,734**	**26,532**	**30,083**	**12.5**

Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics: September and December quarters 2016*

Hardwood sawnwood production declined by 44.3 per cent in the decade to 2015–16, while softwood sawnwood production increased by 15.9 per cent.

Wood-based panel production declined by 12.6 per cent over the decade to 2015–16. Wood-based panels include products such as medium-density fibreboard, particleboard and plywood.

Paper and paperboard production increased by 0.5 per cent over the decade to 2015–16. Paper and paperboard includes products such as newsprint, printing and writing paper, household and sanitary paper, and packaging and industrial paper.

Production of wood products, Australia, 2005–06, 2010–11 and 2015–16

Production	2005–06	2010–11	2015–16	10-year change (%)
Sawnwood production ('000 cubic metres)				
Hardwood **a**	1,211	730	675	–44.3
Softwood **b**	3,821	3,826	4,429	15.9
Total	**5,032**	**4,556**	**5,104**	**1.4**
Wood-based panel production ('000 cubic metres) c				
Plywood	145	140	171	17.7
Particleboard	1,002	986	955	–4.7
Medium-density fibreboard	798	605	574	–28.1
Total	**1,944**	**1,731**	**1,699**	**–12.6**
Paper and paperboard products production ('000 tonnes)				
Newsprint	415	439	319	–23.1
Printing and writing	663	342	513	–22.6
Household and sanitary	203	183	215	5.9
Packaging and industrial	1,926	2,191	2,177	13.0
Total	**3,207**	**3,155**	**3,224**	**0.5**

a Mainly sawn from native forest eucalypt logs. **b** Includes cypress pine logs. **c** Excludes laminated veneer lumber, veneer and hardboard.
Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics: September and December quarters 2016*

Wood product consumption and trade

Domestic consumption of hardwood sawnwood declined by 46.6 per cent between 2005–06 and 2015–16. Imports of hardwood sawnwood also decreased in this period. Over the decade to 2015–16, the proportion of hardwood sawnwood imports to consumption remained relatively stable, averaging around 10 per cent.

Consumption of softwood sawnwood averaged 4.4 million cubic metres per year between 2005–06 and 2015–16 and was around 5.0 million cubic metres in 2015–16. Imports of softwood sawnwood averaged 676,000 cubic metres per year during this period, accounting for 15 per cent of average domestic consumption.

Overall trends in domestic consumption of panel products are closely linked to dwelling commencements. The proportion of medium-density fibreboard manufactured in Australia that is exported decreased from 54 per cent in 2005–06 to 15 per cent in 2015–16.

Australia's consumption of paper and paperboard decreased by 10.9 per cent between 2005–06 and 2015–16. During this period, the substantial decrease in consumption of newsprint was partially offset by an increase in consumption of household and sanitary paper. Over the decade, total consumption of paper products consistently exceeded total domestic production. The difference was made up by paper and paperboard imports averaging 1.7 million tonnes per year.

The total value of wood and paper product exports in 2015–16 was $3.1 billion and the total value of imports was $5.5 billion.

Consumption of wood products, Australia, 2005–06, 2010–11 and 2015–16

Consumption	2005 –06	2010 –11	2015 –16	10-year change (%)
Sawnwood consumption ('000 cubic metres)				
Hardwood	1,299	748	693	–46.6
Softwood	4,112	4,310	4,952	20.4
Total	**5,411**	**5,058**	**5,645**	**4.3**
Wood-based panel consumption ('000 cubic metres) a				
Plywood	346	411	497	43.7
Particleboard	1,072	1,052	1,033	–3.6
Medium-density fibreboard	385	548	577	50.0
Total	**1,803**	**2,011**	**2,108**	**16.9**
Paper and paperboard products consumption ('000 tonnes)				
Newsprint	739	641	339	–54.2
Printing and writing	1,656	1,495	1,334	–19.5
Household and sanitary	259	258	353	36.1
Packaging and industrial	1,485	1,618	1,664	12.1
Total	**4,139**	**4,012**	**3,689**	**–10.9**

a Excludes laminated veneer lumber, veneer and hardboard.
Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics: September and December quarters 2016*

Wood product exports, Australia, 2005–06, 2010–11 and 2015–16

Wood product	2005–06 ($m)	2010–11 ($m)	2015–16 ($m)	10-year change (%)
Roundwood	82.4	197.6	438.0	431.8
Sawnwood **a**	121.0	114.9	103.0	–14.8
Wood-based panels	180.2	98.3	66.5	–63.1
Paper and paperboard **b**	601.1	747.4	898.1	49.4
Recovered paper	140.1	240.0	248.6	77.4
Woodchips	839.0	884.4	1,095.8	30.6
Other products	198.5	185.9	213.3	7.4
Total wood product exports	**2,162.2**	**2,468.7**	**3,063.3**	**41.7**

a Sawnwood represents a wide range of species and grades.
b Mainly packaging and industrial papers.
Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics: September and December quarters 2016*

Wood product imports, Australia, 2005–06, 2010–11 and 2015–16

Wood product	2005–06 ($m)	2010–11 ($m)	2015–16 ($m)	10-year change (%)
Sawnwood **a**	419.4	472.8	555.2	32.4
Miscellaneous forest products	543.3	706.5	1,303.7	140.0
Wood-based panels	229.4	289.3	489.3	113.3
Paper and paperboard **b**	2,187.0	2,223.2	2,230.4	2.0
Paper manufactures	425.8	556.6	661.9	55.5
Pulp	225.0	180.3	221.8	–1.4
Other products	4.0	2.9	5.8	47.0
Total wood product imports	**4,033.9**	**4,431.5**	**5,468.2**	**35.6**

a Sawnwood represents a wide range of species and grades.
b Mainly packaging and industrial papers.
Note: Totals may not tally because of rounding.
Source: *Australian forest and wood products statistics: September and December quarters 2016*

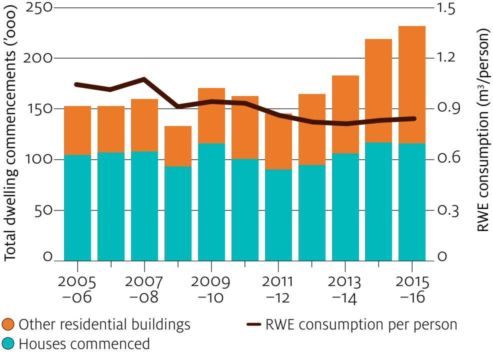
Did you know?
The total volume of Australia's roundwood exports increased from 0.9 million cubic metres in 2005–06 to 3.7 million cubic metres in 2015–16.

Roundwood equivalent consumption and dwelling commencements

Year-on-year consumption of wood products is linked to rises and falls in housing activity because a range of wood products are used in building construction. Between 2005–06 and 2011–12 total dwelling commencements and per person roundwood equivalent consumption followed similar trends. However, in the period 2011–12 to 2015–16 per person roundwood equivalent consumption did not increase in line with total dwelling commencements. This is because other residential buildings historically use less timber in their construction than houses, and the commencement of other residential buildings has more than doubled since 2011–12.

Roundwood equivalent consumption per person was around 0.8 cubic metres in 2015–16, down from around 1.0 cubic metres in 2005–06 largely because of decreased roundwood equivalent consumption of hardwood sawlogs and veneer logs.

Dwelling commencements and roundwood equivalent consumption, Australia, 2005–06 to 2015–16



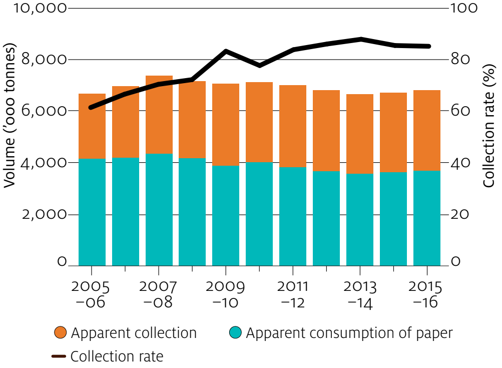
RWE Roundwood equivalent
Source: *Australian forest and wood products statistics: September and December quarters 2016*

Recycling

The collection rate of recovered paper (ratio of the volume of recovered paper to the volume of paper products consumed) increased from 61 per cent in 2005–06 to 85 per cent in 2015–16. The volume of recovered paper increased from 2.5 million tonnes in 2005–06 to 3.1 million tonnes in 2015–16. During this period, consumption of paper products declined by 0.5 million tonnes.

Fifty-five per cent of the recovered paper is used domestically for production of paper and paperboard products; 45 per cent of recovered paper was exported in 2015–16.

Consumption, collection and collection rate of paper products for recycling, Australia, 2005–06 to 2015–16



Source: *Australian forest and wood products statistics: September and December quarters 2016*

Forestry and forest products manufacturing industry and employment

In 2015–16 the annual sales and service income of forest product manufacturing industries was $23.7 billion, representing around 6.4 per cent of sales and service income of total manufacturing industry in Australia. Together with the forestry sector these industries contributed around 0.5 per cent to Australia's gross domestic product in 2015–16.

The Australian Bureau of Statistics labour force survey (ABS 2017) estimated that in 2015–16 around 64,300 people were employed in the forestry and forest products manufacturing industries.

Estimated employment in the forestry and forest products manufacturing industries, Australia, 2015–16

Sector a	**No. of employees** b
Forestry, logging and support services	9,600
Sawmilling and timber dressing	7,900
Other wood product manufacturing	34,000
Pulp, paper and paperboard	2,000
Converted paper products	7,200
Other pulp, paper and converted paper	3,500
Total	**64,300**

a ANZSIC 2006 catagories. **b** Average employment over four quarters. Note: Australian Bureau of Statistics advises caution using employment statistics at the ANZSIC subdivision and group levels due to estimates that may be subject to sampling variability and standard errors too high for most practical purposes.
Source: Australian Bureau of Statistics 2017

Future log availability

Future plantation log availability

Based on surveys completed by plantation owners and managers, and assuming business-as-usual conditions over the period to 2059, ABARES estimates that availability of softwood plantation logs will increase slightly, and peak at around 18.9 million cubic metres per year by 2035–39.

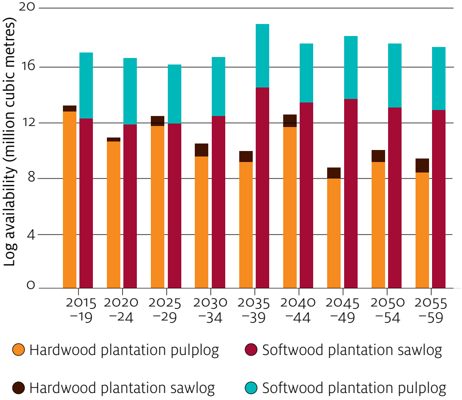
Almost all softwood plantations are managed for sawlog production in Australia. On average, between 2015–19 and 2055–59 around 17.2 million cubic metres of logs are projected to be available from softwood plantations each year, three-quarters of which are expected to be sawlogs (including logs suitable for veneer and plywood manufacturing).

New South Wales and Victoria are projected to have the largest volumes of softwood plantation sawlogs available over the period to 2055–59. The availability of softwood sawlogs is expected to increase most in Victoria and Queensland.

Future hardwood plantation log availability is projected to be volatile over the forecast period because of assumptions around the harvesting and replanting of these plantations, and is projected to peak in 2015–19 then decrease to the lowest level in 2045–49. Based on stakeholder discussions, ABARES has assumed that some existing hardwood plantations in some plantation regions will not be replanted after the first rotation because they are not considered commercially viable.

In contrast to softwood plantations, the majority of hardwood plantations in Australia are managed for short-rotation pulplog production. On average, only around 7 per cent of projected logs available from hardwood plantations over the period to 2055–59 are expected to be sawlogs. Tasmania is forecast to have the largest volume of hardwood plantation sawlogs available over the period to 2055–59. Hardwood plantation pulplog availability is projected to decline in all states and territories except for New South Wales and the Northern Territory, with the greatest decreases occurring in Victoria and Western Australia.

Future log availability from plantations, Australia, 2015–19 to 2055–59



Source: *Australia's plantation log supply 2015–2059*

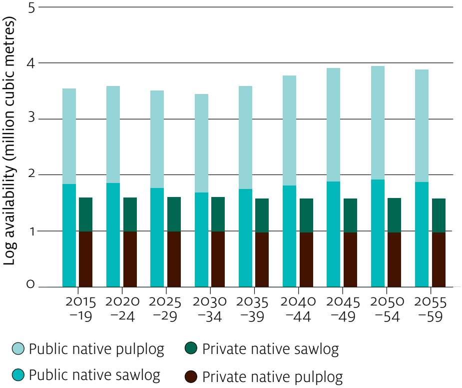
Future native forest log availability

Projections of log availability from public and private native forests are based on published forecasts of log supply to June 2013, supplemented with ABARES estimates of sustainable yield. The projections assume public native forest area available for log production will not decrease in the future.

Overall native forest log availability is estimated to average around 5.3 million cubic metres per year over the period to 2055–59. Around 70 per cent of total native forest log availability is estimated to come from public native forests and around 30 per cent from private native forests. Public native forest log availability is projected to decline to around 3.4 million cubic metres per year in 2030–34 then peak at 3.9 million cubic metres per year in 2050–54. Private native forest log availability is estimated to remain relatively constant over the projection period at around 1.6 million cubic metres per year.

Between 2015–19 and 2055–59 native forest sawlog availability is projected to decline in Tasmania and increase marginally in New South Wales, Queensland, Victoria and Western Australia. The availability of native forest pulplog is forecast to increase in New South Wales, Victoria and Western Australia.

Future log availability from native forest, Australia, 2015–19 to 2055–59

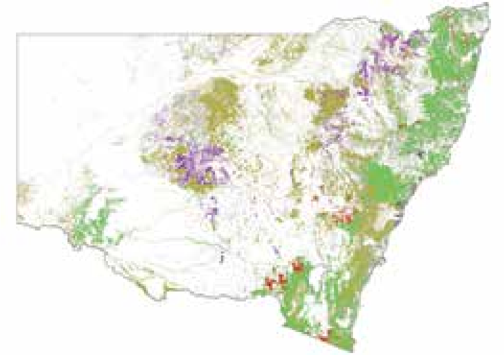


Source: ABARES

State and territory summaries

New South Wales

Forest cover by main category, type and cover class, New South Wales, 2011



- Eucalypt woodland 37%
- Eucalypt open 35%
- Eucalypt closed <1%
- Callitris 7%
- All other forest **a** 20%
- Commercial plantation **b** 2%

a Forest mapped as 'All other forest' comprises: native forest types Acacia, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).

Note: Figures show the area proportion of each forest type compared with the total area of forest in New South Wales. Totals may not tally because of rounding.

Forest and land area, New South Wales, 2015–16

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	22,281	27.8	18.2
Commercial plantations	394	0.5	20.0
Other forest	8	0.0	5.2
Total forest	**22,683**	**28.3**	**18.2**

Native forest area, by tenure, New South Wales, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	5,745	25.8
Multiple-use public forest	2,022	9.1
Nature conservation reserve	5,581	25.0
Other Crown land	79	0.4
Private land (incl. Indigenous)	8,852	39.7
Unresolved tenure	2	0.0
Total native forest	**22,281**	**100**

New South Wales forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, NSW forestry and forest products manufacturing industries employed 22,247 people in 2011 (ABS 2011).

In 2015–16 New South Wales had 78 sawmills, seven panel mills and five paper mills in operation. The state has the largest number of hardwood sawmills in Australia and the largest processing capacity for hardwood and softwood sawmills and paper mills. The average input capacity of these hardwood sawmills is 12,400 cubic metres per year. The average input capacity of softwood sawmills in New South wales is 231,800 cubic metres per year.

Volume and value of logs harvested, New South Wales, 2015–16

Log type	Volume of logs harvested ('000 m^3)	National total volume (%)	Value of logs harvested ($m)	National total value (%)
Hardwood native	876	22.1	110	29.6
Hardwood plantation	63	0.6	5	0.7
Softwood (incl. cypress pine)	4,651	28.5	344	28.8
Total	**5,590**	**18.6**	**458**	**20.2**

Note: Value of logs harvested at mill door prices.

Wood processing capacity, New South Wales, 2015–16

Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	63	779	'000 cubic metres per year log input
Softwood	12	2,782	'000 cubic metres per year log input
Cypress pine	3	na	na
Post and pole	2	na	na
Wood-based panels	7	819	'000 cubic metres per year log and residue input
Paper and paperboard	5	1,586	'000 tonnes per year product output
Log and woodchip export	2	na	na

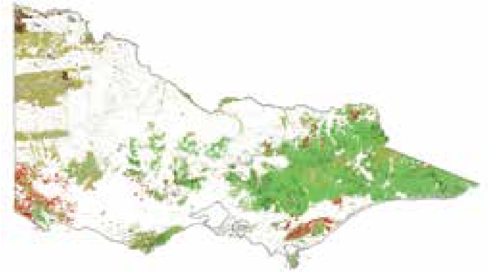
na Not available.
Note: Some data not reported because of confidentiality restrictions.

Did you know?

In 2015–16 New South Wales produced 28 per cent of Australia's softwood logs, 22 per cent of native forest logs and only 1 per cent of hardwood plantation logs.

Victoria

Forest cover by main category, type and cover class, Victoria, 2011



- Eucalypt woodland 29%
- Eucalypt open 56%
- Eucalypt closed 3%
- Casuarina 2%
- All other forest **a** 5%
- Commercial plantation **b** 6%

a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Victoria. Totals may not tally because of rounding.

Did you know?

Seventy-five per cent of all forests in Victoria are in one of the state's five Regional Forest Agreement areas.

Forest and land area, Victoria, 2015–16

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	7,727	34.0	6.3
Commercial plantations	423	1.9	21.4
Other forest	30	0.1	19.6
Total forest	**8,180**	**36.0**	**6.6**

Native forest area, by tenure, Victoria, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	2	0.0
Multiple-use public forest	2,994	38.7
Nature conservation reserve	3,313	42.9
Other Crown land	230	3.0
Private land (incl. Indigenous)	1,184	15.3
Unresolved tenure	5	0.1
Total native forest	**7,727**	**100**

Victoria forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Victorian forestry and forest products manufacturing industries employed 21,826 people in 2011 (ABS 2011).

In 2015–16 Victoria had 40 sawmills, nine post and pole mills, three panel mills and five paper mills in operation. The average input capacity of Victoria's hardwood mills is 20,500 cubic metres per year, the highest of any state. Victoria also has the largest log and woodchip export capacity in Australia.

Volume and value of logs harvested, Victoria, 2015–16

Log type	Volume of logs harvested ('000 m³)	National total volume (%)	Value of logs harvested ($m)	National total value (%)
Hardwood native	1,298	32.8	112	30.2
Hardwood plantation	2,827	28.9	194	27.5
Softwood	4,040	24.7	293	24.5
Total	**8,165**	**27.1**	**599**	**26.4**

Note: Value of logs harvested at mill door prices.

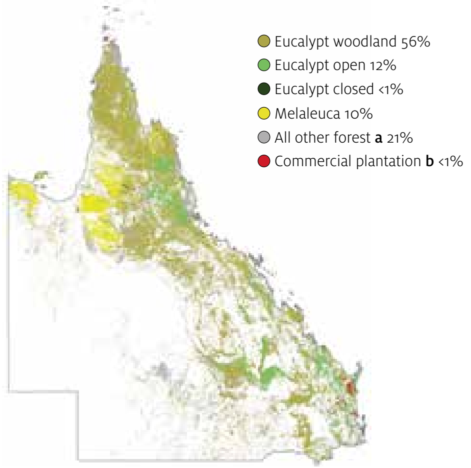
Wood processing capacity, Victoria, 2015–16

Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	30	615	’000 cubic metres per year log input
Softwood	10	1,435	’000 cubic metres per year log input
Post and pole	9	166	’000 cubic metres per year log input
Wood-based panels	3	na	na
Paper and paperboard	5	977	’000 tonnes per year product output
Log and woodchip export	7	6,810	’000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Queensland

Forest cover by main category, type and cover class, Queensland, 2011



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Casuarina, Mangrove, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Queensland. Totals may not tally because of rounding.

Did you know?

Queensland has the largest forest area of all states and territories, with more than twice the forest area of New South Wales, which has the second largest forest area.

Forest and land area, Queensland, 2015–16

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	50,782	29.3	41.4
Commercial plantations	230	0.1	11.7
Other forest	22	0.0	14.4
Total forest	**51,034**	**29.5**	**40.9**

Native forest area, by tenure, Queensland, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	30,656	60.4
Multiple-use public forest	2,905	5.7
Nature conservation reserve	5,098	10.0
Other Crown land	1,208	2.4
Private land (incl. Indigenous)	10,129	19.9
Unresolved tenure	785	1.5
Total native forest	**50,782**	**100**

Queensland forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Queensland forestry and forest products manufacturing industries employed 12,845 people in 2011 (ABS 2011).

In 2015–16 Queensland had 77 sawmills, six panel mills and two paper mills in operation. Queensland has the largest number of cypress pine sawmills in Australia. These have an average log input capacity of 8,100 cubic metres per year. Wood-based panel processors in Queensland have an average annual input capacity of 81,400 cubic metres of log or sawmill residues.

Volume and value of logs harvested, Queensland, 2015–16

Log type	Volume of logs harvested ('000 m³)	National total volume (%)	Value of logs harvested ($m)	National total value (%)
Hardwood native	285	7.2	43	11.7
Hardwood plantation	14	0.1	1	0.1
Softwood (incl. cypress pine)	2,648	16.2	205	17.2
Total	**2,947**	**9.8**	**249**	**11.0**

Note: Value of logs harvested at mill door prices.

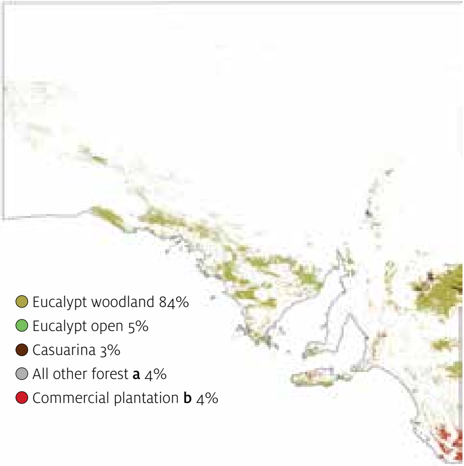
Wood processing capacity, Queensland, 2015–16

Type of facility	No. of facilities	Total capacity	Unit of capacity
Hardwood	46	294	'000 cubic metres per year log input
Softwood	17	1,847	'000 cubic metres per year log input
Cypress pine	14	114	'000 cubic metres per year log input
Post and pole	3	na	na
Wood-based panels	6	489	'000 cubic metres per year log and residue input
Paper and paperboard	2	na	na
Log and woodchip export	5	954	'000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

South Australia

Forest cover by main category, type and cover class, South Australia, 2011



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in South Australia. Totals may not tally because of rounding.

Did you know?
South Australia has the lowest proportion of land with forest cover of all the states and territories (5 per cent).

Forest and land area, South Australia, 2015–16

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	4,376	4.4	3.6
Commercial plantations	179	0.2	9.1
Other forest	0	0.0	0.0
Total forest	**4,555**	**4.6**	**3.7**

Native forest area, by tenure, South Australia, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold land	1,318	30.1
Multiple-use public forest	20	0.5
Nature conservation reserve	1,509	34.5
Other crown land	52	1.2
Private land (incl. Indigenous)	1,455	33.2
Unresolved tenure	23	0.5
Total native forest	**4,376**	**100**

South Australia forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, South Australia's forestry and forest products manufacturing industries employed 6,498 people in 2011 (ABS 2011).

Commercial wood harvesting in native forests in South Australia is not permitted; harvesting is only permitted in plantations.

In 2015–16 South Australia had 14 softwood sawmills, with an average log input capacity of 124,300 cubic metres of sawlog per year. South Australia produced 4.1 million cubic metres of logs in 2015–16, which is 13.7 per cent of Australia's total log production.

Volume and value of logs harvested, South Australia, 2015–16

Log type	Volume of logs harvested ('000 m^3)	National total volume (%)	Value of logs harvested ($m)	National total value (%)
Hardwood plantation	1,151	11.8	94	13.4
Softwood	2,959	18.1	227	19.0
Total	**4,110**	**13.7**	**321**	**14.2**

Note: Value of logs harvested at mill door prices.

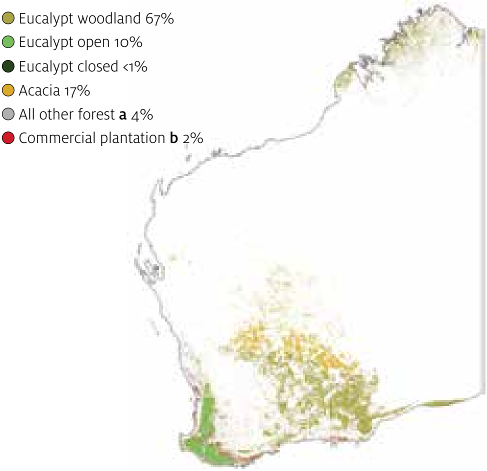
Wood processing capacity, South Australia, 2015–16

Type of facility	Number of facilities	Total capacity	Unit of capacity
Softwood	14	1,740	'000 cubic metres per year log input
Post and pole	2	na	na
Wood-based panel	2	na	na
Pulp and paper	1	na	na
Log and woodchip export	1	na	na

na Not available.
Note: Some data not reported as a result of confidentiality restrictions.

Western Australia

Forest cover by main category, type and cover class, Western Australia, 2011



a Forest mapped as ‘All other forest’ comprises: native forest types Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and ‘Other native forest’. **b** Includes the forest category ‘Other forest’ (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Western Australia. Totals may not tally because of rounding.

Did you know?

Approximately 38 per cent of all eucalypt species in Western Australia are mallee species.

Forest and land area, Western Australia, 2015–16

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	18,752	7.4	15.3
Commercial plantations	383	0.2	19.4
Other forest	57	0.0	37.3
Total forest	**19,192**	**7.6**	**15.4**

Native forest area, by tenure, Western Australia, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	5,559	29.6
Multiple-use public forest	1,291	6.9
Nature conservation reserve	4,610	24.6
Other Crown land	6,010	32.0
Private land (incl. Indigenous)	1,281	6.8
Unresolved tenure	1	0.0
Total native forest	**18,752**	**100**

Western Australia forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Western Australia's forestry and forest products manufacturing industries employed 5,580 people in 2011 (ABS 2011).

In 2015–16 Western Australia had 19 sawmills, including three softwood sawmills. The state has substantial woodchip export capacity, at more than 4.3 million cubic metres of log and residue input per year.

Volume and value of logs harvested, Western Australia, 2015–16

Log type	Volume of logs harvested ('000 m³)	National total volume (%)	Value of logs harvested ($m)	National total value (%)
Hardwood native	355	9.0	28	7.6
Hardwood plantation	3,700	37.8	262	37.1
Softwood	912	5.6	59	5.0
Total	**4,967**	**16.5**	**350**	**15.4**

Note: Value of logs harvested at mill door prices.

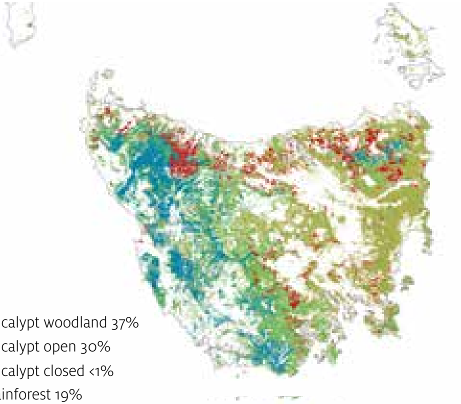
Wood processing capacity, Western Australia, 2015–16

Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	16	260	’000 cubic metres per year log input
Softwood	3	na	na
Post and pole	3	na	na
Wood-based panel	2	na	na
Log and woodchip export	7	4,326	’000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Tasmania

Forest cover by main category, type and cover class, Tasmania, 2011



- Eucalypt woodland 37%
- Eucalypt open 30%
- Eucalypt closed <1%
- Rainforest 19%
- All other forest **a** 5%
- Commercial plantation **b** 9%

a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Casuarina, Mangrove, Melaleuca and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total area of forest in Tasmania. Totals may not tally because of rounding.

Did you know?

Nineteen per cent of all forests in Tasmania are rainforest and 67 per cent are eucalypt forest.

Forest and land area, Tasmania, 2015–16

Forest category	Area ('000 hectares)	% of state land area	% of national forest category area
Native forest	3,362	49.2	2.7
Commercial plantations	310	4.5	15.7
Other forest	33	0.5	21.6
Total forest	**3,705**	**54.2**	**3.0**

Native forest area, by tenure, Tasmania, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	16	0.5
Multiple-use public forest	923	27.5
Nature conservation reserve	1,240	36.9
Other Crown land	287	8.5
Private land (incl. Indigenous)	875	26.0
Unresolved tenure	19	0.6
Total native forest	**3,362**	**100**

Tasmania forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Tasmanian forestry and forest products manufacturing industries employed 3,526 people in 2011 (ABS 2011).

In 2015–16 Tasmania had 30 sawmills, including three softwood sawmills. Tasmania has the most log and woodchip export facilities in Australia and the second largest log and woodchip export capacity.

Volume and value of logs harvested, Tasmania, 2015–16

Log type	Volume of logs harvested ('000 m^3)	National total volume (%)	Value of logs harvested ($m)	National total value (%)
Hardwood native	1,143	28.9	78	20.9
Hardwood plantation	2,025	20.7	149	21.1
Softwood	1,136	6.9	66	5.5
Total	**4,304**	**14.3**	**293**	**12.9**

Note: Value of logs harvested at mill door prices.

Wood processing capacity, Tasmania, 2015–16

Type of facility	Number of facilities	Total capacity	Unit of capacity
Hardwood	27	355	'000 cubic metres per year log input
Softwood	3	na	na
Post and pole	2	na	na
Wood-based panels	5	362	'000 cubic metres per year log input
Paper and paperboard	1	na	na
Log and woodchip export	9	6,331	'000 cubic metres per year log and residue input

na Not available.
Note: Some data not reported because of confidentiality restrictions.

Northern Territory

Forest cover by main category, type and cover class, Northern Territory, 2011

- Eucalypt woodland 44%
- Eucalypt open 36%
- Eucalypt closed 1%
- Acacia 6%
- All other forest **a** 13%
- Commercial plantation **b** <1%

a Forest mapped as 'All other forest' comprises: native forest types Callitris, Casuarina, Mangrove, Melaleuca, Rainforest and 'Other native' forest. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).
Note: Figures show the area proportion of each forest type compared with the total

Forest and land area, Northern Territory, 2015–16

Forest category	Area ('000 hectares)	% of territory land area	% of national forest category area
Native forest	15,169	11.2	12.4
Commercial plantations	48	0.0	2.4
Other forest	5	0.0	3.3
Total forest	**15,222**	**11.3**	**12.2**

Native forest area, by tenure, Northern Territory, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	5,228	34.5
Multiple-use public forest	0	0.0
Nature conservation reserve	13	0.1
Other Crown land	279	1.8
Private land (incl. Indigenous)	9,618	63.4
Unresolved tenure	31	0.2
Total native forest	**15,169**	**100**

Note: Kakadu National Park and some other national parks in the Northern Territory are Indigenous owned private tenure. The territory does not have multiple-use public forest.

Northern Territory forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, Northern Territory's forestry and forest products manufacturing industries employed 244 people in 2011 (ABS 2011).

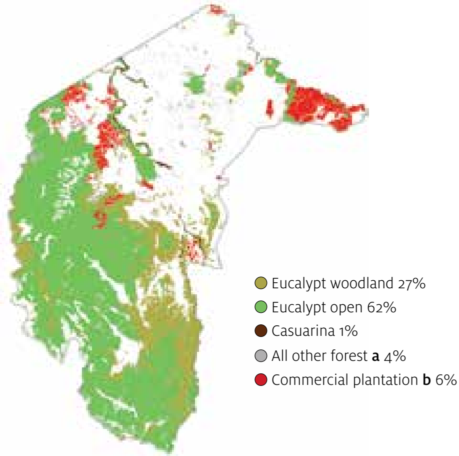
The Northern Territory forest industry is largely based on hardwood plantations and on the Indigenous arts and crafts industry, which uses material from native forests.

Did you know?

Between 2006 and 2011, 15.4 million hectares of forest were burnt in planned and unplanned fires in the Northern Territory.

Australian Capital Territory

Forest cover by main category, type and cover class, Australian Capital Territory, 2011



a Forest mapped as 'All other forest' comprises: native forest types Acacia, Callitris, Mangrove, Melaleuca, Rainforest and 'Other native forest'. **b** Includes the forest category 'Other forest' (non-commercial plantations and planted forest of various types).

Note: Figures show the area proportion of each forest type compared with the total area of forest in the Australian Capital Territory. Totals may not tally because of rounding.

Forest and land area, Australian Capital Territory, 2015–16

Forest category	Area ('000 hectares)	% of territory land area	% of national forest category area
Native forest	129	53.1	0.1
Commercial plantations	7	3.0	0.4
Other forest	1	0.4	0.7
Total forest	**137**	**56.5**	**0.1**

Native forest area, by tenure, Australian Capital Territory, 2011

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	9	7.0
Multiple-use public forest	4	3.1
Nature conservation reserve	115	89.1
Other Crown land	1	0.8
Private land (incl. Indigenous)	1	0.8
Unresolved tenure	0	0.0
Total native forest	**129**	**100.0**

Note: The Australian Capital Territory does not have any forest in the Unresolved tenure category.

Did you know?
Eighty-three per cent of forests in the Australian Capital Territory are in protected-area categories classified by the International Union for Conservation of Nature.

Australian Capital Territory forestry and forest products manufacturing industries

According to the Australian Bureau of Statistics Census, the Australian Capital Territory forestry and forest products manufacturing industries employed 501 people in 2011 (ABS 2011).

Forestry and forest products manufacturing industries in the Australian Capital Territory have contracted substantially since 2003, when bushfires destroyed two-thirds (10,500 hectares) of Australian Capital Territory softwood plantations. The Australian Capital Territory has one softwood sawmill.

In the Australian Capital Territory, commercial wood harvesting is only permitted in plantations.

Sources

Unless otherwise stated, data in this booklet are drawn from Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) publications:

- native forests—*Australia's State of the Forests Report 2013* (MIG & NFISC 2013)
- plantations—*Australian plantation statistics 2017 update* (Downham & Gavran 2017)
- economics—*Australian forest and wood products statistics: September and December quarters 2016* (ABARES 2017)
- wood processing—ABARES infrastructure database – unpublished
- future plantation log availability—*Australia's plantation log supply 2015–2059* (ABARES 2016)
- native forest log availability—ABARES unpublished data

ABARES publications are available at **agriculture.gov.au/abares/publications.**

National Forest Inventory and National Plantation Inventory

ABARES, under the auspices of the National Forest Inventory (NFI), collects and publishes information on Australia's forests. The NFI was established in 1988. It provides authoritative and comprehensive information for national and regional monitoring and reporting. The data support decision-making on Australia's forests. The NFI management team in ABARES—working with state, territory and private forest owners and managers—collects and collates data on Australia's forests for publications such as *Australia's State of the Forests Report 2013* (MIG & NFISC 2013).

The National Plantation Inventory (NPI) is an NFI programme that has been collecting data and reporting on Australia's forestry plantations since 1993. It supports strategic forest industry planning and decision-making by presenting information on total plantation area, new plantings and ownership. The NPI publishes comprehensive map-based reports every five years and updates in other years.

Australian forest and wood products statistics

ABARES compiles and publishes quarterly forest and wood products statistics from a range of sources. Production data are from ABARES and Australian Bureau of Statistics (ABS) surveys and datasets, state forest services and industry organisations. The ABS provides data on imports and exports of wood products.

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