

Public submission

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Australian Climate and Biodiversity Foundation submission to the Independent Forestry Panel on the development of the NSW Forestry Industry Action Plan

13th October 2024 Independent Forestry Panel Via: Online submission

To the Independent Forestry Panel,

I am pleased to welcome the opportunity for the Australian Climate and Biodiversity Foundation (ACBF) to engage with the development of the Forestry Industry Action Plan. We extend our thanks to the panel for accepting this submission.

Our organisation has a strong interest in and a deep understanding of this subject matter. The ACBF welcomes the decision of the NSW Government to establish the panel and develop a plan regarding the future of forestry for the state.

If you have any questions or additional requests, please contact ACBF's NSW State Government Advocate or at

Lyndon Schneiders
Executive Director, ACBF



Who we are

The Australian Climate and Biodiversity Foundation (ACBF) is a not-for profit environment organisation that advocates for the protection and restoration of Australia's native forests to ensure the long-term survival of forest-based biodiversity, to reduce greenhouse gas emissions and to build large scale and resilient carbon sinks consistent with state, national and international policy settings.

The ACBF was established in 2021. We are committed to establishing new opportunities for protecting, managing, and generating income from our forests that benefits our environment, business, government, landholders, producers, and consumers, including through the development and operation of high integrity natural capital markets and effective regulation.

Achieving this outcome requires economic, social, and environmental policy solutions that deliver long term funding for forest restoration and transition. Any policy solution should deliver secure jobs in forest management and a sustainable plantation industry based on purpose planted forests.

We are committed to working with all stakeholders with a long-term interest in forests and forestry to deliver a triple win for Australia and for New South Wales: a significant contribution to a more stable climate, biodiversity that is protected and restored and new economic opportunities underpinning thriving communities.

Introduction

This Inquiry into the sustainability of the NSW Forestry Industry is timely. It is clear to most stakeholders that the industry is at the crossroads. It requires a fundamentally new approach considering the raft of policy changes occurring at the international, national, and state level in response to the dual global crises associated with accelerating climate change and the ongoing decline of the natural world.

The scale and scope of policy change that directly impacts forests and the forestry industry in NSW is listed in an appendix to this submission. This list highlights the need for a new approach to forest management and forestry as well as the opportunities and issues confronting the NSW Government, the industry, and the wider community.

At the outset, it is important to be clear that the ACBF supports the development of a genuinely sustainable, nature positive forests and wood products industry in NSW, based exclusively upon purpose grown plantations.

ACBF recommends that the policy foundation of a future forestry industry in NSW should be to provide materials to support the housing and construction industry



that are low emission, demonstrably and verified sustainable. Nationally, softwood plantations already provide 90% of timber used in construction¹.

The ACBF does not support an ongoing native forest logging industry in NSW. As in other jurisdictions, native forest logging in NSW has been plagued with a range of significant issues including:

- long term negative impacts on forest biodiversity associated with native forest logging, including the Koala², Southern and Central Greater Glider³ and Swift Parrot⁴;
- unrealistic sustained yields calculations that have led to overcutting and a related profound degradation in wood production across the industry, from the provision of sawlogs to the provision of large volumes of low value products;
- the release of significant amounts of greenhouse gases and a change in the levels of embodied carbon retained in wood products due to a shift to much shorter-lived wood products such as paper and firewood⁵;
- poor cost competitiveness compared to plantation-based forestry, apart from a residual sawlog segment that is reliant on the logging of high conservation, mature native forest in northern NSW⁶;
- ongoing job losses and poor levels of reinvestment;
- reductions in wood availability due to catastrophic wildfires driven by accelerating climate change and poor forest management that has produced a drier and more flammable even-aged native forest estate.

These factors have led to a series of changes in the economics and operation of the native forest industry over the past generation. In turn, this has led to a substantial decline in the volume of timber provided by native forest logging as compared to plantation logging, with volumes from native forests declining by two-thirds in the past 20 years⁷. This has resulted in significant job losses and mill closures.

These trends are not unique to NSW and have been reflected in recent decisions to end native forest logging in both Western Australia and Victoria - decisions which have removed a further 39% of native forest wood production nationally.

Native forest logging now only continues in NSW, Tasmania, and Queensland.

¹ FAOSTAT - Australian Forest Product Statistics

² https://www.dcceew.gov.au/environment/biodiversity/threatened/publications/recovery/koala-2022

³ Conservation Advice for Petauroides volans (greater glider (southern and central)) (environment.gov.au)

⁴ https://www.dcceew.gov.au/sites/default/files/env/consultations/00802df7-5a57-4e78-a7e1-261d6d444ba2/files/draft-recovery-plan-swift-parrot.pdf, P.12

⁵ ABARES; FAOSTAT; Forest and Wood Product Association; DFAT State trade data; extrapolation of data based on national uses of each log type and source, given data limitations prevent full reflection of NSW-specific dynamics

⁶ See ACBF submitted slide deck "New South Wales Forestry and Wood Products Analysis"

⁷ ABARES - Australian agricultural product statistics - Forestry



Native forest volumes are expected to decline significantly in Tasmania following revised sustained yield calculations by Sustainable Timber Tasmania⁸ (the Tasmanian Government Business Enterprise with responsibility for public land forest management) and a Queensland Government led process is reviewing the future of native forest logging operations in that state, as part of a larger review of the future of the Queensland Timber Industry².

These structural, economic, and environmental challenges to the long-term viability of native forest logging is occurring at the same time as governments and industry seek to drive down greenhouse gas emissions and halt and reverse the loss of nature and biodiversity, in line with Australia's international, national, and state level policy commitments. This reorientation of policy implies a need to consider alternative commodity values for native forests, in the form of carbon and biodiversity credits. The production and sale of these credits offers significant opportunity to generate long-term revenues that can be deployed to restore the health and resilience of native forests in an era of accelerating climate change.

In summary, it is the ACBF view that business-as-usual is not delivering outcomes for the environment, climate, timber communities, workers, or industry.

The native forest industry has been contracting for 50 years and is becoming increasingly marginal¹⁰.

The plantation sector, whilst profitable and the main source of timber for critical sectors like construction, is also confronting significant headwinds economically and accelerating land-use competition between wood production, permanent planting to store carbon and from other industries.

For all of these reasons, this review provides a timely opportunity to review the economic prospects for the industry and determine a plan that can secure a profitable and sustainable plantation based forest industry, and a new approach to native forest management on public land that rebuilds the health and resilience of native forests, funded through the generation of credits.

The ACBF supports a set of reforms consistent with contemporary state, national and international policy commitments, to enable a 21st century approach to forest management and wood production in NSW. This includes:

a rapid transition out of native forest logging on public land to protect forest biodiversity, reduce greenhouse gas emissions and to generate high integrity carbon and biodiversity credits.

⁸ Sustainable Timber Tasmania (2022) Sustainable high quality eucalypt sawlog supply from Tasmania's Permanent Timber Production Zone Land Available at: https://sttwebdata.blob.core.windows.net/sttprod/assets/Sustainable_Yield_Report_6_FINAL_ae09c6e8ea.pdf

⁹ Miles Doing What Matters: A strong, sustainable future for Queensland timber - Ministerial Media Statements ¹⁰ ABARES - Australian agricultural product statistics - Forestry



- Developing a 'whole of public native forest estate' carbon project to generate long-term investment in improved native forest management to restore forest biodiversity, secure and build carbon stocks and provide employment opportunities for local communities, including first nations, and to manage native forests from myriad threats, including catastrophic wildfires.
- Developing a long-term biodiversity strategy for each forest region to improve native forest health and identify opportunities to generate further investment through the ongoing development of the Nature Repair market.
- Supporting First Nations aspirations to own and manage the public native forest estate.
- Developing a best practice transition package to support impacted workers and communities.
- Committing to the creation of a new forest management agency to integrate the activities of existing government agencies, consistent with the goals outlined above, including the review and replacement of the existing Forestry Act 2012 to ensure the legislative framework is fit for purpose to deliver the policy goals outlined above.
- Committing to a new 'whole of state' plantation industry plan to: a) identify wood products required over the 30-year horizon of this planning process; b) identify opportunities to improve the value add and manufacturing potential of the existing plantation industry, including ongoing product substitution for products derived from native forests; and c) establish the need for the establishment of additional plantations, including species mix, product selection and the role of carbon credits in supporting the viability of new plantations and changed management options, including longer rotations.

Sustainability of current and future forestry operations in NSW

The concept of sustainability operates at a range of different, and at times incompatible, dimensions, including environmental, social, and economic.

But the fact that we have now breached seven of nine broadly recognised planetary boundaries¹¹, in part because of an acceleration of climate change, provides considerable clarity about the feasible futures of nature dependent industries such as forestry.

¹¹ Planetary Boundaries Science (2024) *Planetary Health Check: A scientific assessment on the State of the Planet* Available at: https://www.planetaryhealthcheck.org/storyblok-cdn/f/301438/x/a4efc3f6d5/planetaryhealthcheck2024_report.pdf



Previous claims about the sustainability of the native forest component of the NSW forestry industry have become impossible to defend in the face of the dramatic alteration of native forests due to changing rainfall and weather patterns and the increased frequency of catastrophic wildfires.

Previous measures of sustained yield or the ability of species to coexist with the negative impacts of logging operations have been profoundly challenged by the dramatic biophysical changes that are taking place in real time in NSW native forests.

For these reasons, it is simply no longer tenable to assert that the NSW native forest industry operates in a manner that is consistent with any concept of sustainability.

Likewise, the economic sustainability of the plantation sector is also being challenged by both the direct impacts of climate change, together with changes in the economy including in the construction industry.

Contestation and confusion about the economic and social sustainability of the forestry industry in all dimensions, together with a need to understand the existing structure of the forestry industry in NSW and Australia, led the ACBF to commission a comprehensive industry overview, undertaken during 2023 and 2024.

This report, the most comprehensive snapshot of the industry, highlights several critical issues confronting the industry.

Some key findings from this report are highlighted below and in subsequent sections and as an attachment to this submission. The ACBF would be pleased to organise a detailed briefing with the authors of the report for the Independent Panel.

Key findings include:

- overall wood use in Australia and in NSW continuing to decline in per capita terms¹².
- Ongoing long-term decline in the size of the native forest sector in terms of overall wood production, with only 12 % of wood harvested in NSW coming from native forests and a long-term decline in jobs and the number of native forest sawmills. Overall, native forest hardwood production has declined by two-thirds in the past 20 years in NSW¹³.
- Most products traditionally derived from native forests are being substituted by product derived from plantation forests.

¹² See slides 2 and 3 from the ACBF New South Wales Forestry and Wood Products Analysis

¹³ ABARES; FAOSTAT; Forest and Wood Product Association; DFAT State trade data; extrapolation of data based on national uses of each log type and source, given data limitations prevent full reflection of NSW-specific dynamics



- The evolution of two remarkability different industry profiles of the native forest and plantation sectors. The former is dominated by a myriad of small-scale operations with low wood throughput and generating with a few notable exceptions on the north coast of NSW low value products including woodchips, landscape materials, and firewood and the latter dominated by large scale operations with high wood throughput, high numbers of secure jobs and a focus upon the production of construction materials and pulp and paper products¹⁴.
- Despite the dominance of the plantation sector over the native forest sector, economic returns from the plantation sector being challenging, with ongoing competition for land, leading to plantation disestablishment particularly hardwood plantations which have seen 40% of the estate disestablished since 2010 and a lack of investment in new processing capacity¹⁵.
- Two-thirds of jobs in the forestry sector being found in downstream manufacturing and most workers in the industry being male and in the latter stage of their careers¹⁶. The former conclusion highlights the need to provide environmentally sustainable wood sources to support ongoing manufacturing jobs, either through imported wood from genuinely sustainable sources or through deriving new products from plantations.

Furthermore, and as noted previously, both native forests and plantations are subject to increasing wildfires caused by accelerating climate change.

Native forests are also undergoing profound environmental and biodiversity challenges with many forests' dependent, threatened species in decline across all regions.

One additional solution to addressing the community and consumer concerns surrounding the sustainability of all forestry products sourced from public and private land in NSW would be a requirement that all forestry operations be certified under the internationally recognised Forestry Stewardship Council certification scheme (FSC). Presently, forestry operations in NSW are primarily certified under the Responsible Wood brand, which is a certification scheme developed by the timber industry and by forest managers. The Responsible Wood brand is not viewed as credible by most third parties. In contrast, FSC is supported by industry and eNGO's. Already, most of Australia's plantation estate is certified under rigorous FSC standards.

¹⁴ See Slide 7 of ACBF New South Wales Forestry and Wood Products Analysis

¹⁵ ABARES - Australian Plantation Statistics 2023

¹⁶ ABS Australian Industry Statistics; ABS Input Output (Product) Tables, FY16-FY21



Demand for timber products, particularly as relates to NSW housing, construction, mining, transport, and retail.

Long-term demand for timber products is determined by a range of factors, including;

- cost competitiveness against other materials;
- comparative environmental and climate sustainability credentials of the timber products vs competing materials;
- choices regarding housing and construction materials;
- population growth projection and size of future dwellings;
- competition for land and alternative commodity values, including emergent commodity markets for carbon and biodiversity.

Establishing the future demand for timber products requires a detailed analysis of a range of different scenarios against these key considerations and informed by analysis of long-term historical trends.

The ACBF recommends that this work should be the foundation of a long-term industry strategy for NSW's timber industry through to 2055.

The future of softwood and hardwood plantations and the continuation of Private Native Forestry in helping meet timber supply needs

Answering questions surrounding the future size, scale and species composition of plantations requires clarity and direction regarding the future demand for wood and forests products as highlighted in the previous section.

A demand side approach is essential in assessing the future of plantations in NSW.

A detailed overview of the plantation industry in NSW is included in the attached document.

Some key findings from this overview, supplemented by engagement with the plantation sector, include the following:

- NSW is the largest softwood producer in Australia, primarily harvested and processed in southern NSW (Tumut and Central Tablelands key hotspots).
- The hardwood plantation estate is predominantly found on the North Coast region of Northern NSW. Most of these plantations are clustered between Taree and Grafton, with a high density around Coffs Harbour¹⁷.
- Continuing to support advances in innovation for mills to process timber more efficiently from plantations will play a crucial role into the future.

 $fcnsw. open data. arcgis. com/datasets/74b6f2dfed224759a3eb3729fd694016_0/explore? location=-31.249789\%2C151.304164\%2C6.50$

¹⁷ Forestry Corporation NSW Sustainability Report 2022-23 Available at: https://data-



Providing steady funding streams will also be a critical job in shoring up the future timber supply of NSW.

- Unlike other states, NSW's plantation estate is still mostly publicly owned, with close to 80% of the total estate in the hands of government¹⁸. This allows the NSW government to have a direct role in planning and supporting the future prosperity of this core component of the timber industry within the state. It also allows for government to play a role in keeping manufacturing capacity strong locally, ensuring access to resources required to build additional homes.
- The NSW government should undertake a review of existing hardwood plantations, including an analysis of wood and fibre products that could be derived from these plantations, and how the resource is managed to determine if there is a need for establishment of more into the future. It is unclear what role new hardwood plantations could play in helping transition out of native forest logging given the rotation length from planting to harvesting for sawlogs.

Private Native Forestry is currently a small part of the timber industry in NSW. It is also highly unregulated and lacking in transparency. There is far greater transparency concerning adjacent activities on private land, including residential and commercial development, mining, agriculture and horticulture.

To inform policy analysis of the prospects for the continuation or further development of private native forestry, the following actions must be undertaken;

- an environmental and resource assessment of the scale, quality, and age structure of commercially harvestable native forest species on private land;
- an assessment of the conservation values of native forest on private land;
- an assessment of the carbon stocks of native forests on private lands;
- an assessment of the economic viability of harvesting native forest on private land.

The role of State Forests in maximising the delivery of a range of environmental, economic, and social outcomes and options for diverse management, including Aboriginal forest management models

State Forests in NSW are regulated under the relevant sections of the *Forestry Act* 2012.

The Forestry Act has a range of functions including to provide for the dedication, management and use of State forests and other Crown-timber land for forestry and other purposes; to constitute the Forestry Corporation of New South Wales as a statutory State-owned corporation and to specify its objectives and functions.

¹⁸ ABARES - Australian Plantation Statistics 2023



As outlined in Part 3, Division 1 of the Act, the primary role of State Forests is to provide timber and forest products. Protection of areas of high conservation value is regulated through the creation of Special Management Zones under Part 3, Division 1 of the Act.

The overwhelming majority of the 2 million hectares of State Forests in NSW are native forest.

Future management of the environmental and non-wood commodity values of native forests managed as State Forests will require a new legislative and regulatory framework to address a range of critical issues including:

- How to support increased and improved First Nations ownership and management of land managed as State Forests.
- How best to facilitate generation and management of carbon and biodiversity credits, including improved fire management strategies and strategies to enable large scale restoration of native forest damaged by long term wood production activities.
- Closer integration of management with existing and future protected areas.

ACBF has an ongoing partnership with the Aboriginal Carbon Foundation (AbCF). We have worked closely with AbCF to develop a proposal that would enable AbCF and local First Nation groups to trial the reintroduction of traditional management, including cultural burning practice within some small areas of state forests on the NSW South Coast, to better understand and document the impact cultural fire practice can play in restoring and managing degraded forests.

Opportunities to realise carbon and biodiversity benefits and support carbon and biodiversity markets, and mitigate and adapt to climate change risks, including the greenhouse gas emission impacts of different uses of forests and assessment of climate change risks to forests.

Native forests in NSW have historically been managed to produce timber and other forest products. Over the past 40 years, some native forests with high conservation values have been managed to protect these conservation values through a range of different conservation tenures, including National Parks.

However, over the past 15 years, policy attention has been directed towards the development of nature-based markets and to establish a series of nature-based commodity values to support global, national, and state goals to drive down greenhouse gas emissions and to support activities to protect and restore biodiversity values.

An overview of these policies and initiatives has been provided in Appendix 1 of this submission.



It is the view of the ACBF that the development of carbon and nature based markets in Australia provide a once in a generation opportunity to consider the role of native forests, presently managed for wood production, to provide alternative, non-wood, commodities in the form of carbon and biodiversity credits which can be generated through activities to reduce greenhouse gas emissions through avoidance of activities that release greenhouse gases - such as logging - and through activities that support the protection and restoration of biodiversity values.

The ACBF is supportive of the protection of native forests to generate high integrity carbon and biodiversity credits and supports the development and application of a high-integrity carbon method for avoided harvesting across the public native forest estate.

The ACBF believes that this will be an essential tool for governments to use to support workers at facilities covered by the Safeguard Mechanism and businesses seeking to make voluntary commitments to reduce emissions, help meet climate goals and providing a revenue stream to manage NSW native forests into the future. There are also substantial biodiversity core benefits that arise from a cessation of native forest logging.

In support of this approach, the ACBF has commissioned a world leading report to assess the potential economic value of the implementation of an Improved Native Forest Management carbon methodology across the public native forest estate.

This report established three different scenarios for levels of value that could be derived from transferring NSW's harvestable native forest estate into a carbon project.

Projections of the total revenue that would be generated over a 15-year crediting period range from \$1.038 billion to \$2.658 billion.

This research modelled that a proportion of the revenue derived from an INFM carbon project would need to be spent on forest management for the project, as well as administration and verification. This was calculated at a total of \$383 million over the 15-year crediting period. Notably, this forest management and ongoing cost to maintain the project was modelled to generate a total of 344 jobs in the forest management space over that time.

In the central case, the average annual net income derived from the project, is \$86 million per year over the 15-year crediting period. Given the importance of ensuring any carbon project income is reinvested in delivering outcomes for affected workers, forest management, and the economy in the regions where that income is generated, the report modelled three scenarios to look at how best to utilise the revenue net of costs associated with carbon.



The report modelled a transition package that would be applicable to all workers impacted by a carbon project leading to cessation of logging. Drawing on recent examples in logging transitions in Tasmania, Western Australia, Victoria, and other industries, the report found that carbon revenue from INFM projects could support significant best practice transition efforts.

The option that delivers the greatest outcome for ongoing jobs from the reinvestment of income from the carbon project sees a reinvestment of the remaining income into additional forest management work. This would employ 1,354 people in secure roles to undertake activities that increase access to forests for recreation (road, infrastructure or amenities works), improve biodiversity through environmental plantings, fire mitigation work and weed and feral animal management.

The ACBF would be pleased to organise a detailed briefing on the findings of this report for the panel.





Appendix 1

Existing policy settings in NSW: timber and forests

Global, national, and state level policies that address the role of forests and forestry in respect to climate change mitigation and adaptation and biodiversity conservation and nature repair have been the subject of considerable reforms over the past decade.

This review of the NSW Forestry Industry is the first such review of the Forestry sector to be undertaken in Australia during the period of policy reform and transition.

Key policies and reforms that are of direct relevance to this review are outlined below.

International Commitments

Kunming-Montreal Global Biodiversity Framework: The Australian Government became a signatory to the Kunming-Montreal Global Biodiversity Framework (GBF) under the United Nations Convention for Biological Diversity in 2022. This framework sets out a series of goals and policy priorities by 2050 which signatories aim to meet. It also details key interim steps signatories need to meet by 2030. Some critical targets for 2030 include;

- TARGET 1: Plan and Manage all Areas to Reduce Biodiversity Loss
- TARGET 2: Restore 30% of all Degraded Ecosystems
- TARGET 3: Conserve 30% of Land, Waters and Seas
- TARGET 4: Halt Species Extinction, Protect Genetic Diversity, and Manage Human-Wildlife Conflicts
- TARGET 8: Minimize the Impacts of Climate Change on Biodiversity and Build Resilience
- TARGET 9: Manage Wild Species Sustainably to Benefit People
- TARGET 10: Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries, and Forestry
- TARGET 14: Integrate Biodiversity in Decision-Making at Every Level
- TARGET 15: Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts
- TARGET 18: Reduce Harmful Incentives by at Least \$500 Billion per Year, and Scale Up Positive Incentives for Biodiversity
- TARGET 21: Ensure That Knowledge Is Available and Accessible to Guide Biodiversity Action



Paris Agreement: Australia, along with 195 other nation states, adopted the Paris Agreement at COP 21 in Paris 2015. This established a goal of limiting warming to 1.5 degrees Celsius with a 2-degree Celsius upper ceiling.

Australia has a legal obligation to meet emissions targets embedded within that agreement. This includes reaching net-zero no later than 2050 which is currently Australia's target and interim targets, which currently sit at 43% reduction below 2005 emissions levels by 2030.

National Commitments

There are a host of commitments the Federal government have made which impacts the NSW timber industry and management of its forests, both directly and indirectly.

National Reconstruction Fund: The forestry sector is eligible to \$500 million worth of funding from the National Reconstruction Fund (NRF)¹⁹. The NRF's goal is help drive innovation and efficiency in timber processing and manufacturing in Australia. 20

The Safeguard Mechanism: In 2023, the Federal Government passed the Safeguard Mechanism (Crediting) Amendment Act 2023. It legislates limits for Australia's largest emitters that is consistent with legislated targets to meet Paris Agreement requirements. The legislated requirement that Australia's largest emitters reduce their carbon output will drive a massive demand for ACCUs, because certain parts of industries have 'hard to abate' emissions. These facilities include aluminium smelters, cement works, fertiliser producers, steel makers, and paper products manufacturers. The land sector, including our forest estate, is predicted to be a critical source of carbon credits to allow these hard to abate industries to offset emissions whilst they transition to lower carbon technologies.

ACCU demand is likely to outpace supply under medium (2027) and high (2026) demand scenarios, as current oversupply is used up²¹.

Chubb review implementation: Commitment to implementing recommendations within the Chubb review and increasing supply of high-integrity credits into the Safeguard Mechanism (to also ensure the functioning of this scheme and ensure can offset emissions to level require), have significant implications for the land sector in NSW.

¹⁹ The National Reconstruction Fund: up to \$500m for forestry | Wood Central

²⁰ Agriculture, forestry and fisheries | National Reconstruction Fund Corporation (nrf.gov.au)

²¹ Reputex Energy and SJT (2023) Modelling Results & Impacts - Australian Carbon Credit Unit Market Analysis, Final Report for Climate Change Authority,

Available at: https://www.climatechangeauthority.gov.au/sites/default/files/documents/2023-12/ACCU%20Market%20Analysis%20-%20Final%20Report%20For%20Publication.pdf



Nature Positive law reform and implementation of the findings of the Samuel

Review: The 2020 Samuel Review of the Environmental Protection and Biodiversity Conservation Act (EPBC) recommended National Environmental Standards as the 'centrepiece of reforms needed to deliver effective environmental protection and biodiversity conservation, and more efficient decision-making'. Standards were Samuel's key innovation, providing the decision-making rules that are currently missing in the process focused EPBC.

Samuel also recommended that Regional Forest Agreements (RFAs) should be required to be consistent with these standards, reflecting clear evidence that the effective exemption from the EPBC granted to forestry operations in RFA regions was not delivering outcomes equivalent to the Act.

In 2022, the Australian Government's Nature Positive Plan accepted and committed to implement Samuel's recommendations to create Standards and apply them to RFAs. The second stage of a stepwise implementation of the Nature Positive Plan is currently before federal Parliament, to be followed by a Stage 3 that fully implements planned reforms.

Regional Forest Agreements are regional plans between a State and the Commonwealth for the management of native forests. The EPBC Act recognises the Regional Forest Agreements Act 2002 (RFA Act), and EPBC Act assessment and approvals are not required for forestry activities conducted in accordance with an RFA (except where operations are in a World Heritage property or a Ramsar wetland).

The RFAs have been controversial since their creation and have been the subject of several legal challenges. The RFAs are based on science and assessments undertaken in the mid 1990's. Notoriously, there has been no independent monitoring of the effectiveness of RFAs and commitments to regular review and monitoring have been cursory at best and laughable at worst. RFAs have failed to deliver adequate protections for Matters of National Environmental Significant that occur in forests, most notably in relation to forest dwelling endangered species suffering ongoing declines.

We anticipate that, in line with the Samuel Review and Australian Government Nature Positive Plan commitments, legislative reform to ensure RFAs are compliant with National Environmental Standards - including protection of Matters of National Environmental Significance - will significantly improve the functioning of the Act in relation to native forestry operations in RFA regions. This includes mechanisms to assess impacts and ensure protection of nationally listed threatened species is effective and compliant with national law. The establishment of a new national EPA to assess compliance is also of significant relevance to forestry operations.



While there is currently uncertainty as to whether Standards and ensuring consistency between those Standards and operations in RFA regions will occur in the immediate future, as part of the Stage 2 reforms, or will be implemented through the full Stage 3 reforms at a later date, in any event these reforms will represent a substantial change and opportunity for improvement over the current Commonwealth legislative framework that has prevailed over the past 25 years.

Zero-extinctions: Minister for the Environment Tanya Plibersek made a commitment to no new extinctions during their term and beyond²². This is consistent with 2030 targets within the GBF, specifically Target 4.

National Forest Policy Statement Review: At the August 2023 National Labor Conference, a motion was passed which commits the Federal Government to overhauling and re-writing the National Forest Policy Statement. This statement lays the policy framework for how Australia's forests are managed. It has not been updated since 1992. This document establishes the vision, the national goals, and the policy initiatives for forests in line with the statement. The process of rewriting this policy will consider, as per the motion, the biodiversity and carbon values of forests and ensure they are appropriately valued. It also commits to creating a plantation-based industry plan to maximize jobs and regional opportunity in high value engineered timber products. This will provide the opportunity to transform management priorities of public native forests across the country.

Australia's Strategy for Nature 2024-2030: This strategy was released in October 2024 and represents Australia's implementation plan for the GBF, aiming to "halt and reverse biodiversity loss by 2030, putting nature on a path to recovery, meaning that by 2050 we will be living in harmony with nature²³". It outlines several goals including 'Goal 2: Care for nature in all its diversity' which has a subobjective of "[improving] conservation management of Australia's landscapes, waterways, wetlands and seascapes" and "use and develop natural resources in an ecologically sustainable way".

National Housing Accord: On 16 August 2023, National Cabinet agreed to a new national target to build 1.2 million new homes over 5 years, from 1 July 2024. Ensuring timber supply is available to meet critical housing supply targets will be a responsibility of all timber producing states. Given the role of softwood in construction, and the fact that NSW is the largest producer nationally, NSW will have a large opportunity and role in meeting this target.

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²² https://www.dcceew.gov.au/environment/biodiversity/threatened/action-plan

²³ https://www.dcceew.gov.au/sites/default/files/documents/australias-strategy-for-nature-2024-2030.pdf Pg.



First Nations reconciliation: There are several relevant commitments and policies which sees first nations reconciliation intersect with land and natural resource management. The National agreement for Closing the Gap, signed in 2020, is one such piece of policy which has several priority reforms and goals which are relevant to decisions around any future tenure/management change to forests, including increasing formal partnerships and shared decision making and building the community-controlled sector²⁴. The expansion of the Indigenous Protected Areas estate with a commitment to investing \$231.5 million in the IPA Program from 1 July 2023 to June 2028²⁵ and the Minister for the Environment Tanya Plibersek committing to establish 12 new Indigenous Protected Areas and invest \$1.3 billion in Indigenous Rangers (announced at the Global Nature Positive Summit in October 2024²⁶) are further responsibilities relevant to NSW forests especially.

NSW Commitments

NSW has its own additional responsibilities and commitments beyond those that are required of the state to help meet global and national commitments.

Great Koala National Park: During the 2023 State election campaign, NSW Labor released a commitment to establishing a Great Koala National Park, with the aim of securing and protecting the future viability of the wild koala population in NSW, on the mid-north coast. As part of this commitment, it pledged to establish a process to assess the original proposal area of 176,000 hectares of native state forests.

Housing targets: The NSW has established 5-year targets to respond to its commitment under the National Housing Accord to deliver 377,000 new well-located homes across the state by 2029. There were also additional housing commitments within the 2024 NSW Budget that will impact timber supply, with \$1 billion for repairing 33,500 existing social homes²⁷.

Independent Review of the Biodiversity Conservation Act 2016: A review into the Biodiversity Conservation Act (Henry Review) was conducted by Dr Ken Henry AC and delivered to NSW Parliament in 2023²⁸. Responding and actioning the Henry Review recommendations is a key environmental commitment and responsibility of the NSW Government in this term of government. These are

²⁴ https://www.closingthegap.gov.au/national-agreement/priority-reforms

²⁵ https://www.niaa.gov.au/our-work/environment-and-land/indigenous-protected-areas-ipa

²⁶ https://minister.dcceew.gov.au/plibersek/speeches/keynote-speech-global-nature-positive-summit

²⁷ https://www.abc.net.au/news/2024-07-01/nsw-first-housing-sites-announced/104042528

²⁸https://www.parliament.nsw.gov.au/tp/files/186428/Independent%20Review%20of%20the%20Biodiversity% 20Conservation%20Act%202016-Final.pdf



found within the 'NSW plan for Nature', released in July 2024²⁹. Notably, these include recommendations about how ecologically significant private lands should be managed, which will potentially change how, and where, private native forestry could operate.

First Nations reconciliation: Establishing a treaty process, and hiring commissioners to undertake the consultation, is part of an NSW Government election commitment³⁰.

Reviews of Regional Forest Agreements (RFAs): NSW has a commitment to review the Eden, Southern, North East RFA's every five years. These are due at the end of 2024.



²⁹ NSW Government (2024) NSW Plan for Nature

Available at: https://www.nsw.gov.au/sites/default/files/noindex/2024-

^{07/}NSW%20plan%20for%20nature%20NSW%20Government%20response%20to%20the%20reviews%20of%20the%20Biodiversity%20Conservation%20Act%202016%20and%20the%20native%20vegetation%20provisions%20of%20the%20Local%20Land%20Services%20Act%202013.pdf

³⁰ https://www.nsw.gov.au/media-releases/commissioners-appointed-to-lead-consultation-aboriginal-people-on-agreement-making

This document seeks to provide an evidence base for understanding the current state of the NSW forest and wood products industry

CONTEXT

Please note that assumptions have been made within this report due to availability or access to relevant data. These data limitations include, but are not limited to:

- · Lack of NSW-specific data on forestry and wood products industry value-added
- · Lack of NSW-specific data on intermediate and final uses of NSW-origin wood production
- The last available National Wood Processing Survey having been conducted in 2016-2017

In the first two cases, estimates have been extrapolated based on available NSW and national data, but these may not fully reflect NSW specific dynamics. It is recommended that further detailed analysis take place prior to any specific course of action. This further analysis should confirm the accuracy of key assumptions, further validate the relevant data and take into consideration changes in the external and internal environment impacted by time.

Forest and wood products are a small but important part of the NSW economy, but industry growth and returns appear low in recent years

EXECUTIVE SUMMARY

- Forest and wood products are a small but important part of the NSW economy
- The industry contributes almost \$3b (0.4%) of state GVA and directly employs nearly 16,000 people (as of the 2021 census)
- Total supply volume of ~8.2 million m³ wood fibre equivalent comes primarily from softwood, with native hardwood comprising ~12%, imports ~10%, and hardwood plantation supply ~5%
- This contributes ~6 million m³ of wood products p.a. to the domestic wood product market, including construction and durable wood products (~2/5), paper and paperboard (~1/4), and chips, residues and firewood (~3/10)
- The smaller quantities of plantation hardwood production means NSW exports a smaller proportion of its production than the national average (~3/10 vs. ~2/5)
- Demand for NSW-produced wood products is expected to be driven by broader dynamics in national Australian wood use
- Australian wood use has grown more slowly than the population, with growth in softwood use offset by significant declines in hardwoods
- Softwoods and hardwoods serve different markets, with softwoods accounting for around two thirds of timber construction use and sector value added
- While hardwoods, particular native hardwood, provide some high value durable products, such as flooring and veneers, most hardwood volume goes to low unit-value products including wood chips, pulp and wood fuel
- The long run economics of new NSW production forestry and plantation projects are challenging, with low rates of return on investment and harvestable area declining overall
- In line with national dynamics, NSW plantation establishment activity has largely ceased since 2010 given potentially unfavourable returns on new investment, with hardwood plantation area declining by ~40%
- Native forest wood production has declined by ~2/3 since FY04
- Processing and manufacturing comprise around two thirds of industry value-add and employment, with native forestry accounting for 15-20% of NSW's ~16,000 forestry and wood product jobs in 2021
- NSW softwood mills are typically larger than other states'. Hardwood and cypress pine sawmills are small, and likely to be behind the most efficient sawmill productivity frontier, but support small but value-additive downstream manufacturing activities
- Forestry is particularly important for regional communities. While most industry employment is in downstream manufacturing, employment in logging and primary wood processing are highly geographically concentrated
- NSW population continues to grow (albeit more slowly than other states). However, NSW's ability to meet local demand for construction and other uses will depend on the availability
 of wood products domestically, shaped by national market dynamics and imports

Demand for NSW-produced wood products is expected to be driven by broader dynamics in national Australian wood use

OVERVIEW | NSW WOOD USE AND EXPORTS

Wood harvesting and imports

Wood product processing and manufacturing

Wood use and exports

Wood use summary

- Wood use in Australia is falling in per capita terms, particularly hardwood use which has declined significantly in absolute terms since 2000
- Softwoods have largely replaced hardwoods in use, partly due to lower costs
- Hardwoods are a small share of Australian wood use, but since native forests yield more sawlogs than hardwood plantations, natives are a larger share of Australian hardwood use

Wood construction materials

- Construction products are the largest domestic consumer of wood:
 - Structural timber for frames and trusses are the largest end-use by volume
- Other products e.g. cabinetry and flooring, use a larger share of hardwoods
- Softwoods are more than 90% of construction wood use by volume
- Wood use in construction is declining as housing shifts to apartments

Durable solid and other wood products

- The largest additional use for high-quality wood is as furniture
- Lower grade woods are also consumed typically as firewood, wood mulch, or as wood pellets
- Solid wood manufactured products are more reliant on hardwood given its durability advantage
- Even low value-uses (e.g. firewood) use relatively more hardwood given its lower soot content

Non-durable paper and paperboard

- Harvest logs below saw-grade are used to produce pulp which is used for paper and paperboard products
- Australian pulp and paper consumption has been steady over the past two decades but has grown in packaging materials and declined in printed material and newsprint
- This has seen softwood use grow as it is typically used for 'brown paper' with hardwoods for 'white paper'

Wood product exports

 The lower share of plantation hardwood production means NSW exports a smaller proportion of its production than the national average (~1/4 vs. ~2/5)

The economics of new NSW production forestry and plantations are challenging, with low rates of return and harvestable areas flat or declining overall

OVERVIEW | NSW WOOD HARVESTING AND IMPORTS

Wood harvesting and imports

Wood product manufacturing

Wood use and exports

Wood harvesting

- NSW harvests >80% of its wood (excl. imports) from softwood plantations,* ~5% from hardwood plantations, and ~12% from native forests
- Economics of new plantation areas establishment appears likely un-investable under current context and policy settings

Softwood

- NSW has nearly 300k hectares of softwood plantations, yielding ~5.1 million m³ of roundwood p.a. (just over half of which is sawlogs)
- New softwood plantation establishments have largely ceased since 2010, and total plantation area has been mostly flat
- Estimated IRRs for new softwood plantations are low

Hardwood plantations

- NSW hardwood plantations grew to ~90k Ha plantation establishment by 2010, but ~40% of this has since been disestablished
- NSW now has ~55k hectares of remaining hardwood plantations, nearly all in the North Coast region, producing ~275k roundwood p.a.

Native hardwood

- Native hardwood production has declined by ~2/3 since 2004, now accounting for only ~700k m³ per year of roundwood production (~20% Australian production prior to cessation of native logging in Victoria and WA)
- The direct-cost-only structure of producing sawlogs (excluding externalities and including land cost) from native forests appears generally lower than production from plantations

Wood product imports

 NSW is slightly more import dependent than the Australian average, importing ~10% of total state supply volume (vs. 6% nationally)

While NSW softwood production also includes cypress pine sourced from native forests, this is estimated to account for <1% of total production.

Example: Key points that do not relate specifically to NSW draw on separate analysis of the national forestry market performance and operating context.

Processing and manufacturing comprise ~2/3 of industry value-add, with NSW more focused in wood products relative to pulp and paper vs. the Australian average

OVERVIEW | NSW WOOD PRODUCT MANUFACTURING

Wood harvesting and imports

Wood product processing and manufacturing

Wood use and exports

Wood product manufacturing summary

- The NSW wood products industry produces ~\$2.8 billion of value add
- Processing and manufacturing comprise "two thirds of industry value-add
- Across Australia, wood industry wholesale margins are highest in midstream wood product processing and lowest in harvesting and logging

Sawmill product manufacturing

- NSW had 95 mills in FY17, the majority (68) of which were geared towards processing hardwoods
- NSW softwood mills are typically larger than other states'. However, hardwood and cypress pine sawmills are small, and likely to be behind the most efficient sawmill productivity frontier

Other wood product manufacturing

- Wood-product manufacturing is ~40% of industry value-add in NSW (vs. 35% nationally)
- Australian wood product manufacturing generates pretax profit margins of ~10% with short-term returns boosted by COVID construction activity
- Wholesale margins average
 ~12% across Australia and are
 highest in reconstituted panels,
 furniture, and cabinetmaking

Pulp, paper stock and paperboard manufacturing

- Visy Pulp and Paper Tumut is one of three Australian pulp facilities, producing ~700 kt p.a. of high-quality kraft paper for domestic use and exports
- Pulp, paperstock, and paperboard manufacturing contributes ~8% of industry value-add in NSW
- Australian pulp and paper product manufacturing generates modest returns between 2.5-5% pre-tax

Paper and paperboard product manufacturing

- Paper and paperboard product manufacturing is around 20% of industry value-add in NSW
- Wholesale margins are ~5% across the Australian industry with margins highest in paper stationery and cutlery

Forestry employment is highly localised, with native forestry accounting for 15-20% of NSW's ~15,700 forestry and wood product jobs (based on 2021 census)

OVERVIEW | NSW EMPLOYMENT

Aggregate employment

- NSW's forestry sector employs ~15,700 people, making up around 1/3 of the national forestry workforce (prior to the cessation of native logging in Victoria and WA) - the largest forestry workforce in the country
- Similar to Australia as a whole, ~2/3 of NSW forestry workers are employed in downstream manufacturing
- In line with national trends, NSW's forestry industry is highly localised and makes up a material share of local employment in some regional communities

Native forestry employment

- ~2,400-2,800 (15-18%) of these people are estimated to work in native forestry and wood products (across the full value chain)
- These jobs are predominantly situated upstream in logging and milling and more highly concentrated in regional communities

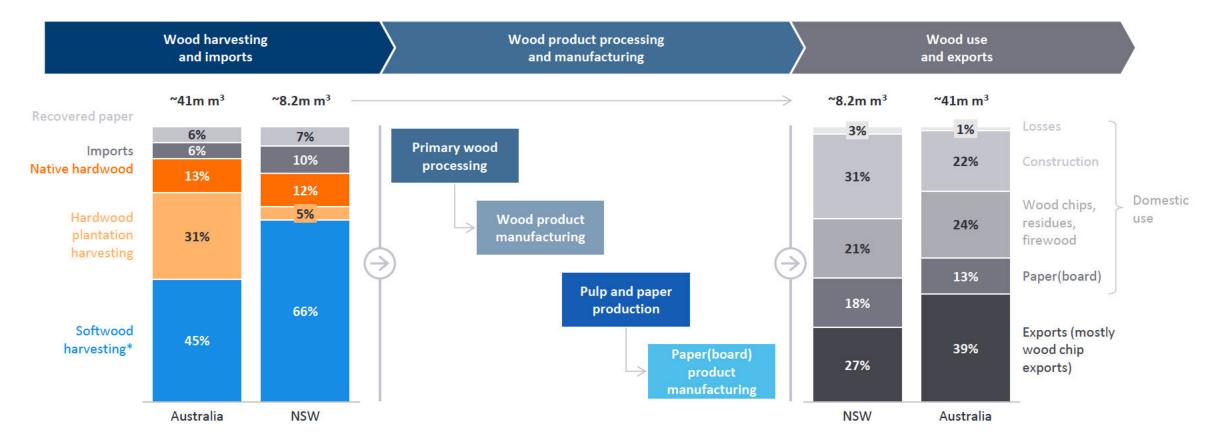
Demographics and job characteristics

- The forestry workforce consists mostly of male employees in the latter stage of their career without degree-level education
- Wages typically range from ~\$40-130k p.a., with lower wages upstream in the forestry value chain
- Around 2/3 of forestry and wood products workers may have viable employment alternatives outside of the industry, but outside options are likely to be more limited for 'upstream' workers in logging and milling

The forest and wood products industry covers all activities from forest harvesting, and product manufacturing, through to end-use and export

OVERVIEW | NSW FOREST AND WOOD PRODUCT INDUSTRY VALUE CHAIN

Million m3 wood fibre equivalent per year



Includes native cypress pine

Note: Figures are 2018-2022 averages and expressed in m³ wood fibre equivalent including volume from recovered paper and substantially transformed products containing wood fibres. Difference between wood use and exports, and wood harvesting and imports, are treated as recovered paper and losses

Source: Analysis of ABARES, FAOSTAT, and Forest and Wood Product Association data.

NSW produces a comparatively higher share of softwoods and sawlogs than the national average

HARDWOOD AND SOFTWOOD PRODUCTION SPLIT, FY18-22 AVERAGE

Million m³ industrial roundwood harvested per year; Percent



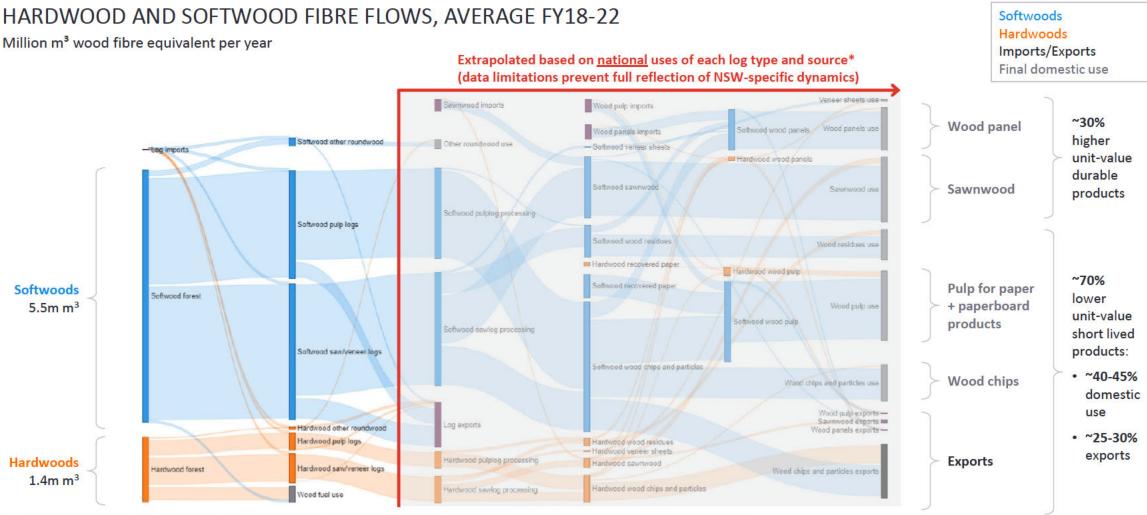
Includes native cypress pine.

Note: Data has been taken directly from ABARES, with no wood fibre equivalent conversion; not including wood fuel, as per ABARES harvest data

Source: ABARES – Australian forest and wood product statistics – December 2022

^{**} Split based on estimated mill throughput from National Wood Processing Survey FY17.

While detailed consumption data is not available at a state level, extrapolating national splits can show the <u>potential</u> flow-on impacts of NSW's emphasis on softwoods

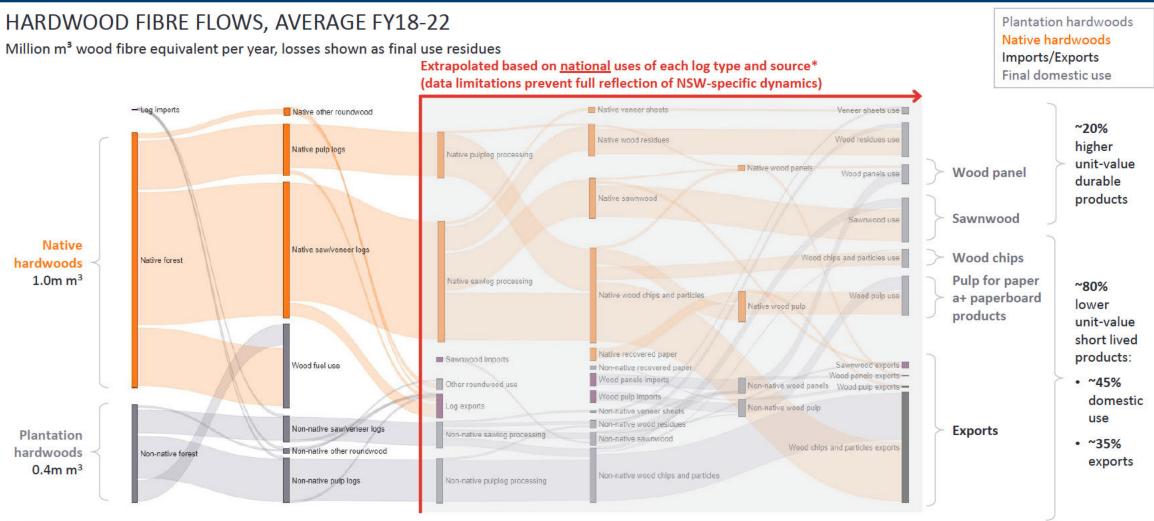


^{*} Wood fuel use, and other subsequent use for each log type/source (e.g. native saw/veneer logs or plantation hardwood pulp logs) is assumed to follow national trends.

Note: Pulp includes unrecoverable pulp losses to produce paper and paperboard products; original data has been converted to wood fibre equivalents.

Source: Analysis of ABARES, FAOSTAT, Forest and Wood Product Association, and DFAT State trade data.

Extrapolating national trends can also show the <u>potential</u> flow-on impacts of NSW's under-indexation of plantation hardwoods



^{*} Wood fuel use, and other subsequent use for each log type/source (e.g. native saw/veneer logs or plantation hardwood pulp logs) is assumed to follow national trends.

Note: Pulp includes unrecoverable pulp losses to produce paper and paperboard products; original data has been converted to wood fibre equivalents.

Source: Analysis of ABARES, FAOSTAT, Forest and Wood Product Association, and DFAT State trade data.

Australia consumes wood products in a variety of forms

AUSTRALIAN REPORTED APPARENT USE OF SELECTED WOOD PRODUCTS, AVERAGE FY18-22



Note: only selected product categories shown; apparent consumption is defined as production plus imports less exports OSB: Oriented Strand Board, MDF: Medium-Density Fibreboard, HDF: High-Density Fibreboard

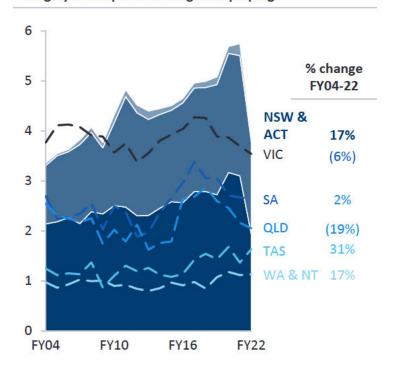
Source: FAOSTAT – Australian Forest Product Statistics

NSW is the largest producer of softwood in Australia, a mid-size native hardwood producer, and second smallest plantation hardwood producer

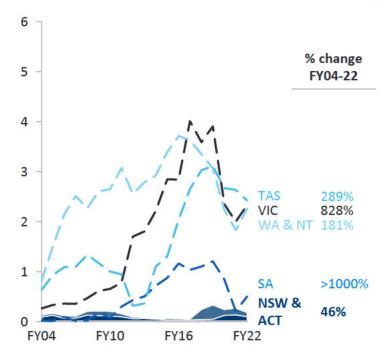
NSW AND AUSTRALIAN PRODUCTION BY LOG TYPE, FY04-22

Million m³ industrial roundwood harvested per year

NSW is Australia's largest <u>softwood</u> producer, with a roughly even split of sawlogs and pulplogs

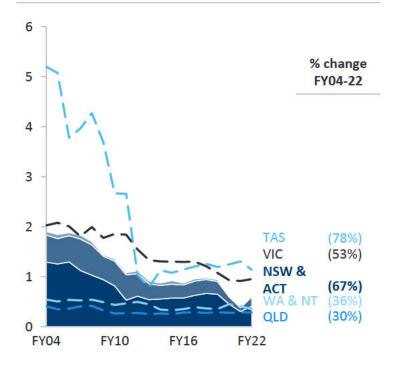


NSW has not grown meaningful <u>plantation hardwood</u> production relative to other states



NSW saw and veneer logs
NSW pulplogs
NSW other

NSW <u>native hardwood</u> production has the second highest decline rate (67% reduction) since FY04



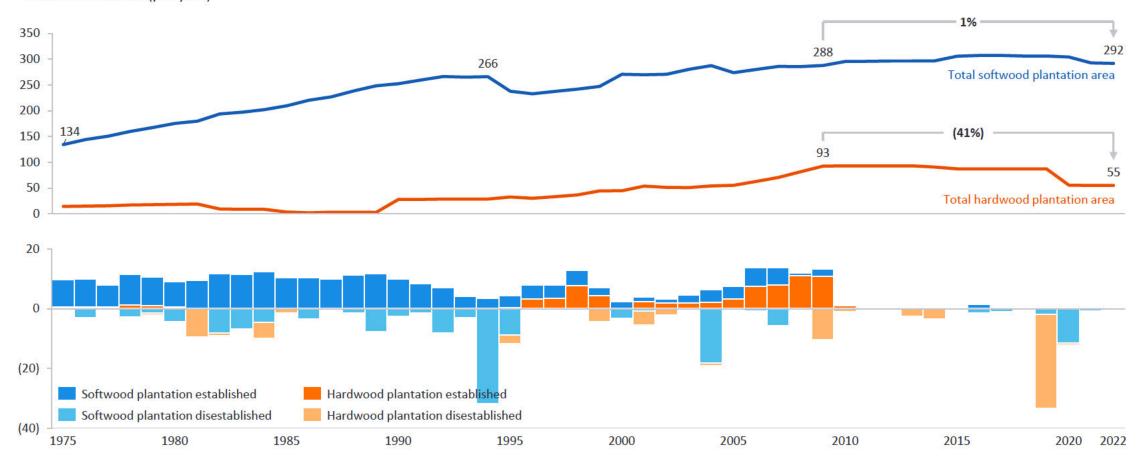
Note: Roundwood refers to wood felled or otherwise harvested or removed (synonymous with logs).

Source: ABARES – Australian forest and wood product statistics – December 2022

Plantation establishments have largely ceased since the early 2010s, with decline in total plantation area driven by hardwood disestablishments

NSW PLANTATION ESTABLISHMENTS, DISESTABLISHMENTS, AND AREA FY1975-2022

Thousand hectares (per year)

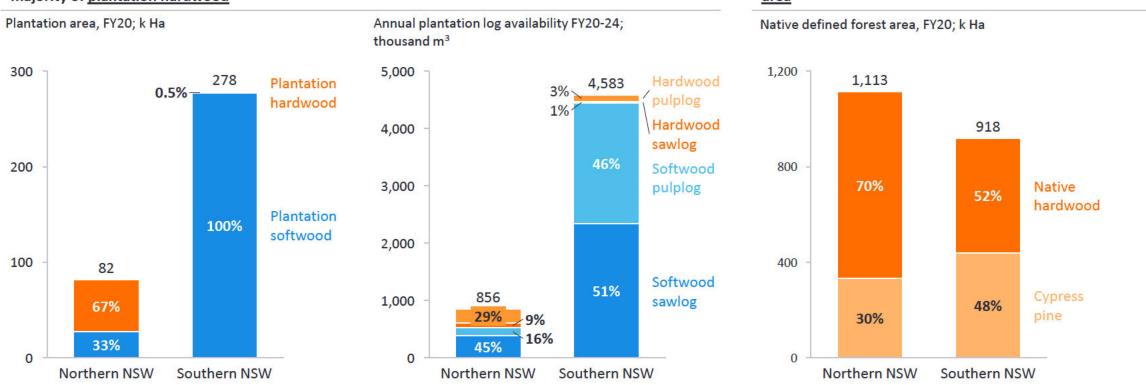


Southern NSW has the majority of total plantation area and production, but Northern NSW has the majority of native and plantation hardwood

NORTHERN VS. SOUTHERN NSW PLANTATION AREA/PRODUCTION, AND NATIVE FORESTRY AREA

Southern NSW has the majority of total <u>plantation area and production</u>, but Northern NSW has the majority of plantation hardwood

Northern NSW has the majority of <u>native defined forest</u> <u>area</u>



Note: Central Tablelands included in Southern NSW. Log availability data includes production from NPI regions that are predominantly in NSW, but include some areas in VIC and ACT (for Southern NSW) and QLD (for Northern NSW).

Source: ABARES - Australian plantation statistics and log availability report 2021; Forestry Corporation 2022-23.

WOOD HARVESTING AND IMPORTS

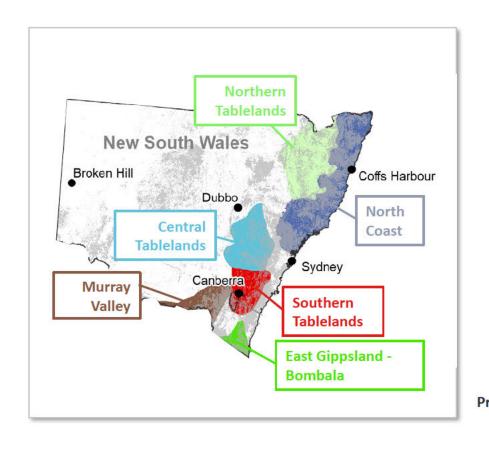
NSW's North Coast region contains nearly all the state's hardwood plantation area, with other regions being predominantly softwood

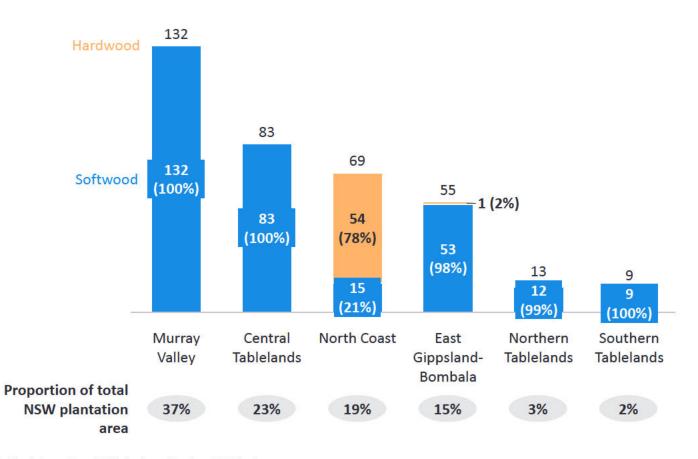
PLANTATION AREA BY PLANTATION INVENTORY REGIONS, FY20

PLANTATIONS

Thousand hectares

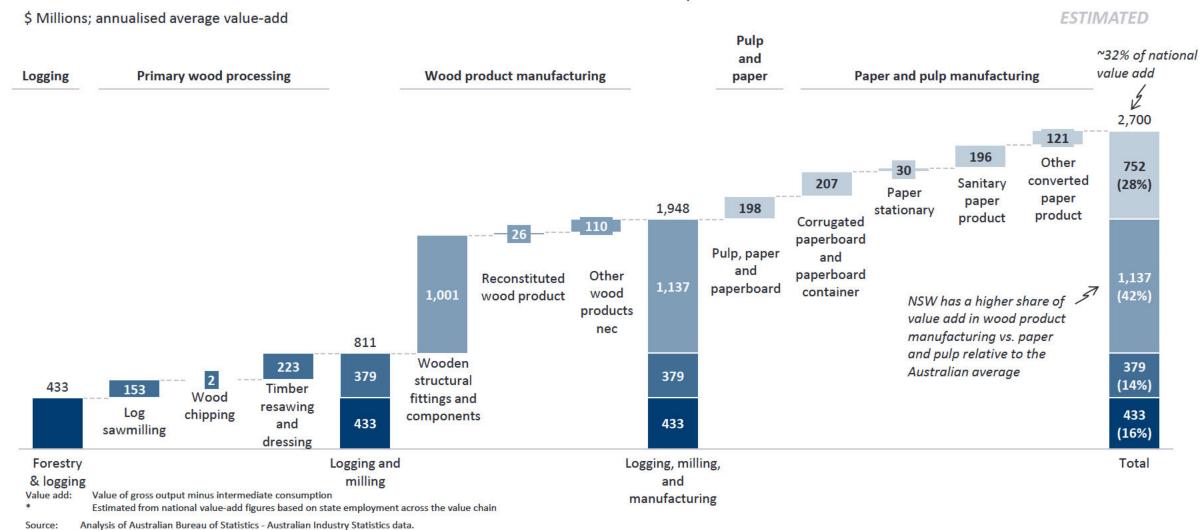
Note:





The NSW wood products industry is estimated to produce ~\$2.7 billion of value add, around 2/3 of which is in processing and manufacturing

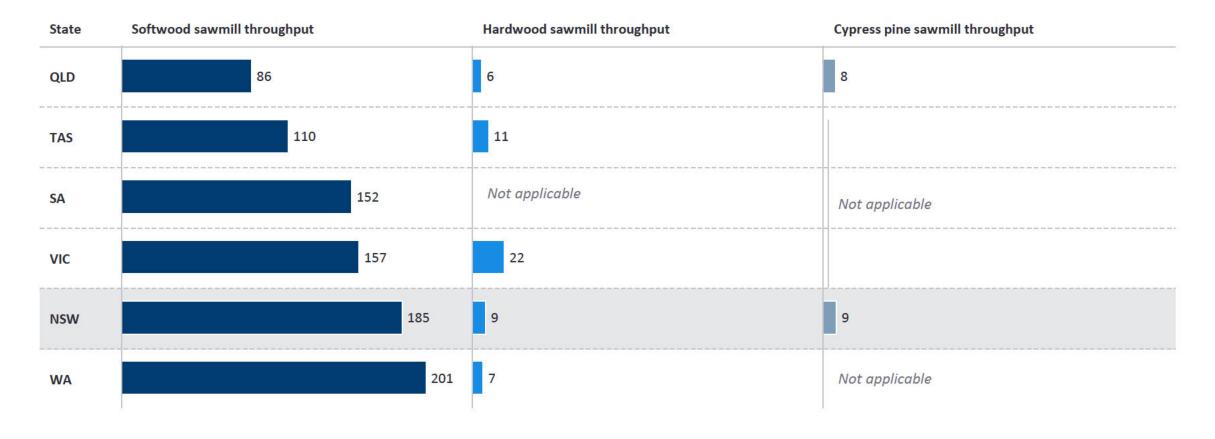
VALUE-ADD FROM NSW FORESTRY AND WOOD PRODUCT INDUSTRY, AVERAGE FY18-22*



NSW softwood mills are typically larger than other states', with hardwood and cypress pine sawmills significantly smaller than softwood mills

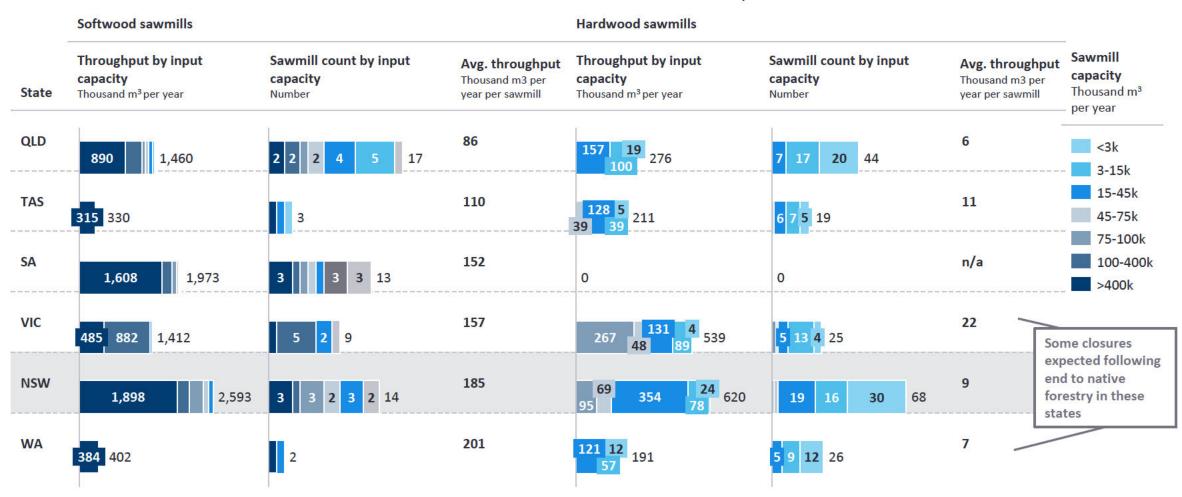
AVERAGE THROUGHPUT OF SOFTWOOD AND HARDWOOD SAWMILLS, FY17

Thousand m³ per year per sawmill



NSW's softwood and hardwood sawmills have the highest total throughput compared to other states

THROUGHPUT DISTRIBUTION OF SOFTWOOD AND HARDWOOD SAWMILLS, FY17

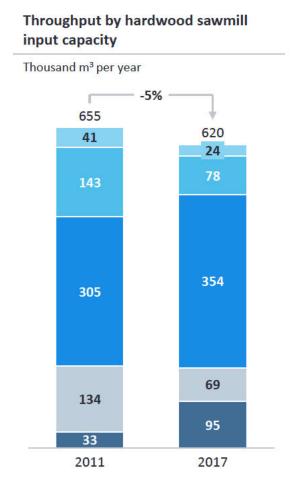


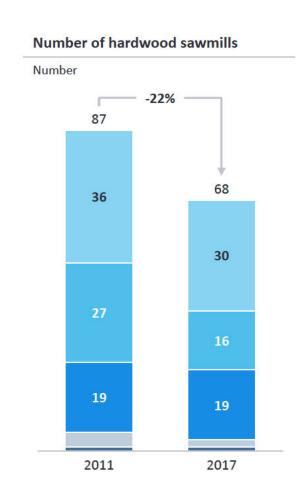
Note: not all sawmills operate at rated input capacity. Capacity data not available for other mill types.

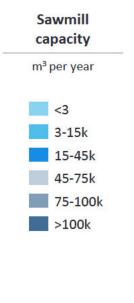
Source: ABARES - National Wood Processing Survey, FY17

Overall hardwood sawmill capacity has declined from FY11-17, driven by consolidation of mostly smaller mills, while capacity at the largest and mid-size mills grow

NSW HARDWOOD SAWMILL CAPACITY AND COUNTS, FY11-17

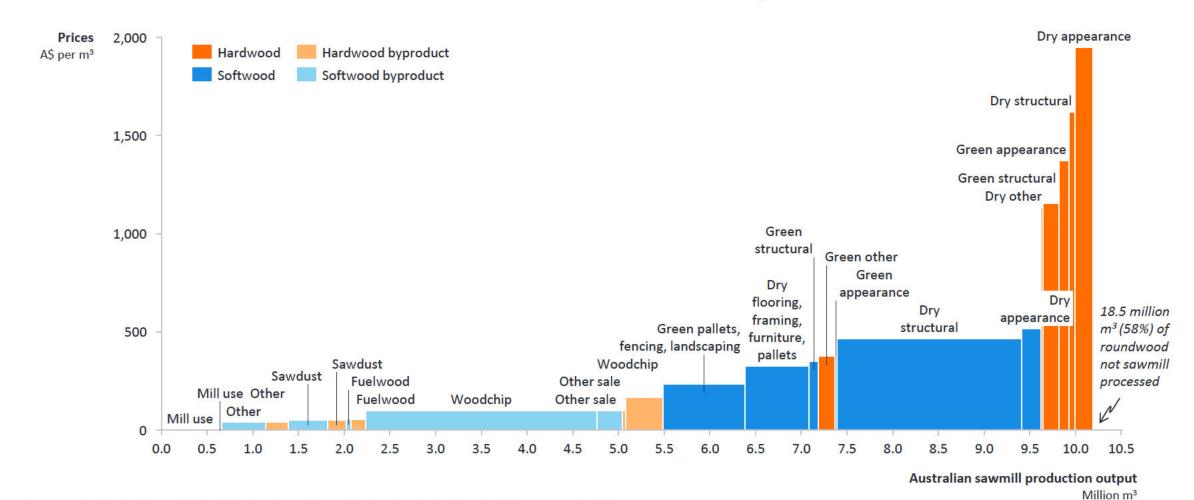






Nationally, hardwood sawmills produce a small volume of premium priced wood products (as of FY17)

AUSTRALIAN SAWMILL SAWLOG PRODUCTION OUTPUTS AND BYPRODUCTS, FY17



End of native forestry in VIC and WA will reduce total share of hardwood production below the 41% share reported in FY17 Note:

ABARES - National Wood Processing Survey FY17 Source:

JOBS AND COMMMUNITIES AGGREGATE EMPLOYMENT

The 2021 census reported ~15,700 people employed in NSW forestry and wood product industry, ~70% in downstream processing and manufacturing

NSW EMPLOYMENT IN FORESTRY AND WOOD PRODUCTS, 2021

