Independent Forestry Panel

Public submission

STEPHEN DADD Submission ID: 203999

Organisation:	*The Pentarch Group*
Location:	*New South Wales*
Supporting materials uploaded:	*Attached overleaf*

Submission date: 10/11/2024 10:35:48 AM

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October 11, 2024

Submission to the Independent Forestry Panel

This submission is made on behalf of Pentarch Forestry, which is one of Australia's largest hardwood and softwood manufacturers. It has operations in NSW, Victoria and Tasmania, a national distribution network and export facilities employing 500 people in metropolitan and regional centres.

As part of The Pentarch Group, Pentarch Forestry is committed to innovation in the circular economy by maximising the use of the available resource to create natural, renewable, carbon-storing products from our native and plantation hardwood and softwood stocks.

The Pentarch Group adheres to and trusts the forest certification processes which align our business with positive environmental outcomes.

As part of our submission, we attach the NSW Forestry Industry Roadmap *prepared on behalf of the NSW forestry industry as a guide for future policy.*

1. Sustainability of current and future forestry operations in NSW

The Forestry Industry in NSW manages 368,000ha of mostly softwood plantations and also draws resource from regrowth native forest in the State Forest estate and from private property. Forestry in NSW operates under strict environmental and management practices and is sustainable by the very fact that regrowth from previously harvested native forests are now again available for harvest. The industry provides specialised land management services, is critical to our regional economies and provides vital renewable products to our housing, industrial and packaging markets.

NSW has over 19 million hectares of native forest, covering nearly 25% of the state's land area. This includes 5.6 million hectares in nature conservation reserves – the most extensive of any state[1]. The NSW multi-use state forests, managed by NSW Forestry Corporation, represent only 9% of this total native forest area. More than half of the multi-use state forest estate is held within permanent protection zones. Native timber harvesting in NSW occurs across less than 1% of the state forest each year under rigorous environmental regulations and all harvested areas are replanted or

[1] Forest facts - DAFF (agriculture.gov.au)

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naturally regrown. Harvest volumes within the native hardwood estate remain well below the long-term sustainable yield.

Hardwood and softwood plantations constitute less than 2% of the total forest area in NSW, which is insufficient to meet the increasing demand for timber in industrial and housing sectors. The recent cessation of native timber harvesting in Victoria will further exacerbate shortages. This shift has increased pressure on NSW and other states while driving up reliance on imports from countries with lower environmental standards.

Forestry and timber production is crucial to NSW's economy, contributing an estimated $6.2 billion annually in Gross Regional Product (GRP), with the native timber industry alone adding $1.1 billion[2]. Bushfires have further reduced stocks in both plantations and native forests, underscoring the need for well-managed, sustainable forestry operations.

A comprehensive picture of NSW forestry sustainability must consider not only environmental management practices but also the economic, social, and cultural values our forests provide. Pentarch, as the largest hardwood forestry operation in NSW and a key player in softwood and residue exports, continues to invest in circular economy initiatives, permaculture, carbon, and energy businesses. Our forestry operations have a legacy spanning over 100 years, from supplying high-value decorative timber for iconic structures like the Sydney Opera House and Parliament House to providing the original timber decking for the Sydney Harbour Bridge in the 1930s. Some of this ironbark timber remains visible on the bridge today. Our experience reinforces that NSW forestry can continue to sustainably supply housing, industrial, and packaging materials for generations to come, through well-managed plantations and regrowth native forests.

The forestry industry enjoys strong support from local communities in major hardwood and softwood growing regions, which has been well-documented in various social licence studies. This community endorsement further validates that responsible management of plantation and regrowth native forests can meet the housing, industrial, and packaging needs of NSW in perpetuity.

2. Environmental and cultural values of forests, including threatened species and Aboriginal cultural heritage values

[2] NSW-Hardwood-Timber-Industry-Economic-Contribution-Study-Final-14-Feb-2023.pdf (timbernsw.com.au)

The timber industry recognises the significant environmental and cultural values of native forests, with a strong commitment to minimising risks to native flora and fauna. This commitment is demonstrated through detailed harvest plans, which include strict protection prescriptions for wildlife habitats, seed trees, and riparian zones. These protective measures effectively reduce the available area for timber harvesting in each coupe by approximately half. Post-harvest regrowth forests are home to abundant native fauna, further supporting the evidence that responsible forest management for timber and fibre does not adversely impact wildlife populations.

Growing scientific consensus highlights that well-managed native regrowth forests can support high biodiversity values alongside sustainable timber harvesting. Studies from the CSIRO[3], DPI's broad-scale koala acoustic monitoring, and infrared drone surveys in the Greater Koala National Park (GKNP) have identified significantly higher koala population densities in managed regrowth State Forests than previously thought. The Natural Resources Commission's Koala Research[4] reinforces these findings, concluding that "*selective harvesting did not adversely impact koala density, nor the nutritional quality of koala habitat*." The research revealed "*researchers using acoustic sensors also examined koala population density in forests that were intensively harvested up to a decade ago. They found koalas were still using these sites and detection rates and density were comparable to unharvested sites*." These high koala densities in working forests reflect the effectiveness of current forest management practices in preserving biodiversity.

Fire management practices and resources are essential in protecting the environmental and cultural values of NSW's State Forests. NSW Forestry Corporation and the timber industry play a vital role in managing fuel loads, controlling invasive species, and maintaining access roads throughout the forest estate. The industry's specialised skills and access to heavy assets have been invaluable in recent fire events, effectively aiding in the protection of both forests and nearby communities.

Cultural heritage values are thoroughly documented and managed under the Forestry codes of practice, acknowledging the long-standing connection of Australia's Traditional Owners to these landscapes. Aboriginal people have sustainably managed these forests for millennia, exemplifying approaches to forest stewardship that are often lacking in national parks and reserves. The forestry industry's commitment to incorporating these cultural perspectives reinforces our dedication to preserving the rich heritage and biodiversity of NSW's forests for future generations.

[3] National Koala Monitoring Program (nkmp.org.au)
[4] Final report - Koala research program - December 2022 v2.1.pdf (nsw.gov.au)

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

Softwood and hardwood products are indispensable to the NSW housing and construction industries, supplying the majority of materials for house frames, cabinetry, structural beams, plywood and bracing, doors, windows, architraves, mouldings, decking, and flooring. Hardwood continues to play a vital role in underground mining operations as well as in the national logistics supply chain, which relies heavily on timber pallets sourced from local plantations and native regrowth forests.

Despite the importance of these materials, NSW faces a significant trade deficit in timber products, importing around 30% of house framing material, virtually all engineered structural beams, most plywood, and large volumes of hardwood decking, flooring, and furniture-grade timber from tropical forests in Asia, Africa, and South America. The collapse of global supply chains during the COVID-19 pandemic exposed the vulnerability of our economy to this dependence on imported forestry products. Unreliable supply of imported timber contributed to construction cost inflation, delays, and even insolvencies within the building sector. Furthermore, the recent restrictions on native timber supply due to the Victorian and Western Australian decisions to end native forestry operations have increased reliance on imported construction materials. Australia now depends entirely on imports for high-value copy paper, for example, after the closure of the Opal Reflex white paper facility in Gippsland, Victoria.

The looming housing crisis and the critical role NSW must play in meeting the targets of the National Housing Accord will put additional strain on local timber fibre supplies. It’s essential that NSW invests in expanding its plantation sector, with at least 90,000 hectares of new softwood plantations needed to satisfy growing demand. Additionally, protecting the entirety of NSW’s existing native hardwood forest estate is crucial to ensuring supply stability.

In other states we have seen the devastating impact that politically motivated contraction in the Forestry Industry has had. The end of native timber harvesting in Victoria, for example, has had far-reaching economic and supply chain impacts, including the closure of Pentarch’s wood pallet manufacturing facility in Dandenong. This facility previously produced up to 700,000 hardwood pallets annually, leaving a significant gap in pallet stocks and reducing the capacity for transporting goods. Meanwhile, the NSW Government has committed to building 75,000 new homes each year to accommodate population growth, in line with the National Housing Accord. This goal, combined with a predicted 50% increase in global demand for forestry products by 2050, places immense pressure on the native timber industry.

Emerging opportunities in Modern Methods of Construction (MMC), including prefabricated and modular timber-based housing, promise to address critical trade shortages and reduce construction times. However, these new construction methods will also increase demand for timber resources. NSW's lack of manufacturing facilities for engineered timber products such as GluLam and MassLam further hampers efforts to maximise the use of available timber. Investing in local manufacturing and increasing our plantation footprint will be vital in reducing dependency on imports, supporting the construction industry, and meeting future demand.

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

The plantation sector in NSW needs revitalisation to meet growing demand and offset supply losses, particularly those caused by bushfires. To address these challenges, approximately 7000 hectares of hardwood should be planted immediately to compensate for the anticipated shortfall when the Great Koala National Park (GKNP) is established. This transition will require at least 30 years to replace the timber supply lost to the creation of the GKNP. Furthermore, an estimated 90,000 hectares of additional softwood plantations are needed, distributed as follows:

- 30,000 hectares in the Central Tablelands to meet demand for new modular housing technologies,
- 30,000 hectares in the Southern Slopes to replace supply lost to bushfires, and
- 30,000 hectares to support Visy's new paper production line in Tumut.

Australia's national plantation estate spans just over 1.8 million hectares, representing less than 1.5% of the country's total forested area—a reduction from a peak of over 2 million hectares prior to the 2019/2020 fires and following years of conversion back to agricultural land. Australia's plantation development occurred primarily in two waves:

1. The first wave (1950s-1970s) focused on exotic softwoods, such as those planted by State Government agencies with federal loan support to address housing demand. Significant softwood plantations were established across NSW in Tumut/Tumbarumba, Bombala, the Central West, and, to a lesser extent, near Walcha in the North.

2. The second wave was driven by Managed Investment Schemes in the 1980s and 90s which incentivised the planting of roughly one million hectares of mainly local hardwoods.

However, many of these plantations targeted export pulp markets, often with limited consideration for proximity to ports or local manufacturing infrastructure.

Over the past decade, NSW has seen limited momentum in plantation expansion. However, recent Federal plantation establishment grants and emerging carbon opportunities have stimulated some new plantings, particularly in the Central West. Despite this progress, NSW remains significantly undersupplied in plantation resources for both current and future needs. Substantial new investment is essential to meet manufacturing demand, reduce reliance on imports, and support timber innovation, including engineered products, Modern Methods of Construction, and a transition to biofuel and bio-chemical feedstock.

Private Native Forestry (PNF) is another crucial component in meeting timber supply needs. According to the NSW Department of Primary Industries, PNF employs approximately 1800 people and contributes between $160 million and $250 million annually to the state's economy. PNF also provides more than 50% of NSW's hardwood supply. Continued support for PNF is critical for the future of the hardwood industry, as it remains a key resource in meeting the state's timber needs.

In light of recent challenges, State Government grant support for fire management in the Tumut/Tumbarumba region has proven beneficial, particularly in areas severely affected by the 2019/2020 fires. This support must be expanded to other hardwood and softwood regions, recognising the strategic importance of these plantation assets to regional economies and the NSW housing industry.

Significant new investment in plantations is required to meet current manufacturing demand, reduce reliance on imports, and drive innovation within the timber industry. Additionally, investment in fire management and infrastructure across all plantation regions will help ensure the long-term viability and resilience of NSW's plantation sector, supporting local economies and the growing demand for sustainable construction materials.

5. 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

The NSW State Forests are multi-use managed forests supporting sustainable commercial harvest of a range of high value timber products. These forests also play a crucial role in supporting recreational activities, creating regional employment and promoting conservation. 50% of the State

Forest estate is held in permanent protection zones where no harvest activity will ever take place. These permanent protection zones contain all the old growth, rainforest, riparian and environmental and culturally sensitive areas in the estate. Cultural burning practices and tourism are increasingly integrated into state forest management.

The NSW State Forestry Corporation manages over 2 million hectares of land, representing less than 10% of the total forest area in NSW. With over a century of experience, Forestry Corporation has developed extensive capabilities in forestry management practices, including plantation and native silviculture, as well as in providing vital community services including ecological services, fire management and mitigation, invasive species control, and plantation nursery operations. Each year, State Forests host over 30 million recreational visits, accommodating campers, hikers, four-wheel drivers, fishers, and other outdoor enthusiasts.

While Forestry Corporation is often evaluated through a narrow financial lens, focusing on its cost recovery from timber supply, this perspective fails to capture the broader value of the corporation's contributions. In addition to resource supply, Forestry Corporation supports a downstream forest products industry that employs more than 15,000 regional workers and generates over $3 billion for the NSW economy. Furthermore, more than half of the land under Forestry Corporation's management – more than 1 million hectares – is designated as Permanent Protection Zones. These areas are managed similarly to national parks, providing critical ecological services at a fraction of the cost associated with comparable national park management.

Forestry Corporation also actively supports Aboriginal forest management practices. With a significant Indigenous workforce, the corporation integrates traditional ecological knowledge into its operations, particularly in fire management. Cultural burning practices, for example, not only enhance forest health and biodiversity but also reinforce the connection between Aboriginal communities and their traditional lands.

By blending conventional forestry practices with Aboriginal land management models, NSW Forestry Corporation is able to maximise environmental, economic, and social outcomes. This approach ensures that State Forests remain productive and resilient, supporting sustainable timber supply while preserving biodiversity, enhancing recreational opportunities, and honouring cultural heritage. The continued incorporation of traditional ecological knowledge and collaboration with Indigenous communities offers a pathway toward a more inclusive and diverse model of forest stewardship.

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6. 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

In NSW the Central West Forestry Hub has conducted a full carbon audit of the forests and timber processing industry within the hub boundaries[5]. The audit has demonstrated that the region is carbon positive on account of new plantations, extensive use of renewable biofuel and carbon sequestered in products more than offsetting all scope 1, 2 and 3 emissions generated by the forestry and processing activities in the region. This is a significant achievement and demonstrates what can be achieved by this industry.

In hardwood native forestry we draw attention to the work of Dr Fabiano Ximenes[6] and Dr John Raison who are experts in forest carbon stocks. Each have found that native forest harvesting has carbon sequestration and storage benefits which, at worst, make native timber production carbon neutral. This is because the wood and fibre extracted from the forests is used in products which store carbon, and young, regrowing forests absorb more carbon. When carbon miles of importing timber to replace supply lost to avoided harvesting is factored in, along with the production of timber in global regions which do not have the same strict emissions standards, it is found that native timber harvesting in Australia is nett carbon positive.

The Intergovernmental Panel on Climate Change states: “A sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.” (IPCC 4th Assessment)[7]. In other advanced countries, forest management is regarded as essential for positive environmental outcomes including the use of biomass as an energy source. The greatest carbon emitter is wildfire which can be mitigated by effective forest management.

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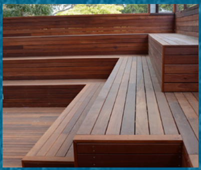
[5] CWFH-ZP102690-Carbon-Footprint-Report-v1_2.pdf
[6] (PDF) Carbon dynamics in native forests - a brief review (researchgate.net)
[7] (18) IPCC report backs Australia’s sustainable forest industries to achieve Net Zero by 2050 | LinkedIn

NSW FORESTRY INDUSTRY ROADMAP

A Forest Industry Action Plan for healthy forests, strong communities and a housing future made in NSW.



2024 - 2034

Contents

Prepared on behalf of the NSW Forestry Industry

NSW Forests at a Glance

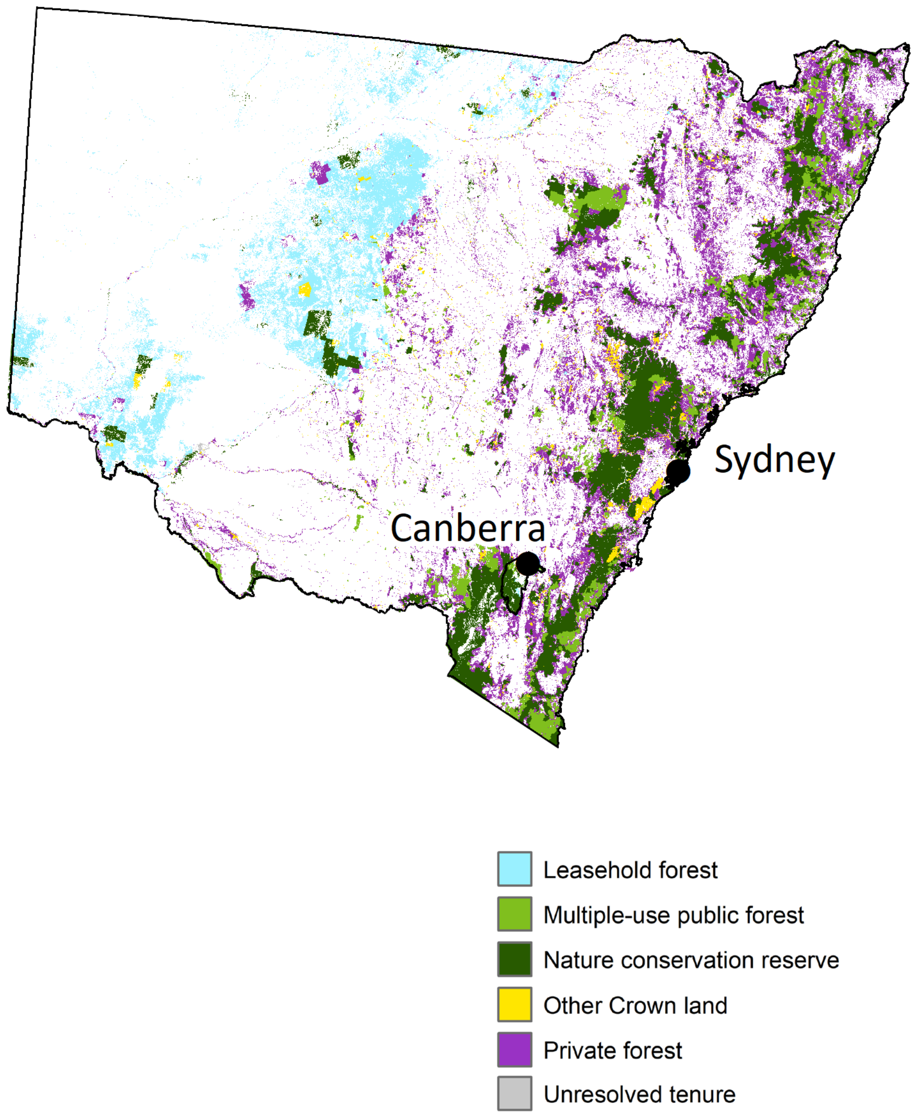
- NSW has over 20m ha of native and plantation forests which is almost 25% of total land area in NSW
- NSW has 5.6m ha of forest in nature conservation reserves which is more than any other state
- 9% of NSW forest is multi-use State Forests, more than half of which is in permanent protection zones
- Our 368,000 ha of hardwood and softwood plantations are less than 2% of forest area and insufficient to meet growing industrial and housing demand.

NSW Forest Area by Jurisdiction

Jurisdiction type	Area ('000 hectares)
Native forest	19,882
Commercial plantation	368
Other forest	34
Total Forest	**20,284**

NSW Forest Area by Tenure

Tenure type	Area ('000 hectares)	Area (%)
Leasehold forest	3,913	21.3
Multiple-use public forest	2,122	9.3
Nature conservation reserve	5,638	27.9
Other Crown land	837	3.8
Private forest	7,708	37.2
Unresolved tenure	66	0.4
Total Forest	**20,284**	**100**



SOURCE: ABARE

NSW Timber Industry at a Glance

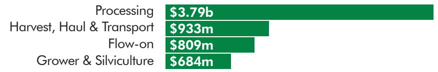
These most up-to-date indicators include direct activity of forestry industry businesses from growing to processing including flow-in effects in other sectors of the economy through purchases of inputs and employment in NSW.

Gross Regional Product:

$6.22b
Contributed to GRP

Contribution to Gross Regional Product (GRP) is a measure of net contribution of an activity (forestry) to the state economy.

Contribution to total GRP in NSW by sector



$408k per employee

of GRP contributed to the NSW economy for each forest industry employee working in the state.

Employment:

15,270
Total Jobs

The total jobs is the equivalent of 15,270 full time jobs in NSW.

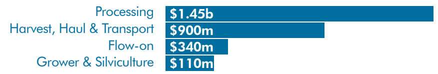
Contribution to total employment in NSW by sector

Income:

$2.8b
Income in NSW

Every week the industry injects $25 million in wages into NSW.

Contribution to total income in NSW by sector



$1,846 per week

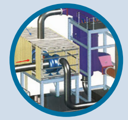
Average weekly wage for a forest industry employee in NSW.

34% more than the median fulltime wage in Regional NSW

Growing, processing and markets

85,000 Ha hardwood, 280,000 Ha softwood and 2.0m Ha native hardwood under management

More than **100 timber mills,** world scale paper, packaging and panels plants, export facilities and value-added remanufacturing



Softwood framing, pallets, engineered products, structural beams, decorative hardwood, power poles, paper and packaging, bio fuels

Community perceptions of our industry

86% of NSW residents believe native forest harvesting is a legitimate industry.

70% of NSW residents believe hardwod timber harvesting is important for rural economies.

90% of Oberon residents view forestry as an important industry to Oberon, equal to agriculture.

76% of Oberon residents believe they have good access to nature recreation areas.
70% believe the quality of these areas is good.

SOURCE: STOLLZNOW RESEARCH

The NSW Timber Industry Roadmap and policy priorities

Global demand for forestry products is set to increase by 50% by 2050.

The NSW Forestry Industry strongly supports our Government's initiative to define a Forest Industry Action Plan to provide certainty and support for industry to meet our state's future demands for housing, industrial and infrastructure timbers and packaging materials.

In support of the Forestry Industry Action Plan we offer this Roadmap which sets a new course for the NSW forestry industries.

New thinking and vision driven by robust, evidence-based science, supply certainty and regulatory support for significant new investment in plantations and manufacturing assets will provide our state with a clear pathway to a Future made in NSW and restoration of sovereign capability.

The Roadmap recognises the urgent need for restoring forest health and fire safety across our 20 million hectares of native and plantation estate and the vital role forestry must play in the low carbon energy and built environment.

The Roadmap respects the NSW Government's dual election commitments to a Great Koala National Park and a thriving native timber industry and offers a workable solution to achieving both these outcomes.

The Roadmap outlines 7 core policy priorities:

1. A program for restoration of forest health and fire safety.
2. Housing for our state and a 'Timber Future Made in NSW'.
3. Supply certainty, including addressing the plantation gap and regulatory reform.
4. A pragmatic and science-based Great Koala National Park solution.
5. NSW low-carbon solutions for energy stability and carbon investment.
6. Regulatory reform in support of forestry and forest products.
7. A new deal for regional communities and forestry industry workers.

Policy Priority 1:
Restoration of Forest Health

Forestry is the care of our forests to promote environmental health while providing vital materials for our everyday needs.

Without careful management of the forest estate by the timber industry, the industry would soon fail and that it has harvested the same areas of forests over again is testament to the sustainability of timber harvesting in Australia.

However, the small areas of forest available for timber production continue to shrink while there is growing pressure to manage the entire forest estate to make it more resilient to catastrophic fire and reduce the impacts of invasive species.

The costs borne by the taxpayer to maintain the forests, particularly in the conservation reserve estate, can be offset by a management plan which restores forest health while making use of the residues.

The outcomes are:

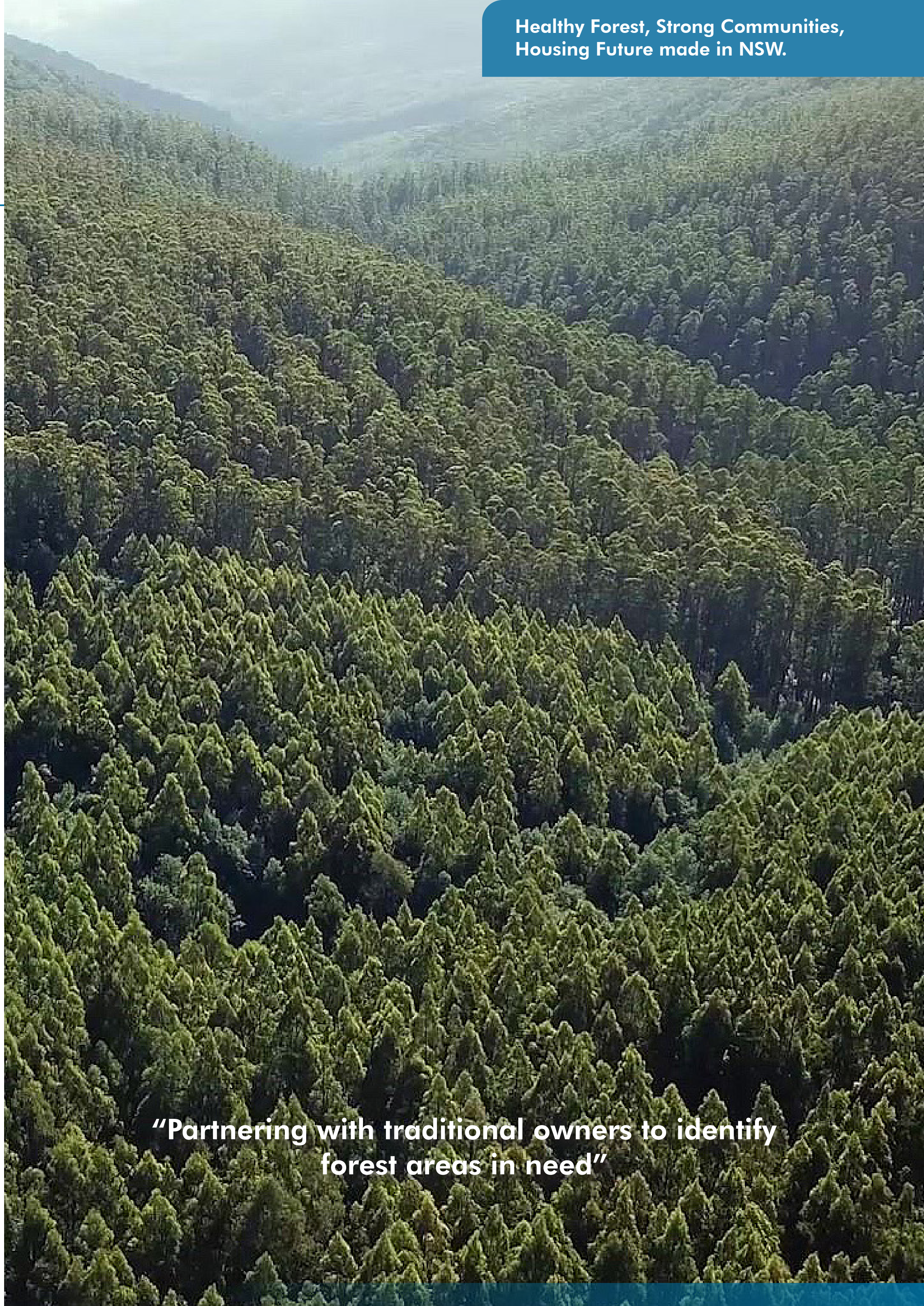
- Healthy, resilient forests
- Reduced fire risk
- Active invasive species management
- Supply of residue from the process as -an income stream

Partnering with Traditional Owners to identify forest areas in need of management and provide guidance on cultural management practices is fundamental to an active forest management strategy.

This Roadmap urges the Government to adopt an active and adaptive forest management framework which recognises the need to restore our forests to a condition which meets the definition of a healthy forest.

Policy outcomes:

- New research to clearly define the characteristics of a Healthy Forest.
- Support initiatives to restore forests to Healthy Forest status.
- Review the fire management strategy focusing on fuel reduction including mechanical thinning and fuel reduction burning.
- Review the economic plan for National Parks and reserves maintenance incorporating the value of residues as a supply of wood and fibre.



Policy Priority 2:
Housing future made in NSW

Supportive housing and procurement policy

Under the Federal accord, NSW has committed to building 75,000 homes per year rising to 80,000 by 2050. The forestry industry can support this ambitious plan but significant change in approvals and government procurement policy must be put into place to guarantee supply.

For example, the 'Pattern Book' concept and 'deemed-to-satisfy' pre-approvals can streamline complex regulatory burdens to ensure that timber-framed housing and engineered timber are included as a preferred material when designing new energy-efficient, sustainable and affordable housing.

This can make tendering for work accessible to a wider range of regional companies providing employment in country Australia.

Policy outcomes:

- 'Local timber first' procurement
- Update the 'Pattern Book' concept and 'deemed to satisfy' pre-approvals to ensure that timber-framed housing and engineered timber are included as a preferred material.
- Direct investment in social and emergency housing.
- Reverse the recent government procurement decision to replace locally sourced timber power poles with composite polyester resin poles.

Support for Modern Methods of Construction (MMC)

Innovative offsite construction techniques (pre-fab and modular) can significantly modify site based and increasingly scarce trade labour requirements, speed up construction, reduce waste and improve quality and cost in housing. Australia has yet to embrace MMC but overseas these techniques and capital investment is gathering momentum.

NSW Government support for MMC can stimulate this significant new growth opportunity targeting the emerging housing crisis.

Policy outcomes:

- Direct NSW Government investment grants in MMC
- Designation of specific MMC manufacturing "precincts" in regional communities with appropriate raw material access, transport links and labour pool with supportive payroll tax, training support, state significant approval status etc.
- NSW Government procurement prioritisation for MMC based government housing, schools infrastructure projects etc.

Support for investment in engineered timber products

Engineered timber construction products are made with material unsuitable for high-grade timber products and wood fibre to create stronger and more flexible building materials.

NSW has virtually no local manufacturing of engineered timber such as cross-laminated timber (CLT), laminated veneer lumber (LVL), glue laminated timber (GluLam), plywood and engineered flooring. Instead, NSW relies on supply from other states and overseas imports. Engineered timber products are typically important in the MMC supply chain.

Policy outcomes:

- Commit to priority investment incentives in these critical products close to supply hub regions to improve NSW's capability to contribute to the built environment and better use the available resource.

Policy Priority 3: Filing the Plantation "Gap"

Across the forestry industry significant investment in processing and manufacturing has stalled due to a lack of future forest resource to underpin growth. This situation has been made worse by the impact of bushfires on mature plantations and conversion of plantation to other land uses in recent times.

The current Federal Government Plantation Establishment Grants and the rising value of carbon has triggered some new plantings in parts of NSW (especially softwood in the Central West region) but much more is needed to stimulate significant new downstream investment.

The concept of establishing Strategic Plantation Expansion Zones (SPEZ's) broadly aligning with existing timber manufacturing "hubs" where social license for the timber industry remains strong can deliver a series of focal points for new plantation investment.

Strategic Plantation Expansion Zones

The Strategic Plantation Expansion Zones (SPEZs) aim to encourage, prioritise and support the sustainable expansion of plantations within NSW. The zones aim to provide greater certainty to investors and the community through the following initiatives:

- Streamlined and prioritised planning approval pathways within SPEZ boundaries.
- Regulatory frameworks to support best practice, low-risk forest management activities with guaranteed harvest provisions.
- Prioritised infrastructure to support existing and new investment.
- Support for community and stakeholders including training and skills prioritisation and funding.

How

Strategic location: The SPEZs will be in regions that have well established markets and existing plantation and supply chain infrastructure. This ensures that the impact on the local communities will be minimised.

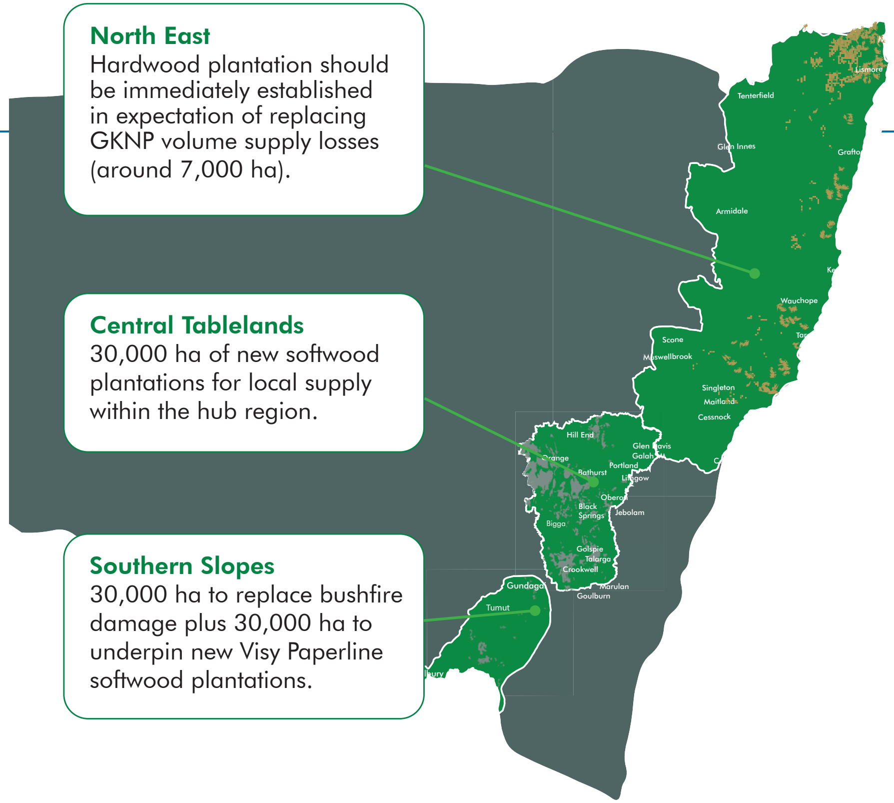
Additionally, the SPEZs will need to be supported by local government and local communities. The SPEZs will need to be in locations where sentiment towards plantation establishment is preferred above other land use changes such as solar, wind and carbon plantings, also known as Environmental Plantings.

Central West Expansion

There has been and there is significant ongoing investment in timber processing facilities in the region which has created a gap between the amount of plantation wood available in the region and the demand from new mills.

To fill this gap, an additional 30,000 ha of softwood plantations are required immediately to allow the mills to operate at capacity.

While these new plantations are maturing, at least another 1000 ha of new plantations need to be established each year to make the required harvest volumes sustainable and to ensure that the industry remains cost competitive against imports.



Replacing the Southwest Slopes resource

The softwood plantations in the NSW Southwest Slopes (Tumut/Batlow/Tumbarumba) were devastated by the Black Summer Bushfires with 30% of the plantation area destroyed.

This leaves a two-decade supply shortage meaning 50% less jobs and 50% less timber available to supply the NSW housing market.

While increased wood flow would not be immediate, the region urgently needs support from the NSW Government to establish 30,000 additional hectares of softwood plantations.

An additional 30,000 ha (a total of 60,000 new ha) is needed to support $500 million of new investment in a third paper line at Visy's Tumut pulp and paper mill.

Supplementary planting to replace losses created by Great Koala National Park in Northeast NSW Hardwood

It would take 30 years for plantation hardwood to replace the supply losses from the establishment of the Great Koala National Park.

It is estimated that 7000 ha of hardwood plantations would need to be established immediately and harvesting of native timber reduced over time to avoid disruption.

Policy Priority 4:
A pragmatic and accountable Great Koala National Park

The Koala is an iconic species in our NSW forests and industry strongly supports conservation efforts preserving biodiversity in our forests. Credible research has long identified bushfires, feral predators, urban expansion and road traffic as the key threats to koalas in NSW.

There is no evidence to suggest a link between sustainable forestry in our state forests and a decline in koala populations. In fact, the most recent research from the NSW DPI (Brad Law - acoustic monitoring), CSIRO koala population study and from infrared drone surveys conducted for the GKNP assessment have all shown healthy and stable koala populations in our mixed use state forests and that koala populations are in fact an order of magnitude higher than claims by activists which have led to an escalated conservation status for koalas.

These drone surveys within the 176,000 ha GKNP assessment area have identified with high certainty between 12-14,000 koalas and large populations of greater gliders in the state forest which is a testament to sustainable forest management for more than 100 years.

Industry however respects the NSW Government's election commitment to deliver a Great Koala National Park alongside its dual commitment to support an ongoing native timber industry.

In its announcement for the establishment of the GKNP in September 2023, the NSW Government stated it was committed to "working closely with industry to develop a blueprint for the future timber sector that accommodates both the park and the production of timber products."

In support of this dual election commitment the industry proposes the creation of a 65,000 ha Koala Park and the adoption of 4 guiding principles in its formation and management:

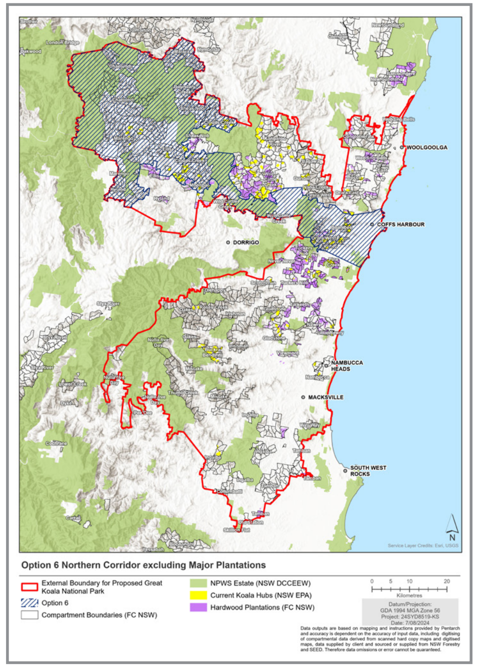
1. Commitment to delivery on the dual election commitments to create a GKNP and retain a viable native hardwood industry.
2. Complete preservation of plantations for timber production.
3. Demonstrable improvement in koala populations within the final park boundaries.
4. Honest and transparent budget process inclusive of industry transition, park establishment and ongoing management costs.

This industry proposal, while resulting in a modest reduction in wood supply, will largely preserve a hardwood industry at scale on the North Coast and create a park with continuity from the mountains to the coast including a concentration of high value koala habitat and incorporating high priority cultural heritage landscape.

An industry support package for timber workers and businesses and changes to Wood Supply Agreements is needed to support the transfer of State Forests to National Park.

Policy outcomes:

- Commitment to further infrared drone surveys to establish a statistical baseline for koala populations across forestry tenures on the north coast
- Creation of contract certainty for the forestry industry post GKNP decision to extend the investment horizon for industry
- Comprehensive assessment and budgeting for the GKNP including an industry support package for disaffected timber workers and new investment in plantations to replace any loss of native supply



Policy Priority 5:
NSW low carbon investment and innovation

The Roadmap supports a low carbon economy by increasing the use of renewable timber products across our building and construction, energy and carbon markets.

The Intergovernmental Panel on Climate Change recognises the management of forests to produce wood and fibre products as a key component of tackling climate issues.

The Forest Industry Roadmap supports the Forestry Australia (FA) submission for a new carbon method for managed native forests. This method includes a full Life Cycle Analysis of native timber harvesting, which includes the Carbon stored in wood and fibre products, Carbon sequestered in post-harvest regrowth and the emissions associated with avoided harvesting, shows that it is at worst Carbon neutral and at best provides significant carbon offsets.

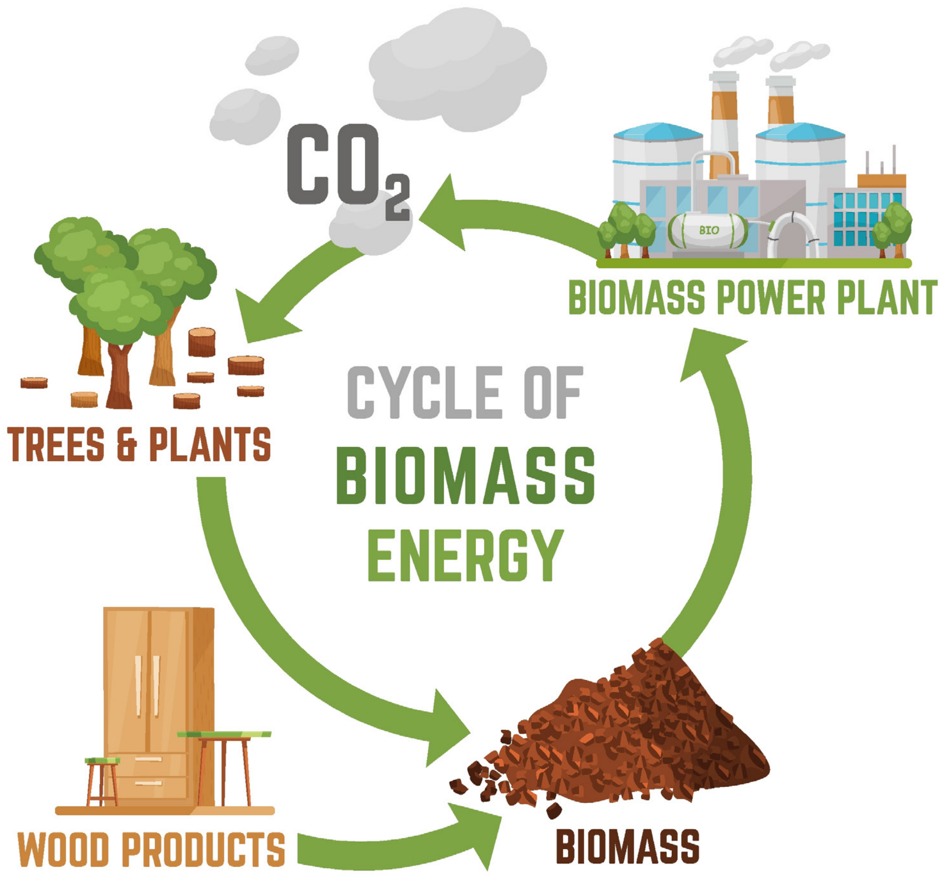
The industry supports increased intensity of renewable timber products in the built environment in preference to extractive and energy intensive alternatives like steel concrete and petrochemical based composites. The recent decision by the NSW Government to replace hardwood power poles by poles made by composite materials will increase cost for consumers and create far less sustainable high carbon outcomes.

Policy outcomes:

- Endorse the FA managed forest carbon method
- Fund research and development initiatives focused on improving technologies for converting timber residues into bioenergy and other valuable products.
- Develop and implement clear regulations and standards that facilitate the use of timber residues in bioenergy production, ensuring sustainability and environmental protection.
- Investigate infrastructure improvements to support the efficient collection, processing, and transportation of timber residues to bioenergy facilities.

Circular Economy

"There is opportunity to contribute to our global responsibility"



Policy Priority 6:
Regulatory reform in support of forestry and forest products

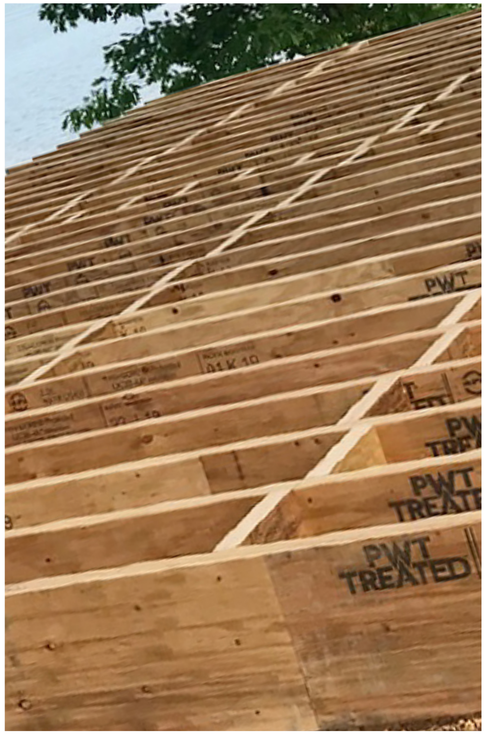
The industry welcomes recent federal government policy adjustments to remove the "water rule" denying access to carbon benefits in key NSW plantation growing regions. However there remains considerable regulatory hurdles to the ongoing management of existing forest for industry and for creating new plantations.

There is an urgent need for a broad-based land use strategy in NSW. There is growing competition for land and connecting infrastructure from intensive renewable energy investments and from the agricultural sector and the principles of "highest and best use" need to be engrained within policy settings balancing the needs of forestry, agriculture and energy.

The regulatory framework governing public native forestry, private native forestry and harvest and haulage of timber and fibre was established to provide certainty of supply as well as conservation outcomes.

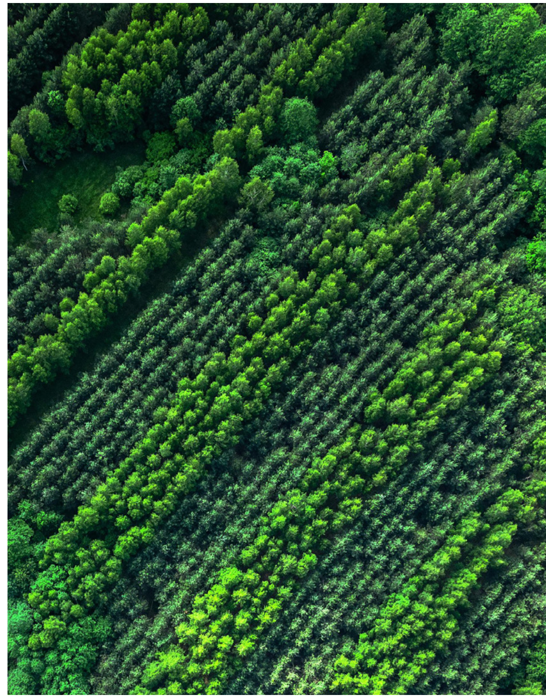
The forestry industry already has comprehensive legislative frameworks. NSW laws such as the Forestry Act 2012 and the Protection of the Environment Operations Act 1997 are used to create a comprehensive regulatory system for forest operations, ensuring that they meet environmental, economic, and social objectives. These frameworks work alongside the National RFA legislation and are aligned with specific IFOAs to ensure compliance with the overarching federal-state agreements, which guide the balance between sustainable forest use and environmental protection.

In this context, dual consent for Private Native Forestry is an unnecessary obstruction for private landowners to engage in the plantation and farm forestry. It should be removed from the regulatory framework.



Policy outcomes:

- Development of a broad-based NSW land use strategy
- CIFOA review: the legislated five-yearly review of the Coastal IFOA is 12 months overdue and should commence immediately. If legislative amendments to the NSW Forestry Act 2012 are required to complete this review, those amendments should be identified and prioritised.
- A statutory review process of Integrated Forestry Operations Approval should be established which includes public consultation on changes or amendments to the IFOAs.
- Removal of dual consent requirements for private forestry to make it easier for landholders to engage in plantation and farm forestry.
- Commit to a review of the NSW Plantations and Reafforestation Act 1999 and make recommendations to update the Act in line with modern requirements.
- Regulatory reform should also include appropriate handling of salvage timber from storm and fire events and corridors cleared through native and plantation forest for renewable energy and transport infrastructure incorporating scientific rigour to determine the best outcomes for forest recovery while making effective use of damaged timber.

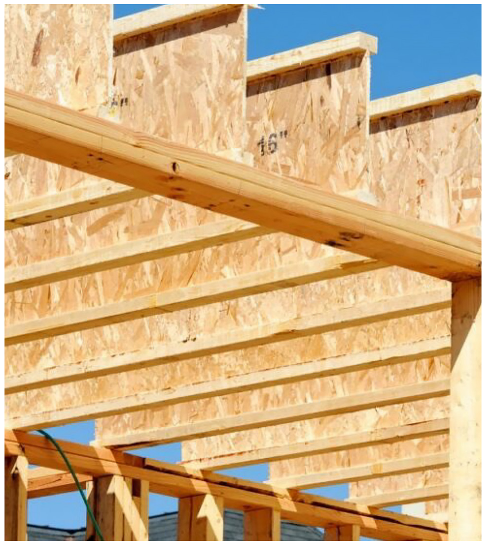


Policy Priority 7:
A new deal for regional communities and forestry industry workers

Housing support for timber workers

Timber manufacturing facilities are best located in regional NSW close to the resource to minimise transport costs and carbon miles.

Expansion of the sector to meet the challenges of housing demand and to reinvigorate our sovereign capability to supply wood and fibre products means increasing housing availability in regional centres. However, accommodation to support growth and investment in timber manufacturing assets has been a major restriction for industry in regional areas. Specific focus on provision of worker accommodation is needed.



Policy outcomes:

- Identify regional NSW timber industry locations expected to see sharp increases in population as the sector expands.
- Investigate opportunities for locally manufactured MMC housing for industry staff with incentives for investment in regional "build to rent"
- Urgent investment in critical community infrastructure including:
  - safer roads around identified hotspots,
  - housing (including rental) assistance in growth areas,
  - GP urgent care clinics in timber towns,
  - increased access to HSC subjects remotely for regional students who must have completed certain prerequisites for further education,
  - investigate on-demand transport options to be redirected to link regional towns. between sustainable forest use and environmental protection.

Timber workers of the future

The modernisation of the wood and fibre industry presents opportunities for facilities to adapt through emerging technologies. As manufacturing plants retool to handle resources of varied quality and dimensions, the workforce must also adapt, gaining skills in production line automation and advanced machinery. Much like the agriculture sector, training will increasingly focus on computer technology and robotics.

This shift also opens the door to a more diverse workforce, encouraging broader gender representation in roles that are increasingly technology-driven. To keep up with these changes, investment in Registered Training Organisations (RTOs) is essential.

Strengthening RTOs' ability to provide relevant training, assessment, and skills recognition will help secure a capable and future-ready workforce for the wood and fibre industry.

A particular focus on new skills required to produce engineered timber products and linkages with MMC production facilities will be a priority for the timber industry workforce of the future.

Policy outcomes:

- Commission the timber industry research bodies (FWPA/AFWI) to explore opportunities for AI learning and virtual reality tools for forest industry training in order to showcase career opportunities and as a safer and more cost effective way of training forestry and timber manufacturing workers
- Develop a coordinated industry skills audit with ForestWorks and appropriate industrial unions to seek funding to develop Recognition of Prior Learning tools to ensure that the skills of this workforce are properly recognised and there are genuine career pathways for the whole supply chain.
- Ensure that government assistance and innovation funds consider the protection and expansion of secure jobs
- A fully funded package and program for any timber workers displaced by changes to the industry initiated by government decision (to be delivered by peer coordinators).

NSW Forestry Industry Roadmap

2024 - 2034