

Public submission

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AKD's submission to the NSW Independent Forestry Panel

The importance of NSW Softwood Plantation Industry in supporting the Australian Housing Sector and Regional Economies

Associated Kiln Driers Pty Ltd (AKD) was established in 1955 and is proudly a 100% Australian owned and operated integrated forestry and timber processing company. AKD is Australia's largest softwood sawmilling business, with six sawmills in Victoria, New South Wales (NSW) and Queensland, employing over 1,000 people in regional communities and producing essential timber products to support the needs of the national housing industry.

In NSW, AKD has two sawmills (Tumut and Oberon¹) and a Treatment Plant & Distribution Centre (Gilmore); it also has one sawmill in Caboolture (Southeastern Queensland) which accesses the North Coast of NSW as part of its softwood plantation working circle.

The long-term demand dynamics for structural timber remain robust, underpinned by population growth, and based on a 2022 Forest & Wood Products Australia (FWPA) report², sawn softwood demand is expected to lift to 6.5 million m³ per annum before 2050. Without strong and clear Federal and State policy support to attract investment and drive economic growth, Australia will become more vulnerable to supply and cost risks associated with a greater reliance on imported timber to meet the demand and supply gap.

AKD is committed to assisting the state Government in meeting its commitment to the National Housing Accord of 377,000 new, well-located houses by 2029³ and subject to sawlog availability is committed to growing its capacity in NSW through continual reinvestment in the business, plant expansions, plantation growth, employee development and the latest processing, automation, scanning and optimisation technology. AKD has invested in excess of \$200m in the past three years in plant upgrades across the six sawmills as well as land acquisitions for plantation expansion across NSW and Victoria. AKD also has a substantial Apprentice and Graduate programs with nearly 100 employees at various stages, providing critical high skilled employment in regional locations.

AKD has identified six priority areas (listed below) that need to be addressed through strong policy and planning to support the growth and future investment into a vibrant and sustainable softwood forests and wood products sector in NSW.

1. Importance of the Softwood Plantation & Wood Products Industry to the State and National Economy
2. Investment in Fire Mitigation & Protection
3. Adoption of an Overarching NSW Timber First Policy (from Seedling to Consumer)
4. Forestry Corporation of NSW (FCNSW) Softwood Plantation Division underwriting the Hardwood Forest Division
5. Improved Supply Chain Efficiency and Productivity
6. Loss of Net Stocked Area

More detailed recommendations on these key aspects are provided below:

¹ 50:50 Joint Venture between AKD and Pentarch Forestry.

² [Future market dynamics and potential impacts on Australian timber imports – Final Report](#)

³ [Housing targets | Planning \(nsw.gov.au\)](#)

1. Importance of the Softwood Plantation & Wood Products Industry to the State and National Economy

According to a Housing Australia report, the residential building construction industry has the second largest economic multiplier of all 114 industries that make up the economy and each \$1 million of residential building construction output supports nine jobs across Australia⁴.

High-quality, Australian grown and processed structural timber is a sustainable, low-carbon and essential material used to underpin housing construction across Australia. Regionally, the NSW Softwood Industry directly employs over 3,500 people and contributes significantly towards jobs, economic activity and social wellbeing across multiple regional communities^{5, 6}.

According to the latest ABARES Australian forest and wood products statistics⁷, NSW houses the second largest softwood plantation area in Australia, representing 21% of Australia's total softwood plantation area. Clearly the country's future success and prosperity is linked at some level to the performance of these strategic assets.

Most of those assets are owned by the NSW State Government and managed on its behalf by Forestry Corporation of NSW (FCNSW). The sustainable growth and supply of high-quality sawlogs from these assets is critical in meeting not just the current and future sawlog demands, but also in supporting a sustainable, low-carbon and renewable industry.

As such, AKD designates the current softwood forest assets in NSW as being of national importance and critical state significant infrastructure. Therefore appropriate policies to provide improved investment certainty and make the region a more attractive destination for capital should be a priority of the NSW Government.

2. Investment in Fire Mitigation & Protection

More than 50,000 ha of the NSW softwood plantation resource was burnt during the 2019/20 Black Summer fires⁸. This catastrophic loss of the NSW softwood plantation estate has significantly impacted the availability of softwood sawlogs in NSW for at least the next 15 years, with AKD Tumut's facility currently operating at less than 50% of capacity.

AKD applauds the recent NSW Ministers announcement of a \$13M forestry funding package to provide much needed protection of critical timber supplies in the Southwestern Slopes region of NSW.

However, given wildfires are without a doubt the greatest risk to the NSW timber industry, more investment is needed across all NSW Regional Forestry Hubs to ensure that the level of resourcing, governance, preparedness, and prevention of the state's statutory firefighting authorities, supported by private industry, is sufficient to mitigate future fire losses.

Given the level of investment and contribution of the softwood industry to the NSW economy, AKD recommends that the panel advocates for:

⁴ [Building Jobs, How Residential Construction Drives the Economy](#)

⁵ [Socio-economic impacts of the softwood plantation industry: Examining a post-bushfire salvage period \(MURR-2021-011\)](#)

⁶ [Socio-economic impact of the Softwood Plantation Industry in the Central West NSW Forestry Hub Region.](#)

⁷ [ABARES: Australian forest and wood products statistics](#)

⁸ [Aussie logs for Aussie jobs. Inquiry into timber supply chain constraints in the Australian plantation sector.](#)

- a) A review of the management capacity and firefighting preparedness of NSW firefighting authorities across all NSW Regional Forestry Hubs, to ensure that they are in harmony with the recommendations and progress reports of the NSW Bushfire Inquiry⁹, specifically regarding current and future appropriateness of training and resource capabilities for the protection of the state's essential softwood estates.
- b) Increased investment in regional fire infrastructure and support the establishment of a coordinated plantation fire management approach, such as the Murray Region Fire Collaboration (MRFC) proposal.

3. Adoption of an Overarching NSW Timber First Policy (from Seedling to Consumer)

In the context of fire risk and future demand for sovereign manufacturing and timber production to address the state's housing crisis, AKD supports a NSW Timber First Policy. Importantly, the policy should extend down the structural timber value chain to include:

- a) **Minimising or eliminating the export of sawlogs.** Over 20 million cubic meters of softwood roundwood sawlog has been exported nationally over the past decade⁷. The export of this significant volume of sawlog has eroded confidence in long term investment and growth of the domestic timber processing sector and in the face of climate and fire risks, jeopardised softwood manufacturing industries which are a significant contributor to the State and Australian economy. Given a national softwood fibre shortage, policy that supports prioritisation of domestic supply, including retaining sawlogs on the stump during cyclical housing market downturns must be adopted.
- b) **Maintaining plantation rotations of 30+ years, under best practice silviculture regimes to grow high quality structure timber.** Due to fire and a lack of material plantation expansion in NSW over almost three decades, there is downward pressure on the average clearfell age of softwood stands.

Of note is that today's harvest was planted over 30 years ago and tended by a different generation of forest managers. Conversely, future harvests will be the output of today's management decisions, and there is clear evidence (as outlined in Appendix A) that the yield of structural grade timber is demonstrably diminished if rotation lengths are shortened. This is further exacerbated if there is a lack of silvicultural investment and emphasis on the growth of high-quality sawlog throughout a rotation. The strategic concern is fibre quality and its impact on the future viability of those businesses that depend on that fibre. Careful planning and delivery of policy to support optimal sawlog management outcomes therefore needs to be considered across the NSW State owned plantation asset.

- c) **Timber and Wood Products First Policy.** NSW sustainably managed softwood plantations and wood products sector is a key regional employer, economic driver and is critical in supporting targets to decarbonising our economy. A recent report by the FWPA noted that a 10% increase in the market share of timber in buildings would lead to annual emission reductions of 1.9 million tonnes of CO₂-e nationally¹⁰.

⁹ [NSW Bushfire Inquiry](#)

¹⁰ [FWPA: Forests, Plantations, Wood Products & Australia's Carbon Balance](#)

Given the above, AKD recommends that:

- i. The NSW Government commits to a NSW Timber and Wood Products First Policy, to support further growth and investment of this essential, low carbon and sustainable industry.

4. Forestry Corporation of NSW (FCNSW) Softwood Plantation Division underwriting the Hardwood Forest Division

As noted above, high quality softwood sawlog plantations are a long-term business, grown over a 30+ year rotation. As the largest softwood forest owner in NSW, the State is inextricably linked to the presence and performance of FCNSW. Sustained reinvestment back into NSW's existing, world-class and value generating softwood plantation, which underpins the NSW wood processing sector, should be a key priority and policy of the NSW Government.

Based on FCNSW annual reports¹¹ and well publicised investigations by the EPA¹², it is evident that FCNSW HFD is in financial distress. AKD has concerns that under FCNSW structure, profits from the Softwood Plantation Division (SPD) are underwriting the Hardwood Forest Division (HFD), to the detriment of the long-term productivity, value and sustainability of a strong softwood forest and wood processing sector. While the impact of such a strategy can be smoothed to a degree in the situation of a one-off age class impact, this is far more difficult when the impact is felt in several consecutive age classes over time.

AKD has concerns that the execution of best practice forest management principles to grow high quality sawlogs, appropriate investment in fire prevention and protection, strategic roading and capital expenditure and investment in research and development to improve productivity are not occurring in SPD to the degree that they should due to subsidisation of the HFD and associated corporate overheads.

It is recommended that:

- a) The NSW Government consider a strategy to finance the HFD and ensure that all proceeds from the SPD are reinvested wholly back into the softwood industry. This is particularly relevant as the NSW softwood industry is still recovering from the social, environmental, and economic impacts of the devastating Black Summer Bushfires and reinvestment in the sector is imperative in optimising the long-term productivity and growth of NSW's State-owned, commercial plantation State forests.

To support long term productivity of the NSW softwood plantation estate and meet future house construction demand for structural timber, it is further recommended that the State Treasury support FCNSW with the appropriate level of additional funding to:

- b) Repair and maintain effective roading networks so that assets can be tended, protected and maintained in accordance with industry best.
- c) Review current establishment and silvicultural practices to confirm they are aligned with industry best practice e.g. >1,300 spha initial planting stocks.
- d) Complete the post-fire reestablishment programme as a priority – this is currently slowing. This includes management of a burgeoning weed spectrum.

¹¹ [FCNSW Annual Reports](#)

¹² [NSW EPA, Registration of Crown Forestry Investigations](#)

- e) Manage the significant emerging Post-Black Summer Bushfire replant regeneration concerns, which has the potential to negatively impact the productivity and access across the softwood estate, as is evident in the regen aftermath of the 2006 Billo Road Fire replants in Buccleuch State Forests.

5. Improved Supply Chain Efficiency and Productivity

It's important to understand that softwood activity in NSW is not a closed loop; in fact, circa 4.5 million tonnes of softwood forest products are transported within and into NSW each year, to support inter-State processing capacity. These fibre movements, of everything from logs to processed wood fibre and residues, are fundamental to maintaining both State and National infrastructure in the softwood wood products sector.

Material disruption to that balance has both short and long-term implications for the sector. For example, post the Black Summer Bushfires, a significantly higher proportion of AKD's softwood supply must be sourced from a greater distance to meet the sawlog supply gap (in some cases over 800km). This is not sustainable over the medium to long term and distinctly disadvantages NSW processors given the significant additional cost in freight.

While there has been some positive investment in key regional infrastructure, many strategic roads and bridges do not support the use of high productivity vehicles (even only to Concessional or Higher Mass Limits), to optimise the safe and efficient freight of forest products from source to destination. For this reason, AKD believes that the supply chain efficiency of NSW lags well behind that of other National Plantation Inventory (NPI) regions such as the Green Triangle, Central Gippsland and South East Queensland.

AKD has identified and recommends the below opportunities to support improved supply chain efficiency and productivity:

- a) Consider the opportunities to support longer distance wood transport to provide structural timber to build NSW houses.
- b) Develop a collaborative model with all levels of government and agencies to facilitate the recommendations from the Heavy Vehicle Access Policy¹³, including a review of interstate rail opportunities to build a future-focused, high productivity freight network for regional communities and the NSW softwood plantation industry.

6. Loss of Net Stocked Area

Encroachment of other land uses such as transmission lines and renewable energy projects pose a significant risk to fibre supply certainty in NSW.

In 2021 the NSW Government amended the *Forestry Act 2012* to allow renewable energy projects in softwood plantations and FCNSW have subsequently awarded permits to four proponents to start community consultation, investigating and, if feasible, planning to erect windfarms in two of the state's highest productivity National Plantation Inventory (NPI) regions. Further, Transgrid have commenced works to on their 500kV transmission line that will be

¹³ [NSW Heavy Vehicle Access Policy](#)

running through sections of FCNSW and Private softwood plantations, reducing NSW net stocked plantation area.

Given the above and concerns that AKD has regarding the potential impacts these projects will have on not only the productivity of the industry but long-term impact re firefighting effectiveness, damage to regional roads, supply disruptions and FCNSW resources, AKD recommends:

- a) Ensure the Forest Industry Action Plan has 'check-back' mechanisms to ensure it is contemporary in meeting the needs for sustainable wood supply and risk reduction, with specific reference to fire and loss of net stocked area related to Humelink and FCNSW Renewable Energy venture.

Conclusion

AKD believes that these items present the greatest opportunities to the NSW Government to safeguard and improve the growth and productivity of the essential NSW softwood plantation and wood products manufacturing sector and we would welcome an opportunity to discuss our submission with the Independent Forestry Panel in more detail.

Appendix A - Case Study: The changing nature of plantation forest management in Australia

The growing of high-quality plantation sawlog requires good genetics and a dedication to precision, best practice silviculture over three decades. Appropriate planted stocking, nutrition, thinning regimes, and time will produce high quality softwood sawlogs capable of yielding suitable structural grade timber for housing. Compromising on one or all these factors is compromising future yields of structural timber.

Pinus radiata wood fibre can be broadly categorised into “core wood” and “sapwood”. The fundamental principle being that the core wood fibre lacks the strength to be used for construction materials such as house framing and is generally used for non-structural products such as treated landscaping. The sapwood on the other hand begins to form after a period in the tree’s lifecycle and importantly, is the part of the tree that can be used for producing construction materials, such as house framing.

The amount of sapwood is directly correlated to the harvest age of the tree, and the time at which the plantation (tree) transitions from core to sapwood. Generally, this occurs around its first thinning, assuming it was planted at the right stocking to achieve canopy closure as early as possible. Thinning then progressively releases the plantation by removing sub optimal trees (size and shape) and allows the select stems to grow and accumulate a higher proportion of sapwood at final harvest.

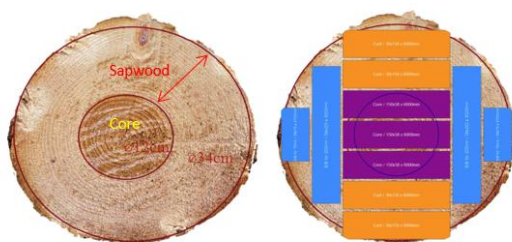
A multiple thin regime over a period of 30 to 35 years is undoubtedly the approach that maximises wood fibre suitable for housing products. Whilst some Australian growers are mandated to maintain a harvest age of 32 to 35, others are reducing the clearfall age of their plantations, and in some instances now prescribe harvest at age 25.

The schematic (to the left) of *P. radiata* logs processed at one of our sawmills, illustrates the difference between management regimes on the log quality produced.

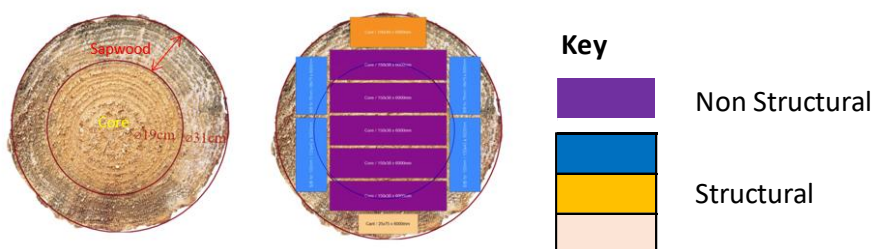
Log 1 represents the outcome of optimal management.

The result is a 30-40% higher proportion of sapwood suitable for structural purposes.

Log 1 – Example of precision silviculture



Log 2 – Example of sub optimal silviculture



Improvements in forest genetics will not compensate for sub optimal silviculture. It is therefore a matter of concern for the industry, that the nature of the future plantation resource across Australia is likely to produce less structural fibre, when compared to that produced in the past.

There has been much discussion on expanding the softwood plantation estate through the ACCU scheme, but of equal importance is maintaining vigilance with respect to proven plantation forestry practices. The industry and community more broadly will not benefit from an expanded plantation estate that produces less structural fibre overall.