Submission
No 111

INQUIRY INTO LONG TERM SUSTAINABILITY AND FUTURE OF THE TIMBER AND FOREST PRODUCTS INDUSTRY

Organisation: Australian Forest Products Association

Date Received: 28 May 2021

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The Honourable Mark Banasiak, MLC
Chair Portfolio Committee No.4 - Industry
Parliament House, Macquarie Street
SYDNEY NSW 2000

Dear Mr Banasiak

Re: AFPA submission - Parliamentary Inquiry into the long term sustainability and future of the timber and forest products industry

The Australian Forest Products Association (AFPA) welcomes the opportunity to provide a submission to the NSW Legislative Council's Inquiry into the long term sustainability and future of the timber and forest products industry.

About AFPA

AFPA is the peak national industry body representing the Australian forest, wood and paper products industry's interests to governments, the general public and other stakeholders on matters relating to the sustainable development and use of Australia's forests and associated manufacturing and marketing of wood and paper products in Australia. In NSW our members cover the full industry value chain.

NSW forest industries

Forest industries are a key industry in NSW, employing 21,000 people across the value chain and adding $7 billion of economic activity annually. The major forestry regions of NSW are the North Coast, Northern Tablelands, Central Tablelands, South West Slopes and the South Coast including, Eden and Bombala.

Forestry underpins the economic success of many regional communities, providing significant employment opportunities, as well as helping to diversify and strengthen regional NSW. While many of the direct jobs are located in rural and regional areas there are large numbers of downstream value adding jobs in other regional and outer urban centres.

The forestry supply chain in NSW can be divided into two distinct sectors – softwood plantation (radiata pine) based industries and the native hardwood timber-based industries, each with its own supply chain of forestry contractors, timber and wood fibre processors who produce timber products including sawn, dressed and treated timber and packaging materials including cardboard and liner board.

There are 63 hardwood mills and 13 softwood mills in NSW, processing more than 4.1 million cubic metres of sawlogs every year[1], though hardwood sawmills typically process much lower volumes than softwood sawmills. A key part of the supply chain is the role wood fibre processors play in processing small logs also known as pulplogs allowing the remaining trees to grow into sawlogs. Annually in NSW, 1.5 million cubic meters of pulplogs not suitable for processing in a sawmill, are

[1] https://www.dpi.nsw.gov.au/about-us/publications/pdi/2020/forestry

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used for pulp and paper manufacturing, woodchips, engineered wood products such as particle board, and bioproducts. Furthermore, residues from sawmills go to pulp processors and industry tries to find the highest value use for residues and minimise waste.

A major challenge facing NSW's softwood industries is the lack of growth in new plantations. Historically the establishment of new softwood plantations nationally has primarily occurred through Federal and State Governments policies. Urgent policy leadership and reform is needed now to avert an already critical shortfall of timber evolving into a national timber shortage crisis in the coming decades.

Without an increase supply of high-quality local timber and forest products, Australia risks not having enough domestic timber supply to meet our housing construction needs, paper and packaging needs, bioenergy demand and emerging bioproducts. There is no guarantee that imports will be able to reliably fill this gap.

The current lack of new plantation development combined with the devastating impacts of the 2019/20 bushfire season places industry under ongoing pressure. The impact of the bushfires and COVID-19 underpin the need to grow the NSW economy to sustain and create jobs. The forest industries stand ready to assist the NSW Government as it looks for opportunities to recover.

Softwood Plantation industry

In NSW there are approximately 393,000 hectares of softwood plantation estate part of an estimated one million hectares Australia wide. The largest plantation estate in Australia is in NSW and run by state owned Forest Corporation NSW (FCNSW), which is responsible for more than 230,000 hectares of pine plantations in the central west, south and north of NSW.

Hardwood Native industry

There are 22 million hectares of native forests in NSW, with approximately 7.5 million hectares managed by the Crown. This leaves a total of 1 million hectares available, of which approximately 30,000 hectares – or 3% – is harvested annually. Harvesting occurs through regular thinning operations or harvesting of small patches. Clear felling in native forests is not practised in NSW. Harvested areas are regenerated by law, predominantly through natural seed fall.

Multiple-use State Forests

There are 5,581,000 hectares managed by the Crown and are made up of "nature conservation areas" under the National Parks and Wildlife Act 1975. These nature conservation areas are not available for timber harvesting. The remaining 2 million hectares consisting of coastal native forests, cypress forests and red gum forests are managed FCNSW as "multiple use public forest".

These multiple-use public forests make up 539 State forests across NSW and are a vital recreation site for many residents with a total of 60,000 kilometres of road and 500 kilometres of bike tracks. There are one million hectares that are permanently protected for wildlife and conservation and allow for a number of commercial recreation and ecotourism-based businesses, events and activities that see millions of visitors each year.

State forests play a unique role in NSW, as many of these activities are not permitted in National Parks. There are some 13 million annual visitors to NSW State forests where people undertake a range of recreational activities from walking, mountain back riding, dog walking, motorbike riding, four-wheel driving, fossicking, hunting and camping – and most of these activities can be undertaken free of charge. In contrast, much of the State forest estate is managed solely for community benefit. Forestry Corporation is the appointed land manager for NSW State forests. In this capacity, Forestry

Corporation facilitates community access and facilities for recreation, is responsible for fire management and firefighting, maintains a public road network and carries out a range of other land management responsibilities.

When forests are managed well and managed sustainably, they deliver a vast range of benefits for our communities, including places to visit and enjoy, clean waterways, habitat for protected wildlife, biodiversity, carbon storage, and of course, wood products.

State forests are major tourism drawcards – the two million hectares of native and plantation State forest in NSW provide a network of roads and trails used by local communities.

Regional Forest Agreements

There are three Regional Forest Agreements (RFAs) in NSW: Eden, North East, and Southern. The RFAs seek to balance economic, social and environmental outcomes for forests by setting obligations and commitments for forest management that deliver:

- certainty of resource access and supply to industry – building investment confidence
- ecologically sustainable forest management – ensuring forests are appropriately managed and regenerated
- an enhanced and permanent forest conservation estate – to provide for the protection of Australia's unique forest biodiversity.

The RFAs provide a streamlined approach to satisfying Commonwealth legislative requirements for environmental planning and assessment and for conducting forestry operations to meet ecologically sustainable forest management (ESFM) objectives.

In the preceding 20-year history of the RFAs, the agreements have been assessed as exceeding the environmental requirements of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, while providing a level of resource security for industry.

The RFA process in the 1990s resulted in a considerable initial reduction nationally in the area of multiple-use forest available for wood production.

As a direct result of the RFAs and public land use decisions since the early 1990s, over 13.6 million hectares have been added to Australia's forest conservation reserve system. The area of native forests in conservation reserves has almost trebled since 1990, from 6 per cent to 16 per cent of all native forests.

This has resulted in a significant contraction in the hardwood sawmill industry across the state over that period. In NSW, hardwood log supply from the public forest estate has declined significantly over the past 20 years, down from around 2000m3 annually to less than 1000m3, with logs from hardwood plantations only increasing marginally.[2]

Regulation of public native forestry

Native forestry on public land is regulated by the Environmental Protection Agency (EPA) under the Forestry Act 2012, the National Parks and Wildlife Act 1974 and the Protection of the Environment Operations Act 1997. Integrated Forestry Operations Approvals (IFOAs) set environmental rules for how forestry operations can be carried out in State Forests and Crown Timber Lands in NSW. Forestry must operate to the standards set in the IFOAs, which integrate the regulatory regimes for

[2] https://www.agriculture.gov.au/abares/research-topics/forests/forest-economics/forest-wood-products-statistics

environmental planning and assessment, protection of the environment and threatened species conservation.

There are 4 IFOAs in NSW:

- Brigalow Nandewar
- South-Western Cypress
- Riverina Red Gum
- Coastal IFOA (combing the areas of the previous Upper North East, Lower North East, Southern and Eden IFOAs)

The Coastal IFOA includes new rules to protect plants, animals, ecosystems, soils and waterways during native forestry operations on State Forests. These include minimum standards to preserve important wildlife habitat, which will be complemented by existing protected areas such as habitat corridors, old growth forest, rainforests, streams and wetlands.

Regulation of Private Native Forestry

Private native forests constitute 8.85 million hectares, or 40 per cent of NSW's total native forest estate (22.3m ha).

Private native forestry (PNF) gives landholders the option of generating farm income from their forests by meeting the growing demand for hardwood products. PNF involves the selective harvesting of timber on private land, and already plays a key wood supply role in supplementing the public forest resource, particularly on the North Coast.

However, PNF has the potential to play a much greater role in meeting domestic hardwood timber demand, thus delivering significant benefits to NSW farmers and the state.

PNF is strictly regulated through Local Land Services under Part 5C of the *Forestry Act 2012*, which regulates the harvesting of native vegetation for the purposes of private native forestry on freehold land and on leases that are not Crown-timber leases. Harvesting activities are authorised through private native forestry property vegetation plans which are issued by Local Land Services and independently audited by the NSW Environment Protection Authority.

AFPA welcomed the NSW Government's recognition earlier this year that the Private Native Forestry Codes of Practice already provides significant protections to koalas and that the Government would exclude primary industries from the revised Koala State Environment Planning Policy (SEPP). This was a balanced decision that avoids unnecessary duplication for already strictly regulated forestry operations on private land.

The existing PNF Codes are already complex and onerous, and deter farmers from undertaking PNF on their land. More needs to be done to make the process clearer and easier for farmers to be involved to ensure private native forestry plays a greater role in supplementing the public forest timber resource.

Great Koala National Park

There has been ongoing public discourse around the creation of a Great Koala National Park to be located on the Nort Coast of NSW. This will do nothing to protect koalas but will destroy the North Coast's vital forest industries which employ around 4000 people and contribute hundreds of millions of dollars to the region's economy.

The establishment of the Great Koala National Park, as proposed by anti-forestry groups, would mean the closure of the North Coast hardwood timber industry, as it would lock up the majority of the remaining multi-use state forests from where timber is sourced.

An independent economic study by Ernst & Young of the impact of the so-called Great Koala National Park on the NSW North Coast found it would lead to a $757 million-a-year hit to the NSW economy and cut almost 2000 jobs, devastating communities across the region where the timber industry is a major employer[3].

AFPA notes that the NSW Labor Opposition took to the last election a policy to create a Great Koala National Park, with no indication of what the impact on industry would be, and no financial provision for the early termination of Wood Supply Agreements or the disastrous economic impact the closure of the industry would have across North Coast communities. AFPA urges the NSW Labor Opposition to abandon this poorly conceived policy which, as the science shows, would do nothing for koala conservation.

A NSW Government study of koala populations in NSW's north-east forests published in 2018 found up to 10 times the rate of koala occupancy than previously estimated, and that timber harvesting has no impact on koala numbers.

The NSW Department of Primary Industries project, which focused on koalas' response to timber harvesting, involved acoustic technology to get a more accurate estimate of the population and range of koalas. The study found:

"… past timber harvesting did not influence koala occupancy. There was no difference in results between heavily harvested, lightly harvested and old growth sites.

"Time since harvesting and the amount of harvesting in the local area did not influence occupancy. There was also no difference between National Park and state forest sites."

– Dr Brad Law, NSW Department of Primary Industries[4]

The way to protect NSW's koala population is using methods that have been proven to make a difference such as better management of urban expansion, pest and disease, and road strike.

Impacts of the 2019-20 Black Summer Bushfire Season

In 2019-20, fires across NSW burnt significant areas of timber production native forests on the North Coast and South Coast. As well as significant areas of softwood plantations in the South West Slopes and a smaller area on the North Coast, the effects of which will resonate for decades for the timber industry in these regions. Hardwood plantations on the North Coast were also burnt.

Impacts on multi-use public native forests

Around 60 per cent of the areas zoned for timber production in the NSW native forest estate were affected by the fires. Some of this timber was selectively harvested from a small proportion of these fire-affected forests and processed by local mills into renewable timber products that is supporting rebuilding efforts.

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[3] https://www.parliament.nsw.gov.au/lcdocs/other/12376/Tabled%20Document-%20Document%20entitled%20-%20The%20economic%20impact%20of%20the%20cancellation%20of%20NSW%20North%20Coast%20Wood%20Supply%20Agreements.pdf

[4] https://www.dpi.nsw.gov.au/about-us/media-centre/releases/2018/acoustics-provide-new-insights-on-koalas-in-hinterland-forests

Selective harvesting in fire-affected forests is different from the salvage harvesting that is carried out in pine plantations. Plantations are planted specifically for timber production so, after a fire, all affected trees are harvested and the entire area replanted.

In the aftermath of the Black Summer bushfires there were calls for native forestry to cease due to claims that logging had made conditions worse. In May 2021, a landmark study into the Black Summer bushfires confirmed timber harvesting operations do not increase bushfire severity, and that the biggest factor is climate change. The report, *The severity and extent of the Australia 2019–20 Eucalyptus forest fires are not the legacy of forest management*[5], published in the Nature Ecology and Evolution Journal, was authored by a team of researchers led by Professor David Bowman from the University of Tasmania.

Post-bushfire management of timber harvesting in native estate

One of the biggest resource challenges facing the hardwood industry is that there has been very little timber harvested in the public state forests since the Black Summer Bushfires nearly 18 months ago, due to unnecessarily onerous restrictions imposed by the EPA.

After more than 16 months of negotiations, FCNSW was unable to reach agreement with the EPA in relation to site-specific operating conditions for each harvesting operation in bushfire-affected coastal forests. The impasse has resulted in some mills running out of timber or severely depleting their log yards well below normal levels, creating considerable uncertainty for mills.

AFPA welcomed FCNSW's recent decision to resume modest levels of harvesting to provide certainty for industry. As a result, renewable timber harvesting on the South Coast and Eden has resumed with additional environmental safeguards to further minimise any risks to fire-affected forests and supply much-needed timber to local industry.

These new rules are above and beyond the existing Coastal Integrated Forestry Operations Approval (CIFOA), which prescribes protections for wildlife, soil and water and enables sustainable timber to be produced and the trees regrown.

FCNSW says the operations will be conducted under this interim arrangement until the results of the review by the National Resources Commission, due later in 2021, are available.

Impacts on Softwood plantations
It is estimated that 35,000 ha of public plantation has been lost in the SW Slopes (and 10,000 ha of private plantation). This will directly impact the region's biggest employer, Visy, major softwood sawmills that produce structural timber for housing (AKD, Hyne and Dongwha), smaller sawmills and plymills, private plantation companies, and harvest and haulage contractors.

This equates to around 40% of the total resource on which the SW Slopes and Bombala processing industries are based. The industry annually processes around 3 million tonnes of fibre in total, of which 2 million comes from the SW Slopes plantations (public and private). It is estimated that the total cost of re-establishing all the plantations lost within the supply zone for the SW Slopes processing industry is around $230 million.

Some areas where the fire burnt through relatively mildly may survive, however, unlike many native species, radiata pine is not fire tolerant and so fire-damaged trees where possible were salvaged for processing and replanting has commenced. The areas impacted range from newly-established plantations that were planted within the past 12 months to mature 40-year-old trees ready for

[5] https://www.nature.com/articles/s41559-021-01464-6.epdf?no_publisher_access=1&r3_referer=nature

harvest. It is estimated that it will take up to 10 years to replant all the plantation estate that was lost as a result of the fires.

In addition to the public and private plantation lost in the SW Slopes, it is estimated that a further 7,300 ha of public and private plantations were burned in the Bombala region.

Two of these regions that were most affected, SW Slopes and Bombala, are considered in more detail below.

State-wide, around 25 per cent of FCNSW's softwood plantations were impacted by the fires. FCNSW also manages 27,000 hectares of southern pine and radiata pine plantations in the Walcha and Grafton region in the state's north. Around 35 per cent of these plantations were impacted by fire. In addition to the native forest estate, FCNSW also manages around 37,000 hectares of hardwood plantations in the north of NSW. Around 15 per cent of these plantations were impacted by fires this season.

A large volume of the burnt timber was salvaged for use due to a careful and co-ordinated planning by both FCNSW and the private growers and contractor crews that ensured the salvage operation was carried out to maximise the volume of merchantable timber recovered from the burnt plantations.

It is therefore imperative that all possible efforts are made to ensure that the industry can continue to operate, albeit at a reduced level for at least 15 years, when fibre from new plantings will start to become available.

South West Slopes (Tumut/Tumbarumba) Region
Close to half of FCNSW softwood plantations are centred around Tumut, with more than 100,000 hectares of radiata pine planted. Around a third of the plantations in the area surrounding Tumut were impacted by fires. In addition, Hume Forests, Southern Cross Forests and Snowy Mountain Forests, private softwood plantation companies managed by Global Forest Partners, collectively had approximately 8000 ha of plantation impacted by fire.

Bombala Region
There are 50,000 hectares of predominately radiata pine plantations in the Bombala management area. Around 31 per cent of these plantations were impacted by fires. These plantations will be replanted.

Forest Industries play a crucial role in bushfire management

The vital role of the timber industry in managing bushfire risk and fighting fires is often not well known or recognised.

During the fire season, all staff within FC NSW were involved in fire management in one-way or another with roles ranging from frontline firefighting to incident management and control, to logistics such as meals, transport and accommodation for firefighters. Over 500 staff were directly involved in firefighting including almost 200 seasonal staff brought on for the fire season.

Forest contracting businesses also play a critical role in fire suppression by providing plant equipment such as bulldozers, excavators, skidders and harvesters at blazes to create fire breaks, access roads, and remove dangerous trees. Without a timber industry this vital resource will be lost to the community.

NSW's Declining Plantation Estate

Forest plantations create many benefits for the community with trees a renewable and sustainable resource that can store carbon dioxide in standing timber and in wood, paper and bioproducts. The World Bank expects the global demand for wood fibre to quadruple by 2050, driven by population growth and greater awareness of the environmental benefits of using wood fibre in various applications[1]. The forest industry has the potential to provide a versatile range of wood products to address this looming demand. In addition, new plantations would support the environment, regional employment, economic activity and improve social outcomes.

However, in NSW the plantation estate area is not increasing with new plantation establishment as shown in figure one has been flatlining for nearly a decade, with only 10,000 hectares added. Furthermore, the small amount of new plantings in NSW's plantation estate, combined with the impacts of the bushfires will lead to a shortfall of wood fibre over the next four decades. Without an increase supply of high-quality local timber and forest products, Australia will be forced to rely on uncertain imports which may also be less sustainably sourced.

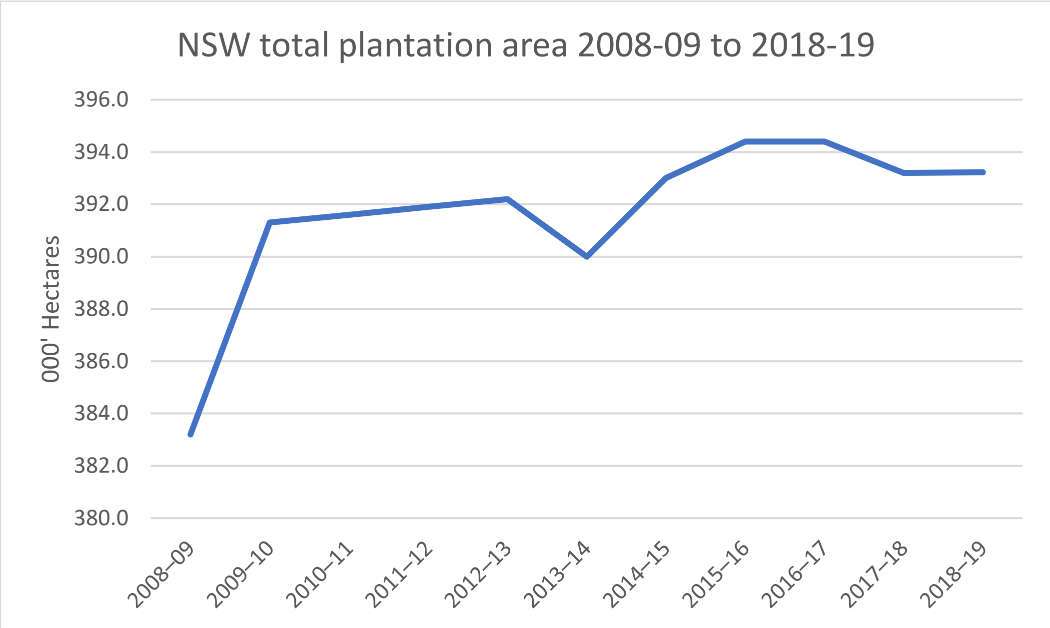

Figure 1. Source: ABARES[6]

Compounding the lack of new plantations, marginal plantations are being converted to other land uses resulting in the weakening of the capacity of the national plantation estate to support future demand for forest products. Part of the reason for the land use change is how long it takes from planting for forestry crops to deliver a financial return. It can take up to 15 years and in some cases as long as 45 years in comparison to other agricultural crops that produce a financial return within a season.

With the right policy settings, more regional jobs and economic activity could be created, allowing our renewable forest industries to be resilient and grow. It is vital the NSW Government plays a key role in assisting with the expansion of the plantation estate by putting in place policies and initiatives that will see the planting of the 'right tree, in the right place at the right scale' which is the overall guiding goal of the federal Government's one billion new trees plan.

[6] ABARES

As state governments in Victoria and Western Australia have concluded – to overcome the economic barriers to plantation development (principally the high cost of land suitable for plantation development) it is necessary to co-fund new plantation development. In both WA (around Bunbury in the South West) and Victoria (Gippsland) governments are in the final stages of creating private-public partnerships to expand the softwood plantation estate. The objective of these major projects is to expand the plantation area to support the resource base necessary to sustain regional forest industries into the future.

Manufacturing of softwood and hardwood timber

NSW's softwood manufacturing industries are huge contributors to both the Australian economy and to Australia's transition towards a more renewable and sustainable future. Forest based softwood manufacturing industries provide renewable products for housing and construction, fibre and energy, to meet Australia's future needs and the growing needs of export markets.

Sawmills in NSW predominately process softwood logs into timber products used in the construction of new houses in Australia and a portion of multi-unit and commercial construction. Softwood sawmills rely completely on the existence of plantations to supply them with their product. This product needs to be a certain tree type and size both to be processed but also to meet the end use requirements in terms of quality specifications mandated by governments.

Engineered timber products such as particle board, MDF and Cross Laminated Timber as well as wood fibre-based paper and packaging production of Kraft Liner Board also rely almost completely on the supply of softwood plantation radiata pine. These production facilities use lower grade timber and complement the sawmills to ensure all of the wood fibre produced is efficiently used.

Hardwood timber from our native forests is sustainably harvested typically after more than 60 years, giving it time to develop the strength and appearance properties required. No old growth is harvested in NSW, only regrowth trees, either from previous harvesting operations or bushfires. Timber from these sustainably managed regrowth forests is visually attractive, dense, strong and durable. Hardwood timber is used for flooring, decks and staircases, as well as for structural purposes such as power poles, wharves and bridges and for lower value applications such as landscaping sleepers, fencing and pallets. Smaller logs unsuitable for use in solid wood products is sold as pulpwood for woodchip export or as firewood for domestic heating.

ABARES is forecasting Australia wide that the volume of all hardwood is expected to fall from 3.5 to 2 million cubic metres per annum whilst the volume of all softwood is expected to remain relatively flat, at around 4.4 million cubic metres[8]. A lack of access to competitively priced wood fibre would eventually make softwood processing facilities uncompetitive and unsustainable.

Another issue facing some processors is that whilst log supply may be available it may be located too far away to be economically viable. This situation has been compounded by the bushfires which destroyed nearby plantations that processors were dependent upon for an annual supply of logs. Now the majority of salvageable burnt timber has been processed, it will take decades for new plantations to provide adequate log supply for the processors. In the meantime, some processors will need to haul logs from plantations that are hundreds of kilometres away to continue to operate.

The NSW Government could look to upgrade existing road and rail infrastructure to make it more cost-effective to transport logs (and other commodities) longer distances. This could include optimising truck routes and capacity (e.g. fast-tracking new A double routes and bridge upgrades).

And improving rail infrastructure including at strategic intermodal terminals to facilitate rail freight of logs and other commodities.

Impacts of COVID-19 on softwood manufacturing

The current national timber shortage is being felt across all building products and is the result of record housing construction activity we are experiencing. In the case of timber framing, imported timber has been unable to fill the gap due to record global demand for timber framing and shipping constraints.

This short-term supply challenge should serve as a warning to all governments across Australia that we have not kept pace with demand in our housing timber needs and that timber shortages such as the one we are experiencing now risk being repeated in periods when imports are constrained.

> AFPA is calling for the NSW Government to urgently work with industry to develop policy measures to aid in the planting of more production trees to service future building demand. There is no instance of a large plantation established anywhere in Australia without the assistance of either State and Federal Government policies. The role of the NSW Government is vital in seeing the establishments of 'the right tree, in the right spot and at the right scale'.

In June 2020, to combat the major forecast demand drop of up to 50% in building new homes due to COVID-19, the Federal Government announced a $688 million HomeBuilder grant program to build a new home or substantially renovate an existing home. The program has been a major success with the Home Industries Association forecasting a record 130,000 new homes will commence construction in 2021 up from the previous record of 120,000 in 2017.

In NSW, sawmills have greatly increased production by adding shifts and ramped up production to keep up with the record demand. The domestic timber industry supplies around 80 per cent of the timber used in home construction. Timber is the number one choice for builders because it is easy to use, low cost, versatile and environmentally friendly. This current surge in demand will pass but it highlights the need to expand and grow the plantation estate in NSW.

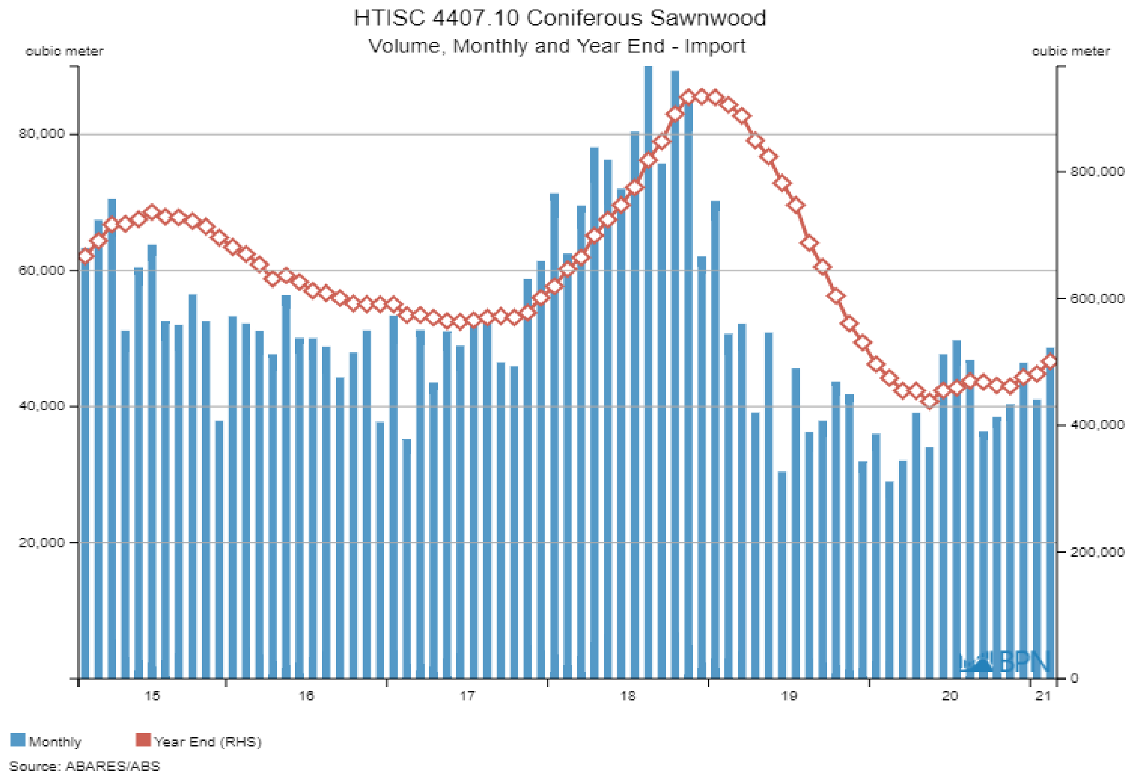

Figure 2. Source: FWPA.

Carbon opportunities

NSW's forest plantations are a renewable and sustainable resource that can store carbon dioxide (CO2) as they grow, and continue to store carbon as wood, paper and bioproducts and for many years.

Major pathways for emissions abatement from the forest products industry include:

- the carbon sequestered in growing forests
- the carbon stored in durable wood and paper products
- the substitution of high emissions materials (e.g. steel, concrete) with wood and other fibre-based products that have low embodied energy, and
- the use of woody biomass for renewable energy (including for renewable heat and biofuels), thereby displacing fossil fuels

As an example, a significant economic, environmental and social opportunity could be realised by prioritising sustainable timber building products under a 'carbon neutral city or town' policy.

A community, place or activity is defined as carbon neutral if it does not effectively release any net greenhouse gases into the atmosphere. This may be because it does not create any in the first place, is able to offset what it does emit through other activities or a combination of the two. This perfectly suits the significant role that sustainable plantation timber products can play in the construction industry.

This policy could provide significant momentum to both lightweight framing and innovative engineered wood product solutions such as Cross Laminated Timber (CLT) in Australia, by promoting a NSW State Government 'wood first' policy that would prioritise the consideration of timber building products given their low carbon footprint. Such a policy would underpin two key policy drivers that all governments are focused on: jobs growth in both traditional and emerging innovative industries and climate change policy (e.g. under a carbon neutral city policy).

CLT is an engineered timber building product used for prefabricated structural applications and is making the construction of entire buildings including multi-rise from timber a reality. CLT was developed in Europe and has been used in constructing buildings overseas for more than ten years. CLT is a durable, strong, sustainable, solid-wood alternative to conventional building materials. Until recently CLT was produced overseas and imported to Australia but recently domestic production has begun.

Benefits of using prefabricated CLT panelised building solutions (or similar engineered wood products) include:

- compared to alternative building materials such as concrete and steel the use of CLT reduces CO2-equivalent emissions by over 1,400 tonnes[7] per average apartment, when carbon uptake during growth is included. That's equivalent to taking 34,517 cars off the road for a year (statistics compiled by Lendlease for the Forte Living Project);
- CLT also has excellent thermal qualities. Timber is warm, natural, smells great, and as a natural product it provides excellent ambient air quality, and
- prefabricated building systems can be constructed up to 90% faster than traditional methods. It can reduce total construction costs by up to 50% and recycle up to 80% of site waste.

NSW is looking for new solutions to curb carbon emissions and tress could assist the NSW Government achieve its goal of net-zero emissions by 2050[8]. Expanding the plantation estate will assist the transition of the NSW economy to this sustainable, lower emissions future.

Carbon Farming Initiative and the Emissions Reduction Farm (ERF)

The ERF is the Federal Governments principal carbon abatement policy framework, it allows proponents to 'bid' carbon sequestration activities into a periodic reverse action system. Inexplicably this system currently discriminates against product trees in favour of environmental plantings. The regulations have so far only been changed at a Federal level to allow the North East NSW and South West Slopes area to participate.

The NSW Government should work with the Federal Government to remove these barriers to participation for the regions of Central West NSW and South East NSW be declared exempt from the CFI rule.

Farm Forestry

Farm forestry is the incorporation of commercial tree growing for multiple benefits into holistic farming systems. For instance, it can include timber belts, alleys, contour plantings and paddock tree plantings on marginal land. Farm forestry is an essential and growing component of the forest products industry.

Farm forestry allows farmers the opportunity to plant a long-term agricultural crop for timber production. It can improve agricultural productivity by providing shelter for stock and crops, increase

[7] RMIT University, Life Cycle Assessment of a Cross Laminated Timber Building Stage 1 – Materials for Construction (not including operation or end of life).
[8] https://climatechange.environment.nsw.gov.au/About-climate-change-in-NSW/NSW-Government-action-on-climate-change

biodiversity, provide other environmental benefits such as decreased erosion, habitat restoration, increased water quality, salinity control, and is an alternative source of income for farmers.

The NSW Government should develop supportive policies (including carbon storage and co-benefits) to underpin the growth of farm forestry across the state.

Innovation in forest industries in a sustainable, low emissions future

As the world transitions to a more sustainable and lower emissions future, NSW's renewable industries are uniquely placed to play a lead role in achieving the national and global goal towards a net zero emissions future as new applications for renewable and recyclable timber and wood fibre emerge, replacing more energy intensive materials.

Forest industries continue to break the boundaries of what is possible with timber in construction. Timber skyscrapers are becoming increasingly common around the world as the carbon-storing, low-energy and aesthetic qualities are increasingly popular with environmentally conscious architects.

Meanwhile, wood-based bioproducts are being deployed in a growing number of innovative ways to replace non-renewable petroleum-based chemicals and materials, with applications in pharmaceuticals, cosmetics, electronics, textiles, car manufacturing, and plastic replacement solutions.

With the right policy framework, the NSW forest product industries can participate in this global shift, and at the forefront of the circular economy revolution, which PwC estimates could be worth $2 trillion to the Australian economy over the next 20 year[9].

However, government investment over the past 20 years in forest industries R&D has drastically declined by more than 80 per cent nationally over the past decade[10], and the number of forest products researchers is down 95 per cent[11]. This dramatic decline in R&D capacity has largely been driven by downsizing and restructuring of R&D within many State and Federal research agencies, including the CSIRO.

Australia risks being left behind and missing out on a once-in-a-generation opportunity to be at the forefront of the global shift to renewable and sustainable industries. And, in the process, we could miss out on thousands of new jobs in advanced manufacturing and circular economy industries.

AFPA believes a new national strategy for forest industries in R&D is needed to create the renewable industries of the 21st century. That is why AFPA is advocating for the Australian Government – with backing from the states – to support the establishment of a national-scale centre for forest products innovation – the National Institute for Forest Products Innovation.

Bioenergy and bioeconomy

[9] https://www.pwc.com.au/press-room/2021/circular-economy-to-grow-australian-GDP.html

[10] Changes in Australian forestry and forest products research for 1985–2013, FWPA, 2015,and AFPA in-house analysis (https://www.tandfonline.com/doi/abs/10.1080/00049158.2015.1095853)

[11] Changes in Australian forestry and forest products research for 1985–2013, FWPA, 2015,and AFPA in-house analysis (https://www.tandfonline.com/doi/abs/10.1080/00049158.2015.1095853)

Australia is a laggard on the global scene when it comes to the uptake of bioenergy. Processors and manufacturers of wood, paper and engineered wood products are significant energy users. These industries, like much of the manufacturing sector, have experienced low price rises for their products for many years and increasing quality and performance demands. While the industry has been able to contain costs through increased efficiency and scale (both usually requiring significant capital investment) and competitive sourcing of raw material inputs, it is unable to control the costs of inputs, including energy and energy distribution.

Sustainably produced biomass from timber processing activities (such as sawdust, timber offcuts and forestry waste) and other agricultural sources, can offer significant potential to contribute to our renewable energy future. Currently, our timber industry produces a large amount of sustainable biomass from timber processing and paper manufacturing operations. However, only some of it is being utilised in local or regional bioenergy facilities, or as wood pellets that are exported overseas as a source of renewable energy, generally into the Japanese market where government policy is mandating renewable energy from biomass[12].

Bioenergy uniquely, provides renewable and dispatchable energy that complements existing power generation and underpins intermittent renewables like wind and solar. Energy from biomass, such as forestry, industry and agriculture residues, is a unique renewable that can be used across all three energy sectors (transport, heat and electricity).

Australia is in the bottom quartile of Organisation for Economic Cooperation and Development (OECD) countries with respect to bioenergy as a proportion of total energy supply. In Australia, biomass for energy purposes makes up around four per cent of total energy consumption. This stands in contrast to the European Union, where 10 per cent of energy consumption is derived from biomass[14].

Internationally competitive energy costs are essential if manufacturing in Australia is to survive and grow which following the COVID19 pandemic is essential. If Australia is to remain competitive in international markets, it is important that Australia's energy policies do not disadvantage domestic operations by subjecting trade-exposed industries to costs not faced by competitors in other countries.

Locking up NSWs multi-use forests will not store more carbon

It is vital that access to NSWs multi-use forests continue, anti-forestry groups wrongly claim that reduced harvesting in native forests will increase carbon sequestration. This is at odds with the international and Australian scientific evidence.

The significant potential for the forestry and forest products industry to contribute to climate change mitigation was acknowledged in the 4th assessment report of the Intergovernmental Panel on Climate Change (IPCC), which stated:

> *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.*[13]

[12] https://www.argusmedia.com/en/news/2203218-japan-may-meet-biomass-goal-despite-fewer-new-projects
[13] https://www.ipcc.ch/site/assets/uploads/2018/03/ar4_wg3_full_report-1.pdf

This is achieved by storing carbon in wood products which both minimises carbon losses from future bushfires and produces renewable, low emissions materials.

Claims that a reduction in timber harvesting sequesters more carbon also ignores the stored carbon from the timber and paper products produced, and the substitution that would occur with imported wood and paper products from countries that do not have the stringent environmental protections and sophisticated forest managements practices that are in place in Australia.

Ceasing domestic production of NSW native forests will increase imports from less sustainable sources

Australia, and indeed NSW, has some of the most stringent environmental safeguards and regulatory frameworks for the sustainable management of native forestry operations.

Like all of Australia's public forestry operations, FCNSW is certified under the PEFC international forest certification standard, operating as Responsible Wood in Australia.

PEFC is the world's largest independent forest certification scheme, covering about two-thirds of the globally-certified forest area.

In contrast, more than 80 per cent of the world's timber-producing forests are not certified at all and at high risk of illegal logging, poor working conditions and contributing to deforestation (as they are not replanted and regenerated).

With high demand in Australia and globally for hardwood products for applications such as floorboards, staircases and furniture, an end to NSW's native forest industries would lead to increased imports from countries with often weaker environmental regulations, including those where tropical rainforests are logged unsustainably and in some cases illegally.

NSW Government assistance packages to industry

AFPA acknowledges the significant support from the NSW Government to affected forest industry businesses to assist with the Black Summer bushfires recovery effort, which will take decades.

The NSW Government's $140 million Bushfire Industry Recovery Package was welcomed by AFPA and provided urgently needed support for the state's forest industries which were severely impacted by the fires.

The program provided immediate support across the whole forest industry sector, softening the impact of the bushfires, and supported employers as they dealt with the arrival of COVID-19.

The NSW Government also provided up to $10 million in matching funding for the Federal Government's $15 million program to assist with the additional cost of freight and storage for burnt logs. Post bushfire there is a need for a state freight system to cover the increased cost of carting green logs to mills from further away, to manage the log shortages caused by the fires.

AFPA also notes the NSW Government's commitment of $46 million equity injection into Forestry Corporation of NSW to support the replanting efforts, road and bridge repairs.

Conclusion

Thank you for the opportunity to provide this submission. AFPA would be most happy to expand upon any of the points raised in this submission at any hearings you may hold.