Annual Report

2019/20

Forest & Wood Products Australia

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From the Chair

To say it has been an interesting 12 months would be an understatement. The following Forest and Wood Products Australia (FWPA) report for the financial year ending 30 June 2020, certainly highlights how resilient and adaptive we can be.

The disruption in Australia and to the forest and wood products sector as a result of drought, bushfires, floods and the outbreak of COVID-19 has been significant. Fortunately, throughout this period, our industry and most members of the downstream supply chain have been able to continue to operate as an 'essential service'.

Although home construction has slowed, government assistance programs have kept this important segment of the industry at reasonable levels nationally. The future impact of these events in terms of market conditions and resource availability is still unknown, but is likely to be significant.

As a result of the COVID-19 lockdown measures, FWPA management has made numerous changes to ensure the work of the organisation has been able to continue successfully, and that our staff - most of whom have been working from home - have been fully supported. Despite these constraints, the FWPA team has met all of the key targets outlined in our Annual Operating Plan for the past year.

Our strategic plan continues to focus on five key, outcome-focused programs - promoting the benefits of wood products; aligning products to market needs; assisting in value chain optimisation; expanding resources; and impacting decision making and industry capability. Despite the lockdown and the challenges associated with a team that has been unable to travel, considerable progress has been made across each of these programs during the past year.

Of particular note has been the success of The Ultimate Renewable™ campaign, with the support of Planet Ark, which is reframing public perceptions of forestry. This initiative has been acknowledged with a number of awards, and has enjoyed significant uptake by the industry and media.

Our Mid-rise Advisory Program continues to yield results and thanks to this work we are seeing an ever-increasing number of commercial buildings designed and built with timber structural components.

FWPA continues to fund numerous research projects, some of which have been made possible through our Voluntary Matched Funding Program.

During the next year, management and the Board intend to carry out a major 'clean sheet' review of our strategic direction to ensure it remains in full alignment with industry needs.

This will guarantee that FWPA continues to provide value for government and industry stakeholders in a rapidly changing economic landscape.

None of our successes over the past year would have been possible without the hard work and dedication of our relatively small team, capably led by Managing Director, Ric Sinclair. My thanks to our Directors, who have continued to provide excellent strategic guidance and high levels of governance.

The ongoing support of the Federal Department of Agriculture, Water and the Environment is also noted and greatly appreciated.

John Simon, Chair

From the Managing Director

I would like to start by acknowledging the FWPA team. Like many office-based organisations, our people have been working remotely, and their adaptability and willingness to go above and beyond in ensuring no disruption to the delivery of our programs during these challenging times has been commendable.

As we are all keenly aware, the bushfire season of 2019/20 resulted in extensive damage and loss to Australia's plantation and natural forest resources, as well as the destruction of many properties.

In response, FWPA acted quickly to develop educational materials and host public workshops to prepare industry and the community for future bushfire events. This work was designed to share knowledge and tools that will ensure resilient homes are rebuilt in impacted areas. In addition, we commissioned a best practices guide for the harvest and storage of burnt plantation logs and a review of the Building in Bushfire Prone Areas standard. My sincere thanks to all involved.

Meanwhile, the unprecedented COVID-19 pandemic continues to effect us all. With the economic consequences still largely unknown, the welfare of our people, members and community has remained our number one priority. As such, FWPA has continued to create and disseminate information to our audiences, while also responding to an ongoing demand for information and opportunities to upskill.

Along with the restrictions, we have also witnessed a number of opportunities. One area of considerable success has been our weekly WoodSolutions Zoom webinars, focusing on subjects of interest to the timber industry and the wider community of architects, designers, specifiers and builders. Typically, these events have attracted between 600 and 800 participants, while also providing an opportunity for designers to obtain their required professional development points. There have been more than 12,000 participants since the start of this program.

2020 also marks 10 years of WoodSolutions. The program has developed a global reputation for providing high-quality information about the benefits of timber and it is one of the most visited wood promotional websites in the world. Over the past decade the program has played a key role in helping to demystify timber and educate industry about how it can most effectively be used in construction through an expanded audience of design professionals and additional technical design guides and other resources.

Despite COVID-19, it has been 'business-as-usual' for FWPA in many ways. Throughout the year we have continued to fund important research projects, many of which have been enabled by our Voluntary Matched Funding Program. The scheme continues to be received warmly, with its funding cap consistently reached. Since 2016, a total of $12m has been invested in R&D projects, and this vital work is serving to significantly increase our industry's technical capacity.

The Mid-rise Advisory Program team continues to encourage the design and construction of commercial timber buildings. Following a show of support last year in the form of additional funding from industry partners, 2019/20 saw the program successfully extend its reach from Victoria and Queensland, to cover all east coast states, along with additional limited coverage for South Australia and Western Australia.

Following its launch last year, our new brand The Ultimate Renewable™ has continued to enjoy a positive reception from consumers and industry. It has been heartening to witness industry stakeholders so willingly engage with the brand, and incorporate its messages into their own collateral. By working together in this way, we are supporting our goal of generating increased community acceptance of forest and wood products.

Our popular ForestLearning program continues to expand, with a growing suite of activities designed to educate children about forestry, and equip them with a deep understanding and acceptance of timber products. In light of the situation with COVID-19, the opportunities for remote learning provided through this program have become even more pertinent. This year saw the development of a number of virtual reality (VR) packages, which enable school children to 'visit' forests and sawmills using VR goggles, while the program's Forester Time webinars have allowed students to join forest workers on-site via online video conferencing tools.

Elsewhere, the knowledge and insights shared with industry through our data aggregation program, which many organisations from across the supply chain contribute towards, continues to aid smarter decision-making.

I would like to thank our Board of Directors and the FWPA team for their dedication, hard work and enthusiasm during the past twelve months. I would also like to acknowledge the commitment and support of our members, stakeholders, R&D partners, suppliers and the Australian Government.

Ric Sinclair, Managing Director

HIGHLIGHTS 19|20

Outcome-focused programs

- Promoting the advantages of wood products
- Aligning products to market needs
- Assisting value chain optimisation
- Increasing resource availability and reducing risk
- Impacting decision making and industry capability

Voluntary Matched RD&E'

$12m invested in projects since 2016

WoodSolutions website: a trusted global source of timber information

- 812,800 sessions
- 116,384 downloads
- 2m page views
- 614,800 users

Engaging youth via ForestLearning

Forest VR™ lets kids experience forest & mill environments first hand

ForesterTime connects kids with forest workers, via Zoom!

- 24,000 website visitors
- 290 teacher packs dispatched, reaching 13,000+ students
- 958 unique resource downloads

Webinar alternative to WoodSolutions seminars embraced by industry

- 12,000 attendees, from all over the world
- 24 events held so far

Planet Ark continues run of success

Two more councils adopt Wood Encouragement Policy... welcome Glenelg, SA and Baw Baw Shire, VIC!

Wood. The Ultimate Renewable™

24% of Australians recalled seeing the campaign

67% said it made them more supportive of forestry

155 have downloaded the branding so far

The Ultimate Renewable™

Supporting Australian Growers

Grower Research Advisory Commitee work sees $2.2m approved for 13 research initiatives

Mid-rise Advisory Program goes national

Work extends from VIC & QLD to include all east coast states, with limited coverage for SA & WA

Rebuilding with resilience in bushfire prone areas

Educational resources & community workshops form comprehensive bushfire response

WoodSolutions Campus goes from strength to strength

745 enrolments

Data Aggregation Program

80+ organisations contribute to 15 data series, in support of smart decision making!

National centre for Timber Durability and Design Life

A growing team of international talent

Collaborarive partnerships

Inaugural five-day workshop

Strategic Framework

During the 2019/20 financial year, Forest and Wood Products Australia's (FWPA) operations aligned with the rolling 2019-24 Strategic Plan, which is reviewed annually, and provides guidance to the 2019/20 Annual Operating Plan.

Industry vision

The forest and wood products industry will grow as a result of increased demand for its market oriented, renewable and competitive products and services.

Mission

We collaborate with industry stakeholders and Government to determine strategy and deliver programs designed to grow the market for forest and wood products, increase productivity (and implied profitability) across the value chain and ensure positive environmental and social outcomes.

Desired outcomes

We work with FWPA members and levy payers, the Australian government and other key stakeholders to secure the cooperation and collaboration required to deliver the outcomes that will be of optimal benefit to the industry as a whole, through:

- increased demand;
- increased community acceptance;
- increased productivity;
- increased sustainability credentials; and
- increased capacity.

Programs

2019/20 is the fourth year of our revised strategic plan, with outcome-themed programs. It was the second full year under our new Statutory Funding Agreement, which came into effect in August 2017.

In prior strategic plans, the organisation's activities were structured around functional areas such as research and development (R&D), marketing and standards development. Our new program structure, which came into effect in 2016, is intended to shift the focus – and language – away from functional inputs and towards the outcomes we are seeking to achieve for stakeholders.

To be successful, this shift requires cultural change within the organisation and the broader industry. In 2019/20, we have continued working towards this outcome, although we recognise it will take time to become fully embedded.

Our outcome-based programs are focused on the following five strategic priorities:

Program 1
Promoting the advantages of wood products.

Program 2
Aligning products to market needs.

Program 3
Assisting value-chain optimisation.

Program 4
Increasing resource availability and reducing risk.

Program 5
Impacting decision-making and industry capability.

The focus of this financial year was to consolidate and implement a number of enhanced activities that will further deliver on the company's mission. Examples include:

- Launch of the new The Ultimate Renewable™ TV commercial and supporting collateral.
- The expanded WoodSolutions midrise advisory team funded through voluntary-contributions and matched Commonwealth funding.
- A new focus on technical extension to the builders and developers of Class 1 dwellings.
- Staged implementation of the forest research priorities as identified in the investment plans approved by the Grower Research Advisory Committee.

The role of FWPA and scope of work will continue to evolve in response to changing industry dynamics, but our focus remains on identifying and delivering collaborative innovation that will benefit the largest proportion of our stakeholders.

FWPA is one of 15 Australian rural research and development corporations (RDCs) and is the nominated industry owned services company under the Forestry Research and Development and Marketing Act 2007.

Strategic Framework

The Australian Government levies qualifying industry participants and provides matching funding in accordance with our Statutory Funding Agreement (SFA). The SFA requires FWPA to continually review its operating environment.

In consultation with key stakeholders, the organisation must regularly consider the appropriateness of its programs and activities.

This strategic review process is shown in the diagram below.

This review process creates a rolling five-year planning cycle that ensures the organisation remains focused on the future, while making necessary adjustments within the operating environment.

This annual report should be read in conjunction with the five-year Strategic Plan (2019-2024) and the 2019/20 Annual Operating Plan.

Organisation Chart
click here

Finding opportunities during a time of crisis

The past twelve months have brought challenges nobody could have predicted. During the summer, Australia was ravaged by some of the worst bushfires our nation has ever seen; a crisis followed almost immediately by the global COVID-19 pandemic.

FWPA would like to acknowledge the devastation caused by the bushfires of late 2019 and early 2020. Everyone at our organisation is deeply saddened by the loss of lives and homes.

We acknowledge the impacts of damaged assets on members and levy payers, and the significant effect this is likely to have on businesses for some years to come. FWPA is with you on the journey towards recovery, and we will continue to take proactive steps to strengthen and support this process.

We also keep in our thoughts all those who have been directly impacted by COVID-19. Alongside the devastating loss of life and severe health impacts, we join other industries in bracing ourselves for an inevitable drop in demand, as a result of the far-reaching impact of the pandemic on the global economy. While the actual impact is still entirely uncertain, FWPA would like to reassure industry that we are thinking ahead, and remain committed to developing measures that will best support the sector through whatever lays ahead.

While these real-world issues have affected our industry in a plethora of ways, FWPA has embraced the opportunities to adapt our approach and respond in a way that will continue to provide benefits to as many stakeholders as possible.

In response to the widespread damage the bushfires caused to Australia's plantation and natural forest resources, we established a Technical Expert Working Group to review available information pertaining to major fires in Australia's past, dating back as far as the 1920s. This provided an opportunity to collate historical information and use it to build a knowledge base that will support risk management and future planning.

Our focus during the rebuilding phase was on helping to ensure resilient homes become the norm in bushfire prone areas. In line with FWPA's mission, this involved supporting and encouraging collaboration across the value chain, improving the availability of information, and educating on timber use in construction.

Providing resources that enable rebuilds to meet bushfire standards, and thereby mitigate future disaster risk, has delivered real benefits for rural and regional individuals, families and communities.

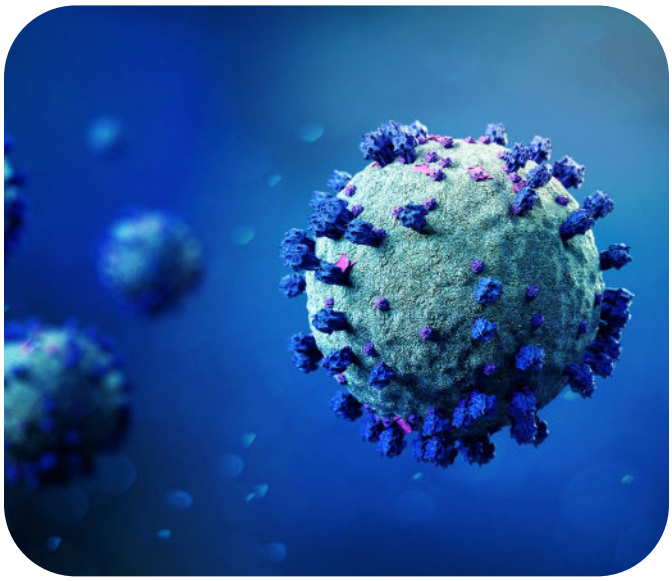
FWPA also developed guidelines for the salvage, storage and processing of fire-damaged logs, to support growers seeking to minimise waste.

In addition, we hosted a number of workshops in fire-impacted communities, focusing on resilience, recovery and rebuilding. Information was included on preparing for and handling fire situations, as well as designing to Bushfire Attack Level (BAL) requirements.

The goal of the workshops was to help maintain confidence in timber amongst the construction industry and home owners. We did this by reassuring attendees that, with the correct information, it's possible to build safely with timber, even in areas where the bushfire threat is high. This education will help to future-proof demand for timber in construction, in the safest and most responsible way.

We reached a milestone at FWPA in 2020, with ten years of the WoodSolutions program. This initiative provides trusted, high-quality and easy-to-understand information about timber's uses and advantages to the design and build sector.

Historically, one of the most popular aspects of this program has been the opportunity to participate in face-to-face educational seminars delivered by leading experts. However,



in light of the social distancing requirements imposed by COVID-19, we knew these events could no longer be delivered in their traditional format.

We asked ourselves: "How in the current context can we continue to provide opportunities for design and build professionals to upskill and discover the many possibilities around what can be achieved with timber?"

The decision was ultimately taken to adapt these events to suit an online webinar format. With 24 subsequent events having attracted more than 12,000 attendees, this weekly series of free events has cemented its place in the diaries of professionals from across the industry.

Feedback on the webinars has been hugely positive, and the new approach brought with it a number of additional benefits. These include the cost-effective nature of hosting a webinar as compared to running a face-to-face workshop or seminar, and the ability to reach a larger audience by removing the restrictions associated with a geographical location or venue seating capacity.

Although we could never have foreseen quite how relevant it would become, our ForestLearning program offers the perfect model to demonstrate the opportunities associated with education in this era of social distancing. Prior to COVID-19, the program had already incorporated various online resources to enable school children to engage with and understand the world of forestry.

The current situation has meant teachers, parents and school children are seeking new opportunities for remote learning. With so much of its existing content already designed for online delivery, the program was in a strong position to offer an expanded number of learning opportunities to students. The ForestLearning team therefore accelerated its efforts and continued to investigate, develop and roll out innovative new resources which are all accessible online.

The ForerstLearning program now includes everything from online work sheets and quizzes to opportunities to connect with foresters out in the field via Zoom, and the use of virtual reality to allow students to experience forest and mill environments first hand.

This work demonstrates that out of a crisis can come opportunities, and being forced to look at something in a different way can often lead to an equally positive or improved outcome. It also goes to show the community in general is ready and willing to embrace new, non-traditional approaches.

This spirit of ingenuity has always been present at FWPA. Our commitment to our members and the broader forest and wood products sector is that, whatever external factors may be at play, we will continue to investigate and develop new ways of benefitting our industry, particularly when offering support during tough times.

A commitment to collaboration

Collaboration is the foundation for FWPA's most important and impactful initiatives and a part of our DNA. Our commitment to collaboration strengthens our efforts to grow the market, improve efficiencies across the value chain, and ensure the best possible environmental and social outcomes.

An excellent example of collaboration at FWPA is our ongoing involvement with the Council of Rural Research and Development Corporations (RDCs). We and Australia's other rural producers and industries face a unique set of biophysical, environmental and societal challenges.

In response, a unique industry-government investment partnership known as the Council of Rural RDCs was formed, with active participation from its 15 RDC members.

Through the work of the Council, rural RDCs collaborate on matters of common interest and importance. During 2019/20, FWPA participated in various council activities, including regular joint meetings to ensure systems and processes are aligned and responsive to government priorities.

The Council's Plant Biosecurity Research Initiative (PBRI), established in June 2017, is a vital initiative that seeks to achieve better coordination and prioritisation of cross-sector plant biosecurity research. The program's five-year strategy (2018-2023) currently has 15 collaborative research projects and funding totalling $50 million. A recent independent review found the PBRI had coordinated investment in projects of national significance, with the potential to create a real difference to Australia's plant biosecurity. As a result of its success, the PBRI Collaboration Agreement was extended for a further three years, providing greater scope and opportunity for FWPA to partner with others RDCs to invest in essential research.

Alongside other Council members, FWPA has continued to sponsor a category at the annual Science and Innovation Awards for Young People in Agriculture, Fisheries and Forestry. Run by the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), the awards give grants to young agricultural researchers to support their projects. Each year it is inspiring to see so many young scientists undertaking such vital projects. By investing in talent in this way, we help sustain future research capacity for our industry.

Another sponsorship resulting from FWPA's involvement with the council this year was our support of the 2020 EvokeAG event in Melbourne. EvokeAG is the Asia Pacific's premier agrifood tech event and showcases the latest products and programs. From our joint stand alongside the other RDCs, we enjoyed valuable opportunities to promote some of the incredible research outcomes we have recently supported.

FWPA will be a co-investor in a special purpose investment vehicle to improve cross-sector collaboration. Owned by the RDCs, the new entity will be responsible for identifying and funding collaborative programs to address climate change, as well as land and water use issues, while attracting international commercial investments for these priority areas. The new company will be formally launched during 2020/21.

FWPA has also continued its participation in the Rural R&D for Profit program. Together with other RDCs, this program supports a diverse range of research projects with benefits for multiple sectors. During 2019/20, FWPA managed two projects under this program, both of which yielded productivity and profitability for forestry and other primary industries.

The first project saw researchers measure and promote the many benefits of integrating trees into farming operations.

This project resulted in robust evidence to back up these benefits, as well as configurations to demonstrate how farmers might increase profitability through planting trees. The second project sought to improve the adoption of natural capital accounting practices amongst Australia's primary industries through a better understanding of the objectives and benefits.

Collaboration was the cornerstone of our response to the catastrophic bushfires of 2019/20. We developed educational materials and hosted workshops to prepare industry and the community for future bushfire events. The response from stakeholders was swift and effective, and represented the first instance of such a diverse array of industry members coming together to develop programs on this particular topic. The enthusiastic adoption by industry of our brand The Ultimate Renewable™ provides another example.

We developed the brand to reinforce the association between wood and the word 'renewable', with stakeholders from across the supply chain amplifying the message by incorporating branded elements into their collateral. This response demonstrates the impact the forest and wood products industry can have when we work together with one common goal.

These are just some of the many initiatives that display how collaboration between members of our sector and others can achieve great things for our industry, and help ensure a brighter future for forestry and wood products in Australia.

Program 1

This program promotes the benefits and usage of forests and wood products in response to changing community attitudes and it has been a key part of the company's activities since 2008.

Promoting the advantages of wood products

- The latest activites from The Ultimate Renewable™
- ForestLearning education program
- WoodChat podcasts
- Planet Ark's Make It Wood campaign

The latest activities from The Ultimate Renewable™

During the previous financial year, following extensive consultation with industry and consumers, we developed our new brand, The Ultimate Renewable™, and its associated consumer advertising campaign. In 2019/20 the brand has continued to promote the sustainability and environmental advantages of our industry, with the goal of reframing public perceptions of forestry and wood products.

The messages underpinning the brand aim to educate the public that Wood is The Ultimate Renewable™ resource because it can be replanted and continually regrown. Since launching, the brand has successfully galvanised stakeholders from across the sector. Industry members have become champions of the brand, by promoting the benefits of sustainably sourced and well-managed forest products and incorporating the branding into their own collateral.

Award-winning architect and host of Grand Designs Australia, Peter Maddison was the face of the accompanying advertising campaign, which took a multi-platform approach, targeting all major and regional Australian cities via television commercials, as well as catch-up TV, social media, online articles, billboards, outdoor displays and print mediums. Following the consumer campaign, 24 per cent of Australians said they recalled seeing the campaign, with 67 per cent of those asserting it had made them more supportive of forestry.

Industry participation

The launch of a dedicated website has made the various visual assets and collateral easily available to industry for download, with 155 companies having downloaded the logo, banner ads and videos so far. These have appeared on letterheads, invoices, websites, truck signage, packaging and more.

The website also includes an online store comprising branded merchandise available at cost price exclusively to program partners for distribution amongst their own networks, further spreading the brand's positive message.

An award-winning campaign!

The success of the brand was recognised when The Ultimate Renewable™ was twice named on the 2020 International Association of Business Communicators (IABC) Gold Quill Award winners list. The award program recognises excellence in strategic communication worldwide and is acknowledged as one of the most prestigious in the communications and marketing sector. The organisers recognised The Ultimate Renewable™ in the Marketing, Advertising, and Brand Communication category, with quills awarded by both IABC Victoria and IABC Asia-Pacific.

ForestLearning education program

Our ForestLearning initiative has continued its focus on providing quality resources for teachers, enabling them to successfully integrate forestry and sustainable wood products information into their classroom teaching, while aligning with Australian curriculum outcomes.

The activities of the ForestLearning program are designed to educate children on forestry from a young age, equipping them with a broader understanding and acceptance of timber products as they grow up and become consumers.

Initiatives such as ForestLearning have become even more vital during the COVID-19 pandemic. With so much of its existing, innovative content, aligned to the national curricula, already designed for online delivery, the program was in a strong position to offer an expanded number of learning opportunities to students as demand for remote learning options increased.

ForestVR™

Since launching in September 2019, the ForestVR™ initiative has allowed students to experience forest and mill environments first-hand, through the use of virtual reality (VR). This immersive technology comprises a series of 360-degree virtual tours and video experiences that educate students on the renewable cycle of forestry and where our wood comes from in an engaging way, while overcoming problems around the inaccessibility of physical forests and wood processing facilities.

The technology can be accessed via the ForestLearning website or by downloading the ForestVR™ app. Content and experiences within the app can be viewed using tablets, laptops or VR headsets, making it accessible in all environments.

The app also offers a range of extra features for increased functionality and ease of delivery for teachers.

Forester Time webinars

This year also saw the launch of the program's Forester Time webinars, which allow students to join forest workers in the field via the online video conferencing tool, Zoom. The initiative allows students to learn more about the daily work of foresters, sustainable forest management and career pathways. Considering the restrictions imposed by COVID-19, these webinars play an important role in connecting more teachers, parents and students with forest and wood processing professionals.

Robust and relevant resources

The ForestLearning website's resources page has attracted more than 24,500 visitors during this financial year, with 122,100 page views.

A new registration portal was launched to allow users access to unlimited free resources, while helping to provide clearer metrics behind user needs and preferences.

There are currently 300 registered users, who downloaded 958 unique resources during the financial year.

290 free teacher packs were dispatched, reaching more than 13,000 students. Meanwhile, more than 900 ForestLearning conference packs were distributed to teachers across the country.

One of the Key Measures outlined in our 2019/20 AOP was the increased use of ForestLearning teaching resources by 10 per cent per year. With users in 2018/19 being 20,072 and users in 2019/20 being 24,500, this was easily exceeded with an increase of 22 per cent.

Productive partnerships

ForestLearning was invited to host professional learning workshops at a number of peak teacher association conferences around Australia, and also hosted its Australian Forest Education Alliance annual meeting in Tasmania. During the meeting, representatives from eight key forest and wood product industry organisations provided input and strategic advice on the program.

Strategic promotions

The ForestLearning quarterly e-newsletter has almost 8,200 subscribers, while the regularly updated Facebook page has 1,977 followers. We have also established a presence on LinkedIn, which currently has 145 followers.

WoodChat podcasts

FWPA has continued to produce episodes of its WoodChat podcast series. Each of the eight new episodes includes in-depth conversations with experts on different industry news stories, discoveries or innovations.

The series is an example of FWPA's commitment to embracing new ways of communicating exciting industry developments. Topics have included how VR is being used to launch forestry into the future, building with wood in bushfire prone areas, and new technology to predict wood quality in standing trees.

Planet Ark's Make It Wood campaign

FWPA's partnership with Planet Ark and the Make It Wood initiative ensures a focus on communicating with local governments, ethical investments, education and health authorities, and key influencers in the built environment space, promoting the positive benefits of sustainably sourced wood products.

Support of The Ultimate Renewable™

In 2019/20 a significant aspect of this work has involved Planet Ark's continued support of The Ultimate Renewable™ brand, which you can read about elsewhere in this Annual Report. Since its launch, Planet Ark has made the new brand's messaging a key component of all of Make It Wood communications.

Wood Encouragement Policies

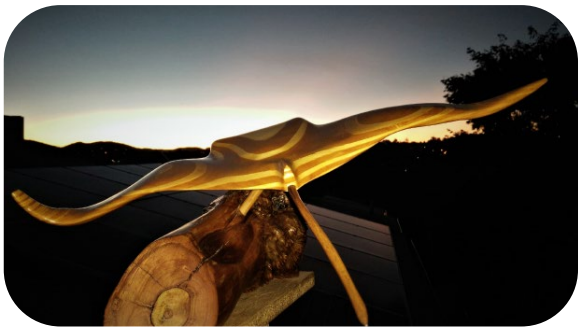
A key element of the Make It Wood initiative is that it seeks to encourage the adoption of Wood Encouragement Policies (WEPs) by all levels of government, throughout Australia. A WEP generally requires responsibly sourced wood to be considered, where feasible, as the primary construction material in all new-build and refurbishment projects. As a result of this work, two local governments in Victoria — Glenelg and Baw Baw Shire Councils — adopted WEPs during the last year. This brings Australia's total number of WEPs to 22, and conversations are ongoing with many more government bodies around the country.

Photo competition

The Planet Ark team ran a Make It Wood photo competition, which invited consumers to discover the beauty of wood through the camera lens. The aim was to inspire the public to consider the many and varied applications of wood by sharing and celebrating some impressive photos of timber in use. More than 450 entries were received across two categories - 'wood in buildings', and 'things you've made or love' using timber. The two winning photos can be seen below!

Left:
Chris Horgan - Fremantle, WA

Below:
Andrew Harring - Petrie Terrace, QLD



Community bushfire recovery workshops

Planet Ark and Make It Wood played a key role in FWPA's series of workshops on rebuilding with resilience in bushfire-affected areas, hosted in Bairnsdale, Tumbarumba and Bega.

During the events, Planet Ark presented on the environmental and biophilic benefits of using sustainably sourced wood in construction. More information on this initiative can be found elsewhere in this Annual Report.

Aligning products to market needs

Program 2

This program aims to ensure that the industry's products and services are fit-for-purpose, appropriately aligned to market needs and better communicated to key influencers.

- Rebuilding with resilience in bushfire prone areas
- Ten years of WoodSolutions
- Webinars in response to COVID-19
- WoodSolutions website
- Latest technical design guide makes 50
- Investigating timber properties to build confidence in timber construction
- Monitoring of mid-rise, timber framed building proves fit for purpose
- Manufacturing facility tours
- Timber Talks podcasts
- Mid-rise Advisory Program
- Uncovering the residential construction industry's views on timber
- New opportunities for fibre-managed plantation hardwood in construction
- WoodSolutions Campus
- WoodSolutions Young Professionals Network
- Exploring a trust mark to certify the quality of timber products
- New substrate could increase use of bonded and coated hardwoods in construction
- National Centre for Timber Durability and Design Life
- Work around Australian Standards and the National Construction Code

Rebuilding with resilience: industry and community in bushfire prone areas

The recent fire season caused extensive damage and loss to Australia's plantation and natural forest resources and destroyed many properties. A number of initiatives have been undertaken with the aim of helping ensure resilient homes are built — and rebuilt — in bushfire prone areas.

FWPA's WoodSolutions program hosted half-day community workshops on Resilience, Recovery and Rebuilding in Bairnsdale, Tumbarumba and Bega. These sessions included presentations by the Rural Fire Service and Country Fire Authority, focused on preparing for and handling fire situations. Architects with experience in designing to Bushfire Attack Level (BAL) requirements for timber also spoke, alongside psychologists who presented on managing mental health after a bushfire event.

FWPA provided attendees with valuable information including WoodSolutions' design guide, Building with Timber in Bushfire-prone Areas, updated in accordance with the bushfire standard AS 3959-2018 (Construction of buildings in bushfire-prone areas). This comprehensive publication provides clear, concise explanations of each BAL, and where and how timber may be used.

Ten years of WoodSolutions

Since launching in 2010, FWPA's WoodSolutions initiative has built a reputation for providing high-quality information about the benefits of timber to the development, design and build sectors.

Initially designed to support FWPA's mission of increasing demand for and acceptance of timber in construction, the program has been successful in demystifying timber and educating those involved in building-material specification about how it can be most effectively used.

Webinars in response to COVID-19

Most recently, in light of the situation with COVID-19, WoodSolutions customised its popular series of face-to-face industry seminars for delivery in a webinar format.

There have been more than 12,000 participants across the 24 events held so far. The ongoing series of free weekly webinars takes place at 11am AEST every Tuesday, and participant feedback has been overwhelmingly positive so far.

Topics are varied to appeal to both specialist and wider audiences. They have included everything from cost management for mid-rise projects, to acoustic design and rebuilding in a bushfire prone areas.

The webinars are significantly more cost-effective than traditional workshops and seminars but continue to provide opportunities for organisations to upskill their teams and expose them to what can be achieved by using timber. Through these webinars we are able to reach an even broader audience, without geographical limitations or the restrictions associated with specific locations or venue seating capacity.

While most attendees have been local, there have also been guests from as far afield as the USA, NZ, the UK, Canada and Brazil.

This is a wonderful testament to how well-regarded Australian expertise is on the global stage.

Feedback regarding the webinars has been overwhelmingly positive:

"The webinar was inspiring and showed amazing projects that can be achieved with timber."

"It was one of the very best in content, format, host instructions I have ever seen. And I do this in New Zealand for mass timber and have run technical conferences for 25 years! What a fantastic collaboration of speakers with such professional interaction."

"Very innovative and thought provoking, particularly the opportunities for hybrid construction and structures."

WoodSolutions website

WoodSolutions.com.au continues to provide a popular and dependable source of timber-related information for the construction industry. It consistently ranks as one of the world's top websites for timber information.

Sessions: 812,800
Page views: 2 million
Users: 614,800
Downloads: 116,384

One of the key measures outlined in our 2019/20 AOP was the increased use of WoodSolutions resources by 10 per cent per year. With use of resources in 2018/19 being 110,378 and use of resources in 2019/20 being 128,384, this represented an increase of 16.3 per cent.

Latest technical design guide makes 50

The WoodSolutions website includes more than 50 technical design guides, which enable engineering and design professionals to easily build their knowledge of timber regulations in construction and design. WoodSolutions' latest technical design guide — Mid-rise Timber Building Structural Engineering — and its accompanying webinar series aim to provide structural engineers with the information required to confidently design a mid-rise timber building.

The guide gives structural engineers the latest, state-of-the-art design information and comprises more than 200 pages. It was developed in response to a recent surge in mid-rise timber buildings — which consist of between three and eight storeys. This surge was facilitated in part by changes to the National Construction Code, which now allows Deemed-to-Satisfy-Solutions for timber in all building classes.

To coincide with the launch of the guide, the WoodSolutions Mid-rise Advisory Program (MAP) conducted a series of three webinars for structural engineers around Australia. All aspects of the guide were looked at in detail during the webinars, and participants were given the opportunity to ask questions of the authors. In total, the webinars attracted more than 860 attendees.

Investigating timber properties to build confidence in construction

The properties of timber vary depending on the direction of the grain, with parallel-to-grain timber elements tending to be stronger than their perpendicular-to-grain counterparts. A more accurate method of predicting the deformation of timber loaded perpendicular-to-grain has now been developed, thanks to FWPA-supported research, with the goal of instilling more confidence amongst designers exploring the specification of wood for their projects.

For one and two storey structures, where load is relatively low, the differences in strength and performance between these two types of wood has minimal impact. However, as wood is increasingly used as a primary material in the construction of mid-rise structures, timber's load bearing capacity needs to be better understood to prevent problematic levels of compression and deformation.

The research team from the Timber Development Association of NSW noted existing data had been around for many years and was derived from timber not commonly used or available today.

In addition, existing methods of calculation were based on low rise structures. Therefore, the researchers set out to understand the performance of 15 timber species commonly used in construction today, developing and testing a new approach to calculating load impact on perpendicular-to-grain timber in various scenarios.

This new and more reliable method of calculating the deformation of perpendicular-to-grain timber was published as part of WoodSolutions' fiftieth technical design guide, Mid-rise Timber Building Structural Engineering. It is hoped that making improved knowledge and data available to the construction industry will lead to increased market acceptance of timber. The findings have also been made available to those responsible for the relevant Australian Standard, to help inform any potential amendments in the future.

Monitoring of mid-rise, timber-framed building proves it's fit for purpose

Movement in buildings can be attributed to closure of timber joints, compression and shrinkage of vertical and horizontal elements, timber deformation, amongst other things.

After monitoring the movement and moisture content of a recently completed timber-framed, mid-rise building in Sydney, researchers from the Timber Development Association of NSW collected data relating to the performance and extent of movement observed.

The team was prompted to undertake this research by a lack of existing data relating to the performance of such buildings in Australia. It is hoped that the data collected will help position timber as a viable, safe, robust and long-lasting option for mid-rise construction, with the ultimate goal being increased confidence, acceptance and use of timber systems in the building trade.

Having already made a number of theoretical assumptions — which are published in WoodSolutions technical design guide, mid-rise timber building structural engineering — the team was keen to test these in practice.

They were pleased to note upon measuring vertical displacement, temperature and relative humidity, that their initial assumptions were validated.

Analysis confirmed any compression, shrinkage, deformation or moisture levels associated with the timber frame would be minimal and of no concern to the building's integrity. In fact, the issues were found to be no more concerning than similar issues associated with alternative construction materials.

Monitoring continues, with data to be collected up until the end of this year. At that stage, the research team will have statistics covering a full year of occupation, and the varying climates of all four seasons.

Manufacturing facility tours

WoodSolutions collaborated with the Australian Institute of Quantity Surveyors (AIQS) and Timbertruss to deliver four in-depth tours of Timbertruss' industry-leading advanced manufacturing facility in Corio, Victoria. Four tours over two days provided attendees with opportunities to learn more about the cost impacts of building with timber and the mature state of the lightweight framing supply chain around the country.

The 45 attendees included quantity surveyors, builders, developers, major financial institutions and students. Feedback was overwhelmingly positive, with those involved suggesting the experience had changed their approach to timber construction.

Timber Talks podcasts

FWPA has continued to publish new episodes of the WoodSolutions podcast series, Timber Talks, which provides up-to-date information, education and inspiration about timber in construction, with 22 episodes published during 2019/20.

Mid-rise Advisory Program

In partnership with key industry sponsors, the Mid-rise Advisory Program (MAP) team engages and educates the construction industry on the benefits of timber. The team is composed of Australia's leading technical specialists, with experience in architecture, structural engineering and costing, and uses information based on the most up-to-date research findings to accelerate the adoption of timber in mid-rise construction.

Last year, thanks to additional funding commitments from industry partners, the MAP's existing work in Victoria and Queensland was significantly extended.

Over the last financial year, the team was able to provide services to all of Australia's east coast states, with additional limited coverage for South Australia and Western Australia.

During the financial year, the team made approaches and/or provided advice on 249 mid-rise projects. This included 18 projects involving timber systems that either commenced construction or advanced to a mature stage of design. These 18 projects roughly equate to the use of 43,050 m3 of timber.

Remote opportunities to learn about timber in mid-rise construction

In response to COVID-19 requirements to work from home, the MAP team has contributed to the overall WoodSolutions weekly webinar series by arranging a number of relevant mid-rise topics, based on marketplace engagement and feedback.

Symposium success

Following the positive reception of previous mid-rise seminars and ongoing interactions between the MAP team and industry, WoodSolutions hosted three more exciting events - Timber Innovation, Manufacture, and Supply Design and Construction: Residential to Mid-rise. Each featured real-life data and case studies, outlining details of flagship buildings that are either completed, under construction or planned.

Engineers, architects, builders, developers, quantity surveyors and construction managers gathered at locations in Melbourne, Brisbane and Adelaide for the events, to hear from a line-up of leading timber industry and building professional experts. Speakers discussed the latest knowledge and innovations, as well as the risks, challenges, opportunities and successes associated with the delivery of specific mid-rise timber constructions.

The content of these seminars is an example of how the MAP team is moving the conversation towards project delivery.

New cost engineering guide

The symposium events provided opportunities for the MAP team to launch the Cost Engineering of Mid-rise Timber Buildings guide #51, which includes practical information about timber for the construction industry and quantity surveyors. It contains reference data and methodological advice for cost engineering activities directly and indirectly associated with the design, procurement and installation of mid-rise timber structures in Australia.

While many WoodSolutions guides have been published on the design and maintenance of timber structures, there has been relatively little focus on the specifics of costing and ultimately building them. The guide was therefore prepared to address the need for specific cost-related knowledge, and the approaches to consider throughout the development process.

Uncovering the residential construction industry's views on timber

Huge quantities of sawn timber are used by the residential construction market, but there has been a lack of understanding amongst growers and processors around builders' views and needs. FWPA therefore commenced the development of a technical extension program to encourage the use of wood products in Class 1 residential properties.

The new research aimed to discover builder opinions about wood, to help realise the full potential of its use in structural and aesthetic applications.

Nationally, the largest 100 builders are responsible for the construction of more than 40 per cent of all detached homes and have the power to influence change and innovation across the residential market. For these reasons, FWPA established a National Residential Construction and Fit-out Program, which targeted these builders to discover their views on timber and the opportunities and barriers around its use.

The insights gained were presented to industry stakeholders during a webinar, and FWPA is now undertaking individual discussions with companies who want to use these insights to help improve their residential market activities.

New opportunities for fibre-managed plantation hardwood in construction

Researchers from the University of Tasmania, with support from industry partners Forico and Britton Timbers, were inspired by the opportunities associated with the estimated 960,000 ha of hardwood plantations across the country.

Over the years, the majority of these plantations have been managed and grown for pulpwood, with most estates left un-thinned and unpruned. This industry-directed research therefore sought to benefit estate owners by identifying ways to diversify their product options over and above the international export fibre market.

The researchers explored methods of converting this resource into viable solid wood products, which led them to recognise the potential to convert the current fibre-grown Eucalyptus plantations into timber boards to be used in flooring. This study went on to focus on the potential, development and structural performance of commodity-based, high-mass timber floor products, assembled from pulp-managed plantations of Eucalyptus nitens and globulus.

During testing, the overall structural performance of the timber was found to be markedly improved when it was used as laminated panels, rather than individual boards. The structural performance of the timber was further enhanced by the development of timber-concrete composite panels.

Additional benefits of timber boards include higher load-carrying capacity, long spans, effective sound insulation and fire resistance.

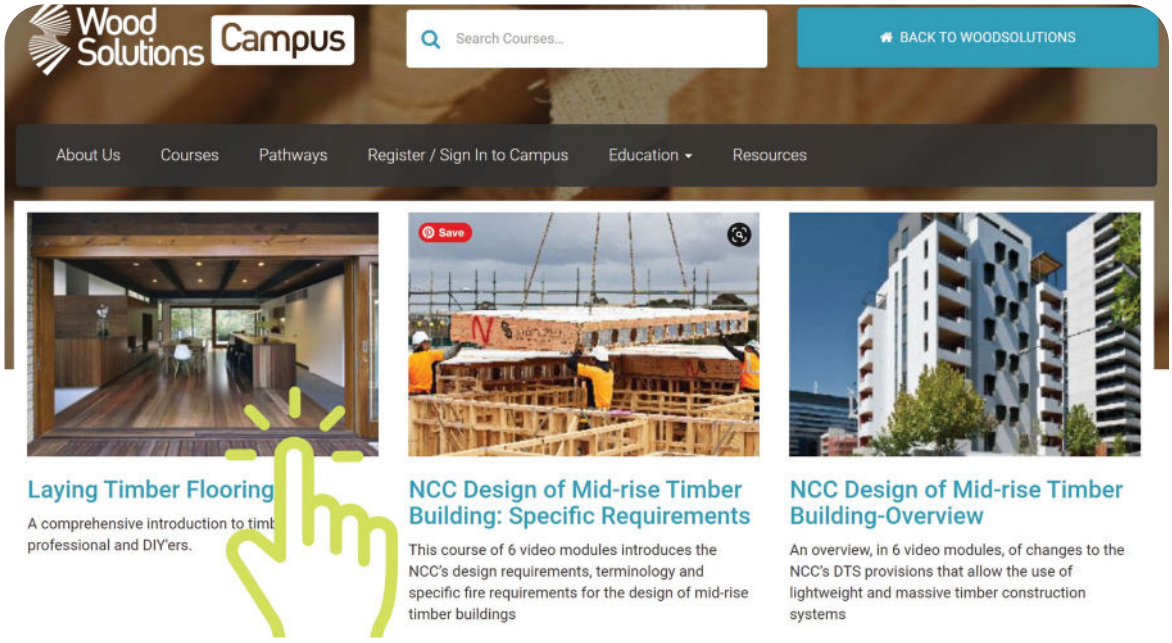
The results of the study demonstrate the output from current Eucalyptus plantations, targeted at pulpwood production, can also be used to create laminated floor panels, providing additional options for the building sector that are particularly suited to use in the upper floors of residential housing and small-to-medium-scale commercial projects.

WoodSolutions Campus

WoodSolutions Campus has continued to offer free online timber education, in collaboration with the University of Tasmania. This work has been crucial in helping counter a lack of knowledge about the nature and performance of wood and wood products, which has the potential to restrict market opportunities, and lead to customer dissatisfaction if inappropriate products are used.

Participants earn credits towards the University of Tasmania's Graduate Certificate in Timber (Processing and Building). Various subject areas are on offer, including mid-rise timber construction, building regulations, timber inspection, managing moisture, designing for durability, designing for bushfires and environmental characteristics.

745 enrolments were received across all WoodSolutions Campus courses during the financial



year, from a variety of professions, including education, trade, built environment, industry and sales.

WoodSolutions Young Professionals Network

WoodSolutions' networking events continue to provide opportunities for early career practitioners below the age of 35, in the construction and design industries, to make new contacts and improve their knowledge of timber and forestry.

The Young Professionals Network aims to ensure a future workforce that is fully engaged and familiar with the benefits of timber.

Hosted in Melbourne and Sydney, the regular meetings focus on the most current and relevant topics relating to timber construction.

Those unable to attend events in person are encouraged to keep updated by joining the associated Facebook group, which functions as a forum and news source.

Before COVID-19 put a stop to the hosting of physical gatherings, WoodSolutions hosted three events with more than 150 attendees.

Exploring a trust mark to certify the quality of timber products

Following a formal request from the Australian Timber Importers Federation (ATIF), FWPA explored possibilities around the development and implementation of a quality mark, commissioning a report into the potential advantages. The goals of the mark would be to reduce and eliminate the risk of products which are not fit for purpose entering the Australian market, and to create a level playing field for all manufacturers to supply products that are credible.

The request came in response to recent quality issues, including out-of-specification products being imported into Australia, which risk damaging market confidence in certain wood products. The first phase comprised the development of an issues paper to explore the viability of such a scheme for engineered wood and structural solid timber products.

The paper includes a review of the Australian timber market and an outline of the key issues, opportunities, implementation considerations and risks. In addition, it considers examples from a variety of industries around the world.

The research suggested the introduction of a trust mark could bring a range of benefits, including improved market confidence and the potential to support regulatory compliance and enforcement. The paper includes a number of key recommendations that should be taken into consideration throughout the development process, and FWPA plans to undertake stakeholder consultation and concept testing by hosting workshops at an appropriate time.

New substrate could increase use of bonded and coated hardwoods in construction

A new type of substrate has been developed to enable hardwoods to respond better when glues are applied. The new technology resulted in bond strength improvements of up to 300 per cent, suggesting the potential to use bonded and coated Australian hardwoods for a much broader range of construction applications.

The FWPA-managed research demonstrated how the newly developed surface modification technology can significantly improve the strength and durability of systems that contain bonded and coated hardwood products.

The investigation was conducted by a team from the CSIRO Manufacturing Business Unit, the University of Melbourne and Swinburne University. It focused on the manufacture of hardwood bonding using adhesives made from the organic plastic 'polyurethane'. Bond strength improvements were observed when a thin layer of the polyurethane adhesion promoter 'CSIRO Surf-BOND' was applied to the wood surface prior to the bonding process.

The benefits became even more pronounced when bond performance was assessed after exposure to environmental conditions like high temperatures and extreme wetness and dryness. These results were validated in a range of scenarios, including laboratory-scale testing, pilot-scale trials, and, ultimately, a final demonstration during industrial trials.

Researchers also observed that several clear coatings improved protection for surface-finished exterior hardwood products, with long term accelerated weathering assessments showing certain high- and low-gloss clear coats survived up to 2,000 hours of Q-Sun or 4,000 hours of QUV testing. Following the testing, the coating layer retained high strength of adhesion to the hardwood surface, while the wood products also maintained their natural appearance.

This technology will allow timber to be promoted and utilised as a sustainable and highly reliable engineering material in a much broader range of applications than has previously been possible.

National Centre for Timber Durability and Design Life

The National Centre for Timber Durability and Design Life is a strategic initiative led by FWPA. It is a partnership between industry, academia and government, designed to put Australia at the forefront of international best practice, and use evidence-based data, systems and tools to underpin consumer confidence in the performance of timber products. The centre continues to encourage input from industry to help ensure access to world-leading research and build links between industry, academia and customers.

The centre is based at the University of the Sunshine Coast, although it takes a national and international approach.

Other partners investing in the centre include the University of Queensland (UQ) and the Queensland Department of Agriculture and Fisheries (QDAF).

A growing team

Professor Jeff Morrell, Director of the centre, has been working to provide an overview of its operations and objectives, engage stakeholders across the country, and identify research needs.

During the year, Dr Babar Hassan joined the centre as Research Fellow, bringing extensive experience on termite biology.

He is already actively engaged in several projects, helping update CSIRO termite risk maps and developing a major review of termite testing methods.

PhD candidate Tengfei Yi, from Southern Forestry University, in Kunming, China, completed his confirmation exam and is now actively engaged in research that aims to assess the potential for using nano-metals for the surface protection of wood against weathering.

PhD student Linda Moss also joined the team. She will assess decay processes in materials examined at a new accelerated exposure test facility near Nambour, Queensland.

Recruiting for students has been delayed due to COVID-19, but it's expected the centre will have its full complement of students by early next year.

Collaborative partnerships

The centre is working with the University of Tasmania (UTAS) under the National Institute for Forest Products (NIFPI) program, to evaluate methods of enhancing the durability of plantation and native forest hardwoods.

The team is also actively engaged on the supervisory panels of two UTAS PhD students.

Meanwhile, work with the NIFPI Hub at the University of South Australia (UniSA) continues. A treatability assessment of the pine resource across Australia is ongoing, as part of a larger testing program.

The centre's UQ partners are focusing on a number of areas relating to fire performance and the effects of fungal attack on timber properties, including preliminary studies on the performance of several Far-North Queensland timbers, and the effects of moisture cycling on timber connections.

Meanwhile, the centre's QDAF partnership has resulted in research into:

- the marine performance of new treatments;
- above-ground decking performance, and
- an initial study focusing on the potential for using portable X-ray fluorescence analysers for the rapid field assessment of preservative retentions.

The QDAF has also completed a survey of moisture issues in mass timber buildings, as a precursor to research around the movement of moisture through various wood-based composites. Finally, the QDAF has initiated a large-scale field trial that is nearing installation, for the collection of data that will be used to improve CSIRO service-life prediction models, which is an important objective of the centre's research program.

The centre is well on its way to meeting its main objectives of revitalising durability research, while helping to educate a new generation of durability researchers.

Work around Australian Standards and the National Construction Code

FWPA continues to seek the removal of unnecessary restrictions on timber use.

As part of this commitment, during the past financial year FWPA has been involved with work relating to AS 1684-2010, a four-part Australian Standard covering design criteria, building practices, tie-downs, bracing and span tables for timber framing members. It is a key industry standard used by builders and designers for the design and construction of residential houses. AS 1684.2 Residential timber-framed construction - Non-cyclonic areas and AS 1684.3 Residential timber-framed construction - Cyclonic areas, are both currently under review, with the goal of updating certain technical aspects, to ensure they remain fit-for-purpose in light of all the latest knowledge. FWPA has contributed its expertise to the committee, which is considering the more than 400 public comments received.

A major review of the AS 1604 Specification for preservative treatment suite of standards has been conducted over the past two years, and is nearing completion. FWPA has been heavily involved in this process, by participating on the committee and providing insights to support the consideration of public comments. Publication of the standards is expected in late 2020.

AS/NZS 8008 Timber - Finger-jointed structural timber - Performance requirements, is a proposed new standard being considered, which has the potential to allow for the broader use of finger-joints in structural timber. FWPA has been actively involved in this process, by providing comment and insights around the technical issues that need to be addressed.

FWPA is continuing its fire testing work, around the kinds of lightweight timber flooring systems commonly found in mid-rise apartment buildings. While a relevant fire test standard exists (AS1530.4), FWPA plans to expose these systems to a more 'extreme' fire to equip industry with data and knowledge to support the use of lightweight timber fire-rated floor-ceiling systems that meet fire safety standards.

Assisting value chain optimisation

Program 3

This program is about increasing the value and volume recovery from existing resources to ensure that all wood fibre is utilised to its highest and best use. As FWPA is funded along the full value chain (i.e. growers, processors, market), it is well placed to work with all value chain participants to help identify opportunities for improved optimisation.

- Resources developed to prepare industry and community for bushfire events
- Creating a successful, sustainable forestry industry, together with Indigenous communities
- Improving efficiencies - re-imaginging the log and woodchip export supply chain
- Opportunities for growers to boost profits with in-field drying
- Virtual reality... changing inventory management as we know it
- Using drones to identify koalas in the forest
- Forest industry urged to work together to capitalise on circular economy
- Successful commecialisation of advanced engineering wood products made from under-utilised forest resources
- Softwood industry considers using raw data to improve processing
- Evaluating new opportunities for creating value added products from forest residues

Resources developed to prepare industry and community for bushfire events

In response to the recent bushfire season, FWPA has been working to extract key practical learnings and develop educational materials to help better prepare industry and the community for future bushfire events. FWPA has developed of a set of guidelines for the salvage, storage and processing of fire-damaged logs, to assist growers in minimising wastage of damaged timber. This work was led by a team headed up by the University of South Australia.

In addition to this team, a Technical Expert Working Group was also established to review relevant literature and reports relating to major fires in the past, with a focus on plantations. This diverse group comprised around 25 members from all states, including representatives from softwood and hardwood plantations and native forest managers. A collection of references based on the best available evidence was also compiled to support the guidelines, which are now available to industry.

In the interest of knowledge conservation, FWPA also developed a report and database capturing historical information on larger-scale Australian plantation fire losses. The aim is to build a knowledge base that will assist with risk management and strategic planning in the future. Australia's forest growers provided data on plantation fire losses for events where 100 ha or more was burnt, with information dating as far back as the early 1920s.

Creating a successful, sustainable forestry industry, together with Indigenous communities

The potential for commercial Indigenous forestry in the Northern Territory's East Arnhem Land is being explored as part of a project that aims to support Traditional Owners in developing a sustainable forest-based livelihood. Forestry has the potential to support Indigenous communities to use their land for employment and economic benefit, alongside cultural purposes.

While indicating their interest in sustainable and commercial forestry, Indigenous communities have not had access to enough information to support progressing business development in this area. The program's work will support Traditional Owners to recognise the commercial assets they have on their land and provide an evidence base to enable them to make informed decisions.

This project is being delivered by the University of the Sunshine Coast (USC) and several partner entities, which will be led by Developing East Arnhem Limited (DEAL), an independent not-for-profit company that aims to drive economic development in East Arnhem Land to promote the resilience of the region and opportunities for its people.

DEAL and USC will work with the Gumatj Corporation, the National Indigenous Australians Agency (NIAA), Aboriginal land management organisations, a range of Northern Territory government bodies and other Aboriginal workforce development groups in the region.

The project — Indigenous Commercial Forestry Opportunities: East Arnhem, Northern Australia — will run for three years, and include:

- A harvesting demonstration and training site, and assessment of how different regimes would meet forest certification standards.
- A marketing pilot to identify, manufacture and market test timber products made using endemic East Arnhem logs from Indigenous-owned forests, which will provide a good indication of how much the market is willing to pay for the various products.
- Engagement with traditional owners and communities to build a deeper understanding of their interest in forestry opportunities across East Arnhem Land.
- Mapping and reporting of the forests of East Arnhem Land and their commercial potential, including forestry inventory assessment and the development of forest assessment tools that can be utilised by local communities.
- On-the-job training of communities in technical forestry operations and the manufacture of forest products.

The initiative provides a great example of how voluntary matching supports projects that might not otherwise progress, by building capacity in smaller markets which are not necessarily driven by the promise of big returns or wider industry inclusion. By supporting emerging markets through R&D we can help place them in a strong position to thrive over time and grow into much more significant sections of the industry.

Improving efficiencies — re-imagining the log and woodchip export supply chain

A recent research project took an in-depth look at the various elements of Australia's log and woodchip export supply chain, to discover how it can be most effectively managed. The team behind the comprehensive study reviewed optimum conditions for storage and haulage, and at ports, and their findings are now being used to identify solutions and innovations for an enhanced and more cost-effective timber export process.

Extensive industry consultation was undertaken; a steering committee comprising representatives from 12 partner organisations was tasked with determining the most important and relevant research activities. These activities were then progressed to the research and testing phase.

Tag, track and trace

Tag, track and trace systems are an essential pillar of many industry supply-chain management operations. While they're well established in Australian forestry between our port gates and international customers, they're much less common between the forest and port.

A thorough technical review of tag, track and trace systems was undertaken.

Researchers looked at various available tagging technologies, and found the benefits to the forestry industry could include opportunities to:

- curb illegal logging and wood theft
- provide chain-of-custody proof for environmentally certified products
- improve logistics and stock control management
- facilitate comparisons between forecast and achieved yields.

The tag would need to be placed on a harvester head, and three technologies were identified as suitable: ink-jet printing of matrix codes, Radio-frequency identification (RFID) and punch code tags. Forest owners, harvesters and log exporters are urged to communicate their needs to machinery suppliers and manufacturers, to prompt the development of at least one of these technologies.

Determining log moisture content

The moisture content of fresh timber can account for upwards of 50 per cent of the mass of a log, driving up haulage costs which are calculated by weight. Storage in-field prior to transportation can reduce moisture in logs and determining moisture content is desirable when optimising the timing of transport.

Using Near Infrared (NIR) spectroscopy, the researchers accurately measured the moisture content in three different species of pine — radiata pine, F2 hybrid pine and Hoop pine. This technology was therefore found to have the potential to help growers manage moisture content to reduce weight, making transport more cost effective and efficient.

Automated detection and diameter estimation of stacked logs

Measuring logs stacked on trucks can be a time consuming, expensive and inaccurate process. Poor measurement not only impacts revenue but could also affect the commercial relationships of the forest grower.

A preliminary study determined the accuracy of automated, computer-vision measurements for logs on trucks. These estimates were then compared with traditional, manual measurement methods. The technology was found to have the potential to detect and estimate diameters quickly and with relatively high accuracy, making it suitable for use in operational conditions.

Impacts of debarking and drying

The impacts on pine log stacks of debarking and drying were observed, during research that focused on how moisture content in pine log stacks, as well as sap stain and incidence of log-end checking, were impacted by factors including debarking, storage location, season and time elapsed since harvest.

Researchers developed a number of economic models — considering the impact of a range of complex and variable factors, and different treatment combinations — for debarking and drying. The results identified three models that could be expected to yield improved net returns.

Log loading

Studies conducted on wood loading technologies provided useful information on the potential for improved efficiencies.

The research showed average loading rates for logs in containers were up to six times faster than those for bulk cargo logs. Faster load rates should mean shorter voyages, lower port costs and a reduced likelihood of demurrage fees.

Loading logs into containers before they are placed onto the ship is an additional step in the forest-to-customer supply chain and requires time, space and money. However, a web-based review indicated a wide range of systems are being successfully used for loading logs into containers globally.

Five systems were included in the analysis, and results indicated productivity and unit costs can vary due to factors including the length and species of logs, and the nature of the onward transport system.

Project outcomes

Off the back of the project, the team developed recommended methods, models and best-practice approaches when it comes to effectively managing the export supply chain. Six webinars have already been delivered to industry, to present and discuss these results. The project suggests the forest industry needs to collaborate, co-invest and continue to work with port operators to ensure lowest cost operations and improve competitiveness.

Opportunities for growers to boost profits with in-field drying

New in-field drying models for Australian logs and biomass will help equip growers with the tools to balance the costs of drying — including physical degradation, damage by biological organisms, increased storage time, and processing machinery

wear and tear — against the potential reduced transportation costs associated with lowering log weight by reducing moisture content. The researchers behind the study also identified opportunities for growers to tap into an additional income stream, by drying and selling logging residue as biofuel for energy production.

Researchers from the University of the Sunshine Coast focused on gathering the background information needed to create models for the effective management of in-field drying under Australian conditions.

Field research was conducted across Western Australia, South Australia and Tasmania, and involved calculation of the relationships between weather variables (recorded by the nearest meteorological stations) and the drying rate of various timber materials (by monitoring changes in weight).

By improving cost-competitiveness through in-field drying, the models may also help to establish a domestic and export forest biofuel industry, providing an additional income stream for growers and helping to reduce greenhouse gas emissions.

Despite the success of using biofuel for this purpose overseas, Australia is estimated to produce less than 2 per cent of its energy needs from such biofuel, which is largely seen as a waste product. The untapped potential in this area may be attributed to the current high delivery costs.

Preliminary models and recommendations created by the researchers are now freely available online and can be used by growers to help predict the current moisture content of their resource, and put the necessary processes in place to best manage the storage and drying of logs and forest biofuel in-field.

Virtual reality ... changing inventory management as we know it

The forestry industry was invited to trial and provide feedback on virtual reality (VR) technology that could revolutionise how field inventory practices are managed.

Attendees at November's ForestTECH conference learned about an FWPA-supported project led by the University of Tasmania, in which the research team used high-density Light Detection and Ranging (LiDAR) data acquired by helicopters to investigate the potential of VR to replace current forest inventory fieldwork practices.

The project has taken data captured from a pre-harvest Pinus radiata inventory plot and successfully imported it into an immersive VR environment, using commercially available hardware. The design was further developed using the results of extensive user testing and feedback, undertaken in collaboration with several industry partners, including field operators themselves.

This testing demonstrated all participants had the capacity to take basic measurements within the VR environment, with further testing required to calculate more complex measurements relating to features inside the canopy.

The VR forest inventory software application is now available for trial by the industry. Once deployable, industry benefits could include improved worker safety, better access to hard-to-reach areas and reduced labour costs.

Using drones to identify koalas in the forest

The first steps were taken towards the development of a koala identification platform using unmanned aerial vehicles (UAVs) and infrared (IR) cameras. Testing found the system had the potential to be used quickly, cost-effectively and with minimum in-field personnel, while at the same time improving safety and animal welfare.

Koala location trials were conducted in the Bessiebelle forest area in Victoria, and collected data was then sent to the Australian Centre for Field Robotics (ACFR) for processing. An algorithm was developed using the data, to facilitate computer identification of koala locations and provide their coordinates to forest operators in real-time.

After the development of several settings and processes, koalas were successfully located. More work is required to make the technology operational and to commercialise it.

Forest industry urged to work together to capitalise on circular economy

A new report called for more collaboration between forest industry stakeholders across the supply chain. Commissioned by FWPA, the discussion paper, Circular economy and Australian wood products industry, considers how the industry can embrace the principles of the circular economy and take further steps to overcome issues around resource scarcity, waste generation and the environmental impact of operations.

State and national governments are taking an increased interest in the circular economy, waste and recycling. As a result, a growing number of government grants to encourage action can be expected, as well as increasing regulation to discourage poor environmental and social outcomes.

Researchers analysed examples of where the circular economy can already be found in the Australian forestry and wood products sector. This highlighted that when it comes to the disposal or reuse of end-of-life timber, one of the main challenges arises from the non-wood chemical components often used in the creation of wood products.

Many traditional low-cost recycling markets are not available to chemically treated products, because environmental agencies are naturally cautious. To overcome this issue, the report recommends:

- Supporting and keeping abreast of research into the use of bio-based substitutes for the problematic chemicals.
- Using identifiers that include technical information on all non-wood substances utilised in wood products.
- Trialling equipment that will enable the high-speed identification and removal of treated timber from the wood waste stream.

To advance understanding and action amongst industry stakeholders, the report also recommends the establishment of an Australian Sustainable Timber Group, comprising interested parties from across the value chain. FWPA is now considering the recommendations and next steps.

Successful commercialisation of advanced engineered wood products made from under-utilised forest resources

Researchers have been working to deliver and validate technologies that transform low-value forest resources and sub-optimum quality logs into high-value construction and aesthetic products suitable for Australian and international markets. The resource assessment study identified a substantial volume of under-utilised logs within Australian commercial forests that could be available for conversion using new spindleless lathe technology. The approach may also have a secondary benefit, assisting improved silvicultural management.

When applied to these sub-optimum logs, the spindleless veneering technology was shown to yield more acceptable recoveries compared to traditional sawing approaches. The resulting veneer contained qualities and properties well suited to the manufacture of veneer-based engineered wood products (EWPs).

The Department of Agriculture and Fisheries' Forest Product Innovation team based at the Salisbury Research Facility led the project, which included a comprehensive product and market assessment that revealed the new 'mid-rise timber' construction sector provides significant opportunities for a wide range of structural and appearance timber products, both sawn and engineered.

They also identified that better performing structural EWPs may provide attractive opportunities for many of Australia's high-strength hardwood species, due to the higher structural loads of taller buildings.

In addition, a reflection on traditional markets occupied by Australia's native forest species identified potential for EWPs to be used for:

- Electricity network cross arms.
- Road and rail bridge components.
- Large dimension posts and beams.

Softwood industry considers using raw data to improve processing

A new approach to tech transfer and skills development was delivered through a workshop to help the softwood sector improve its understanding of how to better use the massive quantities of data collected during mill operations. The goal was to support improved processing activities, optimise recovery, and enhance abilities to verify whether materials are fit for purpose.

FWPA's National Centre for Timber Durability and Design Life co-sponsored the inaugural five-day workshop, which centred on the softwood industry's statistical process control in the manufacture of structural and treated sawn timber. The workshop was hosted by Dr Jim O'Hehir of the University of South Australia at its campus in Mount Gambier and attended by 17 operational and technical industry representatives from around Australia.

Professor Tim Young, of the University of Tennessee, was invited to lead the course.

Professor Young has more than 20 years of experience delivering similar courses in the USA and was quickly brought up to speed with the idiosyncrasies of the Australian sector through a number of site visits and discussions with key industry partners.

Statistical process control is already being successfully used across many sectors — including the automotive industry, hospitality and manufacturing — with the softwood sector being identified as having the potential to reap similar benefits. Attendees heard how data can be used to improve recovery, quality and efficiency during processing, while helping to maintain a competitive environment.

Evaluating new opportunities for creating value added products from forest residues

In response to a lack of understanding about the properties of wood fibres, and how forest and manufacturing residues can most effectively be used to create engineered wood products, FWPA is exploring the establishment of a national research centre to address the issue.

The centre would evaluate existing and new approaches to the production of engineered wood products including Laminated Veneer Lumber (LVL), to identify potential improvements for a faster and more cost-effective process.

In principle, the FWPA Board has approved the establishment of this new centre for an initial period of five-years, however plans have been temporarily placed on hold due to COVID-19. The initiative will be revisited during 2021.

Increasing resource availability and reducing risk

Program 4

This program aims to increase the availability of wood fibre to support an expanding market and associated manufacturing capacity.

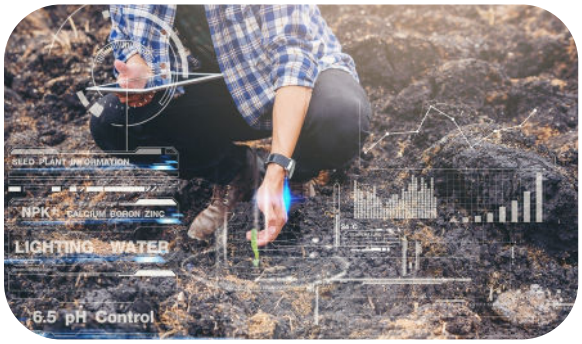
- Grower Research Advisory Commitee
- Growers agree to support increased levy for R&D and bio security
- Forestry and farming unite for everyone's benefit
- Financial incentives for improved forest productivity
- Predicting and controlling wood quality in standing trees
- Optimising value from mahogany plantations in Australia's north
- Reducing the impact of a recently introduced pest

Grower Research Advisory Committee

The FWPA Board approved almost $2.2 million of funding for 13 diverse forestry research initiatives, with a combined total project value of more than $10 million. The Grower Research Advisory Committee (GRAC) selected from an initial list of 56 proposals, using a review process that included an online survey, recommendations by the GRAC Executive, formal endorsement by the wider GRAC group and approval from the FWPA Board.

The projects were selected to address research of high priority and value to the industry, as identified in FWPA's RD&E investment plans. Forest growers are co-funding the initiatives, with matching funding from the Australian Government and a component of levy funds. Below is an overview of the projects, each of which will run for between one and five years.

Characterising and managing fire risks to plantations under changing climates	Fire risks in plantation regions will be modelled and evaluated under current and changing climates, to support evidence-based management and ultimately reduce fire risks to plantation and community assets in coming decades.
Operational immersive visualisation and measurement of dense point cloud data in forest inventory	Progressing previous work in the area, this project will provide operational methods and workflows to improve the accessibility of virtual reality (VR) visualisation and measurement tools to forest growers.
Reducing the risk of myrtle rust strains entering Australia and the Pacific	Taking an international, collaborative approach, this project will aim to limit the risk of new strains of myrtle rust arriving and establishing in the region, and thereby reduce the threat to the Australian hardwood industry.
Mobile applications to support stakeholder identification and reporting of exotic pests	This project will develop and test a mobile application to aid with field identification and reporting of tree pests by stakeholders — including foresters, arborists, local councils and members of the public — who are not taxonomic experts.
Developing exotic forest/tree pest surveillance capacity in high risk areas	By improving exotic forest/tree pest surveillance capability across Australia, this project aims to support early detection and mitigate the impact of pests on native forests, plantations and urban trees.
Innovation in value realisation through the supply chain and supply chain technology	This project is a pilot program approach, to deliver on key priorities of the Forest Operations Supply Chain investment plan. The plan identifies areas of industry research, development, engagement, translation and training that will improve supply chain efficiency.
Tools, systems and enabling genetic technologies for pines and eucalypts	Tools and systems will be developed to enable genomic research and tree improvement outputs to be integrated and used routinely in tree breeding and deployment operations. National databases for data, pedigree, genomic information and genomically enhanced genetic values will be supported.
Optimising productivity of hardwood plantations: yield gap analysis for eucalyptus globulus plantations in Western Australia and Victoria	By defining the potential yield of plantations, estimating the gap between potential and actual yield, and attributing parts of the gap to major limiting factors, this project will provide a framework for making decisions on the location of plantations and the improvement of yields due to silvicultural practices. These might include weed control, thinning and nutritional management.
Sirex biocontrol: cryptic nematode field strain prompts urgent review of program	Pinus radiata is Australia's most valuable softwood resource, but it's extremely susceptible to mortality from sirex wood wasp, the most serious invasive softwood pest to have entered the Southern Hemisphere. The project team will review available data for inoculation history, within and between regions, to analyse patterns associated with sirex parasitism rates and populations that are linked to nematode strains.
Plant Biosecurity Research Initiative	The Plant Biosecurity Research Initiative (PBRI) was established in 2017. It is a partnership between the seven plant-based Rural Research and Development Corporations (RDCs), Plant Health Australia and the Department of Agriculture, Water and the Environment, which is working to coordinate investment in cross-sectoral biosecurity RD&E. The PBRI supports the development of innovative tools, knowledge and capacity to be used across plant industries and regional communities in order to safeguard them from the consequences of pests entering and establishing in Australia. This investment will allow the PBRI collaboration to continue to build on the foundations laid over the past three years, identifying cross-sector investment opportunities for biosecurity RD&E, and building capacity through a coordinated and strategic approach.
Development of fit for purpose silviculture linking plantation management and productivity to wood properties	This project will review current knowledge on silviculture and growth rates, which impact wood properties and the utility of soft and hardwood logs. The work will capture current knowledge that may not be well documented, as well as any knowledge gaps to guide further research.
Development of a portfolio of alternative weed control strategies for use in plantations	Weed control is critical to the productivity and financial viability of plantations. This research piece will see the development of a hierarchy of options to inform field trials, as well as evidence-based responses to certification and social license concerns.
Next generation resource assessment and forecasting for Australian plantation forestry	This project will provide pathways for the Australian plantation forestry industry to cooperatively invest in remote sensing and resource modelling technologies and systems.



Growers agree to support increased levy for R&D and biosecurity

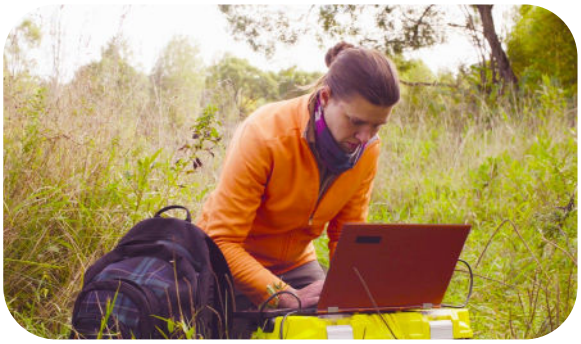
Current levels of investment provided through levies and government funding will not sustain our industry over the long-term.

There is potential for missed opportunities to increase the resilience of our forests, rebuild Australian forestry research capacity, grow the industry through research and innovation, and mitigate risks including those posed by pests, diseases and bushfires.

The Australian Forest Products Association (AFPA) is therefore commencing a formal process to prepare a case for increasing forest grower levy rates. The move comes at the request of major Australian growers and members of the AFPA Growers Chamber Research and Biosecurity Funding Working Group, which prepared a paper outlining how forest growers could come together to create an increased program of R&D, a national forest biosecurity surveillance program, and an ongoing source of funding for operational programs of common interest to grower members.

During a meeting held on 23 June 2020, members of the chamber voted unanimously in favour of starting the process to introduce a levy increase. Members of the AFPA Growers Chamber constitute more than 80 per cent of forest grower levy payers in Australia, by volume. During the discussions, growers voiced their support for the levy increase, citing their recognition of the importance of R&D for increased productivity and profitability, thanks to the successful grower investment plans funded in recent years through the GRAC.

AFPA is now entering into a three-to-six-month consultation process with the broader industry, and encouraging as many Australian forest growers as possible to take part in this process. As well as opportunities to provide feedback and ask questions over the phone, via email or during scheduled town hall Zoom meetings, there will be a formal voting process, with all industry encouraged to have their say. An independent third party will be engaged to conduct an industry-wide poll, seeking support to increase both the grower and biosecurity levies.



If successful, the additional funds generated for R&D through the levy increase will be managed by FWPA.

Forestry and farming unite for everyone's benefit

As demand for wood continues to grow, it appears the establishment of new forest plantations in Australia will be insufficient to meet demand. This has resulted in the need for industry to explore other options. Two research projects have considered the financial, social and environmental benefits of integrating trees into areas of Australian farmland.

Next generation forest plantation investment

In collaboration with industry funders, a University of Melbourne research project has developed and tested a number of business models for agroforestry in Colac Otway and Gippsland regions. By analysing landowner needs and their past experiences with trees or plantations, the team identified what landowners saw as the main benefits or barriers to growing trees on their land.

The researchers noted many advantages were already recognised by farmers, including a diversified source of income, additional shelter for livestock and carbon sequestration.

One of the most common barriers was found to be concern around the level of financial return, alongside the costs associated with converting agricultural land to forestry.

There were also questions around the long growth times associated with trees and loss of flexibility in relation to land use.

Keeping in mind that not all farmers have the same goals, objectives and attitudes, flexible business models were developed to meet diverse needs, considering different payment arrangements, landowner co-investment and tree location on farms. The knowledge from this project is assisting project partners to better understand the range of drivers for integrating trees into farms and offer a range of models that suit the needs of landowners. The outcomes of this research were published in the report, Next generation forest plantation investment.

Gathering the evidence to back up the benefits

Elsewhere, researchers from CSIRO Land and Water worked with Tasmanian farmers to identify and quantify the benefits of integrating trees into their operations and educate them on the many rewards trees can offer. The goal was to gather and communicate robust evidence to back up benefits including economic gains, shelter, biodiversity and improved aesthetics, and develop configurations that would increase profitability for farmers.

Through thorough consultation, the team worked to develop an understanding of the motivations of farmers around tree planting, and the barriers to embracing agroforestry.

They discovered that farmers can generally be divided into three distinct groups:

- Those who see trees as vital and essential to the farm, regardless of cost or economic return.
- Those who see trees as a valuable part of the farming enterprise, and would be willing to plant more trees if the economics stand up.
- Those who do not see trees as being valuable enough to justify the associated costs and logistics.

The largest group was found to be those willing to be convinced that trees could pay their way.

The team conducted a review of agroforestry options, to better understand the economic and biophysical benefits of bringing forestry and farming together. This approach meant the impacts of different configurations could be explored, and modelling clearly demonstrated that well-targeted agroforestry systems can have a higher return than agriculture or tree planting alone.

Researchers sought to strengthen this work with a number of experiments, including a look at the benefits of trees as shelter, and the impact on wind speed, evaporation and pasture productivity. At one study site, a belt of pine trees 15 metres tall was found to effectively shelter more than half of a 25 ha paddock. In the sheltered half, wind speed was reduced by between 15 and 25 per cent, evaporation by 15 per cent, and pasture productivity increased by almost one third.

This project has resulted in a number of publicly available resources, including numerous case studies, two CSIRO reports, three conference presentations, six fact sheets and five published papers, with more on the way. In addition, the team has contributed to at least seven field days with farmers. The knowledge resulting from this research will allow farmers to better account for the costs and benefits involved when considering the adoption, planning and implementation of planting trees on their land. The study was part of the Rural R&D for Profit Program and managed by FWPA.

Financial incentives for improved forest productivity

With the need for privately grown hardwood likely to increase over the next decade, evidence has been gathered to demonstrate the productivity of private native forests in southern Queensland and northern New South Wales.

The research — a collaboration between the Queensland Government Departments of Agriculture and Fisheries, and Environment and Science, the University of Queensland, Private Forestry Service Queensland, and the NSW Department of Primary Industries — found that, on average, trees on silviculturally treated plots tend to enjoy growth rates approximately four times faster than those in non-treated plots.

Data from 203 permanent monitoring plots in commercially harvestable private native forests across Queensland and New South Wales was analysed to measure the impact of forest management practices.

The information collected suggested the variable quality of these practices has negatively impacted the overall productive condition of the forestry resource. Irrespective, the majority of private native forest sites surveyed were still considered to have untapped potential that could be released through improved forest management.

The team has therefore recommended that financial incentives be made available to landholders, to promote widespread adoption of beneficial silvicultural treatments. This would not only help to boost the domestic supply of hardwood, but also have a positive impact on regional employment. Additionally, the treatments would likely lead to improved ecological conditions and biodiversity, and opportunities for carbon sequestration.

The team hopes to continue working with and educating landowners about the positive impacts of silvicultural practices. The development of fact sheets, property case studies and a decision support tool will assist in future communication and education.

Predicting and controlling wood quality in standing trees

Thanks to a research project led by Forest Quality and 12 industry partners, growers can now easily and affordably assess wood quality across their resource, while making decisions around location and management that will best serve the quality of their stands going forward. The ability to predict, maintain and improve timber quality in plantations will help decrease risk and improve productivity, competitiveness and profitability.

Using small-diameter drill technology known as IML-RESI, researchers captured details of wood variability and quality in trees. With this quick and cost-effective process, trees can be sampled within one minute for just a couple of dollars. The recorded data is then uploaded to a specially developed online wood-quality assessment platform, processed, and interpreted to assess the average density and stiffness of trees at the site.

Growers have historically sold logs to processers on the basis of volume rather than quality. This is starting to change now quality indicators can be measured at low cost. Being able to easily measure wood quality in standing trees means growers can gain a better understanding of the properties of processed timber, which can help when negotiating prices.

The technology also has advantages when it comes to aiding grower decision making about which sites and silvicultural practices will impact the stiffness and volume of their timber. This knowledge will allow growers to plan for improved wood quality in their stands, meaning increased value for processors.

Alongside the IML-RESI technology and the online platform, researchers have also developed the eCambium tool. Running on a web platform that allows growers to upload information around planting, harvesting, silviculture, latitude and longitude, this tool automatically collects location-specific weather and soil data and uses it to predict wood growth and characteristics at that site. As well as allowing growers to assess their resource remotely, the tool demonstrates how varying silvicultural practices might impact tree quality.

The eCambium tool is still under development but combining it with IML-RESI will be the next stage. The hope is that growers will find commercial value in running scenarios using eCambium to assess resource variability, before using IML-RESI to test and validate the results.

Optimising value from mahogany plantations in Australia's north

Valuable insights have been gained from a voluntary funded project into the most effective silvicultural regimes for plantations of African mahogany (Khaya senegalensis) in Australia's north, to help maximise productivity and wood quality.

Previously, only limited investigation had been undertaken into the impact of management practices on the productivity of African mahogany plantations. Now the new research has identified a significant knowledge gap — understanding how fertilisation and management can impact plantation growth and the properties of resulting timber.

The study focussed on the Douglas Daly region of the Northern Territory. Researchers from McGrath Forestry Services used fertiliser trials and soil and leaf nutrient assessments to help refine the relationships between nutrient status and growth rates. Thinning regimes were also assessed. In the majority of cases, optimising silvicultural inputs was found to result in marked productivity gains.

The researchers and industry partners hope the outcomes of this work will support sustainable plantation management systems and build the confidence needed to market Australian-grown African mahogany into valuable Asian furniture markets. The full findings will be made available via a report upon the project's completion later in 2020.

Reducing the impact of a recently introduced pest

Work is underway to develop an understanding of the biology and ecology of a recently introduced pest known as giant pine scale, which has been detected

in both Melbourne and Adelaide on Pinus radiata, and is also known to infest other softwood conifers such as spruce, cedar and fir.

A team from La Trobe University is undertaking the research into the sap-sucking insect, which is native to pine forests in the Eastern Mediterranean Region.

Giant pine scale usually clonally reproduces and secretes a thick cotton-like wax. Both traits have rendered conventional eradication strategies ineffective. The biology and ecology of the insect in Australia is poorly understood, which limits the capacity to predict its pest potential and the likely efficacy of management using biological control. This project is therefore aiming to gather relevant data to inform future management efforts.

The team will use a variety of analysis methods, including regular in-field collection of giant pine scale, assessment of the health, growth and defence of infested pine trees, and measurement of factors associated with infestation success. This analysis will provide important insights into the giant pine scale's life in Australia, specifically in terms of what damage it has the potential to cause, when and where this damage is likely to occur, and to what extent local species might support its invasion.

The consequences of infestation will also be quantified through this project, allowing for more accurate estimations of the threat posed. The research will support the industry by helping to identify the best times to deploy control efforts, including stem-injections.

Impacting decision making and industry capability

Program 5

This program will help ensure that the industry has the skills and systems necessary to support improved decision making by all players across the value chain.

- Research supports new timber-pricing index model
- Study shows sustainability strengths, challanges and drivers in forestry
- Placing value on our natural capital to unlock a wealth of benefits for forestry
- Data aggregation Program
- For Our Future - Regional leadership program
- Understanding the social and economic effects of the forestry industry in regional communities

Research supports new timber-pricing index model

A model pricing index that meets the unique needs of the Australian hardwood and softwood sectors is under development. The index will provide market participants with greater transparency and confidence, while supporting planning, growth and investment.

The structure of the Australian forestry sector presents certain challenges in terms of log prices. Saw logs can take more than 30 years to grow, meaning a robust pricing mechanism is needed to ensure such a long-term investment generates an adequate return. Meanwhile, potential customers, saw millers and other processors require security of supply in order to raise the investment funds and debt needed to build new facilities or expand existing operations.

Because the supplier and buyer are often required to enter into long-term contracts, a price adjustment mechanism is necessary. The Timber Market Index Working Group (TMIWG) — a sub-committee of the Australian Forest Products Association (AFPA) — was therefore established, with the purpose of bringing together representatives from the grower and processor chambers to consider options for a model timber market index.

FWPA supported the TMIWG by managing a research project to explore best practice in market indices. In particular, the study looked at data collection and analysis, and index methodologies. Practical consideration was given to the actual data available, and how representative of historic price movements this data is. In terms of data collection, it was determined that the FWPA Data Aggregation Program covering softwood and hardwood timber sales would be a suitable source.

Based on this analysis, a model index was devised with a methodology that was shown to closely approximate historic price movements. This index successfully demonstrated that it approaches best practice, is transparent, and requires limited additional activity within industry to be implemented. A draft report was submitted to the TMIWG, with recommendations to be submitted to AFPA for further review.

The Forestry Corporation of NSW (FCNSW) has used the Timber Market Survey (TMS) since 1994 to provide independent

input into market price movements for log products sold to processors. The corporation is now conducting research to determine whether it is possible to instead use data routinely collected from industry by FWPA alongside the newly developed index, to develop a hardwood log adjustment mechanism for NSW-based hardwood processors.

Study shows sustainability strengths, challenges and drivers in forestry

A sustainability scoping study across the forest and wood products sector has uncovered the strengths, challenges and motivators in sustainability actions and reporting. There is opportunity for the results of the study to be used by the industry to help build capacity around sustainability issues, while aiding the coordination of a sector-wide approach.

A study was undertaken to test the industry's overall approach to sustainability. This initiative was implemented to enhance sustainability outcomes and credentials, as outlined in the FWPA strategic plan 2017–2022. Initial desktop research into the industry's efforts around sustainability revealed a strong sector-wide focus on a specific group of issues, including compliance, forest carbon, health and safety, energy and biodiversity.

While the areas of focus in the Australian forestry industry's approach to sustainability were found to be reflective of approaches taken in other major sustainability frameworks globally, the research highlighted certain gaps in the existing approach, including issues relating to global climate change and human rights agendas.

Interviews with internal industry stakeholders, conducted to test the findings, generally confirmed the results. However, significant differences included internal industry stakeholders ranking issues such as job creation, water, local communities and productivity more highly than the desktop research review. The interviews also found stakeholders tended to believe the industry is doing a reasonable job of managing compliance, but has more to do when it comes to industry coordination and emerging risks such as biosecurity.

Research into the sustainability approaches of other relevant sectors, both globally and nationally, found key features of any approach tend to include agreed principles or commitments, links to standards, stakeholder representation, third-party assurance, performance disclosure and support for product certification.

Key recommendations made upon completion of this study include building the capacity of the sector around new and emerging issues to encourage a coordinated approach across the industry wherever possible.

Placing value on our natural capital to unlock a wealth of benefits for forestry

The productivity and profitability of forestry and other primary producers in Australia could be given a boost, following the development of new approaches to the sustainable management of soil, water and other natural assets.

It's all part of a commitment to what's known as natural capital accounting. This means that stocks of renewable and non-renewable resources, or 'natural capital', which are used to provide products and services, are identified, assessed, measured, recorded and valued.

A research project led by the CSIRO adopted the principles of environmental and economic accounting developed by the United Nations in its System of Environmental Economic Accounting (SEEA). The aim was to support the broader adoption of natural capital accounting practices by primary industries, through improved understanding of the associated objectives and benefits, and to help guide the development of future efforts.

The long-term financial sustainability of primary industries like forestry is dependent on prudent management of natural assets from which future wealth will be generated.

Forestry, like many primary industries, is highly dependent on underlying stocks of natural capital, while also generating many

ecosystem services our society depends on.

In particular, climate and extreme weather events have been identified as having potentially significant impacts on essential pools of natural capital in the future.

The forestry industry already collects information for reporting and certification purposes and is therefore a custodian of existing data that can be used to develop natural capital accounts. The research focused on the Green Triangle area and involved three years' worth of discussions with a broad cross-section of representatives from primary industries. It provides recommendations for a basic set of environmental accounts.

In addition to driving efficiencies, the team identified a range of benefits forestry can derive from natural capital accounting, including:

- Strengthened environmental and sustainability credentials.
- Improved stakeholder communications, particularly with local communities and government, through standardised and internationally agreed environmental reporting.
- Potential improvements to business performance through better finance or access to emerging environmental markets.

The work provides a framework for standardised, industry-specific accounting, and a pathway for individual enterprises to trial natural capital accounting. It also provides a methodology and foundation for the future valuation of natural capital stocks.

Data Aggregation Program

FWPA has continued to work collaboratively in addressing limitations around the data currently available to the industry, by encouraging aggregation of individual company data. We continue to work in partnership with members and key stakeholders, who input into a confidential online data portal, which is aggregated and shared with the industry each month.

Data aggregation provides a host of insights that support informed decision-making, including identifying market trends, monitoring changes in market segments and tracking activity levels in other sectors, which may affect sales. During the financial year, more than 80 organisations have contributed data towards the production of 15 FWPA data series.

This information is shared through the FWPA Data Dashboard, website and monthly e-newsletter Statistics Count. The newsletter is currently circulated to 721 industry participants.

One of the key measures outlined in our 2019/20 AOP was the increased use of the aggregation system and Statistics Count by 10 per cent per year.

With users of the aggregation system in 2018/19 being 173 and users in 2019/20 being 122, this represented a decrease of 29.5 per cent. With subscribers of Statistics Count in 2018/19 being 622, and subscribers in 2019/20 being 721, this represented an increase of 15.9 per cent.

Ongoing support was provided across established data series, while the Forest Grower's Safety Performance Data Series was expanded to include coverage of Medical Time Injuries and silvicultural activities. The new Softwood Weighted Average Price Data Series was also launched and, for the first time, provides quarterly data on softwood weighted average sales dating back to 2014. In addition, support was provided to Western Australian data contributors on the development of specific regional metrics.

This data continues to offer value to industry in a variety of different ways. Examples include the use of data by Australian Forest Products Association (AFPA) in the development of its Diversity and Inclusion Survey for Growers and Processors, and the provision of safety statistics to the AFPA Processors Safety Group.

For Our Future - Regional leadership program

During the previous two years, FWPA's For Our Future leadership program has worked to identify and train the sector's future leaders. The goal has been to assist in building capability and regional collaboration, through a program of experiential learning and opportunities for networking.

After two successful intakes comprising a total of more than 70 participants, the initiative was put on hold in 2019/20 due to the situations with Australia's bushfires and COVID-19.

Understanding the social and economic effects of the forestry industry in regional communities

In 2016 there was little information available on how the forestry industry was changing in different regions, including number of jobs, dependence of communities, type and quality of work generated, and how residents of forest-dependent communities viewed the industry and its impacts. The Socio-economic impacts of the forest industry in Australia project was therefore established to address this gap.

The four-year initiative generated detailed socio-economic reports for all key forestry regions. This covered economic modelling of regional production, combined with detailed employment data. The outcomes have provided detailed information to stakeholders including the industry members,

government and community groups, about jobs and the socio-economic impacts of the industry. The project also identified the need for a more consistent, long-term approach to the collection of this kind of data, to support increased awareness of the forest industry's contributions in an ongoing capacity.

Work is currently ongoing to scope out a new social and economic research program. To this end, FWPA hosted a workshop with industry participants to consider how this might be progressed, in a way that would best leverage the work already undertaken. Further discussions are expected to take place during the next financial year.

Voluntary matching projects

Project Description	Commonwealth and Industry Co-investment ($)	Total Project Costs ($)	Status	Project No.
FCNSW Log Price Review Mechanism	8,865	17,730	Active	VSE126-1920
Industry Edge Pty Ltd				
Sawn Timber in Australia 2019 – 2035 Study	105,946	105,946	Active	VSE124-1920
BIS Oxford Economics Pty Ltd				
Identification of Cost Effective and Practical Methods to Achieve 6-Star Timber Framed Residential Housing Solutions	16,303.78	16,303.78	Active	VNA501-1920
Forest Industries Federation (WA)				
Mid-Rise Timber Construction Supply Chain MIG	65,000	65,000	Completed	VNA415-1617
Wood Products Victoria				
Fire Resistance of Modern Dovetail Timber Connector	138,600	173,250	Active	VNA481-1819
Timber Development Association (NSW) Ltd				
Validated softwood stiffness predictions using IML-Resistograph and eCambium: online automated processing	388,000	388,000	Completed	VNB459-1718
Forest Quality Pty Ltd				
An Investigation to Detect and Map Internal and External Defects in the Commercial Eucalypt Timber Species Using Non-destructive Techniques	10,000	106,155	Active	VNC511-1920
University of Tasmania				
A tool to predict fertiliser response and profitability in softwood plantations across Australia. Component 1: South West WA	81,686	410,436	Active	VNC476-1819
McGrath Forestry Services Pty Ltd				
Characterising and managing fire risks to plantations under changing climates	180,800	742,994	Active	VNC518-1920
University of Melbourne (Forestry)				
Demonstrating Stewardship of the Environment and Ecologically Sustainable Forestry: Monitoring the Effectiveness of the Tasmanian Forest Practices Code for Biodiversity	97,300	171,057	Active	VNC457-1718
Forest Practices Authority				
Indigenous Commercial Forestry Opportunities: East Arnhem, northern Australia	173,064	1,477,609	Active	VNC506-1920
University of the Sunshine Coast				
Innovation in value realisation through the supply chain and supply chain technology	138,400	1,287,000	Active	VNC513-1920
University of the Sunshine Coast				
Mobile applications to support stakeholder surveillance of exotic forest and environment pests	21,000	560,800	Active	VNC514-1920
Plant Health Australia				
Next Generation Resource Assessment and Forecasting for Australian Plantation Forestry	30,000	184,783	Active	VNC519-1920
CSIRO Sustainable Ecosystems				
Operational immersive visualisation and measurement of dense point cloud data in forest inventory	54,000	254,184	Active	VNC520-1920
University of Tasmania - School of Technology, Environments and Design				

Voluntary matching projects

Project Description	Commonwealth and Industry Co-investment ($)	Total Project Costs ($)	Status	Project No.
Silvicultural systems to optimise value from northern Australian Mahogany Plantations	1,010,000	1,570,000	Active	VNC402-1617
McGrath Forestry Services Pty Ltd				
Incorporating genetics into forest valuation models – IRRPLAN	571,238	790,176	Active	VNC480-1819
Tree Breeding Australia Ltd				
Industry wide application of advanced breeding tools and systems – Tree Breeding Australia	1,860,000	3,340,983	Active	VNC406-1516
Tree Breeding Australia Ltd				
Optimising plantation productivity through improved fertilizer regimes	100,000	435,000	Completed	VNC422-1617
McGrath Forestry Services Pty Ltd				
Sirex biocontrol: cryptic nematode field strain prompts urgent review of program	24,000	194,000	Active	VNC517-1920
University of the Sunshine Coast				
Tools, systems and enabling genetic technologies for pines and eucalypts	237,622	1,222,373	Active	VNC515-1920
Tree Breeding Australia Ltd				
Re-measurement of lower-rainfall farm forestry species in Victoria to improve genetic quality and establishment	11,000	11,000	Completed	VNC494-1920
David Dore				
A model system for the discovery and development of biocontrol agents against forest pests	180,000	1,466,194	Active	VNC418-1617
University of the Sunshine Coast				
Giant Pine Scale Chemical Control	230,000	273,000	Active	VNC450-1718
HVP Plantations				
Giant Pine Scale Postgraduate Research Scholarship Agreement	70,000	122,500	Active	VNC472-1819
La Trobe University				
The Industry Plantation Management Group – Applied Research and Extension	487,500	975,000	Active	VNC458-1718
WA Plantation Resources Pty. Ltd.				
Log Haulage Registered Code of Practice (LHRCoP)	10,000	200,000	Active	VNA434-1617
Australian Forest Products Association				
Developing exotic pest surveillance capacity in high risk areas across Australia	90,000	695,960	Active	VNC512-1920
Plant Health Australia				
Optimising productivity of hardwood plantations: yield gap analysis for Eucalyptus globulus plantations in southern Australia	80,000	6,099,973	Active	VNC516-1920
McGrath Forestry Services Pty Ltd				
Operational immersive visualisation and measurement of dense point cloud data in forest inventory	54,000	254,184	Active	VNC520-1920

Levy-funded projects

Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 2 - Aligning products to market needs				
EPD for Australian Cypress Sawn Timber	31,267	31,267	Active	PNA500-1920
Thinkstep Pty Ltd				
Key issues in Builders purchasing decisions for truss and frame raw materials	7,615	7,615	Active	PRA475-1819
Manufacturing Logistics Pty Ltd				
ARC Centre for Advanced Manufacturing of Prefabricated Housing	120,000	4,120,000	Completed	PRA373-1516
University of Melbourne				
Assessing the disruptive potential of engineered wood systems for multi-storey commercial construction	16,000	16,000	Active	PNA461-1718
University of Melbourne - Department of Infrastructure Engineering				
Characteristic Values of Perpendicular to Grain Compression Strength of Common Australian and Imported Timber Species	115,000	140,000	Completed	PNA462-1718
Timber Development Association (NSW) Ltd				
Design of a national research program to determine the effects of fire from commercial plantation pinus species	8,000	8,000	Active	PRA525-1920
Queensland Department of Primary Industries				
Fire Engineering Issues on Exposed Mass Timber and the Way Forward	12,375	12,375	Active	PRA524-1920
Timber Development Association (NSW) Ltd				
Investigation into Tall Timber Frame Building Issues	33,750	33,750	Completed	PRA412-1617
Timber Development Association (NSW) Ltd				
Long-span timber floor and framing systems for commercial buildings	280,000	677,905	Completed	PNA341-1415
University of Technology Sydney				
Measuring Moisture and Axial Displacement in Australia's First 6 Storey Timber Framed Building	77,000	77,000	Active	PRA449-1718
Timber Development Association (NSW) Ltd				
Particleboard Review: On design methodology, design limitations and characteristic properties used in flooring applications	5,456	5,456	Active	PRB493-1920
UTS				
Review and Survey of Global Dust Exposure Levels in Wood Processing	0	0	Active	PRA503-1920
Meder Consulting				
Agrifutures Joint RDC Community Trust Project - Scoping Study	16,700	150,300	Completed	PRA463-1718
Rural Industries R & D Corporation				
Investigate the possibility of using wood powder as feedstock for 3D printing	60,000	216,000	Completed	PNA360-1516
University of Southern Queensland				
Microtimber – Development of a 3D-printed, gradient timber panel composed of forestry waste- and by-products	90,000	405,159	Active	PNA359-1516
University of Sydney				
Softwood EPD update and EPD validity extension	17,024	17,024	Active	PRA527-1920
Thinkstep Pty Ltd				

Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 2 - Aligning products to market needs				
Developing a technical basis for a biased testing structural property verification method for Australian sawn softwood	19,200	54,500	Active	PRA497-1920
TimberED Services Pty Ltd				
Updating of fire safely supporting documentation	75,510	75,510	Active	PRA436-1718
Exova Warringtonfire				
In-grade study strategy and work plan for the proposed "Softwood Machine Graded pine (MGP) grade opportunity planning project"	28,750	28,750	Completed	PRB482-1819
Juniper Consulting				

Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 3 - Assisting Value chain optimisation				
Glulam Review: Assessment of a new design methodology for glulam products	10,000	10,000	Active	PRB484-1819
University of Technology Sydney				
Revision of testing and design methods for nailed, screwed, and bolted timber connections	455,972	645,472	Active	PNB460-1718
Engineered Wood Products Association of Australasia				
Developing high-mass laminated flooring products from fibre-managed plantation hardwood	35,000	186,000	Completed	PNB387-1516
University of Tasmania				
Investment Plan: Operational improvement opportunities for the Softwood sawmilling industry	20,652	20,652	Active	PRB479-1819
Kenneth John Robertson				
Optimising the value chain from forests to end users	36,922	36,922	Completed	PRA483-1819
Margules Groome Consulting Pty Ltd				
Processing pruned Eucalyptus nitens plantation logs to produce high-value sawn and veneer products	100,000	100,000	Active	PNB417-1617
Forestry Tasmania				
Improving productivity of the sub-tropical private native forest resource	276,670	810,576	Completed	PNC379-1516
Department of Agriculture, Fisheries and Forestry QLD (DAFF)				
Production Forest Methodologies for the Emissions Reduction Fund	105,000	496,050	Completed	PNC354-1415
NSW Department of Primary Industries				
ARC Industrial Transformation Training Centre for Forest Value	250,000	250,000	Completed	PRA372-1516
University of Tasmania				
Development of Guidelines for Fire Salvage and Burnt Log Storage and Processing	49,426	49,426	Active	PRB502-1920
University of South Australia				
High-Tech Modular Building Components with High Contents of Australian Hardwoods	660,000	1,380,000	Completed	PNA380-1516
CSIRO				

Levy-funded projects

Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 3 - Assisting Value chain optimisation				
Proposal to assess the impacts of fire severity, plantation age class, site quality measures and salvage log storage conditions on the product yields and quality for solid sawn timber and woodchips post 19-20 fires	7,000	7,000	Completed	PRB504-1920
Forest Quality Pty Ltd				
Control and manage the moisture content of logs and biomass to maximise benefits along the wood supply chain	150,000	589,000	Completed	PNC400-1516
University of the Sunshine Coast				
Effects of fire severity and log storage on chip and timber quality	15,000	15,000	Active	PRB508-1920
Forest Quality Pty Ltd				
Increasing the value of under-utilised forest resources through the development of advanced engineered wood products	245,000	1,036,545	Completed	PNB407-1516
Department of Agriculture, Fisheries and Forestry QLD (DAFF)				
National Centre for Timber Durability and Design Life	2,250,000	3,750,000	Active	PNB425-1617
University of the Sunshine Coast				
National Load Restraint Trial and Testing	9,530	64,530	Active	PRB467-1819
Australian Forest Contractors Association				
RD&E Program in Advanced Log and Woodchip Export Supply Chain Management for Australia	775,000	775,000	Completed	PNC426-1617
University of the Sunshine Coast				

Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 4 - Increasing resource availability and reducing risk				
Advance Queensland Industry Research Fellowship	30,000	30,000	Active	PRC486-1819
University of the Sunshine Coast				
Advanced real-time measurements at harvest to increase value recovery	200,000	2,080,612	Active	PNC465-1718
University of the Sunshine Coast				
AGVET Commonwealth Agreement (ID 4-B14CTJ9)	42,500	85,000	Active	PNC487-1819
University of the Sunshine Coast				
Assessment and Ranking of FWPA Investment Plans 2019	40,355	40,355	Completed	PRC491-1920
Sylva Systems Pty Ltd				
Boosting Diagnostic Capacity for Plant Production Industries	0	14,781,135	Active	PNC499-1920
Grains R & D Corporation				
Enhanced forest inventory practice using immersive visualisation and measurement of dense point cloud data	50,000	211,751	Completed	PNC464-1718
University of Tasmania - School of Technology, Environments and Design				
Improved tools to predict fertiliser response and profitability in softwood plantations across Australia. Component 2: Eastern Australia	166,659	1,572,271	Active	PNC477-1819
TreeMod				
Optimising nutrition management of hardwood plantations for sustainable productivity and profitability	113,551	1,575,029	Active	PNC478-1819
WA Plantation Resources Pty. Ltd.				

Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 4 - Increasing resource availability and reducing risk				
Improving wood quality in radiata and southern pines	300,000	300,000	Active	PNC428-1617
Southern Tree Breeding Association				
Incorporating genomic data in TREEPLAN evaluations to increase genetic gain	640,000	1,407,076	Active	PNC408-1516
Southern Tree Breeding Association				
Investment Plan development – Plantation Nutrition	28,636	28,636	Completed	GRC065-1819
McGrath Forestry Services Pty Ltd				
Investment Plan development – Tree breeding and genetic improvement	35,116	35,116	Completed	GRC085-1819
PTM Solutions Pty Ltd				
Biological Control of Giant Pine Scale in Australia	163,678	850,745	Active	PNC489-1819
Agriculture Victoria				
Improving Plant Pest Management Through Cross Industry Deployment of Smart Sensor, Diagnostics and Forecasting	40,000	14,868,595	Completed	PRC429-1718
Horticulture Australia Limited				
Plant Biosecurity Research Initiative	54,531	54,531	Active	PRC430-1718
Horticulture Australia Limited				
Plant Biosecurity Research Initiative Phase II 2021-23	25,000	767,000	Active	PRC521-1920
Plant Biosecurity Research Initiative				
Plantation Forestry Biosecurity Plan Review	21,390	108,860	Active	PRC468-1819
Plant Health Australia				
Investment Plan development – Forest Fire Management	28,727	28,727	Completed	GRC069-1819
Gary William Morgan				
Participation in a collaborative network for Climate Change Research Strategy for Primary Industries (CCRISPI)	45,000	45,000	Active	PRC226-1011
Climate Change Research Strategy for Primary Industries (CCRSPI)				
Sustainability Scoping Study	25,150	25,150	Completed	PRC451-1718
STR Consulting Pty Ltd				
Alignment of Australian and New Zealand Forest Valuation Standard Methodologies: Project Plan	36,036	36,036	Active	GRC129-2021
Institute of Foresters of Australia Inc.				
Suitability of ABARES FORUM model for the evaluation of investment into forestry R&D	27,273	27,273	Completed	GRC086-1819
Australian Bureau of Agriculture & Resource Economics				
Australian Forest Herbicide Research Consortium	167,000	1,217,000	Active	PNC439-1718
University of the Sunshine Coast				
Investment Plan development – Native Forest Silviculture	27,091	27,091	Completed	GRC070-1819
John Hickey				
Investment Plan development – Operations and supply chain	29,804	29,804	Completed	GRC064-1819
University of the Sunshine Coast				

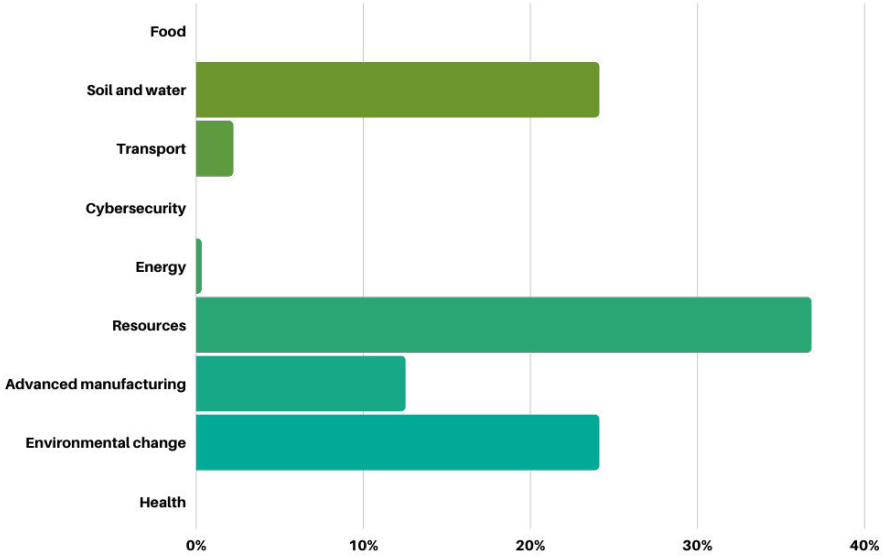
Levy-funded projects

Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 4 - Increasing resource availability and reducing risk				
Investment Plan development – Plantation Silviculture	30,000	30,000	Completed	GRC071-1819
University of South Australia				
Investment Plan development – Resource modelling and remote sensing	32,636	32,636	Completed	GRC066-1819
University of South Australia				
Investment Plan development – threats to the health of production forests	34,341	34,341	Completed	GRC061-1819
Forest Knowledge				
Lifting farmgate profitability through high value modular agroforestry	780,000	1,618,674	Completed	RRD401-1516
CSIRO - Land and Water				

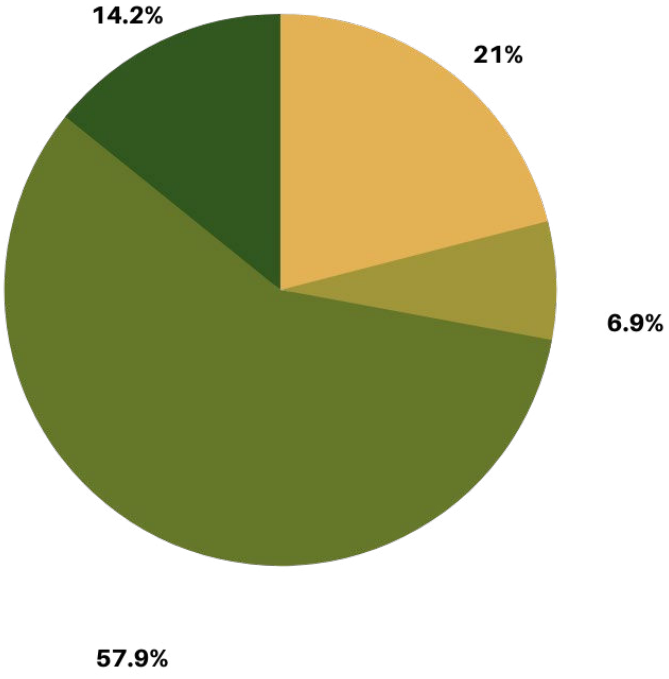
Project Description	FWPA Investment ($)	Total Project Costs ($)	Status	Project No.
Program 5 - Decision making and capability				
Circular Economy SWOT Analysis	13,370	13,370	Active	PRE496-1920
Thinkstep Pty Ltd				
Database capture of individual significant-scale Australian forestry plantation fire losses	6,600	6,600	Active	PRE507-1920
Geddes Management Pty Ltd				
Meta BCA review	18,125	18,125	Completed	PRE495-1920
Agtrans Research				
Environmental and Economic accounting in Primary Industries (Natural Capital Accounting)	1,350,000	1,350,000	Completed	RRD030-1617
CSIRO - Land and Water				
Science and Innovation Awards for Young People in Agriculture Fisheries & Forestry -2020 & 2021 rounds (ABARES) - Sponsorship	45,455	45,455	Active	PRE490-1920
Australian Bureau of Agricultural and Resource Eco				
Timber framed residential housing Thermal Bridging & the path to 7 Star NatHERS	10,000	10,000	Active	PRA526-1920
CSIRO Ecosystem Sciences				

Research priorities

National



Rural



Advanced technology, to enhance innovation of products, processes and practices across the food and fibre supply chains through technologies such as robotics, digitisation, big data, genetics and precision agriculture.

Biosecurity, to improve understanding and evidence of pest and disease pathways to help direct biosecurity resources to their best uses, minimising biosecurity threats and improving market access for primary producers.

Soil, water and managing natural resources, to manage soil health, improve water use efficiency and certainty of supply, sustainably develop new production areas and improve resilience to climate events and impacts.

Adoption of R&D, focusing on flexible delivery of extension services that meet primary producers' needs and recognising the growing role of private service delivery.

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Forest & Wood Products Australia

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Directors' report

Directors present this report on Forest and Wood Products Australia Limited ("the Company") for the financial year ended 30 June 2020.

Directors

During the reporting period, nine non-executive directors served on the Board including the Managing Director. All directors (plus the Managing Director) were Directors of the Company for the full financial year.

Election of Directors

According to the Company Constitution, FWPA's Board shall comprise between five and nine directors (including the Managing Director) at least two of whom are non-member directors. After the first annual general meeting, directors, with the exception of the Managing Director who is an employee of the Company, are appointed on a rotational basis by the Company's voting members at the annual general meeting. The appointments are for terms of three years with a maximum of three consecutive terms.

Board of Directors

The names of each person who has been a director during the year and to the date of this report are:
Mr John Simon
Ms Christine Briggs
Mr Brian Farmer
Mr Jim Henneberry
Mr Stephen Dadd
Mr Craig Taylor
Ms Katie Fowden
Prof Tony Arnel
Mr Alaric Sinclair

Directors have been in office since the start of the financial year to the date of this report unless otherwise stated.

Information on directors

CHAIRMAN (NON-MEMBER)

Mr John Simon

Mr Simon was appointed as the Chairman of FWPA in November 2015. He recently retired as CEO of the national timber wholesaler, Simmonds Lumber Group. After completing his masters in timber engineering, Mr. Simon worked in timber research at the Council for Scientific and Industrial Research (CSIR) in South Africa. He has been the Managing Director of Sterlands, the largest timber frame and truss producer in Australia; CEO of national timber distributor Pine Solutions; Managing Director of merchant and retailer Hudson Building Supplies; and Chairman of the Timber Development Association for 10 years. He is a member of the Housing Industry Association's Manufacturers and Suppliers Council and is a Fellow of the Australian Institute of Company Directors.

Board additional responsibilities:
Chair of Nominations and HR Committee.

NON-EXECUTIVE DIRECTOR

Ms Christine Briggs

Ms Briggs has had a rewarding career over 30 years in the forest and wood products industry, with international experience but focussed largely on the Australian and New Zealand sectors. She has held senior sales and marketing roles with major Australian timber manufacturing businesses such as CSR, Weyerhaeuser, Gunns, Timberlink and is currently at AKD Softwoods. Her international experience includes some time in the US, working with Weyerhaueser Building Materials during 2003. Ms Briggs' general management experience has covered strategic planning and business development, stakeholder engagement, sales & marketing excellence and supply chain development. In her current role, National Marketing Manager with AKD Softwoods, she is responsible for the market positioning of AKD and the development and adoption of the strategic market direction for the business. Ms Briggs' qualifications include a Bachelor of Business with a Marketing Major from University of Technology, Sydney and Graduate of the Australian Institute of Company Directors (GAICD).

Board additional responsibilities:
Nominations and HR Committee.

NON-EXECUTIVE DIRECTOR
Mr Brian Farmer

Mr Farmer is a graduate forester from the Australian National University and has broad experience in forest operations, marketing and management. He has worked in Government and private forest management businesses in New South Wales, Tasmania, South Australia and Queensland. Mr Farmer completed two significant roles as CEO for both ForestrySA and HQPlantations as well as roles as Director for Timber Queensland, Responsible Wood and as a current Trustee with the Gottstein Trust. Mr Farmer is also a director of his consulting company Rolange Pty Ltd. He is a strong advocate for forestry based on sound science, finance and stewardship, and argues that forestry should be delivered to the best possible standards using the best possible knowledge.

Board additional responsibilities:
Member of Nominations and HR Committee.

NON-EXECUTIVE DIRECTOR
Mr Jim Henneberry

Mr Henneberry has led complex, global businesses through director and executive roles. He brings strengths in strategic leadership, culture change, stakeholder engagement, operations and research to the board of FWPA. Mr Henneberry has served as MD and CEO of Australian Paper and director of PPM and the Australian Forest Products Association (AFPA) and is currently a Trustee at Monash Australian Pulp and Paper Institute (APPI). He has held various management positions with CHH, International Paper and other international companies. Mr Henneberry co-chaired the Australian Government Pulp and Paper Industry Strategy Review and is well-placed to extend inclusive consultations with industry partners. He has also led business-focused research in fibre and pulp and paper and has credentials to be able to integrate this with forest and other wood product industries through the FWPA Board. He holds a Bachelor of Science (Pulp and Paper Engineering) from Syracuse University, New York, an MBA (International Marketing) from the University of Houston, completed advanced business leadership at GE's US Leadership Institute and is a graduate of the Australian Institute of Company Directors.

Board additional responsibilities:
Chair of the Audit, Finance and Risk Committee and member of the Nominations and HR Committee.

NON-EXECUTIVE DIRECTOR
Mr Stephen Dadd

Mr Dadd is the National General Manager of Boral's Building Products Division and a Director of Allen Taylor & Co Ltd with responsibility for Boral's wood supply management, timber milling and product distribution businesses in Hardwood, Softwood and Residues. He is also on the Board of Highland Pine Products and is a Director of Australian Roofing Tile Association (ARTA), Concrete Masonry Association of Australia (CMAA), and a Councillor of the Royal Agricultural Society of NSW. Mr Dadd has worked in Boral's Timber business for 17 years and prior to that worked for the Boston Consulting Group and CSR's Sugar Division. He has a degree in Chemical Engineering and an MBA from the London Business School.

Board additional responsibilities:
Member of the Audit, Finance and Risk Committee.

NON-EXECUTIVE DIRECTOR
Prof Tony Arnel

Tony is Industry Professor for the Build Environment at Deakin University and works in the Faculty of Science, Engineering and Built Environmental. Most recently he was the Global Director of Sustainability at Norman, Disney and Young, stepping down after eight years as the company's key strategist for sustainability.

Tony is a Life Fellow of the Australian Institute of Architects. He is also a Life Fellow of the Green Building Council of Australia, a founding director and was chair between 2007-2012. During this time, he was also chair of the World Green Building Council (2008 – 2011). His current board involvement includes the Energy Efficiency Council (President) and Deakin University School of Engineering (Chair). He is also a fellow of the Australian Institute of Company Directors.

Board additional responsibilities:
Member of the Audit, Finance and Risk Committee.

NON-EXECUTIVE DIRECTOR
Ms Katie Fowden

Ms Fowden is the Strategic Relations Manager for Hyne Timber, where a significant part of her role is the promotion of the company's brand, products and the industry more broadly.

Ms Fowden's background is in advocacy, government liaison, policy and corporate communications. Her skills and experience align closely with the aims and objectives of FWPA. She is also currently a non-executive director of Responsible Wood.

Board additional responsibilities:
None

NON-EXECUTIVE DIRECTOR
Mr Craig Taylor

Mr Taylor has over 30 years' management and consulting experience in primary industries, sustainable resource management, supply chain management, manufacturing, sales and marketing, mostly in the plantation forestry sector. He is a Director and Principal of The Fifth Estate Consultancy which works across the spectrum of the resources and primary production sectors. Mr Taylor provides advice to Australia's and New Zealand's largest forest and wood products companies covering strategy, business development and investment. After completing his BSc (Forestry) at the ANU, Mr Taylor worked as a professional Forester with the NSW Forestry Commission before taking on management roles with Boral Timber and Wesfi.

Immediately before joining The Fifth Estate, he was a Vice President with Jaakko Pöyry Asia-Pacific. He is a Non-Executive Director of PF Olsen Limited (New Zealand), the largest independent forest manager in Australia and New Zealand, and Chairman of Beyond Subsistence Pty Limited, a NFP which undertakes forestry and agroforestry training and development with subsistence farmers in Africa. He is a member of the Australian Institute of Company Directors and the Institute of Foresters of Australia.

Board additional responsibilities:
None

MANAGING DIRECTOR
Mr Alaric Sinclair

Before joining FWPA, Mr Sinclair spent seven years in the grocery and food industry where he worked in operations, corporate finance and strategy roles. Mr Sinclair has held operations, marketing and strategy roles at Origin Energy, KH Foods, Chiquita Brands and Amcor/PaperlinX. He holds a Bachelor of Science (Forestry) and a Master of Business Administration. Mr Sinclair was appointed to the role of Managing Director on 2 June 2008.

Board additional responsibilities:
Invited guest to the Audit, Finance and Risk Committee.

Board committees

Board committees ensure appropriate management and review of company operations and make certain that investments are adequately evaluated and deliver outcomes to Company Members and other stakeholders. The Board committees are: Audit, Finance and Risk Committee and Nominations and Human Resources Committee. All committee members listed below were members of the committee for the entire year, unless otherwise specified.

Audit, Finance and Risk Committee (AF&RC)
Members:
Mr Jim Henneberry (Chair)
Mr Stephen Dadd
Prof Tony Arnel

Invited guests:
Mr Alaric Sinclair
Mr Jason See

The key tasks of the Audit, Finance and Risk Committee are to:
- Ensure prudent management of the Company's finances; ensure the Board makes informed decisions regarding the Company's overall expenditures; ensure activities approved by the Board are consistent with Australian law relating to prudent financial management; and provide a general overview of the Company's financial management.
- Liaise with FWPA's auditors; review the adequacy of internal controls and of compliance with relevant laws, regulations, policies and procedures; report to the Board on the adequacy of audit procedures; and promote accurate, high quality and timely disclosure of financial and other information to the Board and key stakeholders.

Nominations and Human Resources Committee (N&HRC)

Members:
Mr John Simon (Chair)
Mr Jim Henneberry
Mr Brian Farmer
The secretary is an independent and external consultant.

The key tasks of the Nominations and Human Resources Committee are:
- The establishment of procedures and systems to assess Board performance, identify skill gaps and to work with the Director Selection Committee to ensure an ongoing focus on Board composition to meet legal obligations, stakeholder requirements and best practice corporate governance.
- Ensure that the Company's remuneration and human resources policies and systems support the Board's desired organisational culture and capacity.
- Approve procedures and systems for the Company relating to staff and director remuneration, human resources and OH&S that are in accordance with agreed Board policies and directions.
- Approve annual adjustments for the remuneration of the managing director and the managing director's direct reports.
- Approve annual performance targets and assessment of performance against the targets

Board meetings

During the reporting period the Board held five meetings. Details of attendance by individual Board members are provided below:

DIRECTOR	BOARD		AUDIT, FINANCE AND RISK COMMITTEE		NOMINATIONS AND HUMAN RESOURCES COMMITTEE		LENGTH OF SERVICE
	Meetings attended	Meetings eligible to attend	Meetings attended	Meetings eligible to attend	Meetings attended	Meetings eligible to attend	Years
Mr John Simon	5	5			2	2	8
Mr Jim Henneberry	5	5	4	4	2	2	6
Ms Christine Briggs	5	5			2	2	6
Mr Brian Farmer	5	5			2	2	6
Mr Stephen Dadd	5	5	4	4			5
Mr Craig Taylor	5	5					2
Ms Katie Fowden	3	5					2
Prof Tony Arnel	5	5	4	4			4
Mr Alaric Sinclair	5	5					12

Principal activities

The principal activities of the FWPA during the financial year comprised:
- Providing research and development to support the Australian forest and wood products industry; and
- Providing domestic marketing and promotion services to the Australian forest and wood products industry.

Significant changes in state of affairs
There have been no significant changes in the nature of these operations during the period.

Objectives
Collaborate with industry stakeholders and Government to determine strategy and deliver programs designed to grow the market for forest and wood products, increase productivity (and implied profitability) across the value chain and ensure positive environmental and social outcomes.

Strategies
- Promote the benefits and usage of forests and wood products in response to changing community attitudes (Promoting the advantages of wood products);
- To ensure that the industry's products and services are fit for purpose, appropriately aligned to market needs and better communicated to key influencers (Aligning products to market needs);

- Increasing the value and volume recovery from existing resources to ensure that all wood fibre is utilised to its highest and best use (Assisting value chain optimisation);
- To increase the availability of wood fibre to support an expanding market and associated manufacturing capacity (Increasing resource availability and reducing risk); and
- Help ensure that the industry has the skills and systems necessary to support improved decision making by all players across the value chain (Impacting decision making and industry capability).

Results of operations

The operating result for the financial year to 30 June 2020 was an operating deficit of $822,777 (2019: $616,582 surplus).

Significant events after the reporting date

The impact of the Coronavirus (COVID-19) pandemic is ongoing and while it has been financially positive for the company up to 30 June 2020, it is not practicable to estimate the potential impact, positive or negative, after the reporting date. The situation is rapidly developing and is dependent on measures imposed by the Australian Government and other countries, such as maintaining social distancing requirements, quarantine, travel restrictions and any economic stimulus that may be provided.

No matters or circumstances have arisen since the end of the financial year which in the opinion of the Directors have significantly affected or are likely to affect significantly the operations of the company, the results of those operations, or the state of affairs of the company in subsequent financial years.

Code of conduct

The FWPA Code of Conduct requires the Board and all staff to promote high standards of ethics and integrity. The language, attitudes and actions of directors, senior management and staff must reflect the principles of integrity and ethics, as well as the company's values and culture. The Code of Conduct recognises that FWPA's employees are vital to the fulfilment of the Company's purpose and, consequently, the highest level of staff satisfaction, health and safety must be maintained. It also encourages directors and staff to commit to the philosophy of continuous improvement at the corporate and individual levels.

Conflict of interest and register of interests

A director must disclose an interest wherever he or she considers there is a potential perceived conflict of interest and a Declaration of Directors' Interests is a standing agenda item for all Board meetings.

Members' Guarantee

The Company is limited by guarantee. If the Company is wound up, the Constitution states that each member is required to contribute a maximum of $1 each towards any outstanding obligations of the Company. The total amounts that members of the company are liable to contribute if the company is wound up is $180, based on 180 current ordinary members.

Risk management, fraud control and business recovery

The company has risk management, business recovery and fraud control plans in place. It also maintained a human resource policy and procedures, work health safety and a Corruption and Fraud Control policy, a Whistleblower policy and a policy and procedure manual.

Environmental regulation and performance

The Company is not subject to any particular or significant environmental regulation.

Auditor's independence declaration

A copy of the Auditor's Independence Declaration as required under s.60-40 of the Australian Charities and Not-for-profits Commission Act 2012 is included in page 7 of this financial report and forms part of the Directors' Report.

Signed in accordance with a resolution of the Board of Directors.

John Simon
Director
27 August 2020

Alaric Sinclair
Managing Director
27 August 2020

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Auditors Independence Declaration under Section 60-40 of the Australian Charities and Not-for-profits Commission Act 2012

As lead auditor for the audit of the financial report of Forest and Wood Products Australia Limited for the year ended 30 June 2020, I declare that, to the best of my knowledge and belief, there have been no contraventions of:

(i) the auditor independence requirements of the Australian Professional accounting bodies; and

(ii) any applicable code of professional conduct in relation to the audit.

RSM AUSTRALIA PARTNERS

R B MIANO
Partner

Dated: 27 August 2020
Melbourne, Victoria

Financial statements

Statement of Profit or Loss and Other Comprehensive Income

For the year ended 30 June 2020

		2020	2019
	Note	**$**	**$**
Revenue	3	14,849,938	15,390,910
Interest revenue calculated using the effective interest method		116,395	176,845
Promoting wood products	4(a)	(3,598,003)	(1,594,079)
Aligning products to market needs	4(b)	(2,792,694)	(4,970,668)
Assisting value chain optimisation	4(c)	(699,455)	(1,059,133)
Resource availability and risk	4(d)	(1,306,582)	(1,511,434)
Decision making and capability	4(e)	(1,008,495)	(1,347,304)
Voluntary contribution programs	4(f)	(3,333,893)	(3,325,355)
Government grant programs	4(g)	(2,946,976)	(968,944)
Grower research contribution programs	4(h)	(103,012)	(174,255)
Net surplus / (deficit) before income tax expense		**(822,777)**	**616,583**
Income tax expense	1(q)	-	-
Surplus / (deficit) after income tax expense for the year attributable to the members of Forest and Wood Products Australia Limited		**(822,777)**	**616,583**
Other comprehensive income for the year, net of tax		-	-
Total comprehensive income / (loss) for the year attributable to the members of Forest and Wood Products Australia Limited		**(822,777)**	**616,583**

The above Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes.

Statement of Financial Position

As at 30 June 2020

	Note	2020 $	2019 $
ASSETS			
Current assets			
Cash and cash equivalents	5	4,168,613	6,498,146
Trade and other receivables	6	1,599,853	2,210,275
Financial assets	7	7,853,457	3,145,483
Total current assets		**13,621,923**	**11,853,904**
Non-current assets			
Furniture and equipment	8	216,035	132,979
Total non-current assets		**216,035**	**132,979**
TOTAL ASSETS		**13,837,958**	**11,986,883**
LIABILITIES			
Current liabilities			
Trade and other payables	9	3,205,405	1,782,067
Provisions	10	474,230	452,434
Other liabilities	11	-	3,876,658
Contract liabilities	12	5,303,156	-
Lease liabilities	13	90,021	-
Total current liabilities		**9,072,812**	**6,111,159**
Non-current liabilities			
Provisions	10	72,996	91,016
Other liabilities	11	-	348,570
Lease liabilities	13	78,789	-
Total non-current liabilities		**151,785**	**439,586**
TOTAL LIABILITIES		**9,224,597**	**6,550,745**
NET ASSETS		**4,613,361**	**5,436,138**
EQUITY			
Retained surplus		4,613,361	5,436,138
TOTAL EQUITY		**4,613,361**	**5,436,138**

The above Statement of Financial Position should be read in conjunction with the accompanying notes.

Statement of Changes in Equity

For the year ended 30 June 2020

	Retained surplus	Total
	$	$
Balance at 1 July 2018	4,819,556	4,819,556
Net surplus for the year after income tax	616,582	616,582
Other comprehensive income for the year, net of tax	-	-
Total comprehensive income for the year	616,582	616,582
Balance at 30 June 2019	**5,436,138**	**5,436,138**
Balance at 1 July 2019	5,436,138	5,436,138
Net surplus for the year after income tax	(822,777)	(822,777)
Other comprehensive income for the year, net of tax	-	-
Total comprehensive income for the year	(822,777)	(822,777)
Balance at 30 June 2020	**4,613,361**	**4,613,361**

The above Statement of Changes in Equity should be read in conjunction with the accompanying notes.

Statement of Cash Flows

For the year ended 30 June 2020

		2020	2019
	Note	$	$
Cash flows from operating activities:			
Receipts from members and government		16,093,322	16,180,235
Payments to suppliers and employees		(13,727,292)	(12,656,772)
Interest received		108,678	193,311
Net cash provided by / (used in) operating activities	**14**	**2,474,708**	**3,716,774**
Cash flows from investing activities			
Acquisition of furniture and equipment		(10,272)	(22,051)
Proceeds from / (Investments in) of financial assets		(4,700,000)	900,000
Net cash provided by / (used in) investing activities		**(4,710,272)**	**877,949**
Cash flows from financing activities			
Repayment of lease liabilities		(93,970)	-
Net cash provided by / (used in) financing activities		**(93,970)**	-
Net increase / (decrease) in cash and cash equivalents		**(2,329,533)**	**4,594,723**
Cash and cash equivalents at the beginning of the financial year		6,498,146	1,903,423
Cash and cash equivalents at the end of the financial year	**5**	**4,168,613**	**6,498,146**

The above Statement of Cash Flow should be read in conjunction with the accompanying notes.

Notes to the financial statements

1 Summary of significant accounting policies

a) General information

The financial statements cover Forest and Wood Products Australia Limited as an individual entity. The financial statements are presented in Australian dollars, which is Forest and Wood Products Australia Limited's functional and presentation currency.

Forest and Wood Products Australia Limited is a not-for-profit unlisted public company limited by guarantee.

The financial statements were authorised for issue, in accordance with a resolution of directors, on 27 August 2020. The directors have the power to amend and reissue the financial statements.

The principal accounting policies adopted in the preparation of the financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

b) New or amended Accounting Standards and Interpretations adopted

The company has adopted all of the new or amended Accounting Standards and Interpretations issued by the Australian Accounting Standards Board ('AASB') that are mandatory for the current reporting period.

Any new or amended Accounting Standards or Interpretations that are not yet mandatory have not been early adopted.

The following Accounting Standards and Interpretations are most relevant to the company:

AASB 15 Revenue from Contracts with Customers

The company has adopted AASB 15 from 1 July 2019. The standard provides a single comprehensive model for revenue recognition. The core principle of the standard is that an entity shall recognise revenue to depict the transfer of promised goods or services to customers at an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard introduced a new contract-based revenue recognition model with a measurement approach that is based on an allocation of the transaction price. This is described further in the accounting policies below. Credit risk is presented separately as an expense rather than adjusted against revenue. Contracts with customers are presented in an entity's statement of financial position as a contract liability, a contract asset, or a receivable, depending on the relationship between the entity's performance and the customer's payment.

AASB 1058 Income of Not-for-Profit Entities

The company has adopted AASB 1058 from 1 July 2019. The standard replaces AASB 1004 'Contributions' in respect to income recognition requirements for not-for-profit entities. The timing of income recognition under AASB 1058 is dependent upon whether the transaction gives rise to a liability or other performance obligation at the time of receipt. Income under the standard is recognised where: an asset is received in a transaction, such as by way of grant, bequest or donation; there has either been no consideration transferred, or the consideration paid is significantly less than the asset's fair value; and where the intention is to principally enable the entity to further its objectives. For transfers of financial assets to the entity which enable it to acquire or construct a recognisable non-financial asset, the entity must recognise a liability amounting to the excess of the fair value of the transfer received over any related amounts recognised. Related amounts recognised may relate to contributions by owners, AASB 15 revenue or contract liability recognised, lease liabilities in accordance with AASB 16, financial instruments in accordance with AASB 9, or provisions in accordance with AASB 137. The liability is brought to account as income over the period in which the entity satisfies its performance obligation. If the transaction does not enable the entity to acquire or construct a recognisable non-financial asset to be controlled by the entity, then any excess of the initial carrying amount of the recognised asset over the related amounts is recognised as income immediately. Where the fair value of volunteer services received can be measured, a private sector not-for-profit entity can elect to recognise the value of those services as an asset where asset recognition criteria are met or otherwise recognise the value as an expense.

AASB 16 Leases

The company has adopted AASB 16 from 1 July 2019. The standard replaces AASB 117 'Leases' and for lessees eliminates the classifications of operating leases and finance leases. Except for short-term leases and leases of low-value assets, right-of-use assets and corresponding lease liabilities are recognised in the statement of financial position. Straight-line operating lease expense recognition is replaced with a depreciation charge for the right-of-use assets (included in operating costs) and an interest expense on the recognised lease liabilities (included in finance costs). In the earlier periods of the lease, the expenses

associated with the lease under AASB 16 will be higher when compared to lease expenses under AASB 117. However, EBIDA (Earnings Before Interest, Depreciation and Amortisation) results improve as the operating expense is now replaced by interest expense and depreciation in profit or loss. For classification within the statement of cash flows, the interest portion is disclosed in operating activities and the principal portion of the lease payments are separately disclosed in financing activities. For lessor accounting, the standard does not substantially change how a lessor accounts for leases.

Impact of adoption
AASB 15, AASB 16 and AASB 1058 were adopted using the modified retrospective approach and as such comparatives have not been restated. There was no impact on opening retained profits as at 1 July 2019.

The impact of the new Accounting Standards compared with the previous Accounting Standards on the current reporting period is as follows:

	New	Previous	Difference
	$	$	$
Furniture and equipment	308,519	132,979	175,540
Provisions	543,080	543,450	(370)
Current Other Liabilities	-	3,876,658	(3,876,658)
Current Contract Liabilities	3,852,372	-	3,852,372
Current Lease Liabilities	76,142	-	76,142
Non-Current Other Liabilities	300,000	348,570	(48,570)
Non-Current Lease Liabilities	168,810	-	168,810
Net assets	**5,436,138**	**5,436,138**	-

	1 July 2019
	$'000
Operating lease commitments as at 1 July 2019 (AASB 117)	411,111
Operating lease commitments discount based on the weighted average incremental borrowing rate of 5.5% (AASB 16)	(30,280)
Operating lease commitments as at 1 July 2019 not within scope of AASB 16	(201,007)
Right-of-use assets (AASB 16)	**179,824**
Lease liabilities - current (AASB 16)	(76,142)
Lease liabilities - non-current (AASB 16)	(168,810)
Make good provision (AASB 16)	(9,630)
Lease incentive liability (AASB 117)	72,856
Furniture and equipment improvements (AASB 117)	5,716
Trade and other payables (AASB 117)	(3,814)
Impact on opening retained surpluses as at 1 July 2019	-

When adopting AASB 16 from 1 July 2019, the company has applied the following practical expedients:
- accounting for leases with a remaining lease term of 12 months as at 1 July 2019 as short-term leases;
- not apply AASB 16 to contracts that were not previously identified as containing a lease.

c) Basis of preparation
These general purpose financial statements have been prepared in accordance with Australian Accounting Standards - Reduced Disclosure Requirements and Interpretations issued by the Australian Accounting Standards Board ('AASB') and the Australian Charities and Not-for-profit Commission Act 2012 ("ACNC Act").

The financial report, except for the cash flow information, has been prepared on an accruals basis and is based on historical costs, modified where applicable, by the measurement at fair value of selected non current assets, financial assets and financial liabilities.

Critical accounting estimates
The preparation of the financial statements requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the company's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed in note 2.

d) Revenue recognition

The company recognises revenue as follows:

Revenue from contracts with customers
Revenue is recognised at an amount that reflects the consideration to which the company is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the company: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

Variable consideration within the transaction price, if any, reflects concessions provided to the customer such as discounts, rebates and refunds, any potential bonuses receivable from the customer and any other contingent events. Such estimates are determined using either the 'expected value' or 'most likely amount' method. The measurement of variable consideration is subject to a constraining principle whereby revenue will only be recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The measurement constraint continues until the uncertainty associated with the variable consideration is subsequently resolved. Amounts received that are subject to the constraining principle are recognised as a refund liability.

Industry contributions (levies)
Industry contributions (levies) are recognised when it is received or when the right to receive payment is established from the Department of Agriculture and Water Environment and from State Growers.

Commonwealth matching and Voluntary matching
Commonwealth matching and Voluntary matching revenue is recognised when it is received or when the right to receive payment is established from the Department of Agriculture and Water Environment.

Government grants
Grant revenue is recognised in profit or loss when the company satisfies the performance obligations stated within the funding agreements.

If conditions are attached to the grant which must be satisfied before the company is eligible to retain the contribution, the grant will be recognised in the statement of financial position as a liability until those conditions are satisfied.

Interest
Interest revenue is recognised as interest accrues using the effective interest method. This is a method of calculating the amortised cost of a financial asset and allocating the interest income over the relevant period using the effective interest rate, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset.

Other revenue
Other revenue is recognised when it is received or when the right to receive payment is established.

e) Current and non-current classification

Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is current when: it is expected to be realised or intended to be sold or consumed in normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within twelve months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period. All other assets are classified as non-current.

A liability is current when: it is expected to be settled in normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within twelve months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period. All other liabilities are classified as non-current.

f) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks and other short term highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value.

g) Trade and other receivables

Receivables are recognised at amortised cost, less any allowance for expected credit losses.

h) Furniture and equipment

Each class of furniture and equipment is carried at historical cost, less, where applicable, accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attribute to the acquisition of the items.

Purchases of furniture and equipment are recognised initially at historical cost, except for purchases costing less than $1,500, which are expensed in the year of acquisition (other than where they form part of a group of similar items which are significant in total).

Depreciation

The depreciable amount of all fixed assets is depreciated on a straight line basis over their useful lives to the Company commencing from the time the asset is held ready for use.

The residual values, useful lives and depreciation methods are reviewed, and adjusted if appropriate, at each reporting date.

The depreciation rates used for each class of depreciable assets are:

Office furniture and equipment	13% - 50%
Leasehold improvements	14%

An item of furniture and equipment is derecognised upon disposal or when disposal or when there is no future economic benefit to the company. Gains and losses between the carrying amount and the disposal proceeds are taken to profit or loss.

i) Right-of-use assets

A right-of-use asset is recognised at the commencement date of a lease. The right-of-use asset is measured at cost, which comprises the initial amount of the lease liability, adjusted for, as applicable, any lease payments made at or before the commencement date net of any lease incentives received, any initial direct costs incurred, and, except where included in the cost of inventories, an estimate of costs expected to be incurred for dismantling and removing the underlying asset, and restoring the site or asset.

Right-of-use assets are depreciated on a straight-line basis over the unexpired period of the lease or the estimated useful life of the asset, whichever is the shorter. Where the company expects to obtain ownership of the leased asset at the end of the lease term, the depreciation is over its estimated useful life. Right-of use assets are subject to impairment or adjusted for any remeasurement of lease liabilities.

The company has elected not to recognise a right-of-use asset and corresponding lease liability for short-term leases with terms of 12 months or less and leases of low-value assets. Lease payments on these assets are expensed to profit or loss as incurred.

j) Impairment of non-financial assets

Non-financial assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

Recoverable amount is the higher of an asset's fair value less costs of disposal and value-in-use. The value-in-use is the present value of the estimated future cash flows relating to the asset using a pre-tax discount rate specific to the asset or cash-generating unit to which the asset belongs. Assets that do not have independent cash flows are grouped together to form a cash-generating unit.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the statement of comprehensive income in the period in which they arise. When revalued assets are sold, amounts included in the revaluation reserve relating to that asset are transferred to retained earnings.

k) Trade and other payables

Trade and other payables represent the liability outstanding at the end of the reporting period for goods and services received by the Company during the reporting period which remain unpaid. The balance is recognised as a current liability with the amounts normally paid within 30 days of recognition of the liability.

l) Contract liabilities

Contract liabilities represent the company's obligation to transfer goods or services to a customer and are recognised when a customer pays consideration, or when the company recognises a receivable to reflect its unconditional right to consideration (whichever is earlier) before the company has transferred the goods or services to the customer.

m) Lease liabilities

A lease liability is recognised at the commencement date of a lease. The lease liability is initially recognised at the present value of the lease payments to be made over the term of the lease, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the company's incremental borrowing rate. Lease payments comprise of fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, amounts expected to be paid under residual value guarantees, exercise price of a purchase option when the exercise of the option is reasonably certain to occur, and any anticipated termination penalties. The variable lease payments that do not depend on an index or a rate are expensed in the period in which they are incurred.

Lease liabilities are measured at amortised cost using the effective interest method. The carrying amounts are remeasured if there is a change in the following: future lease payments arising from a change in an index or a rate used; residual guarantee; lease term; certainty of a purchase option and termination penalties. When a lease liability is remeasured, an adjustment is made to the corresponding right-of use asset, or to profit or loss if the carrying amount of the right-of-use asset is fully written down.

n) Employee provisions

Provision is made for the Company's liability for employee benefits arising from services rendered by employees to the end of the reporting period.

Short-term employee benefits

Liabilities for wages and salaries, including non-monetary benefits, annual leave and long service leave expected to be settled within 12 months of the reporting date are recognised in current liabilities in respect of employees' services up to the reporting date and are measured at the amounts expected to be paid when the liabilities are settled.

Other long-term employee benefits

The liability for annual leave and long service leave not expected to be settled within 12 months of the reporting date are recognised in non-current liabilities, provided there is an unconditional right to defer settlement of the liability. The liability is measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on commercial bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

Contributions are made by the entity to an employee superannuation fund and are charged as expenses when incurred.

Superannuation

Employees of the Company are members of the AustralianSuper, Equipsuper, Qsuper, Superleader, Vision Super Saver, VicSuper Future Saver, Care Super, The Trustee for Apical Super Fund, BT Super for Life and Jim Houghton's Superannuation Fund. Contributions are made to the Company employee superannuation funds and are charged as expenses when incurred.

o) Provisions

Provisions are recognised when the Company has a legal or constructive obligation as a result of a past event and it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate of the amount of the obligation can be made. If the effect is material, provisions are determined by discounting the expected future cash flows using a current pre tax rate that reflects, where appropriate, the risks specific to the liability.

p) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO).

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with other receivables or payables in the statement of financial position.

Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities, which are recoverable from or payable to the ATO, are presented as operating cash flows included in receipts from customers or payments to suppliers.

Commitments and contingencies are disclosed with GST recoverable from, or payable to, the tax authority.

q) Income taxes
No provision for income tax has been raised as the Company is exempt from income tax under Division 50 of the Income Tax Assessment Act 1997.

r) Rounding of amounts
The company is of a kind referred to in Class Order 98/100, issued by the Australian Securities and Investment Commission, relating to "rounding-off". Amounts in this report have been rounded-off in accordance with that Class Order to the nearest dollar.

s) Economic dependence
Forest and Wood Products Australia Limited (FWPA) is dependent on the Department of Agriculture, Water and Environment for the majority of its revenue used to operate the business. At the date of this report, the Board of Directors has no reason to believe the Department will not continue to support FWPA Limited.

2 Critical accounting judgements, estimates and assumptions

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses. Management bases its judgements, estimates and assumptions on historical experience and on other various factors, including expectations of future events, management believes to be reasonable under the circumstances. The resulting accounting judgements and estimates will seldom equal the related actual results. The judgements, estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities (refer to the respective notes) within the next financial year are discussed below.

Estimation of useful lives of assets
The company determines the estimated useful lives and related depreciation charges for its property, plant and equipment. The useful lives could change significantly as a result of technical innovations or some other event. The depreciation charge will increase where the useful lives are less than previously estimated lives, or technically obsolete or non-strategic assets that have been abandoned or sold will be written off or written down.

Impairment of non-financial assets
The company assesses impairment of non-financial assets at each reporting date by evaluating conditions specific to the company and to the particular asset that may lead to impairment. If an impairment trigger exists, the recoverable amount of the asset is determined. This involves fair value less costs of disposal or value-in-use calculations, which incorporate a number of key estimates and assumptions.

Employee benefits provision
As discussed in note 1, the liability for employee benefits expected to be settled more than 12 months from the reporting date are recognised and measured at the present value of the estimated future cash flows to be made in respect of all employees at the reporting date. In determining the present value of the liability, estimates of attrition rates and pay increases through promotion and inflation have been taken into account.

Lease make good provision
A provision has been made for the present value of anticipated costs for future restoration of leased premises. The provision includes future cost estimates associated with closure of the premises. The calculation of this provision requires assumptions such as application of closure dates and cost estimates. The provision recognised for each site is periodically reviewed and updated based on the facts and circumstances available at the time. Changes to the estimated future costs for sites are recognised in the statement of financial position by adjusting the asset and the provision. Reductions in the provision that exceed the carrying amount of the asset will be recognised in profit or loss.

Incremental borrowing rate
Where the interest rate implicit in a lease cannot be readily determined, an incremental borrowing rate is estimated to discount future lease payments to measure the present value of the lease liability at the lease commencement date. Such a rate is based on what the consolidated entity estimates it would have to pay a third party to borrow the funds necessary to obtain an asset of a similar value to the right-of-use asset, with similar terms, security and economic environment.

Coronavirus (COVID-19) pandemic
Judgement has been exercised in considering the impacts that the Coronavirus (COVID-19) pandemic has had, or may have, on the company based on known information. This consideration extends to the nature of the products and services offered, customers, supply chain, staffing and geographic regions in which the company operates. Other than as addressed in specific notes, there does not currently appear to be either any significant impact upon the financial statements or anu significant uncertainties with respect to events or conditions which may impact the company unfavourably as at the reporting date or subsequently as a result of the Coronavirus (COVID-19) pandemic.

3

	2020	2019
	$	$
Revenue		
Revenue from contracts with customers		
Voluntary contributions	1,674,893	1,666,355
Government grant	2,605,492	828,944
Industry project contributions	125,000	140,000
Grower research contributions total	103,012	174,255
	4,508,397	**2,809,554**
Other Revenue		
Industry contributions (levies)		
Processors	3,078,619	3,366,213
Importers	878,846	1,185,725
Growers	1,016,469	1,125,546
State growers	401,365	434,982
Penalties	9,217	14,573
	5,384,516	**6,127,039**
Commonwealth matching	2,749,118	4,528,746
Voluntary matching	1,619,000	1,659,000
Other income	588,907	266,571
Total industry contributions	**10,341,541**	**12,581,356**
Total revenue	**14,849,938**	**15,390,910**
Disaggregation of revenue		
The disaggregation of revenue from contracts with customers is as follows:		
Geographical regions		
Australia	**4,508,397**	**2,809,554**

AASB 15 was adopted using the modified retrospective approach and as such comparatives have not been provided for disaggregation of revenue.

As part of its response to COVID-19, the Australian Government, in March 2020, announced various measures to ease the burden experienced by businesses as a result of the economic fallout from the coronavirus lockdown and social distancing measures. The company met the eligibility criteria to receive the 'Boosting cash flow for employers' payment of $100,000 from the Australian Government, which has been recognised as Other income revenue in the current financial year.

	2020	2019
	$	$
4 Program expenses		
(a) Promoting Wood Products		
Consumer activities	2,343,355	830,545
Forest education activities	160,389	200,890
Program support management	1,094,259	562,644
	3,598,003	**1,594,079**
(b) Aligning Products to Market Needs		
Specifier activities	1,062,843	1,969,180
Research and development activities	101,822	1,380,470
Building codes and standard actiivties	249,069	202,192
Statistic and economic activities	4,999	3,600
National residential construction	223,892	4,462
Program support management	1,150,069	1,410,764
	2,792,694	**4,970,668**

	2020	2019
	$	$
Program expenses (continued)		
(c) Assisting Value Chain Optimisation		
Research and development activities	389,825	684,628
Building codes and standard actiivties	2,712	19,200
Statistic and economic activities	-	-
Program support management	306,918	355,305
	699,455	**1,059,133**
(d) Resource Availability and Risk		
Research and development activities	705,106	784,099
Statistic and economic activities	500	134,268
Program support management	600,976	593,067
	1,306,582	**1,511,434**
(e) Decision Making and Capability		
Research and development activities	67,887	69,627
Statistic and economic activities	540,138	549,683
Leadership activities	13,356	331,122
Program support management	387,114	396,872
	1,008,495	**1,347,304**
(f) Voluntary Contribution Program		
Voluntary contribution project	2,382,096	2,379,434
Midrise program	951,797	945,921
	3,333,893	**3,325,355**
(g) Government Grant Program		
National institute of forest products innovation	2,409,407	538,819
Research grant project	516,791	387,625
Other government fund project	20,778	42,500
	2,946,976	**968,944**
(h) Grower Research Contribution Program		
Grower research project	103,012	174,255
	103,012	**174,255**
(i) Employee benefits expenses*		
Wages and salaries	1,854,887	1,750,291
Annual leave	(5,682)	(39,248)
Increase/ (decrease) to long service leave provision	(20,964)	65,451
Superannuation contributions	152,814	144,806
	1,981,055	**1,921,300**

** Employee benefits expenses were allocated into various program support management from 4(a) to 4(e) above as per cost allocation policy. Midrise employee benefits expenses were allocated to 4(f).*

	2020	2019
	$	$
Program expenses (continued)		
(j) Matchable Expenses		
Promoting wood products	590,354	679,965
Aligning products to market needs	2,291,872	4,614,751
Assisting value chain optimization	692,541	1,045,835
Resource availability and risk	1,302,609	1,508,660
Decision making and capability	1,004,520	1,344,495
Levies and other not matchable expenses	(383,658)	(136,215)
	5,498,238	**9,057,491**
Commonwealth Matching (total matchable divide by 2)	**2,749,119**	**4,528,746**

5 Cash and cash equivalents

Cash on hand	200	200
Cash at bank	1,168,413	2,497,946
Short-term bank deposits	3,000,000	4,000,000
Total cash and cash equivalent	**4,168,613**	**6,498,146**

9 Trade and other receivables

Commonwealth matching	362,052	1,145,955
Levies receivable	254,504	199,167
Interest receivable	26	282
Prepayments	30,952	20,728
Voluntary contribution	73,400	-
Voluntary matching	820,119	312,653
Other revenue	58,800	7,700
GST receivable	-	523,790
Total trade and other recievables	**1,599,853**	**2,210,275**

8 Other financial assets

Long term bank deposits	7,829,500	3,129,500
Interest receivable	23,957	15,983
Total other financial assets	**7,853,457**	**3,145,483**

8 Furniture and equipment

Office equipment		
At cost	251,299	287,910
Less accumulated depreciation	(183,461)	(198,339)
Total office equipment	**67,838**	**89,571**
Improvements		
At cost	92,551	102,551
Less accumulated depreciation	(66,785)	(59,143)
Total improvements	**25,766**	**43,408**
Right of Use Asset		
At cost	186,451	-
Less accumulated depreciation	(64,020)	-
Total Right of Use Asset	**122,431**	-
Total furniture and equipment	**216,035**	**132,979**

Furniture and equipment (continued)

(a) Movements in Carrying Amounts

Reconciliations of the written down values at the beginning and end of the current and comparative financial years are set out below:

	Right of Use Asset	Office Equipment	Improvements	Total
		$	$	$
Balance at 30 June 2018	-	97,462	58,192	155,654
Additions	-	22,051	-	22,051
Depreciation expense	-	(29,941)	(14,785)	(44,726)
Balance at 30 June 2019	**-**	**89,572**	**43,407**	**132,979**
Balance at 30 June 2019	-	89,572	43,407	132,979
Impact of adoption of AASB 16	179,824	-	(4,284)	175,540
Balance at 30 June 2019 - restated	**179,824**	**89,572**	**39,123**	**308,519**
Additions	6,627	10,272	-	16,899
Write offs	-	(2,043)	-	(2,043)
Depreciation expense	(64,020)	(29,963)	(13,357)	(107,340)
Balance at 30 June 2020	**122,431**	**67,838**	**25,766**	**216,035**

	2020	2019
	$	$
9 Trade and other payables		
Trade payables	2,733,084	1,718,211
	2,733,084	**1,718,211**
Other payables & accruals		
Audit fee	17,050	15,000
PAYG tax & FBT (BAS)	84,999	48,856
GST payable	370,272	-
	472,321	**63,856**
Total trade & other payables	**3,205,405**	**1,782,067**

10 Provisions

	Annual Leave	Long Service Leave	Make good of premises	Total
	$	$	$	$
Balance at 30 June 2018	134,128	344,376	10,000	**488,504**
Additional provisions	-	80,083	-	**80,083**
Amounts used	(25,137)	-	-	**(25,137)**
Balance at 30 June 2019	**108,991**	**424,459**	**10,000**	**543,450**
Balance at 30 June 2019	108,991	424,459	10,000	**543,450**
Impact of adoption of AASB 16	-	-	(370)	**(370)**
Balance at 30 June 2019 - restated	**108,991**	**424,459**	**9,630**	**543,080**
Additional provisions	9,415	-	133	**9,548**
Amounts used	-	(5,402)	-	**(5,402)**
Balance at 30 June 2020	**118,406**	**419,057**	**9,763**	**547,226**

	2020	2019
	$	$

10 Provisions (continued)

Analysis of total provisions		
CURRENT		
Employee benefits - annual leave	118,406	108,991
Employee benefits - long service leave	355,824	343,443
	474,230	**452,434**
NON-CURRENT		
Employee benefits - long service leave	63,233	81,016
Make good of premises	9,763	10,000
	72,996	**91,016**
Total provisions	**547,226**	**543,450**

11 Other liabilities

CURRENT		
Lease incentive liability	-	24,286
Deferred revenue	-	3,224,034
Grower research advisory committee	-	535,036
Growers' collaboration fund	-	93,302
	-	**3,876,658**
NON-CURRENT		
Lease incentive liability	-	48,570
Provision for probable claim	-	300,000
	-	**348,570**
Total other liabilities	-	**4,225,228**

The adoption of AASB 15 introduced the new term 'contract liabilities' to represent the company's obligation to transfer goods or services to a customer for when consideration has been received in advance of satisfying the company's performance obligation. As such, the Deferred Revenue, Grower Research Advisory Committee and Grower's Collaboration Fund balances have been separately presented as Contract Liabilities in Note 12 as at 30 June 2020 from Other Liabilities in Note 11 as at 30 June 2019.

The adoption of AASB 16 resulted in a reduction of the Lease Incentive Liability to zero and the Lease Liability separately presented in Note 13.

	2020	2019
	$	$

12 Contract liabilities

Contract liabilities		
Midrise program contribution	279,209	-
NIFPI grants	3,891,310	-
Other Government grants	214,722	-
Grower research advisory committee	56,113	-
Growers' collaboration funds	843,507	-
Woodsolutions national program	18,295	-
	5,303,156	-

	2020	2019
	$	$
13 Lease liabilities		
CURRENT		
Lease liability	90,021	-
	90,021	-
NON-CURRENT		
Lease liability	78,789	-
	78,789	-
Total lease liabilities	**168,810**	-
14 Cash Flow information		
Reconciliation of Cash Flow from operations with profit after income tax		
Net income for the year	(822,777)	616,582
Depreciation, amortisation and impairments	105,438	44,726
Unwinding of interest on lease liability and make good provision	11,334	-
Impact of adoption of AASB 16	73,223	-
Change in operating assets and liabitlities		
(Increase) / decrease in trade and other receivables	610,422	808,513
(Increase) / decrease in interest receivables	(7,974)	16,468
Increase in trade payables and other payables	1,423,338	499,266
Increase / (decrease) in provisions	3,776	54,946
Increase / (decrease) in other liabilities	(4,225,228)	1,676,273
Increase / (decrease) in contract liabilities	5,303,156	-
Cash flow from operations	2,474,708	3,716,774

15 Key management personnel compensation

Any person(s) having authority and responsibility for planning, directing and controlling the activities of Forest and Wood Products Australia Limited, directly or indirectly, including any director (whether executive or otherwise) of that entity is considered key management personnel.

The totals of remuneration paid to key management personnel (KMP) of the company during the year are as follows:

	2020	2019
	$	$
Aggregate compensation	615,697	595,526

16 Related party transactions

Key management personnel

Disclosures relating to key management personnel are set out in note 15.

Transactions with related parties

Various project expenditures were made to the following director related entities. The directors involved took no part in any relevant decisions of the Board. The directors related to the various entities are listed next to them.

	2020	2019
	$	$
Payment to related parties:		
J.W. Gottstein Memorial Trust (J.Simon, B.Farmer)	2,000	2,000
HIA Manufacturers and Suppliers Council (J. Simon)	5,950	22,000

Related party transactions (continued)

	2020	2019
	$	$
Income from related parties:		
AKD Softwood (C.Briggs)	-	94,000
Hyne Timber (K. Fowden)	41,620	15,817
Timberlands Pacific (J. Henneberry)	29,775	11,000
Allen Taylor (S. Dadd)	1,000	-
Boral Ltd (S. Dadd)	-	7,000
PF Olsen (C.Taylor)	116,864	14,077
Highland Pine Products Pty Ltd (S. Dadd)	9,000	10,000

Receivable from and payable to related parties
There were trade receivables from or trade payables to related parties at the current and previous reporting date.

	2020	2019
	$	$
Current receivables:		
Hyne Timber (K. Fowden)	-	15,817
Allen Taylor (S. Dadd)	1,100	-
PF Olsen (C. Taylor)	19,580	-
Timberlands Pacific (J. Henneberry)	5,500	-

Loans to/from related parties
There were no loans to or from related parties at the current and previous reporting date.

17 Contingent assets and contingent liabilities

There were no contingent assets and contingent liabilities as at 30 June 2020 and 30 June 2019.

18 Amounts guaranteed

The Company has issued a guarantee in the amount of $29,500 in favour of Parkside Properties Pty Ltd with respect to an agreement for leased premises at Level 11, 10-16 Queen Street, Melbourne. The guarantee is held in term deposit with Commonwealth Bank of Australia.

19 Operating Lease Commitments (non-cancellable)

	2020	2019
	$	$
By Maturity		
Operating lease commitments		
Within one year	9,990	140,362
One to five years	-	270,749
	9,990	**411,111**

NB: Commitments are GST inclusive where relevant.
1 Operating leases included are effectively non-cancellable and comprise leases for office accommodation.
Leasing arrangement: Lease payments are subject to annual increase in accordance with upwards movements in the Consumer Price Index.

Operating lease commitments included leases under non-cancellable operating lease expiring within 12 months.

20 Project of commitments

	2020	2019
	$	$
By Maturity		
Project commitments		
One year or less	2,123,693	1,251,095
From one to five years	1,817,182	2,750,807
	3,940,875	**4,001,902**

NB: Commitments are GST inclusive where relevant.

21 Events after the reporting period

The impact of the Coronavirus (COVID-19) pandemic is ongoing and while it has been financially positive for the company up to 30 June 2020, it is not practicable to estimate the potential impact, positive or negative, after the reporting date. The situation is rapidly developing and is dependent on measures imposed by the Australian Government and other countries, such as maintaining social distancing requirements, quarantine, travel restrictions and any economic stimulus that may be provided.

No matter or circumstance has arisen since 30 June 2020 that has significantly affected, or may significantly affect the company's operations, the results of those operations, or the company's state of affairs in future financial years.

22 Company details

The registered office of the Company is:

Forest and Wood Products Australia Limited
Level 11, 10-16 Queen Street
Melbourne Victoria 3000

Directors' Declaration

In accordance with a resolution of the directors of Forest and Wood Products Australia Limited, the directors declare that:

In the directors' opinion:

- the attached financial statements and notes comply with the Australian Charities and Not-for-profit Commission Act 2012 ("ACNC Act"), the Australian Accounting Standards - Reduced Disclosure Requirements, the Australian Charities and Not-for-profit Commission Act 2012 ("ACNC Act") and other mandatory professional reporting requirements;
- the attached financial statements and notes give a true and fair view of the company's financial position as at 30 June 2020 and of its performance for the financial year ended on that date; and
- there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

This declaration is made in accordance with a resolution of Board of Directors.

On behalf of the directors

Director
John Simon

Director
Alaric Sinclair

Dated this 27th day of August 2020

RSM

RSM Australia Partners

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INDEPENDENT AUDITOR'S REPORT
To the Members of Forest and Wood Products Australia Limited

Opinion

We have audited the financial report of Forest and Wood Products Australia Limited ("the Company"), which comprises the consolidated statement of financial position as at 30 June 2020, the consolidated statement of comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion the accompanying financial report of the Company is in accordance with Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012* ("ACNC Act"), including:

(i) giving a true and fair view of the Company's financial position as at 30 June 2020 and of its financial performance for the year then ended; and

(ii) complying with Australian Accounting Standards- Reduced Disclosure Requirement and Division 60 of the *Australian Charities and Not-for-profits Commission Regulation 2013*.

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Company in accordance with the auditor independence requirements of the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

The directors are responsible for the other information. The other information comprises the information included in the Company's annual report for the year ended 30 June 2020 but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards – Reduced Disclosure Requirements and the *Australian Charities and Not-for-profits Commission Act 2012* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Company to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, Sindividually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

A further description of our responsibilities for the audit of the financial report is located at the Auditing and Assurance Standards Board website at: http://www.auasb.gov.au/auditors_responsibilities/ar4.pdf. This description forms part of our auditor's report.

RSM AUSTRALIA PARTNERS

R B MIANO

Dated: 2 September 2020
Melbourne, Victoria

FWPA Members

As of 30 June 2020

Full Member Companies

A G Brown Sawmill Pty Ltd
ACT Environment, Planning and Sustainable Development Directorate – Departmental
Agriwealth Contracting Pty Ltd
AKD NSW PTY LTD
AKD Queensland Pty Ltd
AKD Victoria Pty Ltd
Albany Plantation Export Company Pty Ltd
Allied Timber Products Pty Ltd
Alpine Mdf Industries Pty Ltd
ANZFIF Sub 1 (Australia New Zealand Forest Investment Fund)
ANZFOF Sub1 (Australia New Zealand Forest Operating Fund)
Associated Kiln Driers Pty Ltd trading as A.K.D. Softwoods
Austral Plywoods Pty Ltd
Australian Bluegum Plantations Pty Ltd
Australian Solar Timbers
Australian Sustainable Hardwoods Pty Ltd
Australian United Timbers Pty Ltd
Australian Wood Panels Pty Ltd
Auswest Timbers Pty Ltd
AW Moran Sawmilling Pty Ltd
Baradine Sawmilling Co Pty Ltd
Bayswood Timber Wholesalers Pty Ltd
Big River Group Pty Ltd
Birnam Forests Pty Ltd
Bluebat
Boral Timber Division
Borg Panels
Briggs Veneers Pty Ltd
Britton Bros Pty Ltd
Bunbury Fibre Exports Pty Ltd
Bunbury Fibre Plantations Pty Ltd
Bunbury Treefarm Project
Byjuke partnership
Carter Holt Harvey Woodproducts (Southern Region) Pty Ltd
Carter Holt Harvey Woodproducts (Central and Northern Regions) Pty Ltd
Carter Holt Harvey Woodproducts Australia
Clockworkbovine
Cotswold Investments Pty Ltd
D&R Hendersen Pty Ltd
D.M and L.A Pratt
D.S Fuller & L.R Fuller trading as Dale & Lindsay Fuller Partnership
Dale & Meyers Operations Pty Ltd trading as DTM Timber
Darren Bott
David Neville Calvert
Dindas Australia Pty Ltd
DMK Forest Products Pty Ltd
Endeavour Foundation trading as Nangarin Timbers
Enrights Sawmill
Environmental Forest Farms Management Ltd
Fenning Investments Pty Ltd
FGI Australia Pty Ltd
Forest Products Commission (WA)
Forest Strategy Pty Ltd
Forestry Corporation
ForestrySA
Forico Pty Ltd
FourSquare Timbers Pty Limited
Frostpine
G.L. & V.N. Barber Pty. Ltd.
Garry Davey Timber Cutting
George Fethers & Co. Trading Pty Ltd
Gippsland Logging & Earthmoving Pty Ltd
Green Triangle Forest Operating Sub Trust
Green Triangle Forest Products
Greensill Bros Pty Ltd
Greenvalley Pty Ltd
Gunnedah Timbers Pty Ltd
Gunnersens Pty Ltd
GW & NI Saunders Sawmill Pty Ltd
Hallmark Oaks Pty Ltd
Hancock Victorian Plantations Pty Ltd (HVP)
Henson Sawmilling Pty Ltd
Hexan Holdings Pty Ltd trading as Whiteland Milling
Highland Pine Products Pty Ltd
HQPlantations Pty Ltd
Hume Forests Limited
Hurford Sawmilling Pty Ltd
Hurford Wholesale Pty Ltd
Hyne Timber
Injune Cypress
Intech Operations Pty Ltd trading as Mucherts Sawmill (QLD)
Ironwood Taree Pty Ltd
ITI (NSW) Pty Ltd
ITI (Queensland) Pty Ltd
ITI (SA) Pty Ltd
ITI (Victoria) Pty Ltd
ITI (WA) Pty Ltd
J Notaras & Sons Pty Ltd
J Wright & Sons Pty Ltd
Jarrah Select Pty Ltd
Jarrahwood Australia Pty Ltd
Jeff and Lilian Ang
Jelfor Timbers Pty Ltd
Jetstar Enterprises Pty Ltd trading as Permapole
John Cook & Sons Pty Ltd
Kangaroo Island Plantation Timbers
Kilner Creek Company Trust
Koppers Wood Products Pty Ltd
KSI Sawmills Pty Ltd
LA & KE Barnett
LM Hayter & Sons Pty Ltd
Lormier Timber Pty Ltd trading as Davids Timber
Lotus Oaks Pty Ltd
Machin's Sawmill Pty Ltd
Mathews Timber Pty Ltd
McCormack Demby Timber Pty Ltd
McDonnell Industries Pty Ltd
McKay Timber
Meyer Timber Pty Ltd
Middlesex Mill Pty Ltd
Midway Limited
Millmerran Timbers Pty Ltd
Montana Timber Holdings Ltd
Moran Logging Company Pty Ltd
Morgan Sawmill Jamestown
Morgan Sawmill Jamestown
MRG Connections Pty Ltd
Nannup Timber Processing (NTP)
New Forests Asset Management Pty Ltd (ABN 42 114 545 283) trading as The Trust Company (Australia) Ltd (ABN 21 000 000 993)
Norske Skog Paper Mills (Australia) Ltd
NSFP Smartfibre Pty Ltd
Onefortyone Plantations Pty Ltd
Oregon Sales Pty Ltd trading as Timbeck Cedar Products
Parkside Building Supplies Pty. Ltd.
Penrose Pine Products Pty Ltd
Pentarch Forest Products Pty Ltd
Planet Timbers (WA) Pty Ltd
Porta Mouldings Pty Ltd
Porters Sawmilling Pty Ltd
Portland Pine Products
Private Forestry Service Queensland
Queensland Department of Agriculture and Fisheries
Radial Timber Australia
Ravenshoe Timbers Pty Ltd
Redmond Sawmill
Regional & Rural
Reliance Forest Fibre
Ridgewood Timber Pty Ltd
RMS Australian Forests Assets Pty Ltd
Ryan & McNulty Pty Ltd
S A Relf & Sons Pty Ltd
SA Pine Pty Ltd
Sarawood (Aust)
Schiffke Sawmill Pty Ltd
SFM Environmental Solutions
Simmonds Lumber Pty Ltd
South East Fibre Exports Pty Ltd
South East Pine Sales Pty Ltd
Southern Pacific Fibre
Stora Enso Australia Pty Ltd
Sustainable Timber Tasmania
Swan Le Messurier Pty Ltd
Ta Ann Tasmania Pty Ltd
Tarmac Sawmilling Pty Ltd
TASCO trading as Dongwha Timbers Pty Ltd
Tasman KB Pty Ltd
The Hesmat Unit Trust
The Laminex Group
The Timber Treaters Trust
Tilling Timber Pty Ltd
Timberlands Pacific Pty Ltd
Timberlink Australia
Timothy J Mitchell
Towers Timber trading as Wambenger
Treated Pine Distributors trading as Waverly Consulting
Urgenty Pty Ltd trading as Mary Valley Timbers
Ventech Australia
VicForests
VIDA Wood Australia Pty Ltd
Visy Pulp & Paper Pty Ltd
WA Chip & Pulp Co Pty Ltd
Wade Sawmill Pty Ltd
Weathertex Pty Ltd
Wesbeam Pty Ltd
Wespine Industries Pty Ltd
Whiteheads Timber Sales Pty Ltd
Wild Partnership
Williams Timber Pty Ltd
Wilton Logging Pty Ltd
Woodpanels International Pty Ltd
Wright Forest Products Pty Ltd

Associate Member Companies

A G Brown Sawmill Pty Ltd
Associate Member Companies
A E Girle & Sons
AG Trusses
Australasian Timber Flooring Association
Australian Forest Contractors Association
Australian Forest Products Association (AFPA)
Australian Timber Importers Federation
Biomass Heating Australia
BIS Shrapnel Pty Ltd
Everist Timber Pty Ltd
Frame & Truss Manufacturers Association of Australia Ltd (FTMA)
Keith Timber Group
Kennedys Classic Aged Timbers Pty Ltd
Koppers Performance Chemicals Australia
Lendlease DesignMake Pty Ltd
Lonza Wood Protection trading as Arch Wood Protection (Aust) Pty Ltd
Margules Groome Consulting
McInnes International Pty Ltd
Merriwa Timbers
Multinail Australia Pty Ltd
Omega Consulting
Poyry Management Consulting (Australia) Pty Ltd
Pryda
Regional Development Australia Limestone Coast Incorporated
Responsible Wood
Rodpak
Rothoblaas SRL
Stephen Mitchell Associates
The Timber Preservers Association of Australia
Timber & Building Materials Association (Aust.) Ltd
Timber Corporation PTY LTD
Timber Development As. (NSW) Ltd
Timber Insight Pty Ltd
Timber Merchants Association (Victoria)
Timber Queensland Ltd
Victorian Association of Forest Industries (VAFI)
Wood Products Victoria Ltd
XLam Pty


Forest & Wood
Products Australia