



Australian Government

GROWING A BETTER AUSTRALIA

A billion trees for jobs and growth



Wood – the ultimate renewable

An Australian Government Plan

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Cataloguing data

This publication (and any material sourced from it) should be attributed as: Department of Agriculture and Water Resources 2018, Growing a better Australia – A billion trees for jobs and growth, Canberra. CC BY 4.0. ISBN 978-1-76003-174-9 (printed)

This publication is available at agriculture.gov.au/forestry

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FOREWORD

Australia has a proud forestry history that can be traced back to its nation-building origins.

Our forests are continually growing wood and fibre that provide products we all use in our daily lives.

Our forests provide products that are natural, recyclable and renewable, making them an excellent substitute for more carbon-intensive materials in an increasingly waste-conscious society.

Forestry also provides stable, long-term employment in rural towns around Australia.

About 70,000 Australians are directly employed in the growing and processing of our forest products – and tens of thousands more whose jobs are indirectly supported by forestry. Annually, the sector generates \$23 billion¹ of economic activity.

But there is a large challenge which Australia needs to address.

Despite our natural advantage in growing trees in many parts of Australia, to grow our forest industries we need to capitalise on the increasing domestic and global demand for timber and wood-fibre².

Domestically this increased demand is being most keenly felt by home-builders relying heavily on our softwood saw-millers and timber processors around Australia to build the next generation of homes.

As Australia's population grows, and with global demand for timber expected to quadruple by 2050³, this challenge will get even more pronounced unless something changes.

From high-rise timber construction to replacing plastics with new and emerging wood-fibre based materials, global demand for wood and fibre is continuing to increase.

Australia's forest industries are well placed to seize this opportunity. Through this forest industries plan, the Australian Government will work in partnership with industry to ensure Australia reaps the benefits of this forest fibre boom.

We sustainably manage our native forests (only 0.06 per cent is harvested annually and then regenerated) and the almost 2 million hectares of plantation forests nestled in key regions of our nation.

We must create the setting to significantly increase new plantation forestry plantings to deliver confidence to our forestry-dependent communities, that they may have a bright future.

A billion more plantation trees – the right trees at the right scale in the right places

Australia is an attractive investment destination for international forest sector investors because of market demand and our robust and transparent legal, environmental and economic standards.

Numerous studies show the need for 400,000 hectares of new plantations over the next decade to meet Australia's demand for wood⁴.

This amounts to a billion new trees planted to produce more timber and wood-fibre.

This target is in addition to the 70 million trees planted every year to replace those trees harvested in Australia's plantations.

Growing the size of Australia's plantation estate will provide confidence to our forest industries that they will have the resource security they need into the future to underpin their investment decisions for decades to come.

The larger existing plantations are nestled in key plantation regions such as Tumut and Oberon in New South Wales; Gippsland and Colac in Victoria; Mt Gambier in South Australia; Maryborough in Queensland; Bunbury in Western Australia; and northern and southern Tasmania.

Farmers will play a vital role

The next generation of plantation growth in Australia will also rely on, and reward, our farmers.

The Government is determined to ensure that we support our farming communities and regional centres, and they will be a centre piece of this forest industries plan.

Commonwealth Scientific and Industrial Research Organisation (CSIRO) research tells us what farmers already know – trees in the right places can improve the productivity of their crops and stock as well as provide a range of additional benefits such as reducing erosion, reducing salinity, providing windbreaks, and enhancing the amenity of the property.

Working with farmers to secure a long-term 'wood bank' for the forest industries' future will be an economic win for all the parties involved, the farmers and the forest industries. At maturity, when the trees have been established in the right quantities and in the right locations, they will

provide wood and fibre resources for processing facilities and income for farming families.

The native forest sector will remain an important part of the industry going forward, with special timbers to be harvested from appropriate regions in an ethical way which brings the community along and wins important social licence.

There are huge opportunities for Indigenous employment on country with harvesting done in a sensitive and sustainable manner.

The Coalition Government is delighted to deliver this new plan to launch forest industries in this nation into a new and brighter future as a growth engine for regional Australia.

We are committed to building a stronger economy to provide jobs for Australians, and forest industries have a major role to play.

This plan and the 2018 Budget commitment of \$20 million over four years demonstrate how the Coalition Government is supporting forest industries to meet the challenges of the future and underpinning growth in the renewable timber and wood-fibre industries.

The vision and the measures contained in this plan will provide industry with the certainty it needs to invest in its own future.



The Hon. David Littleproud MP
**Minister for Agriculture and
Water Resources**



Senator the Hon. Richard Colbeck
**Assistant Minister for Agriculture
and Water Resources**



OUR GOAL

A billion new plantation trees

Over the next decade, Australia will need a billion new trees in forestry plantations to meet our future needs for wood and fibre.

Technological advances are unlocking an array of new and exciting uses of materials derived from trees, such as:

- engineered wood products
- the construction of high-rise buildings entirely out of wood
- food additives
- pharmaceutical and medical applications
- biofuels derived from wood that can replace fossil fuels
- wood plastics that can be turned into anything from car components to recyclable replacement plastic bags.

These new applications for wood and fibre will place even more pressure on Australia's existing forest resources.

Investments in planting trees today will pay dividends for future generations as these trees mature and become available for wood and fibre supply.

A billion new plantation trees will boost the Australian economy and drive jobs and growth in our rural industries and regional manufacturing.

These trees will provide timber for the new homes we will need in the coming years, as well as the wood and fibre products we use every day and will need into the future.



To support the delivery of this goal for forest industries, the Australian Government is focusing on:

- Driving plantation growth by creating Regional Forestry Hubs, with a focus on existing softwood plantation and processing regions. The hubs will identify new plantation opportunities, ensuring the right trees are planted in the right places, add value to existing infrastructure and processing capability and maximise community participation
- Delivering the policy mechanisms and on-ground support within the hubs, which will give farmers the confidence needed to participate in profitable farm forestry ventures
- Reducing barriers to forestry expansion and supporting the planting of more trees, with a strong focus on the hubs
- Using our forestry resources smarter, to help industry extract greater value from our all forest products
- Growing community understanding of forestry, to build public support for sustainable forestry activities in Australia.

New jobs and new growth

Establishing an additional billion new plantation trees is an investment in growing new jobs across Australia.

These jobs will be in rural and regional Australia as well as our cities. The jobs will be across the value chain, from establishing and managing plantations through to manufacturing wood and fibre products, to research and development.

Today, Australian forest industries employ some 70,000 people directly and tens of thousands more indirectly.

If our plantation estate expands by a billion trees, industry has projected that 18,000 jobs would be created over the next 10 years in our forest industries⁴.



GROWING OUR FOREST INDUSTRIES

The Australian Government, in the 2018 Budget, announced funding of \$20 million between 2018–19 and 2021–22, to underpin growth in Australia's renewable timber and wood-fibre industry.

This funding will support Australia's forestry sector in growing associated industries and in making an even greater contribution to Australian jobs and the broader economy.

It will be focused on regional forestry hubs where there is the potential to create regional jobs and support regional communities while adding value to our wood and fibre industries.

The Australian Government
is committed to growing
our forest industries

This plan includes funding to:

- transform farm forestry as a commercial enterprise supplying timber to Australia's forestry sector
- enable the identification, improvement and use of existing forest resources on Indigenous owned and managed land, and privately owned land
- drive further innovation, research and development of new products and value-adding in forest industries
- determine opportunities and gaps in key Regional Forestry Hubs.



CREATING REGIONAL FORESTRY HUBS

Australia's forest-growing and processing industries are clustered in around 30 key regions that have productive forests, processing facilities, and access to transport and markets.

A future forest industry in Australia needs to be globally competitive, and key to this is providing long-term security to underpin investment, innovation and growth.

Managing our forest resources and better utilising their products depends on having up-to-date knowledge on where the resources are and the potential for wood and fibre supply that they have.

For example, large tracts of forested lands are held in private or Indigenous ownership or management across Australia. Working together to better understand the potential for these lands to produce commercial wood supplies can support the forestry sector, landowners and communities.

The Australian Government is investing with the Victorian Government in upgrades to three vital regional freight routes in one of Australia's major forestry, farming and mining regions, the 'Green Triangle'⁵.

Potential plantation hubs are likely to occur in areas where the greatest concentrations of plantations already exist.

The exact location, composition and size of forestry hubs will, however, be determined in consultation with industry, state and local governments, and other key stakeholders.



The Australian Government supports plantation expansion in the right places, at the right scale and with the right species

The Australian Government will support the analysis of Regional Forestry Hubs across Australia, with the regions identified in partnership with industry, to turbo-charge forest industries by securing new resource opportunities.

It will work with industry and all levels of government to identify infrastructure needs and regulatory barriers.

"The NFF [National Farmers Federation] is pleased to be working with AFPA [Australian Forest Products Association] on a rejuvenated quest to see farm forestry tree plantings become a larger part of our farm landscape."

Ms Fiona Simson – President of the National Farmers Federation⁶

Detailed assessments of key Regional Forestry Hubs will:

- analyse constraints that affect the productivity and efficiency of the forestry sector
- pinpoint opportunities for future investment in infrastructure and technology, and areas for potential expansion by forest industries
- identify and support business cases for the investment in new infrastructure, such as roads, bridges, ports, telecommunications and training facilities, thereby assisting forest service industries better plan their futures
- determine the potential for future plantation expansion within appropriate transport distances and near other existing sources of wood and fibre.



Actions

The Australian Government will support the development of Regional Forestry Hubs that will turbo-charge growth in forest industries in regional Australia by:

- piloting the creation of a Regional Forestry Hub, followed by the roll out to other regions across the country
- working with industry, state and local governments, other key stakeholders, and the community to undertake assessments of the production forestry resources, processing capacity and infrastructure needs and limitations in key Regional Forestry Hubs
- undertaking an inventory of farm forestry resources on private land to determine their potential to supply wood for the processing sectors
- working with states and industry to help farmers explore opportunities for expanding farm forestry, creating future wood and fibre supplies, improving linkages with the forestry industries, and increasing economic returns for farmers
- working with state governments, private native forest owners and interested Indigenous communities to unlock potential timber supply, and to deliver economic returns to landowners.



REDUCING BARRIERS TO FORESTRY EXPANSION

Australia's almost two million hectare plantation estate has not grown in size in the last 10 years. It currently occupies 0.25 per cent of Australia's land area.

More than 75 per cent of Australia's plantation forests are owned by the private sector. The vast majority of these are replanted after harvest.

Investment decisions to establish new areas of plantation are complex; investors need to consider issues including land price, long growth times and pest and climate risks.

The forest sector has projected that Australia needs to establish approximately a billion trees (equivalent to 400,000 hectares) of new plantations over the next decade to meet our future demand for wood⁴.

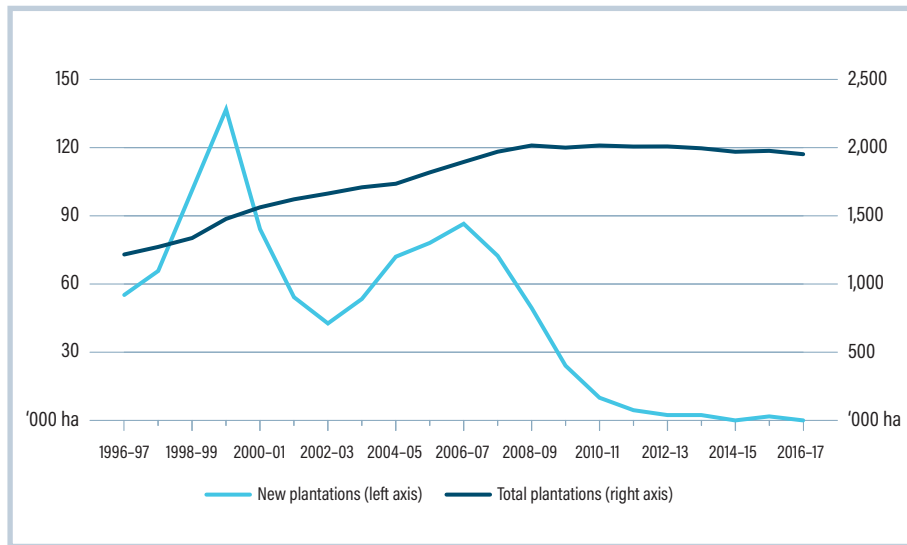
Planting new trees in commercial plantations and through farm forestry will provide greater certainty and confidence for our forest industries,

which in turn will drive investment, innovation and jobs growth. It is important that farm forestry be fully integrated into the existing commercial supply chains.

If the forest industry plants one billion new trees over the next 10 years an estimated additional 18 megatonnes of carbon dioxide will be sequestered per year by 2030.⁷

The National Farmers Federation's support for the inclusion of farm forestry tree plantings as a supplement to primary agricultural purposes confirms that farmers are poised to support a bigger part of tree growing in our landscape.

Total and new plantation area⁸



Plantation trees on farms are investments not only for the present, but for future generations.

There are opportunities to integrate new tree plantings on farms which will complement existing farm activities. Selecting the right trees at the right scale can improve agricultural productivity, and diversify farmer incomes. Trees also store carbon, provide shade and shelter, improve soil stability and mitigate flooding.



The Australian Government will take action to remove impediments to, and enable the sustainable expansion of, plantations.

Actions

The Australian Government will support a goal of adding a billion new plantation trees by:

- undertaking a review of the water requirements in the Emissions Reduction Fund (ERF) farm forestry and plantation methodologies to enable forestry to fully participate in the ERF
- working with industry and state governments to allow Regional Forestry Hubs to maximise their capacity to accommodate plantation expansion in the right places
- reviewing other legislation, policies and processes that may be unintentionally restricting plantation expansion.



USING OUR FOREST RESOURCES SMARTER

Our modern forest industries invest considerable resources in innovation, research and development to maximise the value of the wood grown and harvested from Australia's forests.

New developments in science and technology are leading to greater productivity from our forests and new products from processed wood.

Australia's forestry industries are becoming more technologically advanced, from the forest to the factory floor. A wide array of technologies including drones, sensors, laser scanners, tree breeding and big data are being used to better understand the structure of our forests, the potential wood that will be available and the products that can be created.

These new technologies are helping to extract greater value from all parts of the tree.

Innovation through research and development is required across all links in the value chain.

In our plantation forests, additional research is required to grow the best trees possible for Australian conditions.

In our processing plants, research is required to support continual improvement and the transition to a smarter, higher value industry that extracts greater value from all parts of the tree.

Research and new technologies are providing new and innovative products through advanced manufacturing in fields such as bioenergy, biochemicals and artificial intelligence, and from new engineered solutions.

Domestic manufacturing with wood creates and maintains jobs, especially in regional and rural Australia

Managing plantation forests, creating wood products, and developing new, innovative processes and products needs a qualified and skilled workforce.

Attracting students and offering courses in the relevant skills will support the forestry sector in developing the skilled workforce needed to grow.

In 2017–18 the Australian Government provided Forest and Wood Products Australia with \$5.7 million in matching funding for eligible research, development and extension projects.

Actions

To support the development of new forest products, the Australian Government will:

- develop at least two additional research centres of the National Institute for Forest Products Innovation (NIFPI), in partnership with states and industry
- establish a National Steering Committee to oversee the NIFPI centres, providing national coordination and guidance, enabling the nodes to move towards specialisation in priority areas for industry, such as bio-products, hardwood, softwood plantation and social license
- work with Forest and Wood Products Australia to support ongoing research, development and extension activities associated with the forestry industries
- support forestry education at secondary and tertiary levels and encourage education institutions to promote further uptake of forestry-related courses.

The Australian Government has invested \$4 million in partnership with the South Australian and Tasmanian governments and industry in two National Institute of Forest Products Innovation research centres at Mount Gambier and Launceston.





GROWING COMMUNITY UNDERSTANDING OF FORESTRY

Australians love the many and varied products that our sustainably managed forests and plantations produce, including timber flooring, framing timbers and bespoke furniture.

Continuous improvement in the management of our forests is vital to ensure that they are available both for today and into the future.

Few Australians realise that our native forest managers reseed and regenerate areas harvested, and that more than 70 million seedlings are planted each year by our plantation owners.

Our timber and fibre industry provides regional employment, as well as opportunities for recreation, amenity and the conservation of biodiversity.

More than 90 per cent of Australia's commercial native forest operations are independently certified (either under Responsible Wood or Forest Stewardship Council certification

schemes), demonstrating global leadership with respect to sustainable forest management practices.

Yet, research tells us that Australians have limited understandings of the management of our trees, and misconceptions regarding the sustainability of the sector.

To improve public understanding of forest management in Australia, we need to improve the transparency around our management practices.

We need to ensure that the post-harvest replanting and regeneration of our native production forests is effectively demonstrated to the public.

We need to promote an understanding that wood products sourced from our production forests are sustainable, carbon positive, renewable and recyclable.

Australia's forest industries are part of the solution to climate change

Ensuring transparency in the management of our forests can demonstrate how the environment is being protected while showcasing the technology and innovations that forestry operators are adopting.

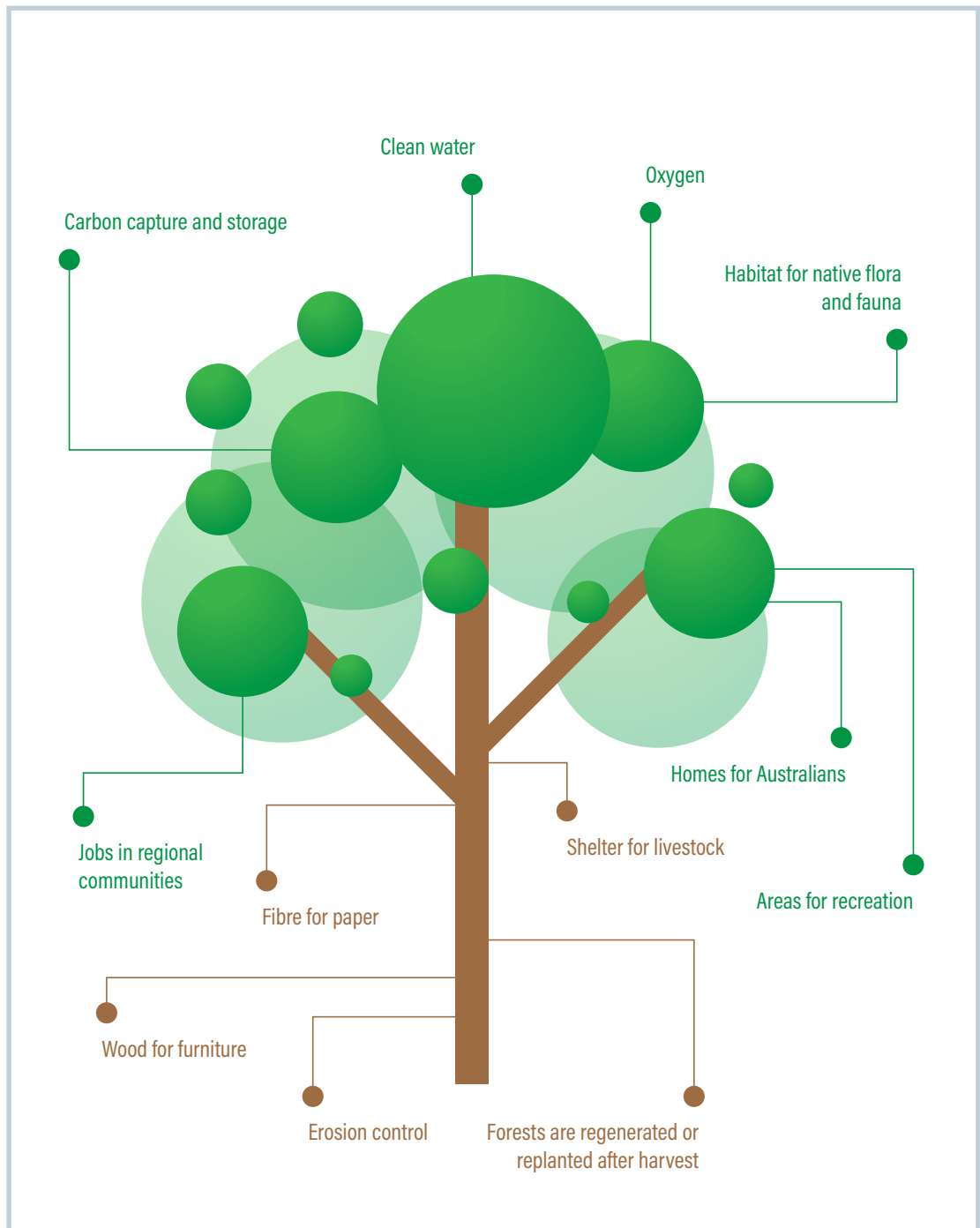
Actions

The Australian Government will assist in growing community understanding of forest management by:

- working with industry to ensure it meets community expectations and engages with a broad range of stakeholders in a manner that builds trust and confidence
- reporting on the management of Australia's forests and forest industries through the State of the Forests reports
- reporting on the management of native forests in the Regional Forest Agreements regions every five years.



BENEFITS OF TREES IN PRODUCTION FORESTS





Endnotes

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