



No credit required

Four examples of successful forestry transitions without market mechanisms

Logging in Tasmania's native forests should cease as soon as possible. The transition away from logging should not involve the use of carbon credits; the examples in this paper show that market mechanisms are at best a distraction from, and at worst a hinderance to, an effective transition.

Andrew Bakonyi

November 2023

ABOUT THE AUSTRALIA INSTITUTE

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. We barrack for ideas, not political parties or candidates. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

OUR PHILOSOPHY

New dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

OUR PURPOSE - 'RESEARCH THAT MATTERS'

The Institute publishes research that contributes to a more just, sustainable and peaceful society. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

5th Floor, 24 Davey St Hobart, Tasmania 7000 Tel: (02) 6130 0530 Email: mail@australiainstitute.org.au Website: www.australiainstitute.org.au ISSN: 1836-9014

ACKNOWLEDGEMENT OF COUNTRY

The Australia Institute Tasmania acknowledges that Tasmania was taken forcibly and unethically, and that Tasmanian Aboriginal people continue to suffer the consequences of this today. The Institute offers respect to Elders past and present.

Contents

Contents	1
Introduction	2
Carbon markets and native forestry transitions: a brief history	6
Victoria	9
Victoria: Carbon credits	9
Victoria: Background	11
Victoria: managing the transition	15
Western Australia	18
Western Australia: carbon credits	18
Western Australia: background	20
Western Australia: managing the transition	22
New South Wales and Bob Carr	25
New Zealand	28
Conclusion	31

Summary

Over the last five years, the governments of Victoria and Western Australia have both announced an end to logging in their respective native forests. The rest of Australia's states and territories are expected to follow suit as native forest logging becomes less and less economically viable, further dependent on government subsidies, and increasingly unpopular with the public.

As the state with Australia's largest native forestry sector, the question of how to transition away from native forest logging is especially important to Tasmania. Despite the Tasmanian government's refusal to countenance a ban on native forestry, there is already debate on how best to manage this transition, and some of this discussion has focused on the idea of generating carbon credits from the reduction in greenhouse gas emissions that would result from a cessation of logging.

This idea is not new; the Victorian government spent years exploring it before eventually deciding to proceed without it. The Victorian experience should serve as a cautionary tale, as ultimately all that the attempt to include carbon credits in the state's transition plan achieved was to slow that transition down unnecessarily.

More generally, the use of carbon credits in industry transitions is neither necessary nor especially desirable. It is dubious from an economic point of view, as it effectively means using one market mechanism to try to mitigate the failings of another—and the highly questionable integrity of most Australian Carbon Credit Units (ACCUs) only makes their use all the more problematic.

Neither Victoria nor Western Australia have relied on ACCUs in their transition plans. This briefing note examines both states' plans in detail, and also looks at two other examples of successful forestry industry transitions that made no use of market mechanisms: the wide-ranging expansion of New South Wales' national parks under Bob Carr's Premiership during the late 1990s and early 2000s, and the complete cessation of native forest logging on public land in New Zealand over the course of the 1980s and 1990s. All four examples serve to illustrate that industrial transitions must be planned assiduously and managed carefully—not left to the vagaries of the market.

Introduction

The recent bans on native forest logging in Victoria and Western Australia have renewed focus on achieving a nationwide end to the practice, particularly in the state with the largest native forestry sector—Tasmania.

The Tasmanian Government has so far refused to consider an end to native forest logging, declaring it a "sustainable success story".¹ Despite the Government's support, however, pressure is increasing on Tasmania's native forestry sector. Today, native forest logging in Tasmania occurs almost entirely within public forests. These are managed by state-owned logging company Forestry Tasmania, now trading as Sustainable Timbers Tasmania (STT), and its output has fallen by over 75% since 2002–03.²

The company has been kept afloat for decades by government subsidies. Before its rebranding and downsizing, STT produced cash deficits of \$562m over the 20-year period after the Tasmanian Regional Forest Agreement (RFA) was signed in 1997. The State and Federal Government and the sale of plantation assets funded these cash deficits. STT's more recent "paper profits" are underwritten by an annual \$12m state government grant for land and fire management services and questionable accounting practices relating to the book value of its forestry estate. When assessment is confined strictly to the performance of STT's core business, forestry practices, cash losses continue.³

As well as being a financial loss-maker for STT, logging native forests also has other, less quantifiable effects, including on other industries: experts suggest that established native forests reduce the risks of catastrophic bushfires and require less ongoing land management,⁴ while parts of Tasmania's booming tourism industry complain that

¹ 'Liberals Will Always Back Our Forestry Industry', Premier of Tasmania, accessed 31 October 2023, https://www.premier.tas.gov.au/site_resources_2015/additional_releases/liberals-will-always-backour-forestry-industry.

² 'ABARES 2022, Australian Forest and Wood Products Statistics, March and June Quarters 2022' (Canberra: ABARES series report, November 2022).

³ John Lawrence, 'STT Revisited', *Tasfintalk* (blog), 4 August 2023, https://tasfintalk.blogspot.com/2023/08/stt-revisited.html.

⁴ David Lindenmayer, Don Bradshaw, and Philip Zylstra, 'Coming of Age: Research Shows Old Forests Are 3 Times Less Flammable than Those Just Burned', The Conversation, 22 March 2022, http://theconversation.com/coming-of-age-research-shows-old-forests-are-3-times-less-flammablethan-those-just-burned-179571.

forestry activities impact eco-tourism operations and the marketing of the state as a clean, green destination. 5

Despite the company's name, STT's sustainability credentials are also highly questionable. The company has been refused key sustainability certification important for market access.⁶ Legal challenges against STT's native forestry are common,⁷ and native forest logging is the state's most significant sources of greenhouse gas emissions.⁸

With the clock seemingly ticking on Tasmania's native forestry operations, plans have emerged as to how to manage a transition to all-plantation forestry. One proposal is for this transition to be funded by monetising the resulting reductions in greenhouse gas emissions.⁹ This would be done by developing a methodology within Australia's carbon offset system for recognising the emissions saved by a halt in logging, and selling the resultant offsets to polluters—such as Australia's expanding fossil gas industry.

From an economic perspective, this proposal is unusual. The environmental and climate impacts of native forest logging and the social impacts of its cessation would generally be described by economists as examples of "market failure": the markets for forest products, labour, and other inputs have failed to incorporate the full costs of the operations and supply of the market. This leaves those impacts "external" to the market, and they are generally referred to as "externalities".

Economic textbooks typically call for government intervention when instances of market failure and externalities occur. Externalities such as climate change and biodiversity loss caused by the forestry industry are addressed through regulation,

⁵ 'Tourism Pressure Mounts on Tasmanian Government to End Native Forest Logging', ABC News, 9 November 2021, https://www.abc.net.au/news/2021-11-10/tourism-businesses-call-for-end-tasnative-logging/100607752.

⁶ Adam Morton and Adam Morton Environment editor, 'Native Forests: Why Logging in Tasmania and Victoria Is under Pressure', *The Guardian*, 22 August 2020, sec. Environment, https://www.theguardian.com/environment/2020/aug/23/native-forests-why-a-court-ruling-isanother-blow-to-logging-in-victoria-and-tasmania.

⁷ ""Just the Beginning": Blue Tier Group to Continue Logging Fight after Legal Setback', ABC News, 9 December 2022, https://www.abc.net.au/news/2022-12-09/blue-tier-group-to-continue-logging-fightafter-legal-setback/101755730.

 ⁸ Brendan Mackey et al., 'Net Carbon Accounting and Reporting Are a Barrier to Understanding the Mitigation Value of Forest Protection in Developed Countries', *Environmental Research Letters* 17, no. 5 (1 May 2022): 7, https://doi.org/10.1088/1748-9326/ac661b.

⁹ 'Forest Economics Congress: NEW A\$\$. CLASS – Blog', Mona, accessed 3 November 2023, https://mona.net.au/blog/2023/08/forest-economics-congress-new-a-class.

funding and other policy interventions planned in conjunction with industry and other stakeholders.

When addressing one market failure, it is unusual to introduce a new market to mitigate the problems caused by the first—particularly if the new market is as plagued by questions of integrity as Australia's carbon offset market has been in recent years. Expecting such a controversial mechanism to make significant contributions to the delicate social and economic policy task of industrial transition seems to prioritise hope over experience.

Despite the problematic logic of using market mechanisms to manage market failure, the Tasmanian proposal is not the first time this has been attempted—both Victoria and Western Australia have considered similar ideas. This paper discusses these examples, along with cases in New Zealand and NSW where more traditional industrial transition strategies have been followed. The conclusion is that market mechanisms are, at best, a distraction from planning industrial transition, and that pursuing this strategy in Tasmania is unlikely to result in an effective, efficient and equitable end to native forest logging.

Carbon markets and native forestry transitions: a brief history

Proposals for generating carbon credits from native forests as a market mechanism for those forests' protection emerged soon after the *Carbon Credits (Carbon Farming Initiative) Act 2011* was passed. These proposals came as part of the Carbon Pricing Mechanism, which was Australia's inaugural carbon market and operated as a capand-trade emissions trading scheme. The Carbon Farming Initiative was a voluntary offset scheme that generated carbon credits from approved projects to complement the Carbon Pricing Mechanism (CPM) and cover sectors that fell outside its mandate.

It was within this context that leading environmental law and policy scholar Andrew Macintosh published modelling for The Australia Institute in 2013, exploring carbon credits as a viable nationwide exit strategy from logging native forests.

In any event, the entire carbon market and regulatory environment was overhauled by the change in Government that took place after the 2013 federal election. By 2014, the Coalition Government replaced the CPM—under which polluters paid for their carbon emissions—with the Emissions Reduction Fund (ERF) and an expanded CFI framework. This "direct action" policy resulted in taxpayers becoming the primary purchasers of emission cuts, as the Australian Government used the fund to purchase "abatement" (emission reductions) from businesses and landholders.

The Safeguard Mechanism (SM) was also introduced as a regulatory framework under the ERF to limit the emissions from 215 of the nation's highest emitting sites, half of which are fossil fuel operations. This policy's poor design and enforcement have resulted in increased emissions and new greenfield fossil fuel projects. There have also been concerns since the ERF's inception about whether the fund is fit for purpose. These concerns have only intensified as the Fund has evolved into Australia's only legislated national climate policy.

Policymakers initially designed carbon credits to play a small role in Australia's multiprong approach to decarbonisation, designed as a tool of "last resort". Unfortunately, ACCUs have become the primary instrument found in the Australian climate action toolkit.

Under the ERF scheme, one ACCU represents one tonne of carbon dioxide avoided or sequestered from a project, provided that project uses an approved methodology. These methodologies vary from sector to sector. The land sector predominately

produces ACCUs from vegetation management activities, including the avoided deforestation method for private landholders (revoked in February 2023) and, most appositely for the forestry industry, the plantation forestry method.

The ERF is administered by the Clean Energy Regulator, a government body that develops methods, registers projects, checks compliance and issues ACCUs. The Clean Energy Regulator has never created an ACCU methodology for avoided native forest deforestation, although there are suggestions preliminary work on doing so was conducted by the Commonwealth during the mid-2010s.¹⁰

Without other climate reduction policies, ACCUs have become a key enabler of the growth in emissions from large industrial facilities covered under the SM and other firms voluntarily engaging in carbon markets to meet their corporate climate pledges or achieve carbon-neutral certification. In recent years, there has been a concerted effort to increase the number of ACCUs significantly to maintain the market equilibrium for low-cost ACCUs to match the market for the substantial increase in new emissions from numerous new fossil fuel projects, primarily from the gas industry. Large quantities of low-cost ACCUs are essential to these projects' commercial viability.

The Minister for Industry, Energy and Emissions Reduction announced in 2020 that the Government was speeding up all processes associated with new ACCUs coming online. The Government's signal encouraging more projects saw carbon credit project registrations increase tenfold between 2019 and 2022.

These additional risks to the integrity of ACCUs are concerning, given that their integrity was already very much open to question: Andrew Macintosh exposed the lack of integrity of ACCUs issued under the three main methodologies—accounting for 70% to 80% of all ACCUs—after stepping down as the Chair of the Emissions Reduction Assurance Committee, which oversees the CER¹¹.

The change in carbon credit usage from a Government purchasing abatement to a growing carbon market, driven by the private sector, has encouraged more lobbying by potential beneficiaries.

¹⁰ Borschmann (2019) "'Common Sense': Littleproud Backs Victoria Plan to Earn Carbon Credits by Forest Conservation", *The Guardian*,

https://www.theguardian.com/environment/2019/mar/28/common-sense-littleproud-backs-victoria-plan-to-exit-logging-to-earn-carbon-credits

¹¹ Thomas Fearon, 'Australia's Carbon Market a "Fraud on the Environment", Text, ANU College of Law (The Australian National University, 23 March 2022), https://law.anu.edu.au/news-andevents/news/australia%E2%80%99s-carbon-market-fraud-environment.

The Australia Institute's view of how carbon credits could facilitate an exit from native forest logging has changed to a degree consistent with the change in the structure and effectiveness of Australia's carbon markets. This view is perhaps best summarised as follows: "While the ERF is labelled a climate policy, it is more accurate to describe it as a gas expansion policy in its current form".¹² ACCUs for native forests promote sub-optimal outcomes on two fronts: they delay Australia's decarbonisation efforts, and seek to protect forests within a problematic market trading scheme instead of expanding or establishing national parks, which have a long, unbroken record of protecting native forests once they enter the reserve system. Including an environmental credit trading scheme as part of the transition away from native forestry would be the exception rather than the rule in the history of industrial transition policy.

Previous policies, decisions and delays impact the current policy avenues and opportunities. Although carbon credits could have played a role in transitioning out of native forestry when it was a smaller niche market, its policy moment has passed. Native forests are too ecologically, economically and culturally important to outsource to a market plagued by poor governance.

The examples set by Victoria and Western Australia show that ACCUs need not play any role in industry transitions away from native forest logging. Both states have announced an end to native logging, and neither transition used carbon markets to drive regulatory change, although the Western Australian focus on softwood plantation investment as part of its transition has opened opportunities to create ACCUs in the future. In this case, the income from these credits will help support the business case for plantations. The carbon sequestration benefits of these plantations are welcomed, but the major environmental impact from this transition will occur within the newly protected areas of native forests.

The Victorian and Western Australian decisions to end native forest logging have influenced each other. They set a precedent for a government-led and funded transition, and their timetable to exit the industry eventually merged, with logging in both states to end on 1 January 2024.

¹² Polly Hemming, Alia Armistead, and Sumithri Venketasubramanian, 'An Environmental Fig Leaf?' (The Australia Insititute, May 2022), 35, https://australiainstitute.org.au/wpcontent/uploads/2022/05/P1223-An-environmental-fig-leaf-05-2022.pdf.

Victoria

In November 2019, Victoria became the first state in Australia to announce an exit from native forest logging.¹³ The initial plan was to end logging by 2030, but in May 2023, the State government announced that native forest logging would cease by the end of the year.¹⁴

The one-in-a-decade *Victorian State of the Forests Report* published in 2018 highlighted the fragmentation of Victoria's native forests¹⁵, and the increasing negative impacts of this fragmentation on threatened forest-dependent species¹⁶. These concerns had been apparent to many—including local communities, conservation groups and the scientific community—long before the Commissioner's findings were published. To these groups, the end of native forest logging was welcome—if long-overdue—news.

VICTORIA: CARBON CREDITS

Victoria's decision to end native logging came after years spent attempting to convince the Federal government to develop a methodology to recognise the value of native forest conservation in the form of carbon credits. Despite multiple lobbying attempts by the Victorian government and the Victorian Forest Industry Taskforce, these efforts were ultimately unsuccessful,¹⁷ and the time wasted pursuing them represented an unnecessary detour—one that led ultimately to a dead end.

During these years, the going concern of VicForests, the state-owned forestry corporation, deteriorated rapidly. Multiple legal defeats related to native forest activities motivated a regulatory response to end native forest logging and a Government-funded transition support package. Market mechanisms were not part of this transition strategy. (As such, it follows a similar ACCU absent transition pathway as other Victorian high-emitting industrial transitions, such as the Hazelwood coal power

¹³ 'Securing The Future For Forestry Industry Workers', Premier of Victoria, 7 November 2019,

http://www.premier.vic.gov.au/securing-the-future-for-forestry-industry-workers-0.

¹⁴ 'Delivering Certainty For Timber Workers | Premier of Victoria', 23 May 2023,

http://www.premier.vic.gov.au/delivering-certainty-timber-workers. ¹⁵ Sparkes (2018) Victoria: State of the Forests, 2018 Report, p 21,

https://www.ces.vic.gov.au/sites/default/files/publication-

documents/State%20of%20the%20Forests%202018%20Report.pdf.

¹⁶ Ibid., p 29

¹⁷ Borschmann, op. cit.

station, Anglesea brown coal mine and power station, Port Henry aluminium smelter and rolling mills.)

The Victorian government and forestry stakeholders explored generating carbon credits from native forests to support the forestry industry in winding down native forestry activities as early as 2015. That year, the Leadbeater's possum—Victoria's faunal emblem—was listed as critically endangered, and the federal Threatened Species Scientific Committee recommended that "the most effective way to prevent further decline and rebuild the population of Leadbeater's possum is to cease timber harvesting within montane ash forests of the Central Highlands".¹⁸

In November 2015, the Victorian government announced the establishment of the Victorian Forest Industry Taskforce, a multi-party stakeholder group tasked with articulating a collective environmental and job protection vision for the future of forestry in Victoria.¹⁹ (The Taskforce never reached a consensus position or formally recommended a unified path forward.)

Both the Taskforce and the Victorian Minister of Energy, Environment and Climate Change identified carbon credits as a future income stream to support the industry and protect forests. In March 2016, Lisa Neville, the Victorian Minister for Environment, Climate Change and Water, wrote to her federal counterpart Greg Hunt about the possibility of establishing an ACCU methodology for the conservation of native forests on public lands.²⁰ In response, a month later, Hunt referred Neville to the list of methods listed as priorities for investigation on his department's website.²¹ Native forest conservation was not on this list.

In November 2016, Professor Don Henry, the Chair of the Victorian Forest Industry Taskforce, wrote to Josh Frydenberg, the new Federal Minister for the Environment and Energy, to request the development of three new carbon methodologies for harvest plantations, alternative silvopasture management, and protection of native

¹⁸ Threatened Species Scientific Committee (2015), Conservation Advice: Gymnobelideus leadbeateri (Leadbeater's possum), http://www.environment.gov.au/biodiversity/threatened/species/pubs/273conservation-advice.pdf

¹⁹ Premier of Victoria (2015) "Forest Industry Taskforce Terms Of Reference Released", http://www.premier.vic.gov.au/forest-industry-taskforce-terms-reference-released

²⁰ Lisa Neville, 'Forestry and the Emissions Reduction Fund to Greg Hunt', 29 March 2016, https://uploads.guim.co.uk/2019/03/26/Neville_to_Hunt29032016.pdf.

²¹ Greg Hunt, 'Re: Forestry and the Emissions Reduction Fund to Lisa Neville', 19 April 2016, https://uploads.guim.co.uk/2019/03/26/Hunt_to_Neville19042016.pdf.

forests.²² A month later, Lily D'Ambrosio, the new Victorian Minister of Energy, Environment and Climate Change, supported this request and proposed a joint state and federal working group to drive the development of eligibility for these ACCU projects.²³

Frydenberg replied in August 2017, noting that the harvest plantation forestry methodology was now approved to participate in the ERF. He suggested that the fact that the other two proposed methodologies were not suggested that they didn't stand out as activities "with the greatest opportunity for uptake and delivery of genuine emissions reductions."²⁴

Forestry plantations of a limited number of species, primarily radiata pine (58% of the Australian plantation estate²⁵), are technically more straightforward to quantify carbon and meet other critical integrity criteria than native forests with wide varieties of different species and representative forest plots. Additionally, regarding priority, plantations accounted for 87.5% of Australia's forestry production during these discussions in 2016–17.²⁶

VICTORIA: BACKGROUND

Like most states, the origins of Victoria's transition to plantation-based production and regulatory mitigation can be traced to the 1970s, a decade in which forestry practices industrialised—and also clashed with rising environmental awareness in the community. The growing forestry trends of the era—woodchip exports, clear-cutting of forestry coupes, and systematic clearing to expand the plantation estate—put native forests under increasingly measurable and visible environmental pressures. Local and nationally organised campaigns resisted these practices and lobbied for

²² Professor Don Henry, 'FOI - 190406 - Doc 1 - Correspondence between Minster of Environment & Energy and Chair of VIC Forest Industry Taskforce - RE: Native Forest Method', 22 December 2016, 5–6, https://www.agriculture.gov.au/sites/default/files/documents/190406.pdf.

²³ Henry, 9–11.

²⁴ Henry, 8.

²⁵ Australian Bureau of Agricultural Resource Economics and Sciences (ABARES), 'Australian Plantation Statistics Update', Excel, Supporting Data Table, accessed 19 October 2023,

https://www.agriculture.gov.au/abares/research-topics/forests/forest-economics/plantations-update. ²⁶ Australian Bureau of Agricultural Resource Economics and Sciences (ABARES), 'Australian Forest and

Wood Products Statistics: March and June Quarters 2022', 23 November 2022, https://www.agriculture.gov.au/abares/research-topics/forests/forest-data#australian-forest-and-

wood-products-statistics.

increased native forest protections in national parks and other formal conservation reserves.²⁷

Starting in 1983, the Victorian Government underwent a review of the forestry industry, which resulted in the Timber Industry Strategy 1986²⁸. It was the first state to take a "triple bottom line" approach to the industry, seeking to balance social, economic and environmental tensions. These principles and policy prototypes influenced other similar state strategies, and also the federal National Forest Policy passed in 1992.²⁹

The five Regional Forestry Agreements signed between the Victorian and Commonwealth governments between February 1997 and March 2000 legislated land transfers and redrew boundaries of the forestry estate.³⁰ The designated net area of native forests available for VicForests to manage with commercial intent shrank by 78% between 1986 and 2018, from over 2m ha to 450,000 ha³¹. Of this, 2,941 ha was being logged annually in 2019, the most recent year for which VicForests has provided figures.³²

The contraction of the native forest estate coincided with an expanded and maturing Victorian plantation estate. The Plantations for Australia 1997 initiative tripled the area of the forestry plantation estate by 2020, ³³ and that area now stands at 382,600 ha. These plantations now account for five out of six trees harvested by VicForests.³⁴ The disparity in productivity between the plantations and native forest estates in Victoria, as elsewhere in Australia, demonstrates the economic gravity towards a purely plantation forestry future.

 ²⁷ John Dargavel, 'Views and Perspectives: Why Does Australia Have "Forest Wars"?', International Review of Environmental History 4 (4 May 2018): 37–38, https://doi.org/10.22459/IREH.04.01.2018.04.

 ²⁸ Victoria, ed., Auditor-General of Victoria - Timber Industry Strategy, Special Report, no. 22 (Melbourne: L.V. North, Govt. Printer, 1993), 33,

https://www.audit.vic.gov.au/sites/default/files/19930501-Special-Report-22-Timber-Industry-Strategy.pdf.

²⁹ David Willams, 'Timber Industry Strategy 1986', 3 June 2020, https://www.victoriasforestryheritage.org.au/forest-estate/plantation-forests/445-timber-industrystrategy-1986-p.html.

³⁰ 'Victorian Regional Forest Agreements - DAFF', accessed 19 October 2023,

https://www.agriculture.gov.au/agriculture-land/forestry/policies/rfa/regions/victoria.

³¹ Sparkes, op. cit., p 96

³² 'Setting the Record Straight', VicForests, accessed 19 October 2023,

https://www.vicforests.com.au/publications-media/forest-facts/setting-the-record-straight.

³³ 'Plantations for Australia: The 2020 Vision' (Department of Agriculture, Fisheries and Forestry, n.d.), 1, https://www.agriculture.gov.au/sites/default/files/documents/plantations-australia-2020-vision.pdf.

³⁴ 'Setting the Record Straight'.

Litigation has been central to the government's announcement to end native forest logging in Victoria. The cases against VicForests started in 2009 when Environment East Gippsland Inc commenced court proceedings to stop logging at Brown Mountain in East Gippsland due to the presence of threatened fauna species. The case drew judicial attention to legislation enacted in the late 1980s, including the *Flora and Fauna Guarantee Act 1988*, and "action statements" designed to protect threatened species made under this legislation.

Environment East Gippsland won its case in 2010. This encouraged more litigation, and incorporated associations across Victoria used similar legal challenges against VicForests to stop logging that would jeopardise the survival of other threatened forest-dependent species in their regions. These include cases brought by MyEnvironment Inc and Friends of Leadbeater's Possum Inc to cease logging of the last remaining habitat of the Leadbeater's Possum in the Central Highlands; by Kinglake Friends of the Forests Inc to protect the endangered Greater Glider; and by Wildlife of the Central Highlands Inc to save the habitat of the Sooty Owl and Powerful Owl.

The impacts of VicForests' court defeats spread across every aspect of the company's business and supply chain. The prohibitive injunctions reduced production because of lost access to planned logging operations, which caused contractual breaches. The company's legal costs—both from defending itself across multiple cases, and from liabilities for the other party's legal costs in the case of defeat—also became significant.

The impacts of reduced resource availability from the 2018–19 bushfires³⁵ also affected VicForests' finances, and were felt for years: contractor stand-down payments and other forms of contractual compensation costs strongly impacted VicForests' financial performance in 2021–22, resulting in a net loss of \$54.2 million.³⁶ Other factors also played a part: the closure of Opals' Maryvale paper mill in February 2023 meant the loss of a key customer for VicForests' native logging business. The Premier

³⁵ 'VicForests Annual Report FY2018-19', n.d., 15,

https://www.vicforests.com.au/static/uploads/files/vf-annual-report-2019-wflsxuyybrca.pdf. ³⁶ 'VicForests Annual Report FY2021-22', n.d., 28,

https://www.vicforests.com.au/static/uploads/files/vf-annual-report-2022-final-201222-wfjdjhwlojpk.pdf.

announced a mill worker support package in March 2023³⁷ for 120 already stood-down workers and the additional 200 workers expected to lose their jobs.³⁸

The legal momentum in these cases against VicForests—along with bushfire impacts and decades' worth of environmental advocacy, citizen science, and structural economic challenges for the industry—combined to force the Victorian government to set the stage for further transition of the timber industry. The suddenness of its decision was startling: when Premier Daniel Andrews announced an end to native forest logging, there was already \$110m allocated in the Victorian Budget to establish timber plantations in the La Trobe Valley,³⁹ and 250,000 bluegum seedlings were in the ground near the Australian Paper Maryvale Mill.⁴⁰

The 30-year plan to support the sector included an initial commitment of \$120m, and in response to industry feedback, a further \$100m+ in additional funding was allocated in December 2021 for opt-out packages and redundancy payments.⁴¹ Nevertheless, the intensification of pressures demanded an accelerated transition,⁴² and in May 2023, the Victorian Government brought the deadline to end native forest logging forward from 2030 to 1 January 2024. The announcement included an additional \$200m in funding, and the total industry support package had grown to \$875m.⁴³

The six-year acceleration of the transition timetable demonstrates what is possible when met by compelling circumstances. The Victorian Government had seven months to navigate the on-the-ground realities of this compressed transition. The details of the Victorian Forestry Plan had taken shape in the three-and-a-half years since the initial native forest exit announcement.⁴⁴ All aspects of business, community and worker support were underway or scheduled to start in 2023.

³⁷ 'Support For Maryvale Mill Workers | Premier of Victoria', accessed 1 November 2023, http://www.premier.vic.gov.au/support-maryvale-mill-workers.

³⁸ 'Victorian Paper Producing Plant to Close with Loss of up to 200 Jobs', ABC News, 14 February 2023, https://www.abc.net.au/news/2023-02-14/white-paper-production-stops-maryvale-papermill/101973646.

³⁹ 'Victorian State Budget 2017-18.' (Victorian Government, n.d.), 9,

https://www.dtf.vic.gov.au/sites/default/files/2018-02/state-budget-overview-2017-18.pdf.

⁴⁰ 'Securing The Future For Forestry Industry Workers'.

⁴¹ 'Bolstering The Victorian Forestry Plan | Premier of Victoria', accessed 1 November 2023, http://www.premier.vic.gov.au/bolstering-victorian-forestry-plan.

⁴² 'Victorian Budget Death Knell for State's Native Timber Industry', ABC News, 23 May 2023, https://www.abc.net.au/news/2023-05-23/victoria-native-timber-logging-industry-budget/102379388.

⁴³ 'Delivering Certainty For Timber Workers | Premier of Victoria'.

⁴⁴ 'Victorian Forest Plan' (Victoria, Department of Jobs, Precincts and Regions, 2021), https://ehqproduction-australia.s3.ap-southeast-

^{2.}amazonaws.com/f46c1751149444af5b7c7287b261d62a81be99f8/original/1670195257/b28296bc10

VICTORIA: MANAGING THE TRANSITION

The exact number of forestry jobs in the Victorian native forest supply chain is contested: the Victorian Association of Forestry Industries estimates the number at around 4,000,⁴⁵ while another industry-funded research project published a lower figure of 1,639 jobs in 2018.⁴⁶

Whatever the case, these workers should benefit from a Victorian state government with an increasingly robust institutional understanding of managing industry transition, such as the experience gained from the unexpected early closure of the Hazelwood Coal Power Station in March 2017.⁴⁷ There is muscle memory within the Victorian Department of Energy, Environment and Climate Action (DEECA) from its involvement with the Hazelwood transition. Additionally, new transition-specific regional organisations, such as the Latrobe Valley Authority (LVA), were created in November 2016 to support the future-focused economic diversification of the region.⁴⁸

Towns most at risk of hardship from the forestry transition were the focus of the community support investments, with 14 towns already receiving support by August 2022, primarily from the Local Development Strategy grants program.⁴⁹ In the pilot project town of Orbost, work was already well underway, and the local Innovation Working Groups had already identified opportunities for economic diversification in

dbba2ef3365c9f7688b57d_Victorian_Forestry_Plan_%28small%29.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKIOR7VAOP4%2F20231101%2Fap-southeast-2%2Fs3%2Faws4_request&X-Amz-Date=20231101T043654Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-

Signature=7746319a4bb5a404835f4a9955763177d36b6bdc4e4b190d88611d9759d3df62.

⁴⁵ 'With Native Forest Logging in Victoria to End Early, Hundreds of Workers Face an Uncertain Future', *The Guardian*, 26 May 2023, https://www.theguardian.com/australia-news/2023/may/26/with-nativeforest-logging-in-victoria-to-end-early-thousands-of-workers-face-an-uncertain-future.

⁴⁶ Jacki Schirmer et al., 'Socio-Economic Impacts of the Forest Industry - Victoria (Exc. the Green Triangle)' (Forest & Wood Products Australia, University of Canberra, Econsearch, March 2018), 21, https://fwpa.com.au/wp-content/uploads/2018/08/Vic_Report_FINAL.pdf.

⁴⁷ 'Labor Government To Support Hazelwood Workers', Premier of Victoria, 3 November 2016, http://www.premier.vic.gov.au/labor-government-support-hazelwood-workers.

⁴⁸ Latrobe Valley Authority, 'LVA - About Us', text, Latrobe Valley Authority, 8 September 2023, Victoria, https://lva.vic.gov.au/about.

⁴⁹ 'Gippsland Timber Communities Supported During Industry Transition | Premier of Victoria', accessed 1 November 2023, https://www.premier.vic.gov.au/gippsland-timber-communities-supported-duringindustry-transition.

the specialised seed, agriculture, forest management, tourism and education sectors.⁵⁰

International best practice transition methodologies, such as the Smart Specialisation Strategy (S3) pioneered in the EU, were implemented and tested during the Hazelwood transition.⁵¹ S3 process looks to leverage existing initiatives and strengths in the transitioning town or region by facilitating new connections between stakeholders from academia, the local community, Government and industry and accessing resources to realise the potential for innovation, resilience and new competitive economic activities.⁵²

S3 is a core philosophy of the Victorian forestry transition alongside other critical lessons learned, such as engaging with those impacted as early as possible with oneon-one individualised case management supported by localised mental health resources.⁵³

The future of Victorian native forest management once commercial activities end is also a vital part of this transition, and their ongoing care structure is still unclear.⁵⁴ Responsibilities for native forest land management activities are spread among various agencies but primarily are under the guidance of DEECA.

As the risks of bushfires increase with climate change, fire management on public lands is a significant concern. The Chief Fire Offer for Forest Fire Management Victoria (FFMVic) has confirmed that "forest contractors will be engaged for DECCA land and fire management works beyond the end of native timber harvesting".⁵⁵ DEECA has not yet announced the details of these contracts, but planning was "underway", with the

⁵⁰ 'Innovation Working Groups', Orbost Region, accessed 19 October 2023, https://orbostregion.com.au/?view=page&id=33.

⁵¹ Leo Goedegebuure et al., 'Gippsland: Smart Specialisation - Developing and Implementing an Approach to Regional Innovation and Development in Gippsland, Victoria (2018-2020)', n.d., https://sustainable.unimelb.edu.au/research/research-projects/gippsland-smart-specialisationstrategy.

⁵² 'Gippsland Smart Specialisation Strategy (G-S3)', accessed 1 November 2023, https://www.rmit.edu.au/about/schools-colleges/global-urban-and-social-studies/research/europeanunion-centre-of-excellence/projects/gippsland-smart-specialisation-strategy.

⁵³ Andrew Bakonyi interviewing DEECA about recent industry transitions in Victoria., 3 October 2023.

⁵⁴ Tim McGlone, 'What to Do with 1.8m Hectares of Victorian Public Forest?', *The Guardian*, 15 June 2023, sec. Australia news, https://www.theguardian.com/australia-news/2023/jun/16/what-to-do-with-18m-hectares-of-victorian-public-forest.

⁵⁵ 'As Native Logging Ends, Some Are Worried the Upper Murray's next Fire Season Could Be "Catastrophic", ABC News, 26 August 2023, https://www.abc.net.au/news/2023-08-27/bushfireconcerns-in-corryong-as-native-logging-ends-victoria/102552744.

expectation of offering ex-forestry workers ongoing DEECA land and fire management contracts.⁵⁶

It is impossible to know how Victoria's transition away from native forest logging might have proceeded had the methodologies it requested to allow VicForests to generate income from ACCUs had been developed. However, one thing is clear: the longer the industry delayed its transition, the more evident the problems with the health of Victoria's flora and fauna, Australian carbon markets, VicForests legal liabilities, and native forestry business would have become.

Ultimately, the Victorian government's decision to abandon the idea of carbon credits demonstrates that governments can address environmental, societal and intergenerational market failures with strong regulation—when there is enough political will to do so.

⁵⁶ Andrew Bakonyi interviewing DEECA about recent industry transitions in Victoria.

Western Australia

Western Australia's decision to end native logging was announced in September 2021. Perhaps hoping to make up for lost time, the Western Australian government proposed a more ambitious timeline than Victoria, planning to cease logging by 1 January 2024.

WESTERN AUSTRALIA: CARBON CREDITS

As in Victoria, market mechanisms play no role in the Western Australian transition plan. The Western Australian government has certainly examined the idea of using ACCUs to facilitate the transition: The Australia Institute was commissioned by the Conservation Council of Western Australia in 2013 to analyse the potential carbon credits generated by ending native forest logging on public lands.⁵⁷ Our conclusion was that, depending on the carbon price, the annual value of potential ACCUs generated from ending native forest logging was between \$16m and \$438m annually.⁵⁸ At that time, the CPM was still in place, and carbon credits were examined within the context of that framework.⁵⁹

The debate was timely: in 2013, the Conversation Commission of Western Australia released the draft *Forest Management Plan* (FMP) for 2014–23. At the time, leading Western Australian forestry campaigners echoed the call to incorporate the carbon credit approach to protect native forests.⁶⁰

Nevertheless, the final version of the FMP did not incorporate carbon credits. There is no public record of ongoing dialogue between the Western Australian and Commonwealth Governments exploring alternative ACCU pathways to transition out of native forestry, and the state-owned forestry corporation, Forest Products Commission (FPC), could only deal with forest products until the *Forest Products Act*

⁵⁷ Andrew Macintosh, 'Carbon Credits from Western Australia's Multiple Use Public Native Forests: A First Pass Assessment.' (The Australia Institute, 2013), 4, https://australiainstitute.org.au/wpcontent/uploads/2020/12/TB18-Carbon-credits-from-Western-Australia_4.pdf.

⁵⁸ Macintosh, 42.

⁵⁹ Macintosh, 'Carbon Credits from Western Australia's Multiple Use Public Native Forests: A First Pass Assessment.', 4.

⁶⁰ Jess Berkerling, 'WA's Forests Are Worth More Standing', 20 February 2013, https://thestringer.com.au/was-forests-are-worth-more-standing-522.

2000 was amended in June 2022 to expanded the company's mandate to include carbon assets.⁶¹

Similarly, despite the sizeable avoided emissions and carbon sequestered by the end of native forest logging, neither market mechanisms or ACCUs were mentioned in the Western Australian government's transition announcements. As discussed above, there is no ERF-eligible native forest methodology to generate ACCUs, but the plantation forestry methodology was updated in 2022.⁶² The \$350m of plantation establishment funding is managed by FPC, and references to carbon credit opportunities do appear on its annual reports, starting in 2021–22. In the 2022–23 financial year, FPC announced the registration of several of its new plantations with the ERF from the transition-funded Softwood Plantation Investment Program. It expects to receive its first ACCUs in 2023–24⁶³ and registered "FPC Carbon Project 2" with the ERF in October 2023.⁶⁴

However, the potential of future ACCUs generated from the newly established plantations did not drive the end of native forest logging decision or contribute funding towards the transition. The expansion of the Western Australian forestry estate was already part of ongoing discussions between FPC and the State Government. In 2020, FPC released a Problem and Opportunity Statement seeking private investment to expand the plantation estate by 50,000 ha.⁶⁵

The expected contraction of half of the FPC-managed softwood plantations over the next 20 years is driven by diverse factors, such as plantations on private lands not being replanted after the expiry of their single rotation obligations and water-stressed public areas being taken out of the estate after their harvests to recharge aquifers.⁶⁶

 ⁶¹ 'Timberbiz » WA Forest Products Act Allows FPC to Trade in Carbon Assets', accessed 2 November 2023, https://www.timberbiz.com.au/wa-forest-products-act-allows-fpc-to-trade-in-carbon-assets/.
⁶² 'Plantation Forestry Method', accessed 2 November 2023,

https://www.cleanenergyregulator.gov.au/ERF/Choosing-a-project-type/Opportunities-for-the-land-sector/Vegetation-methods/plantation-forestry-method.

⁶³ 'FPC - Annual Report FY2022-23' (Forests Products Commission, n.d.), 13,

https://www.wa.gov.au/system/files/2023-09/fpc-annual-report-2022-23.pdf.

⁶⁴ 'ERF Project - FPC Carbon Project 2', accessed 2 November 2023,

https://www.cleanenergyregulator.gov.au/ERF/Pages/Emissions%20Reduction%20Fund%20project%2 0and%20contract%20registers/Project%20register/ERF-Project-Detailed-

View.aspx?ListId=%7B7F242924-BF02-45EE-A289-1ABCC954E9CE%7D&ItemID=2087.

⁶⁵ 'FPC - Annual Report FY2020-21' (Forests Products Commission, n.d.), 15,

https://www.wa.gov.au/system/files/2021-10/fpc-annual-report-2020-21.pdf.

⁶⁶ 'Tenders WA | Display Tender MLPPOS8', accessed 2 November 2023,

https://www.tenders.wa.gov.au/watenders/tender/display/tender-

details.do?&id=46960&action=display-tender-details&returnUrl=%2Ftender%2Fsearch%2Ftendersearch.do%3FCSRFNONCE%3DAD59BF77BA63241434068750DD72633A.

Additionally, an estimated 10,000 ha have been lost to bushfires since 2010, according to a former director of the FPC (who also expressed concerns about ongoing bushfire management on existing and new plantation estates).⁶⁷

Softwood plantations make up 34% of Western Australia's total plantation area,⁶⁸ and the lack of investment over the last decade will create an inevitable gap in harvest maturity dates. New funding was needed to replant plantations removed from rotation after harvest to meet increasing future demands. The NFTP provided an opportune moment to announce a \$350m investment in the plantation estate—a figure that comprises over 80% of the total transition funding.

WESTERN AUSTRALIA: BACKGROUND

The forestry industry's economic relevance to Western Australia has been declining for years. Native forests contributed 8% of WA's forestry industry and only 0.1% of the total State Gross Regional Product in 2022,⁶⁹ and for years there have been increasing challenges across the entire native forest supply chain. In a parliamentary debate a week after the announcement of the end of native forest logging, it was noted major native forest mill operator Parkside Group approached the government a month before the decision was made to request a \$25.8 million grant to ensure its business remained viable; otherwise, it would need to shut their mills by the end of 2021.⁷⁰ The Government denied that the Parkside Group request drove its decision, but like other mill closures, such as the Pemberton and Manjimup mills in 2016⁷¹, the business case for the native forest industry was eroding.

This decline in economic viability came against a background of decades' worth of unsustainable forestry practices, which led eventually to falls in productivity. Between 2000 to 2021, the total area of Jarrah forests logged in Western Australia fell by over 70%.⁷² The falling volume of native sawlogs, increasing conversion to low-quality products such as woodchips, and reduced yields of 50% per hectare, all meant that native forest logging ultimately became untenable.⁷³

⁶⁷ Butcher, 'Australia's Timber Crisis'.

⁶⁸ (ABARES), 'Australian Plantation Statistics Update'.

⁶⁹ 'Protecting Our Native Forests: Native Forestry Transition Plan', 8.

⁷⁰ 'Parliamentary Debates (HANSARD) - Sept 2021', 15 September 2021, 26,

https://www.parliament.wa.gov.au/Hansard/Hansard.nsf/0/E61458CAECDE539848258753002EF274/\$ file/A41%20S1%2020210915%20All.pdf.

⁷¹ 'Parliamentary Debates (HANSARD) - Sept 2021', 3970.

⁷² 'Protecting Our Native Forests: Native Forestry Transition Plan', 8.

⁷³ 'Protecting Our Native Forests: Native Forestry Transition Plan', 8.

The FPC distinguishes between three primary income streams: Native Forests, Plantations and Sandalwood. Over the last five financial years, the Native Forests business unit has reported combined operating losses of \$30.355 million.⁷⁴

These economic challenges have been exacerbated by ecosystem stress due to climate change, suffered in the southwest forestry region and across the state; decades of industrial logging; and region-wide land use changes. Declining water supply is also an issue: the region's rainfall has fallen 20% in the last 50 years, and modelling suggests a further 15% reduction by 2030.⁷⁵ This problem is exacerbated by the fact that younger regenerating native forests have higher water needs than established forests, which makes them more vulnerable to the more frequent extreme heat events, drier soils and more prolonged droughts experienced in recent years.

This deterioration of growing conditions is already increasing mortality rates in native forests, and the compounding consequences of climate change will cause ongoing declines.⁷⁶ The Western Australian government's transition plan cites the need to maintain forest health, biodiversity and carbon sequestration in the context of worsening climate conditions and falling timber yields as the primary driver of the decision to end native forest logging.⁷⁷

This decision had a strong community mandate, with 73% of the public agreeing that no native forest harvesting should occur during the public consultation on the value and use of Western Australia's native forests.⁷⁸ There have been grassroots campaigns against logging for decades, and these gained momentum following Victoria's decision. They also enjoyed a fundraising boost following the release in 2020 of the film *Cry of the Forests*, which contrasted damaging forestry practices with increased evidence of successful alternative economic forest use.

All these factors combined to ensure that sooner or later, the political will would be demanded to meet what had long been a community, economic, ecological and scientific consensus.

⁷⁴ FPC, Annual Reports FY2018-19 - FY2022-23.

⁷⁵ 'Protecting Our Native Forests: Native Forestry Transition Plan', 5–6.

⁷⁶ 'Protecting Our Native Forests: Native Forestry Transition Plan', 6.

⁷⁷ 'Protecting Our Native Forests: Native Forestry Transition Plan', 2.

⁷⁸ 'Protecting Western Australians Native Forests - Announcement Fact Sheet', 2.

WESTERN AUSTRALIA: MANAGING THE TRANSITION

The decision to end native forest logging will protect over 2m ha of native forests in southwest Western Australia, including 400,000 ha of karri, jarrah and wandoo forests. The state FMP for 2024-2033 allows no native forest logging except in the cases of land management practices to improve forest health, such as thinning and clearing—and for approved mining operations, including, controversially, bauxite mining in the state's jarrah forests.⁷⁹

The carbon sequestration capacity of the native forests protected by the decision is estimated to be approximately 600m tonnes of CO₂-equivalent.⁸⁰ In addition to the avoided emissions, the Department of Jobs, Tourism, Science and Innovation estimated that the sequestration potential of planting 50 million pine trees in new plantations established under the plan will be between 7.9 to 9.5 million tonnes of CO₂-equivalent over 50 years⁸¹. These new plantations comprise 33,000 ha of new softwood timber plantations,⁸² a significant addition to the existing Western Australian softwood plantation estate of 97,900 ha and exceeding the 6,861 ha planted over the last ten years.

The Western Australian Native Forest Transition Plan (NFTP) has two main support packages: \$350m over 10 years for these new plantations, and \$80m to support those impacted by the transition. Most of the funding targets replace native forest production volumes and address estimated pre-existing structural timber shortfalls.⁸³ The \$80m provided by the NFTP to support businesses, communities and

⁷⁹ 'Protecting Western Australians Native Forests - Announcement Fact Sheet'.

⁸⁰ 'Logging of WA Native Forests to Be Banned under State Budget Plan Unveiled by Mark McGowan', ABC News, 8 September 2021, https://www.abc.net.au/news/2021-09-08/logging-of-wa-nativeforests-to-be-banned-in-state-budget-plan/100443070.

⁸¹ 'Protecting Our Native Forests: Native Forestry Transition Plan' (Department of Jobs, Tourism, Science and Innovation, July 2023), 17, https://www.wa.gov.au/system/files/2023-07/native_forestry_transition_plan_v14.pdf.

⁸² 'Protecting Western Australians Native Forests - Announcement Fact Sheet' (Government of Western Australia, September 2021), https://www.wa.gov.au/system/files/2021-09/Announcement%20Fact%20Sheet.pdf.

⁸³ Gavin Butcher, 'Australia's Timber Crisis: Government Throws Money at Trees', Wood Central (blog), 7 July 2023, https://woodcentral.com.au/australias-timber-crisis-government-throws-money-at-trees/.

workers is a notably smaller figure than the \$180m offered when old-growth logging was banned after the change of State Government in 2001.⁸⁴

The NFTP estimated that the native forest logging industry provided 1,980 jobs, comprising 860 direct jobs and 1,120 indirect jobs,⁸⁵ although these figures and the nature of the employment have been questioned.⁸⁶ Industry-funded research from 2018 reported 508 workers in the native forestry supply chain up to the primary processing point⁸⁷. These native forestry jobs account for .0325% of WA's 1.564m jobs.⁸⁸ The NFTP estimated that the investment in new softwood plantations would allow for the retention of these jobs, and also create additional positions (60 direct and 80 indirect).⁸⁹

There are two main job categories in native forestry: growers, nursery and road contractors, who represent 24% of employment; and those working in harvesting, haulage and wood processing, who accounts for the remaining 76%. The ten-year annual \$35 million support for new plantations invests directly in the core activities of the capacity of the growers, nurseries and road contracting businesses. However, there are valid concerns about the immediate employment prospects for harvest and haulage contractors and sawmill businesses as these new plantations mature.⁹⁰ In 2018, there were 15 sawmill businesses engaged in native forest processing

⁸⁴ "Forestry Is Part of Our DNA": Hundreds Protest against Ban on Native Logging', *ABC News*, 13 September 2021, https://www.abc.net.au/news/2021-09-13/hundreds-gather-to-protest-nativetimber-logging-ban/100457874.

⁸⁵ 'Just Transition Plan - Announcement Fact Sheet' (Government of Western Australia, September 2021), https://www.wa.gov.au/system/files/2021-09/Just%20Transition%20Plan.pdf

⁸⁶ 'Parliamentary Debates (HANSARD) - March 2022', 24 March 2022, 1384–85, https://www.parliament.wa.gov.au/Hansard/Hansard.nsf/0/E61458CAECDE539848258753002EF274/\$ file/A41%20S1%202010915%20All.pdf.

⁸⁷ Jacki Schirmer et al., 'Socio-Economic Impacts of the Forest Industry - Western Australia' (Forest & Woods Products Australia, University of Canberra, Econsearch, December 2017), 31,

https://fwpa.com.au/socio-economic-impacts-of-the-forest-industry-western-australia/.

⁸⁸ 'Labour Force, Australia, September 2023 | Australian Bureau of Statistics', 19 October 2023, https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-forceaustralia/latest-release.

⁸⁹ 'Just Transition Plan - Announcement Fact Sheet' (Government of Western Australia, September 2021), https://www.wa.gov.au/system/files/2021-09/Just%20Transition%20Plan.pdf

⁹⁰ 'Native Logging Ban Leaves "bitter Taste" in Mouth of Forestry Families, amid Timber Supply Concerns', ABC News, 4 June 2022, https://www.abc.net.au/news/2022-06-04/native-logging-banimpact-on-forestry-families-and-timber-supply/101118870.

activities.⁹¹ The Western Australian government has reached agreements to pay all eligible businesses.⁹²

The specifics of the worker support component of the NFTP are less generous than those announced by Victoria. Western Australia's Workforce Transition Program (WTP) offers payments of between \$10,000 and \$45,000 to workers; its \$19.3 million budget⁹³ equates to an average of \$38,000 per native forest-dependent job. By contrast, payments under the Victorian package are capped at \$150,000 (for those under 45) and \$200,000 (for those over 45), with the exact amounts provided dependent on the length of service. Another example is relocation support for moving to pursue new employment, which is up to \$5,000 in WA but \$45,000 in Victoria.⁹⁴

⁹¹ Schirmer et al., 'Socio-Economic Impacts of the Forest Industry - Western Australia', 18.

⁹² 'Protecting Our Native Forests: Native Forestry Transition Plan', 13.

⁹³ 'Protecting Our Native Forests: Native Forestry Transition Plan', 4.

⁹⁴ 'Victorian Forestry Workers Support Program', Forestworks, accessed 19 October 2023, https://forestworks.com.au/victorian-forestry-worker-support-program/.

New South Wales and Bob Carr

Bob Carr was the Premier of New South Wales between 1995 and 2005.⁹⁵ He was a crucial figure in the structural reforms to the NSW forestry industry, and to increasing the size of the NSW National Park system.

Carr was elected to NSW Parliament in 1983, and spent four years between 1984 and 1988 as Environment Minister for the government of Neville Wran.⁹⁶ Wran shared Carr's commitment to environmentalism; in 1982, he designated 90,000 ha of rainforests in northern NSW as national parks, and these became the core of the Gondwana Rainforests of Australia World Heritage Site in 1986.⁹⁷

After seven years in Opposition, Labor was re-elected to the NSW Government in 1995, and Carr was sworn in as Premier. Protection of forests from logging was one of Labor's key election pledges, and Carr acted on it immediately: the *Forestry Restructuring and Nature Conservation Act 1995* and *Environmental Trust Act 1998* provided the framework and funding mechanism for creating forestry industry reforms and further new national parks.⁹⁸

Over Carr's ten years as Premier, the number of protected areas in NSW increased by over one-third,⁹⁹ and 350+ new national parks were created in the state. This record earned Carr international recognition and a World Conservation Union International Parks Merit Award.¹⁰⁰ Carr was also Premier during the negotiations of the three NSW RFAs. These agreements, in combination with other policies and purchases, resulted in land practice changes that collectively transferred around 3m ha into the National Parks and Wildlife Service and reserve system.¹⁰¹

⁹⁵ 'Former Senator Bob Carr – Parliament of Australia', accessed 20 October 2023,

https://www.aph.gov.au/Senators_and_Members/Parliamentarian?MPID=wx4.

⁹⁶ 'Former Senator Bob Carr – Parliament of Australia'.

⁹⁷ 'Nature's Gifts and Politicians - National Parks Association of NSW', National Parks Association of NSW, 27 February 2023, https://npansw.org.au/2023/02/28/natures-gifts-and-politicians/.

⁹⁸ Stewart Smith, 'Forests in NSW: An Update' (Parliament NSW, February 1999), 5,

https://www.parliament.nsw.gov.au/researchpapers/Documents/forests-in-nsw-an-update/02-99.pdf. ⁹⁹ 'Nature's Gifts and Politicians - National Parks Association of NSW'.

¹⁰⁰ 'Bob Carr', Q+A, accessed 20 October 2023, https://www.abc.net.au/qanda/bob-carr/10642238.

¹⁰¹ Walt Secord, 'National Parks and Wildlife Amendment (Illegal Forestry Operations) Bill 2012 - Second Reading', 23 August 2012,

https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#/docid/HANSARD-1820781676-48285.

No carbon trading mechanisms were associated with these forestry protections, despite NSW setting up the world's first mandatory carbon credit trading scheme—the Greenhouse Gas Reduction Scheme—in 2003, focusing on electricity generation emissions¹⁰². By this time, the forestry industry's transition away from operation in the newly protected areas was mostly complete.

In the following years, the Forestry Corporation—now rebranded as Forests NSW became the company in the world to trade carbon credits arising from sequestration in forests. In the financial year 2004–05, the company generated more than \$1.5 million in revenue from the NSW carbon markets.¹⁰³

As a result of the extensive forest protection arrangements implemented by the Carr government, the Forestry Corporation of NSW saw its mandate over the state forests estate shrink from a peak of 3.7m hectares in 1994¹⁰⁴ to 2.44m ha by 2006.¹⁰⁵ The accompanying forestry reforms reduced hardwood sawlog quotas by 30%, funded plantation development and upgraded value-adding milling activities.¹⁰⁶

The forestry industry received transition support for its concessions in the form of the Forest Industry Labour Adjustment Package (FILAP). Between 1995 and 2005, the NSW Government and the Commonwealth each initially committed \$60 million towards a five-year \$120m transition support program.¹⁰⁷ The NSW FISAP later received further

¹⁰² 'Greenhouse Gas Reduction Scheme (GGAS) Commenced on 1 January 2003.', Independent Pricing and Regulatory Tribunal (IPART) NSW, accessed 20 October 2023,

https://www.ipart.nsw.gov.au/Home/Industries/Energy/Energy-Savings-Scheme/Greenhouse-Gas-Reduction-Scheme.

¹⁰³ 'Forests NSW - Annual Report FY2004-05' (Forests NSW, 2005), 6,

https://www.forestrycorporation.com.au/__data/assets/pdf_file/0008/416357/Annual-report-2004-05.pdf.

¹⁰⁴ 'Forests NSW - Annual Report FY2012-13' (Forests NSW, October 2013), 94, https://www.forestrycorporation.com.au/__data/assets/pdf_file/0005/491837/forests-nsw-annualreport-2012-13.pdf.

¹⁰⁵ 'Forests NSW - Annual Report FY2005-06' (Forests NSW, December 2006), 32,

https://www.forestrycorporation.com.au/__data/assets/pdf_file/0018/416331/Annual-report-2005-06.pdf.

¹⁰⁶ 'Regional Forest Agreement for the Eden Region of NSW', August 1999, 71,

https://www.agriculture.gov.au/sites/default/files/sitecollectiondocuments/rfa/regions/nsw-eden/nsw_rfa_eden.pdf.

¹⁰⁷ 'Commonwealth Forest Industry Structural Adjustment Package - DAFF', Department of Agriculture, Fisheries and Forestry, accessed 20 October 2023, https://www.agriculture.gov.au/agricultureland/forestry/policies/rfa/publications/deferred/wood-paper/commonwealth-fisap.

funding from the NSW Government of \$20m in 1999¹⁰⁸ and a final five-year extension of $10m^{109}$

The FILAP's four primary assistance focuses were transport to new forestry coupe areas, industry development in value-adding growth areas, and support for displaced workers and businesses exiting the industry. Over the program's life, the NSW FISAP assisted approximately 186 businesses and 683 displaced forest workers.¹¹⁰

The nature of this support has exerted a strong influence on the structure of the transition agreements for the cessation of native forest logging in Victoria and Western Australia. In NSW itself, native forest logging continues, although the production volumes of native logs have fallen by 79% since 2002–03.¹¹¹

Reflecting on the forestry transition years later, Carr wrote, "Rural towns did not 'die'... [the town of] Kyogle, once the centre of logging, has rebadged itself 'Gateway to the Rainforests'."¹¹²

¹⁰⁸ Ian Macdonald, 'Report to Parliament on Forest Industry Restructuring Expenditure for the 6 Months from 1 January 2005 to 30 June 2005', September 2005, 4,

https://www.parliament.nsw.gov.au/tp/files/43916/Forest%20Industry%20Restructuring%20Expendit ure%20Jan%20to%20June%202005.pdf.

¹⁰⁹ 'Forest Agreement for Upper North East Region (1999)' (NSW Government, 5 March 1999), 24, https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/forestagreements/UNEagree ment.ashx.

¹¹⁰ Macdonald, 'Report to Parliament on Forest Industry Restructuring Expenditure for the 6 Months from 1 January 2005 to 30 June 2005', 3.

¹¹¹ 'ABARES 2022, Australian Forest and Wood Products Statistics, March and June Quarters 2022'.

¹¹² 'It's Environmental Vandalism, Not Jobs Creation', *The Sydney Morning Herald*, 24 July 2009, https://www.smh.com.au/politics/federal/its-environmental-vandalism-not-jobs-creation-20090724dvfn.html.

New Zealand

New Zealand's landscape has undergone rapid changes in land use since human habitation 650–750 years ago—first from fire, introduced by Polynesian settlers, and then from the logging and clearing carried out by European settlers. During this time, the islands' forest cover fell from 85% of their land area to 23% in 1997¹¹³.

By 1913, the pace of clearing was threatening some native forest species with extinction, leading to the establishment of The State Forest Service in 1917.¹¹⁴ To relieve clearing pressures, the dual approaches of implementing timber export restrictions and incentivising pine plantations were underway by 1925.¹¹⁵

Throughout the 1970s and 1980s, there was a surge in public concern over forest conservation, driven by the New Zealand environmental movement. This resulted in a series of changes in forest policy.¹¹⁶ The most notable of these was the 1986 West Coast Accord, which dealt with the future management of native forests on Crown lands, and led to the protection of tracts of the native forest estate by the newly created Department of Conservation a year later.¹¹⁷ The Accord permitted specified indigenous forest production land for continued logging activities until the growing plantation forest industry matured.¹¹⁸

The *Forest Amendment Act 1993* expanded native forest harvest restrictions on private lands and export controls,¹¹⁹ and by the end of the century, a complete export ban was

¹¹³ Rowan Taylor and New Zealand, eds., *The State of New Zealand's Environment, 1997* (Wellington: Ministry for the Environment : GP Publications, 1997), 354.

¹¹⁴ '100 Years of New Zealand Forestry: 1919–2019 - Visual Timeline' (Ministry for Primary Industries NZ, n.d.), https://www.mpi.govt.nz/dmsdocument/37323-TUR-Timeline-100-years-PRINT.PDF.

¹¹⁵ Ministry for Primary Industries, 'About New Zealand's Forests | - Ministry for Primary Industries NZ' (Ministry for Primary Industries, 5 May 2022), https://www.mpi.govt.nz/forestry/new-zealand-forestsforest-industry/about-new-zealands-forests/.

¹¹⁶ New Zealand Ministry for Culture and Heritage Te Manatu Taonga, 'Story: Logging Native Forests -Conflicting Views', Web page (Ministry for Culture and Heritage Te Manatu Taonga), accessed 20 October 2023, https://teara.govt.nz/en/logging-native-forests/page-6.

¹¹⁷ 'Conservation Act 1987 No 65 (as at 24 August 2023), Public Act Contents – New Zealand Legislation', accessed 20 October 2023,

https://www.legislation.govt.nz/act/public/1987/0065/latest/DLM103610.html.

¹¹⁸ Pete Hodgson, 'Forests (West Coast Accord) Bill 2000 - Speech.', The Beehive - Official website of NZ Government, 18 May 2000, https://www.beehive.govt.nz/speech/forests-west-coast-accord-bill-2000.

¹¹⁹ 'Forests Amendment Act 1993 No 7, Public Act – New Zealand Legislation', accessed 20 October 2023, https://www.legislation.govt.nz/act/public/1993/0007/latest/whole.html.

in place.¹²⁰ The cumulative effect of these agreements meant that native forest logging accounted for less than 1% of NZ's annual wood production by 2000.¹²¹

That same year, the *Forests (West Coast Accord) Act 2000* was passed. The act legislated an end to native forest logging on public lands in NZ by 2002.¹²² It also provided a \$120m transition package to support the economic and social objectives of affected regions.¹²³ Although the harvesting of speciality native forest products from private lands continues today, the volume produced—some 10,000 tonnes per year—accounts for only 0.03% of the total log flow in New Zealand.¹²⁴

However, the end of native forest logging was far from the end of the forestry industry in New Zealand. The well-established plantation industry—and its diversification into value-added products such as solid panels, LVL lumber, and cross-laminated timber manufacturing—employs 35,000 to 40,000 people across the wood production, processing, and commercial sectors.¹²⁵

New Zealand Forestry represents 1.6% of New Zealand's GDP, and wood products are the fourth-largest export earner.¹²⁶ The New Zealand plantation forestry estate is 2.1 million hectares (of which 1.7 million are distinguished as "productive"), surpassing Australia's plantation estate of 1.72 million hectares.¹²⁷ Indeed, Australia imported \$525 million of forestry and wood products from New Zealand in 2021–22,

¹²⁰ 'Smith Announces Ban On Exports of Unsustainably Harvested Native Timber', The Beehive - Official website of NZ Government, 14 October 1997, https://www.beehive.govt.nz/release/smith-announces-ban-exports-unsustainably-harvested-native-timber.

¹²¹ Chris Brown, Patrick Durst, and Thomas Enters, 'Forests out of Bounds: Impacts and Effectiveness of Logging Bans in Natural Forests in Asia-Pacific' (Asia-Pacific Forestry Commission - Food & Agriculture Organization of the United Nations), sec. PART I: The Logging Bans in Context-Impacts on timber production, accessed 20 October 2023, https://www.fao.org/3/x6964e/X6964E00.htm#TOC.

¹²² 'Forests (West Coast Accord) Act 2000 No 45 (as at 28 October 2021), Public Act – New Zealand Legislation', accessed 20 October 2023,

https://legislation.govt.nz/act/public/2000/0045/latest/whole.html.

¹²³ Hodgson, 'Forests (West Coast Accord) Bill 2000 - Speech.'

¹²⁴ 'Facts & Figures - FY 2021/22 - NZ Plantation Forest Industry' (Forest Owners Association, n.d.), 23, https://www.nzfoa.org.nz/images/FGT_4234_Facts_and_Figures_2021_22_Internals_FA_web_update d_1feb2023.pdf.

¹²⁵ 'Forestry and Wood Processing Data', Ministry for Primary Industries NZ (Ministry for Primary Industries, 17 August 2023), https://www.mpi.govt.nz/forestry/forest-industry-andworkforce/forestry-wood-processing-data/.

¹²⁶ 'Forestry and Wood Processing Data'.

¹²⁷ 'DAFF - Australian Plantation Statistics Update -', Excel, accessed 20 October 2023, https://www.agriculture.gov.au/abares/research-topics/forests/forest-economics/plantationsupdate#download-the-overview-report-and-datasets.

representing 7.8% of this trade category. This makes New Zealand Australia's third biggest import partner, just behind Indonesia.¹²⁸

The forestry industry transition in New Zealand took place over decades. It required numerous policy iterations to make for manageable government intervention in line with community attitudes toward alternative forest values and their significance to their natural heritage.¹²⁹ Today, the successful planation-based forestry industry across the Tasman provides a model for Australia, demonstrating that there is an opportunity for Australia to develop similar value-added capacity from softwood plantations as states end logging in native forests.

¹²⁸ 'DAFF - Australian Forest and Wood Products Statistics', Department of Agriculture, Fisheries and Forestry, loc. Data visualisation-Value of Trade-by country, accessed 20 October 2023, https://www.agriculture.gov.au/abares/research-topics/forests/forest-economics/forest-wood-

products-statistics#download-the-overview-report-and-datasets.

¹²⁹ Hodgson, 'Forests (West Coast Accord) Bill 2000 - Speech.'

Conclusion

Industrial transitions are driven by societal values, politics, money, and collaboration not markets. When managed properly, these transitions can represent an opportunity for well-planned and well-funded investments in regional areas, and can result in more economic and ecologically sustainable futures. But they must be managed. The examples of Victoria, Western Australia, New South Wales and New Zealand all demonstrate how government regulation and support were required to achieve a change in forestry practices.

Market mechanisms and environmental trading schemes can't replicate—let alone act as a substitute for—multi-faceted government support for workers, businesses and communities. Generally, the more experience governments have managing transitions, the more capable they become at offering the proper support. Learning from the experience of the policy pioneers outlined in this briefing note can help shape future transitions to ending native forest logging in Australia.