

Nelson Tasman Forestry & Wood Processing

Our Economy at a Glance

Unless otherwise stated, all figures throughout this document are from the Nelson-Tasman Regional Economic Briefing, the Nelson Tasman Productivity Gap and Infometrics.

Size of economy =

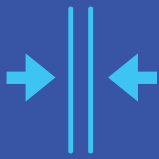
\$6,159m

GDP per filled job =

\$105,070

Productivity gap =

\$1.63bn



Closing the productivity gap =

123 years

at current trajectories



Population =

113,200



Mean earnings =

\$60,048



Proportion of small businesses (<20 employees) =

96.3%



Inward migration = positive net 300 people (plus 90 natural increase)



Intellectual Capital (Knowledge Intensive Employment) = 15,538 jobs = 26.5% of total jobs

Strong opportunity for growth:

Sectors with high regional competitive advantage



Blue Economy



Forestry



Horticulture



Science & Tech



Tourism

Nelson-Tasman Regional Economic Briefing February 2023 update, People and Places, February 2023

Nelson-Tasman Productivity Gap 2022 Supplementary Update, People and Places, February 2023

Nelson Tasman Regional Economic Profile, Infometrics, January 2023

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A note on Nelson Tasman

As a region, Nelson Tasman includes two unitary areas, whose economies are inherently connected and share many of the same aspirations. Areas like infrastructure provision, economic development, tourism and business confidence spans across both areas.

However, it is worth noting that there are some differences between the urban and rural communities.

NELSON OVERVIEW

Nelson is home to approximately 54,500 people, with a geographical area that includes Nelson City, Tāhunanui and Stoke. A small proportion of residents live in the surrounding rural areas.

Key stats:

GDP – \$3,234m

Business Units – 6,720

Average household income – \$92,433

Filled jobs – 30,886

TASMAN OVERVIEW

Tasman is home to approximately 58,700 people, with a urban and rural geographical area that includes Richmond, Motueka, Waimea, Golden Bay, Murchison and St Aurand.

Key stats:

GDP – \$2,925m

Business Units – 7,473

Average household income – \$101,596

Filled jobs – 27,732

Introduction

Forestry and Wood Processing is a significant economic driver

Forestry and Wood Processing is a significant economic driver for Nelson Tasman, providing in 2021 \$175m of GDP, 2049 jobs and an extended supply chain. As noted by MPII however, the importance of forests to New Zealand goes well beyond commercial timber production. New Zealand's forests have spiritual, social, cultural, environmental, {as well as} economic importance”

The global outlook for the forestry and logging market² is positive “...estimated at USD 285.2 billion in 2021 and is expected to reach a revised size of USD 438.5 billion by 2026, growing at a CAGR of 6.3% over the period 2022-2027.....(drivers are) increased construction of wooden buildings, adoption of automated forest management, increased use of biomass, and growing demand for wooden furniture.”

New Zealand's policy direction for climate change mitigation focuses heavily on the potential for the forestry and wood processing sector to contribute to both carbon sequestration and emissions reduction.

The sector faces a variety of challenges ranging from low investment and low value-add to skills shortages/attraction challenges, highly-concentrated export markets and fragmented industry groups - which exacerbates the difficulty of addressing the challenges. However the sector has the potential to increase yield and value and to contribute to improved wellbeing among our communities and our environment – for Nelson Tasman and for NZ Inc.



Regional Strategies and Documents

The Nelson Tasman Regeneration Plan

cites Forestry and Wood Processing as an economic driver for the region. The relatively high regional competitive advantage indicates a strong opportunity for growth as recognised in the Briefing for Ministers.

As cited in the [Nelson Tasman Regional Economic Briefing](#), the sector is one of the top three contributors to employment in Nelson-Tasman and one of the three key production and processing foci along with horticulture, and the blue economy, all of which have expanded strongly over the past decade and have experienced resilient demand through the pandemic. These sectors are also well aligned to longer-term structural shifts in global demand towards food and fibre products which can be produced with relatively more sustainable environmental footprints.

Nelson Tasman is home to one of the largest MDF plants in the world and the [Location Quotient report](#) commissioned by NRDA shows that the region has New Zealand's highest concentration of specialist processing, particularly in laminated and structural wood products. The specialist sub-industry Reconstituted Wood Product Manufacturing has a location quotient of 11.2, which is extremely high. The region is ranked third to fourth for forestry and logging, sawmilling and forestry support services.

The sector is considered to be significant in terms of future workforce needs and is a focus area for the 2023 Workforce Development Plan from the Regional Skills Leadership Group.

The Nelson-Tasman Regional Economic Briefing notes the resilient demand experienced by the sector throughout the pandemic, and that, along with the blue economy and horticulture, the sector is well-aligned to longer-term structural shifts in global demand towards food and fibre products that can be produced with relatively more sustainable environmental footprints."

The Economic Briefing also notes that Nelson-Tasman is a leader in its ability to add value within the forestry sector, with the region having New Zealand's highest concentration of specialist processing, particularly in laminated and structural wood products, and glues used in these production processes. Nelson's new airport terminal showcases the potential for commercial uses of engineered wood products in the construction sector, and there are further opportunities to capitalise on huge demand for housing and sustainable building practices."



Size and Shape of Forestry Estate

According to the National Exotic Forest Description, Nelson Tasman has 92,913 hectares under commercial forestry, with around 90% of that situated in Tasman, which incidentally is about the same size estate as neighbouring Marlborough. The standing volume of wood (in 000s cubic metres) is 26,439.

The amount of new land planted as forestry in 2020 and 2021 combined was 53,000 hectares – equal to the amount planted in the preceding 9 years but nowhere near the volumes being planted in the 1990s.

93% of Nelson Tasman forestry is radiata pine, with a small amount of Douglas fir and a scattering of cypress, eucalypts, softwoods and other hardwoods.

Ownership of the Nelson-Marlborough estate is approximately 36% small owners (each owning less than 100 hectares across the country), 50% large owners (10,000 plus hectares) with the rest somewhere in the middle.

Tasman District Council reports show that the council owns 2891 hectares of forests, while Nelson City Council holds approximately 700 hectares.

Export Volumes

The NZ Forest Owners' Association report¹² shows that in the year to March 2020, 962,529 cubic metres of logs were exported via Port Nelson, valued at \$132.6m. This represents 5% of New Zealand total exports. A further 682,607 m³ went via Picton, valued at \$97.8m or 3% of NZ total.

In addition, 81,749 m³ of sawn timber was exported via Port Nelson, valued at \$34.4m or 5% of NZ total. For comparison, Tauranga handled 21% of logs and 51% of sawn timber.

Contribution to the Nelson Tasman Economy

The Forestry and Wood Processing sector as defined by NRDA is composed of a number of sub-industries, as identified in Table 1 below.

The contribution of this sector to the regional economy is illustrated by some key statistics:

- GDP 2021 \$175m of which biggest components are
- Industry GDP grew by 2.1% in 2021 compared to 0.5% for total Nelson Tasman GDP
- Regional competitive advantages are in log sawmilling and reconstituted wood product manufacturing
- Employment is 2049 filled jobs, growing by 1.3% compared to 1.2% for total Nelson Tasman employment
- Business units 378
- Productivity (GDP per employed person) \$85, 407 versus \$141,629 average NZ in forestry and wood processing.

Sub-industry	Nelson-Tasman						New Zealand		
	GDP		Employment		Businesses		GDP	Employment	Businesses
	Level	% of total	Level	% of total	Level	% of total	% of total	% of total	% of total
Forestry	\$14.1m	8.1%	130	6.3%	228	60.3%	14.6%	6.6%	53.2%
Logging	\$43.9m	25.1%	411	20.0%	30	7.9%	32.9%	14.9%	10.0%
Forestry Support Services	\$11.2m	6.4%	193	9.4%	33	8.7%	6.6%	12.0%	8.2%
Log Sawmilling	\$36.9m	21.1%	469	22.9%	18	4.8%	11.6%	17.4%	3.9%
Wood Chipping	\$0.0m	0.0%	0	0.0%	0	0.0%	0.1%	0.1%	0.2%
Timber Resawing and Dressing	\$8.6m	4.9%	110	5.4%	9	2.4%	3.7%	5.5%	1.5%
Prefabricated Wooden Building Manufacturing	\$1.65m	0.9%	22	1.1%	9	2.4%	1.1%	1.6%	1.5%
Wooden Structural Fittings and Components Manufacturing	\$17.3m	9.9%	245	12.0%	27	7.1%	15.7%	23.4%	12.6%
Veneer and Plywood Manufacturing	\$0.4m	0.2%	6	0.3%	0	0.0%	2.3%	3.5%	0.30%
Reconstituted Wood Product Manufacturing	\$26.2m	15.0%	318	15.5%	6	1.6%	2.1%	3.2%	0.30%
Other Wood Product Manufacturing n.e.c.	\$1.92m	1.1%	26	1.3%	9	2.4%	4.5%	6.7%	5.10%
Timber Wholesaling	\$12.9m	7.4%	119	5.8%	9	2.4%	4.7%	5.1%	3.40%
Total	\$175m		2,049		378				

Key Players

Forestry owners/managers and transport providers in Nelson-Tasman include the following:

- Tasman District Council
- Nelson City Council
- OneFortyOne
- Nelson Forests Ltd
- PF Olsen
- Tasman Pine Forests Ltd
- Action Forest Management Ltd
- Buck Forestry Services
- Bryant Logging
- Forest Enterprises Investments
- Stuart Drummond Transport

The NZ Forest Owners' Association identifies the following Nelson Marlborough Forest processing industry entities at March 2021:

- CHH Wood Products, Nelson Sawmill (Eves Valley)
- D&E Taylor Timbers Ltd, Hope
- Eurocell Wood Products (Nelson)
- Goldpine Ltd (Richmond)
- Halswell Timber Limited (Nelson)
- Heagney Bros Ltd, Blenheim
- Genia, Motueka (previously known as Motueka Lumber Co)
- Nelson Forests Ltd (Renwick)
- Nelson Pine Industries (Richmond)
- Oji Fibre Solutions (NZ) Tasman
- Plankville Ltd, Richmond
- Prowood Ltd (Motueka)
- Southpine Ltd (Nelson)
- Southwood NZ Limited, Motueka
- Timberlink New Zealand Ltd, Blenheim
- Timpack Industries Ltd, Nelson
- XLAM (Nelson)



Industry Challenges and Opportunities

The Forestry and Wood Processing Industry Transformation Plan cites a considerable number of challenges facing the sector, that need to be solved in order to achieve the vision of the ITP. The workforce challenge was particularly endorsed at the ITP consultation session held in Nelson in September 2022.

Over-reliance on a single species

90 percent of production forests in New Zealand are radiata pine, where other types can add value and resilience to our land use and the products we can make.

Lost opportunity from uncaptured residues

Residues from harvesting and processing logs are not always effectively used for their highest value use.

Static wood processing capacity and low levels of new investment

Processing capacity on average has remained flat over the past 20 years.

Lack of international competitiveness for processed wood products

60 percent of the wood we harvest is exported as raw logs. There has been minimal growth in the export of value-add wood products.

Highly concentrated export markets

80–90 percent of our export logs go to China, which exposes the sector to risks of economic shocks and price volatility. An independent study¹⁶ cited the China market demand as the most severe risk facing the industry in NZ. Further details are given in Appendix A.

Certainty of supply

Short-term log supply contracts are common in the sector and create considerable uncertainty for mills seeking to attract investment and expand production.

Social licence challenges

The forestry sector has a range of social licence challenges that impact its ability to operate. Work is needed to improve public perceptions of forestry. One major local forestry company spoke about harvesting noise and logging truck traffic near residential areas; soil erosion if harvested forests are not replanted; runoff and trash impacting downhill areas; wilding pines; and sedimentation of waterways.

While Māori own a significant portion of the land under New Zealand's plantation estate, they often do not own the trees and forestry licences. Māori also make up a significant proportion of the wood processing workforce but are underrepresented at the ownership and leadership level.

There are opportunities for improving how the sector works together

The sector has several different associations with different membership bases. This creates challenges for coordination and funding of industry-good activities. Sector issues, such as social licence and workforce challenges require a cohesive and unified sector to address them. More work is needed by the sector to understand and test new ways of working together.

Industry Challenges and Opportunities

We need to boost recruitment and retention of skilled workers

Like many sectors in New Zealand, this sector faces substantial challenges when recruiting and retaining a suitably skilled and qualified workforce. Attraction challenges are driven by a range of factors including an aging workforce, rural depopulation, and perceptions of work in the sector as unsafe and physically demanding. Advances in safety and handling equipment in sawmilling has improved safety outcomes.

Diversity remains a challenge for the sector

Diversity remains a challenge in the sector with the workforce identifying as 60 percent Pākehā, 22 percent Māori, and the remaining 18 percent consisting of Pasifika, Asian, and others. These diversity challenges are more pronounced at leadership level where most leadership positions are occupied by Pākehā men, with women, Māori and other ethnicities underrepresented. The forestry and wood processing sector is also male dominated (82 percent), compared to the New Zealand labour force where the split is more equitable, with 48 percent female and 52 percent male. Recent trends are positive and indicate a growing number of women joining the sector. In 2016, 23 percent of new entrants to the sector were female.

Other challenges identified include:

- Barriers to land use/land use change as identified by Agfirst. A major local company has advised that establishing greenfield forestry sites is particularly challenging.
- Climate change risks to species performance, cited at the ITP consultation session.
- Uncertainty around markets and values was cited at the ITP consultation session in Nelson, as well as dependence on a small number of overseas markets for logs.
- World events disrupting markets, cited at the ITP consultation session.
- The Emissions Trading Scheme can make it attractive for landowners to keep their trees growing rather than to harvest them, cited at the ITP consultation session.
- Moves to native planting: An MPI report¹⁸ explores transitioning radiata pine forests to native plantings to operate as permanent carbon sinks and to support biodiversity. Such moves would have impacts on the whole sector and value chain.

On the upside, the Location Quotient report cites forestry as providing opportunities for the region's niche and/or low-momentum industries (such as Manufacturing of professional, scientific, and specialised machinery and equipment). There are opportunities for these industries to solve problems in forestry locally that have applications nationwide and world-wide.

There is considerable opportunity for adding value to current industry activities. The National Exotic Forest Description²⁰ notes that only 6% of Nelson Marlborough forest area has been pruned and production thinned, and 22% is pruned without production thinning. Pruning and thinning can deliver higher value timber that can be utilised in higher value manufactured products. However this is part of a complex chain of dependencies and it is not straightforward to introduce change.

Opportunities are explored further in the next section, Future Direction

Future Direction

Central government initiatives and policies are a significant factor in setting the future direction of Forestry and Wood Processing across New Zealand. There are three such components in particular that will inform activity, and their goals represent opportunities for significant benefits to be realised for the sector, for Nelson-Tasman and for the country as a whole.

Forestry ITP Key Points

A potential opportunity to access significant government investment for the region, delivering:

- lasting improvements to productivity and whole-of-tree utilisation
- increased science and tech development
- higher-value jobs that will attract young people
- improved public perception / social licence
- potentially contributing to cost reduction for new builds

Forestry as an important interim solution for climate change mitigation through

- carbon sequestration while the tree is growing
- replacing higher-emission sources of heat generation
- increasing production of biofuels to displace fossil fuels
- displacing higher-carbon footprint building materials (concrete, steel)

The Energy Efficiency Conservation Authority's Regional Energy Transition Accelerator

The RETA initiative is currently focused on reducing carbon emissions by process heat users – typically emissions from fossil-fuelled boilers. Funding is available to help businesses to convert to a low- or no-emissions system that utilises biomass. The biomass can be from various sources but there is a heavy emphasis on the use of forestry waste as a fuel source.

This initiative harmonises with the Forestry ITP achieve greater use of, and greater value from, forestry products.

Future Direction

NZ Emissions Reduction Plan Forestry chapter

Forests store carbon from the atmosphere, helping offset other sectors' greenhouse gas emissions. Forestry and wood processing already make an important contribution to Aotearoa New Zealand's bioeconomy.

Reducing gross emissions from the sectors that make up our economy is the Government's priority – but forestry has a part to play in offsetting the emissions of sectors that cannot easily reduce or remove their emissions. It also contributes to lowering gross emissions in other sectors through providing inputs to the bioeconomy. Forestry can provide flexibility in our path to a cost-effective, timely and equitable transition.

Key actions identified to realise the intentions of the reduction plan:

- Support afforestation by considering amendments to the New Zealand Emissions Trading Scheme (NZ ETS) and resource management settings to achieve the right type and scale of forests, in the right place
- Support afforestation by supporting landowners and others to undertake afforestation, particularly for erodible land
- Support afforestation by providing advisory services to land users, councils, Māori and other stakeholders to support choices for sustainable afforestation.
- Encourage native forests as long-term carbon sinks through reducing costs and improving incentives.
- Maintain existing forests by exploring options to reduce deforestation and encourage forest management practices that increase carbon stocks in pre-1990 forests.
- Grow the forestry and wood processing industry to deliver more value from low-carbon products, while delivering jobs for communities.



Appendices

Appendix A: Risks to the Sector

An independent study²⁴ looked into the high exposure associated with the China log market that collapsed due to Covid, and looked ahead at what was needed to not be caught like this again – and adapt for the future.

“The large reliance on the export market has left New Zealand’s forest sector exposed to market changes.Furthermore, this lack of knowledge leads us unable to identify the potential points where the value chain could be improved into a high added value chain. These research gaps call for exploration and analysis of New Zealand’s forest supply chain risks. This article offers an initial result and some valuable insights from our survey research.”

“According to the mean value of each risk, we prioritised the risks from the first-round survey. In addition, we have consulted with several forestry researchers and scientists, the results were validated. The measurement scale and top 25 risks (mean value greater than 3, equal / above minor problem) indicate as follows:

- 1 = No Problem
- 2 = Cosmetic problem only: need not be fixed unless resource is available
- 3 = Minor problem: fixing this should be given low priority
- 4 = Moderate problem; should be fixed to avoid the problem getting worse
- 5 = Significant problem: need to be fixed, a medium priority
- 6 = Severe problem: important to fix, so should be given high priority
- 7 = Critical problem: imperative to fix this before product can be released

Rank	Risk	Mean value
1	China market demand	4.27
2	Economic crisis / recession	4.07
3	Fluctuating log price	4
4	International competition i.e. German beetle infested lumber and Russian lumber	3.94
5	International politics i.e. China-US trade war	3.87
5	International market demand	3.87
7	Labour shortage / Immigration	3.8
7	Supply chain disruption / broken supply chain	3.8
9	Weather-related risks / climate change,	3.6
10	Forest waste	3.47
10	Natural disasters	3.47
12	NZ government Policy / regulation	3.4
12	Domestic sawmills / onshoring Production	3.4
12	Domestic market demand	3.4
15	Lack of skilled / experienced worker	3.27
15	Infrastructure	3.27
15	Financial risks	3.27
18	NZ domestic politics	3.2
18	Decreasing investor	3.2
18	Shipping	3.2
18	Health & safety at work	3.2
18	Forestry nursery / Pests	3.2
23	Road transportation	3.13
23	Unstable NZ domestic log supply	3.13
25	NZ production capacity	3.07
25	Unstable export log supply	3.07

Appendices

Appendix B: Government support mechanisms

Callaghan Innovation is the New Zealand government's innovation agency. It provides support and funding for innovation and research and development. In Nelson Tasman, Callaghan's services are delivered to the local community through the Regional Business Partners programme, hosted by NRDA.

New Zealand Trade and Enterprise (NZTE) is the government's international business development agency. It supports exporters in accessing overseas markets, attracting foreign investment and enhancing New Zealand's business reputation internationally.

The Ministry for Primary Industry's Sustainable Food and Fibre Futures (SFFF) programme supports innovation in New Zealand's food and fibre sectors, by co-investing in industry development initiatives that make a positive and lasting difference.

Appendix C: Future Workforce

Between 2021 and 2040, the overall working-age population in Nelson Tasman is forecast to decline by approximately 13,500 individuals, while the Māori working-age population is forecast to increase by more than 2,000 individuals.

Ministry of Education figures for educational attainment in 2021 are as follows:

Education level	Nelson	Tasman	Total NZ
Starting school having attended ECE	99.6	97.7	96.8
NCEA Level 1 or above	90.2	87.5	87.3
NCEA Level 2 or above	80.2	77.4	78.7
NCEA Level 3 or higher	56.7	43.0	55.8
School leavers retained until at least age 17	81.9	77.4	81.4
School leavers enrolled in tertiary within 1 year of leaving	67.3	60.9	64.8

For the year to March 2021, the NEET rate (the percentage of potential employees aged 15-24 who are not in employment, education or training) in the region was 9% compared to 12.7% for average NZ.

NELSON
REGIONAL
DEVELOPMENT
AGENCY

 NELSON
TASMAN
insights