



ROTORUA FOREST FUTURES ACTION PLAN TE ANAMATA O NGĀ WĀO NUI O ROTORUA 2023-2026

Taking a te ao Māori approach to deliver Rotorua-led initiatives to bring the community benefits from forests as we move towards becoming a Centre of Excellence in forestry and wood processing.

**E kore te tōtara e tū noa i te pārae engari
me tū i roto i te wao-nui-a-Tāne**

**The tōtara tree does not stand alone in the field,
but stands within the great forest of Tāne**

This whakataukī has been gifted for use in the Rotorua
Forest Futures Action Plan



WHAKATAUKĪ INTERPRETATION AND ALIGNMENT TO THE ROTORUA FOREST FUTURES ACTION PLAN

The tōtara as a metaphor can be interpreted in two ways.

Firstly, the tōtara metaphor can be used to refer to the individual parts of the Action Plan (i.e., forestry, forests, ngahere, circular bioeconomy, engaged communities, Rotorua as Centre of Excellence, science, research, education, etc.) and how they should not be considered in isolation of one another but rather as parts of a whole. In other words, the components of the Action Plan should not stand alone in the field but should stand within the great forest of Tāne, i.e., the greater parts of the Action Plan that make the whole.

Secondly, the tōtara metaphor can be used to refer to the Action Plan as a whole, and that it should not be considered as a stand-alone strategy but rather about other similar council/community strategies that aim to improve the environmental, economic, social, and cultural outcomes for the people of Rotorua and the wider region.

Thank you to the following collaborators who
contributed to this piece of work.





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WHAKAPAPA OF THE ACTION PLAN TE WHAKAPAPA O TE MĀHERE NEI

Significant investment in regional economic development by Central Government was driven by agreed regional priorities, and Rotorua was encouraged to understand ours. In 2020 a group chaired by Julian Elder, chief executive officer of Scion, was brought together as the Build Back Forestry Group to understand the priority actions that will support the growth of the forestry sector in Rotorua. This group identified five priority areas, including the establishment of Rotorua as a Centre of Excellence in the low-carbon economy.

The importance of forestry to the region was then further recognised with the drafting of the Rotorua Lakes Council's Economic Development Strategy Framework (2020). Forestry was highlighted as one of three priority areas to have a more detailed Action Plan developed. Rotorua Lakes Council and RotoruaNZ, have jointly taken the lead and responsibility for the development of this action plan, however, this is an industry-led plan. The mandate for the creation of this Action Plan is illustrated in Figure One.



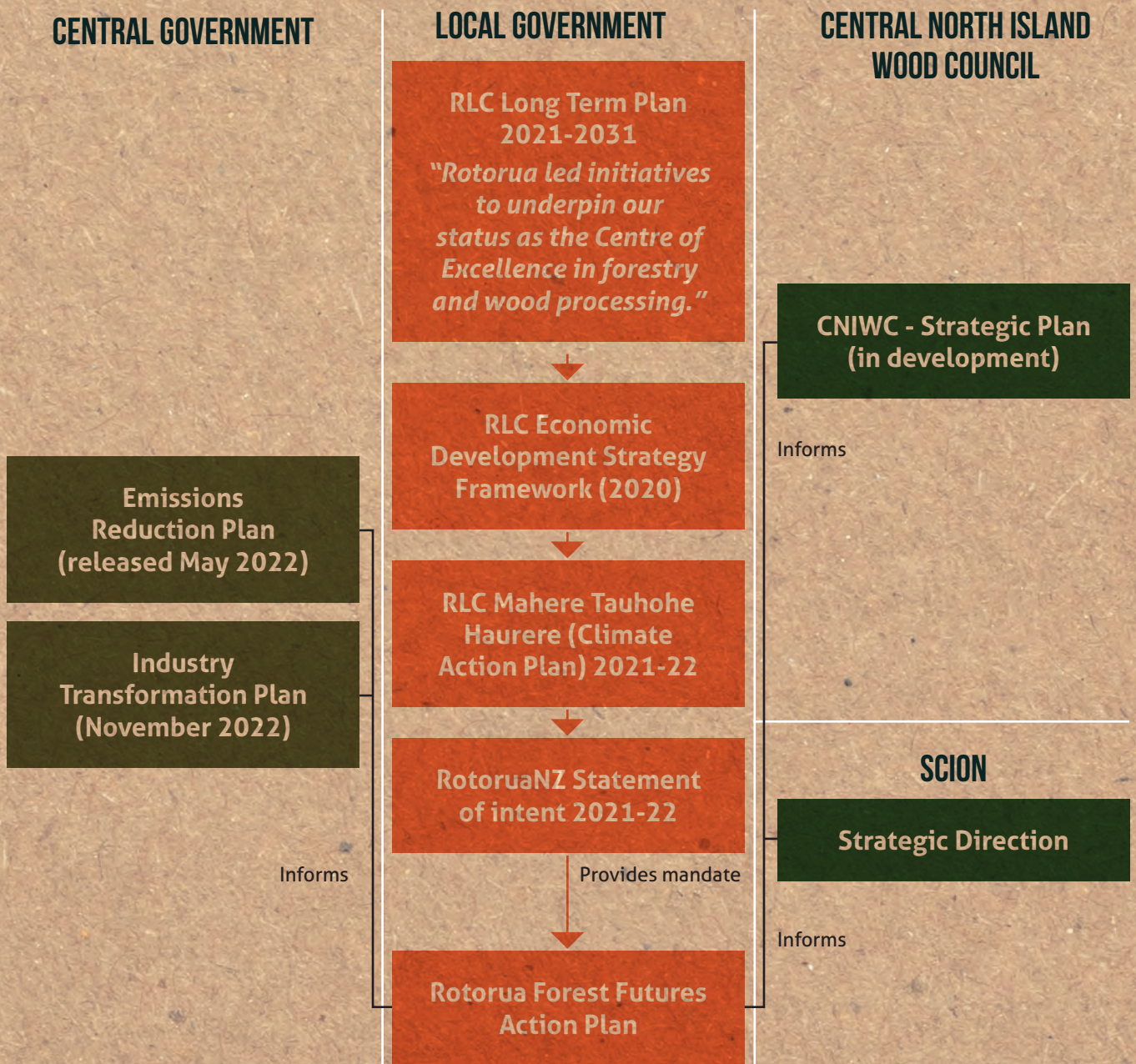


FIGURE ONE: The mandate to deliver the Rotorua Forest Futures Action Plan is set in Rotorua Lakes Council's Long-term Plan 2021-2031.

This Rotorua Forest Futures Action Plan 2023-2026 is building on the work of the Build Back Forestry Group and aligns with the following: Rotorua Lakes Council's Long-term Plan 2021-2031; Rotorua Lakes Council's Mahere Tauhohe Huarere (Climate Action Plan) 2021-2022; RotoruaNZ Statement of Intent 2021-2022; Central Government's Forestry and Wood Processing Industry Transformation Plan; the Emissions Reduction Plan; and Scion's Strategic Direction.

Achievements since the start of this kōrero that are relevant to this Action Plan are:

- The development of the strategic case for a bio-innovation network alongside Scion and Te Uru Rākau – New Zealand Forest Service
- Establishment of the CNI Wood Council and the Generation Programme
- Investment by Central Government into the Red Stag Cross Laminated Timber (CLT) factory and the Timber Design Centre.

BACKGROUND AND CONTEXT TUĀPAPA ME TE HOROPAKI

Importance of forests to the people of Rotorua

Lakes and forests¹ are significant features in Rotorua. All, especially Māori, revere our forests and ngahere² for their intrinsic value, from their beauty, spiritual presence, a bountiful supply of food, rongoā (medicines), weaving, and building materials. The people of Rotorua value the many roles the forests play in our lives. We walk, hike and ride through them, they protect our rivers and lakes from the impacts of climate change and human activity, and they support biodiversity and sustainable living. They provide us with a place to improve our spiritual and physical health and wellbeing.

Te ao Māori (the Māori world view) recognises the interconnection and interdependency (not dominance) of tāngata (humans) with all other living things, such as ngā manu (nature reserve), ngahere (native forest), ika (fish), awa (rivers), whenua (land), and maunga (mountains).

This relationship with nature is reflected in the pūrākau (legend) of Ranginui (Sky Father), and Papatūānuku (Earth Mother) during the creation of the world. During the creation of the world, Ranginui and Papatūānuku were joined together in a tight embrace, but the world of potential was filled with Te Pō (Darkness). One of their children, Tāne Mahuta, atua (god) of the forests, did not want to live in darkness any longer, so he pushed his parents apart and created Te Ao Mārama (the World of Light). The trees and forests form a cloak (korowai) which Tānemāhuta created to clothe his mother, Papatūānuku.

Tāne Mahuta then fashioned humanity from the soil of the forests. This is why the trees are considered tuākana and sacred, as tāngata (humans) are inextricably linked to the forests.

The interdependency between tāngata and te taiao (Earth) means environmental, cultural, and social outcomes must be considered alongside economic outcomes. Te ao Māori recognises the balance that must be maintained between these four interdependencies.³

As Tānenui-a-rangi, he is the creator of the first human. Respect for Tāne's forest is shown through tikanga (customs) and kaitiakitanga (guardianship) and protection⁴.


Here in Rotorua, as a centre for tourism, we introduce global and local visitors to these ideas and their relevance to today's world.

1 We are defining forests in this action plan as any group of trees, whether indigenous or exotic, or a mix of both, including the understory.

2 We are defining ngahere in this action plan as indigenous native forests including the understory.

3 Ngā Pou a Tāne response to the Draft ITP: Te Ara Whakahou – Ahumahi Ngahere, October 2022.

4 <https://teara.govt.nz/en/te-ngahere-forest-lore/page-1>



This tree symbolises the God of the Forest, Tāne Mahuta, holding his father, Ranginui from his mother, Papatūānuku, apart so that the world could be covered in light.

When the European settlers came to Rotorua, the rich forests in this area were quickly felled. The forestry and wood processing industry in Rotorua began in 1899 when the Central Government planted exotic forests at the southern edge of town to address growing timber shortages as slow-growing native forests were exhausted.

Our soils and climate suit forest growth. The industries associated with our forests are diverse and economically significant. Approximately 40% of New Zealand's wood is harvested within a 100km radius of Rotorua. More than 15% of our employment is in forestry or forestry-related sectors. Forestry and logging, together with wood product manufacturing, contribute about 7% of Rotorua's GDP.⁵

Today, forests and ngahere are places where we work to make a living but also where we work together as a community to restore the biodiversity of native fauna, flora, streams, and rivers. They are places for recreation, relaxation, enjoyment, and wellbeing for those of us that live here and our many visitors.

The Rotorua Forest Futures Action Plan puts te ao Māori at the heart of our actions and seeks to bring the community benefits from forests as we move towards becoming a Centre of Excellence in forestry and wood processing.

⁵ <https://www.rotoruanz.com/stories-articles/rotorua-s-wood-first-policy-leads-the-way>

Importance of forests to Māori and Te Arawa

Protecting and enhancing our forest's biodiversity is critical for the life-supporting services they provide to all organisms, including humans.

"The story of creation shows how important forests and the interdependency between te taiao (the natural world) and people are to Māori, from the creation of the world and throughout Māori history to the current day.

"Forests have provided and continue to provide shelter, food, water, social and cultural wellbeing, and other important life-sustaining qualities for Māori. This whakapapa influences Māori forestry practices, encouraging sustainability and the strong focus Māori have on long-term sustainability and biodiversity, and ensuring forestry provide wider benefits to Māori communities."⁶

This Action Plan needs to bring positive change to Māori. Māori have significant interests in New Zealand's commercial forestry sector. Today Māori own \$4.3 billion of assets in forestry and have ownership of more than 30 per cent of land under plantation forestry as well as large areas of indigenous forest. Additionally, more than 10,000 hectares of Crown forests are on Māori land⁷. Around 8,300 Māori work across the forestry and wood processing sector, making up 22 per cent of the workforce. In Rotorua, the Māori population is 40 per cent of our total population.

The Regional Workforce Plan (2022) recognises the significance of forestry for Māori and the need to partner with iwi/hapū and Māori employers: targeted programmes are needed for the workforce to thrive.

Large-scale planting of production forests on Māori-owned land began in the 1960s. Many of these new forests were under Crown Forestry licences, with the Crown often paying rent below market rate and a percentage of stumpage fees.

Kaingaroa Forest (the second largest plantation forest in the Southern Hemisphere) is a prime example where the land is owned by the Central North Island (CNI) Iwi Collective, but the trees and the forestry lease are still largely held by a private company - Timberlands Ltd is their forestry management company.

Te Pumautanga o Te Arawa Trust (TPT) and Te Komiti Nui o Ngāti Whakaue are members of the Central North Island Iwi Collective and have an enduring interest in the sustainable development of the forestry industry for the benefit of their people. There are also many other groups that have interests in smaller scale commercial forests in the Rotorua area, for example hapū and Māori Land Trusts.

The Emissions Trading Scheme has implications for non-forested Māori land. The possibility of afforestation on low productivity grasslands – either through national regeneration or through deliberate planting – represents an important carbon sequestration opportunity⁸.

One of the many challenges facing Māori Land Trusts undertaking forestry is the uneven cash flow associated with a surge of income at specific times in the forestry cycle. During the development of this Action Plan, we have heard that one of the ways this challenge can be addressed is through the collectivisation of Māori Land Trusts with forestry assets. We have also heard that this collectivisation would allow Māori Land Trusts to participate across the whole value chain.

Rotorua's forests and ngahere play a vital role in protecting the awa (rivers), whenua (land) and tāngata (humans) of Rotorua by providing a real and tangible buffer to the impacts of climate change and human activity.

⁶ <https://www.mpi.govt.nz/forestry/forest-industry-and-workforce/forestry-and-wood-processing-industry-transformation-plan/>

⁷ www.mpi.govt.nz/forestry/about-te-uru-rakau/crown-forestry/

⁸ West, T., Monge, J., Dowling, L., Wakelin, S., Gibbs, H. (2020). Promotion of afforestation in New Zealand's marginal agricultural lands through payments for environmental services, *Ecosystem Services*, Volume 46, 2020, 101212.

We have also heard that the aspirations of Māori in forestry are strong but there is a need to support and care for our forests and ngahere holistically, including biodiversity, and to support the reconnection of their people to their culture and whenua.

Tē tōia, tē haumatia

**Nothing can be
achieved without a
plan, workforce, and
way of doing things.**

The Regional Workforce Plan for the Bay of Plenty also highlights the agriculture, forestry, and fishing industries as being significant contributors to the region's economy.



Taking a te ao Māori approach to becoming a Centre of Excellence in forestry and wood processing

Rotorua could be the global epicentre of the circular bioeconomy enhanced with te ao Māori. There is a clear and strong alignment between Māori values and the sustainability of forests and forestry, recreational and wellbeing uses, including food and rongoā. We want to ensure that our forests and biodiversity are cared for so our future generations of landowners and communities can continue to benefit and enjoy our lakes and forests and the multiple benefits these forests provide, like protecting our whenua from climate change impacts and supporting the water quality of our lakes.

Rotorua Lakes Council and RotoruaNZ have worked in partnership with industry stakeholders in this Action Plan to take a te ao Māori approach to lead initiatives to support Rotorua becoming a Centre of Excellence in forestry and wood processing⁹. Rotorua has a cluster of research, training, and business organisations with talent, experience, and innovative ideas. The purpose of this Action Plan is to support stronger connections across this cluster so that the community benefits as fully as possible from forests, ngahere, and forestry – culturally, socially, environmentally, and economically.

The “Wood First”¹⁰ policy of Rotorua Lakes Council (adopted in 2015) recognises the economic, environmental, cultural, and social significance of wood¹¹ and is intended to increase the use of timber solutions for housing and commercial construction. This Action Plan has a focus on strengthening the “Wood First” policy to ensure it delivers on the intended outcomes.

Scion, the Crown Research Institute focused on forestry, has been based in Rotorua for nearly 75 years. Scion is at the forefront of forestry research, development, and innovation. In recognition of the role the forestry industry plays in Rotorua’s economy, Te Uru Rākau – New Zealand Forest Service has located one of its two headquarters here in Rotorua.

Also prominent in the industry is Red Stag Timber, an independent, privately owned timber company based in Rotorua. Established in 2003, the Red Stag operation has an annual turnover of more than \$220 million and is one of Rotorua’s largest employers with approximately 400 full-time staff. Red Stag trains its own staff in the use of its state-of-the-art processing plants.

⁹ <https://www.rotoruanz.com/do-business/industries/forestry-and-wood-processing>

¹⁰ https://www.rotorualakescouncil.nz/repository/libraries/id:2e3idno3317q9sihrv36/hierarchy/our-council/policiesandbylaws/policies/9_7-Wood-First-Policy.pdf

¹¹ <https://www.rotorualakescouncil.nz/our-council/council-publications/10yearplans>

Natural forest		Planted forest				Non-forest
Primary	Modified natural forests	Semi-natural forests		Plantations		Trees outside forest (TOF)
		Assigned natural regeneration	Planted component	Protective	Productive	
Forest of native species, with no clearly visible indications of human activities and the ecological processes are not significantly disturbed.	Forest of naturally regenerated native species with clearly visible indications of human activities.	Silvicultural practices for intensive management (weeding, fertilizing, thinning, selective logging).	Forest of native species, established through planting, seeding or coppice of planting trees.	Forest of native or introduced species, established through planting or seeding mainly for provision of services.	Forest of introduced or native species established through planting or seeding mainly for production of wood or non-wood goods.	Stands smaller than 0.5 ha; trees in agricultural land (agroforestry systems, shelterbelts, orchards); trees in urban environments and scattered along roads and in landscapes.

FIGURE ONE: UN FAO forest types

There are strong ties through working partnerships with workforce development, foresters, researchers, wood processing and manufacturing. This is the forestry ecosystem that we are investing in through this Action Plan.

To address the key challenges in climate change, biodiversity, environmental degradation and supporting the shift to a zero or low-carbon economy, as a district we should look at forest purpose. Looking at a forest's purpose would enable a wider debate past 'exotic plantations versus natural conversation forests'. Functional forests should have species and management regimes tailored to the whenua and landowner preferences, putting function or purpose first¹². Figure one shows the UN FAO forest types. Rotorua could lead the way in introducing and managing forests in a different way leading to better environmental, social, cultural and climate resilience outcomes.

12 Payn, T. (2021). Putting purpose first – 10 functional forest types for New Zealand, *NZ Journal of Forestry*, Volume 66, No.1.

Forestry and the circular bioeconomy

Forestry is a bioeconomy: it produces renewable biological resources and then converts these resources and waste streams into value-added bio-based products and bioenergy. In a circular economy, the value of products is maintained in the economy for as long as possible, and the generation of waste is minimised.¹³ Scion is leading the thinking regarding the benefits of a strong bioeconomy. Rotorua is an ideal site to pilot a circular approach and build a low-emissions, bio-based and bio-diverse circular network¹⁴.

Rotorua Lakes Council's economic development strategy includes an intent to attract investment to initiatives that can transform the industry locally. A bio-pilot plant¹⁵ is one of the important opportunities under consideration.

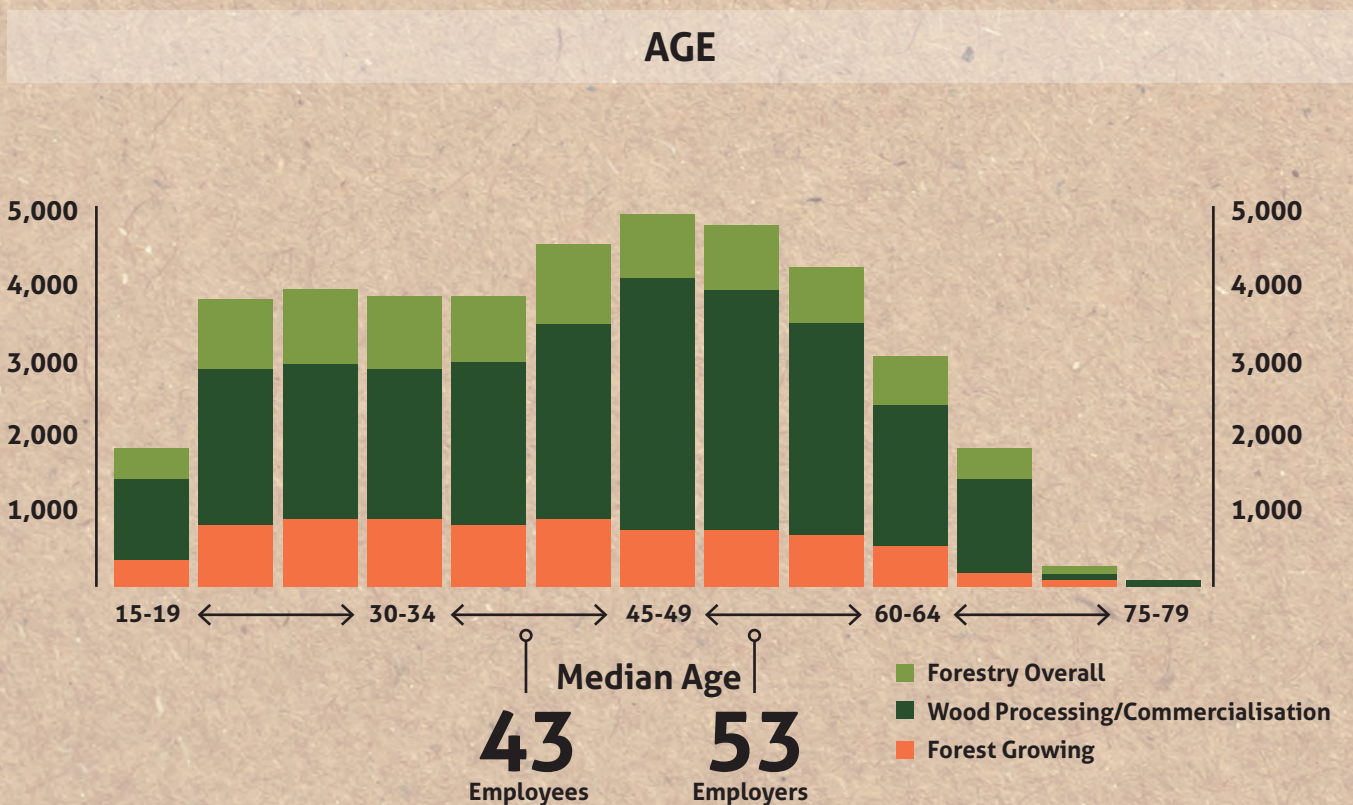
Policy settings from Central Government

We need to be well connected to national policies and action plans. The Forestry and Wood Processing Workforce Action Plan 2020-2024¹⁶ is an example of a national strategy that we need to connect with and understand Rotorua's role in delivering.

Attracting, training and retaining a skilled, safe and productive workforce where Māori participation in the industry translates into careers at all levels is important for Rotorua. We support the National Workforce Action Plan's intent to make training more accessible and the forestry workforce more diverse.

In 2022 Central Government released major policy statements on transforming the forestry industry and reducing CO₂ emissions.

FIGURE TWO: Forestry and wood processing workforce demographics, 2017



13 Definition from the Draft Industry Transformation Plan.

14 <https://scion-web.squiz.cloud/about-us/about-scion/corporate-publications/scion-connections/past-issues-list/scion-connections-issue-37,-september-2020/Missing-the-biopilot-bridge-between-science-and-commercialisation>

15 <https://rotoruanz.blob.core.windows.net/rotoruanz/rotoruanz/media/pdf/statement%20of%20intent/rs04277-rotorua-economic-development-statement-of-intent-2022-2023.pdf>

16 <https://www.mpi.govt.nz/dmsdocument/40366-Forestry-Wood-Processing-Workforce-Action-Plan-20202024>

Te Ara Whakahou – Ahumahi Ngahere, the Forestry and Wood Processing Industry Transformation Plan (ITP), vision recognises forestry and wood processing as a key pillar for regional economies, underpinning a low-emissions economy. The key changes it looks to progress are to process more logs and wood residues onshore and so add more value to wood products. It advocates for growing the bioeconomy, driving science and innovation, and supporting Māori aspirations in the sector.

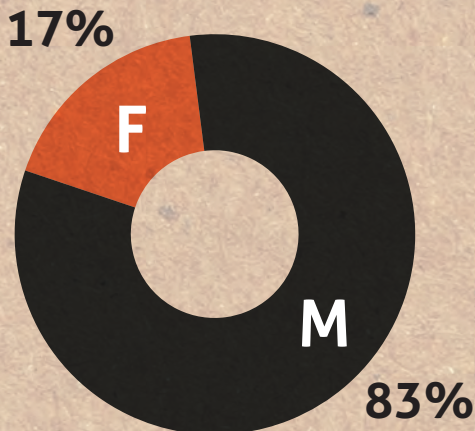
The Emissions Reduction Plan (ERP) is the first statutory plan under the Climate Change Response Act¹⁷ to require Central Government to act to reduce emissions right across the economy.

Some major actions under the ERP over the next few years, relevant to the forestry sector, include:

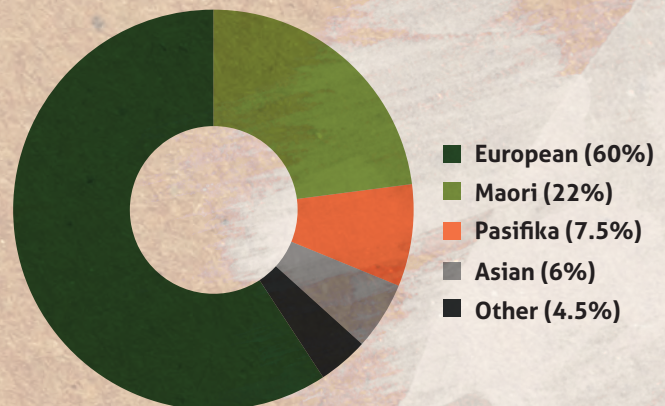
- supporting businesses to improve energy efficiency and move away from fossil fuels, such as coal, by continuing to roll out the Government Investment in Decarbonising Industry (GIDI) Fund;
- establishing native forests at scale to develop long-term carbon sinks and improve biodiversity; and
- accelerating the supply of woody biomass to replace coal and other carbon intensive fuels and materials.

The Action Plan has been developed to respond to climate change in positive ways and leverage forestry's role to benefit the Rotorua community.

GENDER



ETHNICITY



Source: Ministry for Primary Industries <https://www.mpi.govt.nz/dmsdocument/17638-human-capability-in-theprimary-industries-part-1-2002-to-2016-an-overview>.

17 <https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/executive-summary/>





PRIORITY IDEAS AND LIST OF ACTIONS



PRIORITY AREAS WĀHANGA MATUA

This Action Plan focuses on achieving landowner and community benefits and the action that Council and partners can take to support our people to work and play in our forests and ngahere. Te ao Māori is at the centre of our tourism industry. We expect that to be the same for our forests and ngahere, forestry, and wood processing.

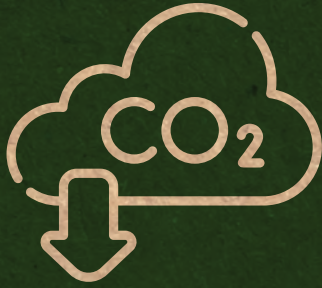
There will be an increasing number of interesting career opportunities for people in Rotorua that are directly or indirectly associated with forests. We want to make sure people are aware of what is possible now and in the future. Strong connections between our education, research and training organisations are the key to eliciting excitement in our people about the future of forests and ngahere.

The future is about using the strengths of this cluster to improve what we do. That means applying mātauranga Māori alongside research and industry knowledge. Helping our people share in our purpose is central to this Action Plan. By doing this we expect to grow pride in Rotorua that innovates for local and national benefit.

We want to create an environment where it's safe to take risks with new ideas. Where we back each other to be successful and put our people and environment first for the sake of future generations. The actions in this plan have come about through the collaborative processes run over the previous 12-18 months via the Rotorua Economic Recovery Plan: Build Back Better¹⁸ process, collaborative discussions, and direct feedback on the Action Plan.

18 <https://www.rotorualakescouncil.nz/repository/libraries/id:2e3idno3317q9sihrv36/hierarchy/our-council/agendas-and-minutes/livestream/documents/2020/council/Rotorua%20Economic%20Recovery%20Plan%20Build%20Back%20Better.pdf>

Our Action Plan will focus on four priority areas:



Moving to carbon zero

Actions under this priority look to support our district to move towards becoming carbon zero.

This action plan will support the biodiversity outcomes of this journey by supporting more planting of trees in the right place for the right purpose.



Research, science, innovation and commercialisation

Actions under this priority aim to increase the resilience of our forests and ngahere, increase the use of wood in construction, increase connectedness across the innovation system, and establish a bio-innovation hub.



Engaged communities

Actions under this priority aim to amplify our pride in Rotorua as a Centre of Excellence for forestry and wood processing taking a te ao Māori approach and building awareness of training, scholarships and associated careers to benefit our community.



Māori and forests – by Māori for Māori

Actions under this priority recognise that Māori lived in balance with ngahere before colonisation. Ngahere resources were used, but with tikanga (practices) that maintained ecosystem health. We want to bring knowledge of te ao Māori to more of our community and industry so that we can share holistic ideas about the natural world and how they can be applied today. The ITP discusses similar ideas – using every part of the tree, creating valuable products, and returning what is not used to the forest.

We know that Māori want to play a lead role in the commercial aspects of our forests and ngahere. We will use this Action Plan to support Māori aspirations for the care of forests, and participation in the forestry industry.

Implementation of the plan

The actions in this plan have been staged over three years. The projects we intend to support in delivery for years two and three will need to have funding secured. However, by including them in this plan we are ensuring we know what needs to be done next to move us in the right direction to achieve our purpose, and we are signalling to our community and potential funders that these actions are important to us and need attention.

Rotorua Lakes Council and RotoruaNZ will work together in partnership with Scion, Te Uru Rākau, Toi Ohomai, iwi (via Ngā Pou a Tāne – Waiariki Branch), Bay of Plenty Regional Council, and the action owners over the next three years to secure funding and ensure we are strategically aligned and nimble throughout delivery.

Moving to carbon zero

Forestry has an important role in reducing our greenhouse gas emissions and supporting us to move to carbon zero as a district. Our forests store a large quantity of carbon, preventing carbon from collecting in the atmosphere, and reducing our net emissions profile. In 2019 the Climate Change Response (Zero Carbon) Act passed into law. This sets domestic targets for reducing New Zealand's total greenhouse gas emissions. New Zealand's domestic targets are:

- Net zero emissions of all greenhouse gases other than biogenic methane by 2050, and
- 24% to 47% reduction below 2017 levels of biogenic methane emissions by 2050, including 10% reduction by 2030.

These targets were due for review in 2022.

In 2021, with community partners, Rotorua Lakes Council developed a climate action plan for the district (Mahere Tauhohe Huarere¹⁹). One of the actions includes a focus on Supporting biodiversity. This action plan directly contributes this to Mahere Tauhohe Huarere.

Research, science, innovation, and commercialisation

We have a state-of-the-art example of the innovative use of wood in construction in Rotorua: Te Whare Nui o Tuteata, the Scion Innovation Hub designed to co-locate teams with an interest in forests and ngahere.

Rotorua has been home to Scion for 75 years. Scion gives Rotorua an edge as we move towards being a Centre of Excellence in forestry and wood processing taking a te ao Māori approach. Being recognised as a Centre of Excellence will draw the interest of innovative companies locally and globally.

The commercial and environmental benefits from a circular economy approach in the forestry sector aiming for zero-waste throughout the forestry industry can be better understood through establishing a bio-innovation pilot here in Rotorua.

This Action Plan looks to support and enable research, science, innovation, and commercialisation to be as successful as possible here in Rotorua and looks to leverage the many areas of good work already underway. For example, the work by the New Zealand Farm Forestry Association supports anyone that is 'keen on getting more trees in the ground' with great information and tools available on their website (<https://www.nzffa.org.nz/>).

19 <https://letstalk.rotorualakescouncil.nz/61044/widgets/308606/documents/198622>

TUTEATA – THE SCION INNOVATION HUB

“Named after Tuteata, an ancestor of the three local subtribes, Te Whare Nui o Tuteata is a cutting-edge showcase for engineered timber not only in terms of the aesthetic but what it contributes to a carbon-zero future.

By using engineered products made from sustainably grown pine and putting more thought into the operational characteristics of a building, the building significantly contributes to New Zealand’s carbon-zero future to leave a much lighter footprint on the land.”

<https://rtastudio.co.nz/portfolio/scion-hub>

Māori and forests – by Māori for Māori

The state of Rotorua’s forests and ngahere needs to be understood. Where our taonga are and how we can protect and enhance these treasures. Our production forests are also home to a wide range of species that need protection. Rotorua needs to look holistically at our forest and ngahere and how we care for and utilise it for the benefit of future generations. Our great forests are part of what makes Rotorua unique and special.

Rotorua has an important role to play in fostering Māori leadership in the forestry sector. As a major hub for the education and training of the forestry workforce, our region is influential in setting aspirations and expectations for career pathways and for being a safety-first industry. Currently, Māori are significantly under-represented in parts of the forestry value chain. Highlighting this is the fact that Māori are represented in only <2% of management roles²⁰.

Treaty settlements have led to ownership of forestry blocks by many iwi but there is still more work to do for Māori to be leading the strategy for the long-term use of these assets. One of the key challenges we’ve heard during the development of this plan is the variable income generated by forestry and the impacts this has on the Māori Land Trusts’ ability to deliver value to their whānau. We’ve heard that collectivising the Māori Land Trusts is one option to help remedy this challenge. Through supporting Māori Land Trusts to collectivise, we also aim to support an uplift in capability and capacity to start shifting Māori representation across the value chain, and increasing Māori presence in all levels of leadership.

Engaged communities

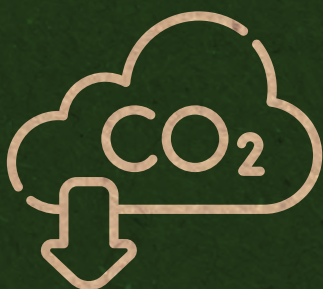
The forestry sector will not be successful unless we create substantive community support and social licence to operate. Our community can access and enjoy our diverse forests and ngahere areas for recreation and wellbeing. We want to expand and enhance these recreational opportunities. We also need to build awareness of the benefits the forest and forestry sector provide for our communities. We want our community to be proud of our forestry industry and see how we are leading the way nationally and globally, and to participate in the job opportunities available.

High paying, sustainable employment at all levels of the industry is already a reality in our region but we need to do more to excite young people about what’s on offer and showcase the training pathways available here in Rotorua. Where there are scholarships or support to enter the industry, we need to make sure we are promoting these. With more than 15% of Rotorua’s working population employed in the forest sector, collaborating with Toi Ohomai and other training providers can ensure we have the right people and skills for forestry jobs available now and in the future.

20 Ngā Pou a Tāne response to the Draft ITP: Te Ara Whakahou – Ahumahi Ngahere, October 2022.

THE LIST OF ACTIONS NGĀ TUKANGA

Since the initial work was undertaken in 2020, several high-level actions have been identified and tested through the collaborative discussion process. The actions which make up this plan are spread over three years, with those projects in years two and three yet to secure funding. We heard during the development of this plan that there are several areas where action is needed but are not funded. By including them here we are ensuring we know what needs to be done next to move us in the right direction to achieve our purpose and we are sending the signal to our community and potential funders, that these actions are important to us and need attention.



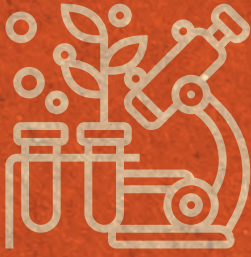
Moving to carbon zero

The forestry sector has a critical role to play in supporting our district to deliver our Mahere Tauhohe Huarere, Rotorua Climate Action Plan. At the heart of this support is the fact we need to sequester and store more carbon. This means planting more trees and building with wood products. We are seeking two outcomes in the next three years to support this priority area. It is outlined in the table below, alongside a set of actions. We will baseline a set of measures to enable us to check in on our progress.

Measure of success

We will know we have been successful in delivering this priority area because landowners, architects and builders have the information they need to make decisions to help us move to carbon zero.

THREE-YEAR OUTCOME	ACTIONS	OWNER	SUPPORTING PARTIES	DELIVERY YEAR AND RESOURCING
Our forests are more diverse and increasingly resilient.	1. Support landowners to make decisions about planting alternative tree species and planting the right tree in the right place for the right purpose.	Te Uru Rākau and Bay of Plenty Regional Council		Years 1, 2 and 3. Resourced through existing work within Te Uru Rākau and Bay of Plenty Regional Council
	2. Demonstrate the use of alternative tree species in wood products.	Te Uru Rākau	Scion	Years 1, 2 and 3. Resourced through existing work within Te Uru Rākau and Scion
	3. Support greater biodiversity protection by effective and targeted pest eradication programmes using the latest technology, e.g., gene editing and scent technology.	Bay of Plenty Regional Council	Department of Conservation	Years 1, 2 and 3. Resourced through existing work within Bay of Plenty Regional Council
	4. Support research on restorative/enrichment planting.	Scion	Te Arawa Climate Change Working Group	Year 2. Exploring resourcing options
We have afforestation in our district.	5. Afforestation on council-owned land and reserves is investigated to support greater biodiversity and carbon sequestration outcomes.	Rotorua Lakes Council		Years 2 and 3. Exploring resourcing options
The use of wood in construction increases.	6. Wood First policy phase one: review of RLC's Wood First policy; and phase two: informed by the findings of phase one.	Rotorua Lakes Council	Red Stag Timber and Scion	Year 2. Exploring resourcing options
	7. Review the building development pipeline and identify people who are already using wood first and showcase their progress.	Rotorua Lakes Council		Year 2. Exploring resourcing options
	8. Leverage existing mechanisms, for example, the Timber Design Center, to support developers and architects to use more wood.	Rotorua Lakes Council	RotoruaNZ	Years 1, 2 and 3. Resourced through existing work within Rotorua Lakes Council



Research, science, innovation and commercialisation

Taking the research and science from our best and brightest and making it a commercial reality is no easy feat but to be a Centre of Excellence in forests, ngahere, forestry, and wood processing we must get it right. We are seeking one outcome in the next three years to support this priority area. It is outlined in the table below, alongside a set of actions. We will baseline a set of measures to enable us to check in on our progress.

Measure of success

We will know we have been successful in delivering this priority area because we see a greater number of innovations and or start up business in the market place.



THREE-YEAR OUTCOME	ACTIONS	OWNER	SUPPORTING PARTIES	DELIVERY YEAR AND RESOURCING
The sector is enabled to innovate and prosper because of improved connectedness across the research, science, innovation, and commercialisation system.	9. Review of forestry land use across Rotorua district to inform future afforestation efforts.	Bay of Plenty Regional Council and Rotorua Lakes Council		Year 2. Resourced through existing work within Bay of Plenty Regional Council and Rotorua Lakes Council
	10. Ensure land is zoned appropriately for the expansion of the wood processing sector.	Rotorua Lakes Council	Central North Island Wood Council	Year 2. Resourced through existing work within Rotorua District Council, Review of Industrial Land
	11. Share information about transitioning exotic forests to ngahere.	Scion and Te Uru Rākau	RotoruaNZ and Bay of Plenty Regional Council	Year 2. Exploring resourcing options
	12. Establish a bio-pilot testing facility in Rotorua.	Scion	Te Uru Rākau and RotoruaNZ	Years 1, 2, and 3. Resourced through existing work within Scion and RotoruaNZ. Capital funding not yet secure
	13. Identify and drive opportunities for the uptake of wood-based bio-products (e.g., biofuels, biochemicals, bio plastics etc.).	Scion	RotoruaNZ	Years 1, 2, and 3. Resourced through existing work within Scion and RotoruaNZ
	14. Identify and support technologies that look to maximise value extraction from radiata pine logs.	Scion		Years 1, 2, and 3. Resourced through existing work within Scion
	15. Creation of a toolkit (collateral, documents, resources) which provides key insights and data about the forestry and wood processing sector to the district.	RotoruaNZ		Years 1 and 2. Resourced through existing work within RotoruaNZ
	16. Advocate for forestry and wood processing sectors across key matters of interest with Local Government New Zealand.	RotoruaNZ and Rotorua Lakes Council		Years 1, 2 and 3. Resourced through existing work within Rotorua Lakes Council and RotoruaNZ
	17. Develop and implement a talent attraction strategy to bring the right skills to Rotorua's forestry and bioeconomy sector.	RotoruaNZ	Scion	Years 2 and 3. Exploring resourcing options
18. Targeting forestry and bioeconomy events to be held in Rotorua.	RotoruaNZ	Scion	Years 1, 2, and 3. Resourced through existing work within RotoruaNZ and Scion	



Māori and forests – by Māori for Māori

Actions under this priority recognise that Māori lived in balance with ngahere before colonisation. Ngahere resources were utilised, but with tikanga (customs, practices) that maintained ecosystem health. Our long-term vision is that our forest and ngahere are thriving, Māori have the capability and capacity to participate in all levels of the forest sector, and the sector is supportive of and integrates Māori values and approaches. We want to bring knowledge of kaitiakitanga (guardianship) to more of our community so that we can generate recognition of how te ao Māori, with its more holistic ideas about the natural world, can be applied today and in the context of all forests and forestry. The ITP discusses similar ideas – using every part of the tree, creating valuable products, and returning what is not used to the forest.

We know that Māori want to play a lead role in the commercial aspects of forests and ngahere. The first action of this priority area is to stand up a local Māori and Forests – by Māori for Māori Working Group. By establishing this working group, we will put Māori at the centre of the actions in this plan to support their aspirations within forests and the forestry industry. Without the guidance of this Working Group, progress cannot be made. We are seeking three outcomes in the next three years to support this priority area. These are outlined in the table below, alongside an initial set of actions to progress action. We will baseline a set of measures to enable us to check in on our progress.

Measure of success

We will know we have been successful in delivering this priority area because there will be a collective plan to realise Māori aspirations in forests and ngahere, forestry and wood processing.

THREE-YEAR OUTCOME	ACTIONS	OWNER	SUPPORTING PARTIES	DELIVERY YEAR AND RESOURCING
Māori capability and capacity are lifted across the value chain.	19. Establish a Māori and Forests – by Māori for Māori Working Group to drive and progress the priority area and actions.	RotoruaNZ	Rotorua Lakes Council	Year 1. Funding to be confirmed
	20. Understand ways to create greater value from Māori assets, particularly where health and safety concerns exist on unsafe terrain for forestry, and explore alternative revenue options, for example wind and energy.	To be confirmed		Years 2 and 3. Exploring resourcing options
	21. Support the collectivisation of Māori Land Trusts to participate more effectively in forestry.	Working Group		Years 2 and 3. Exploring resourcing options
	22. Establish a pilot project to capture key data relating to Māori forestry enterprises to further support intervention identification.	To be confirmed		Years 2 and 3. Exploring resourcing options
	23. Establish baseline data for workforce make up across the forestry sector.	Te Uru Rākau		Years 2 and 3. Exploring resourcing options
We have better data to manage and care for forests across Rotorua.	24. Scope a project to establish baseline ecological data for forests across Rotorua, including small urban stands and existing biodiversity.	Te Arawa Climate Change Committee	Scion and Rotorua Lakes Council	Years 2 and 3. Exploring resourcing options
Understanding of te ao Māori is greater in the local forestry sector and community.	25. Deliver a compare-and-contrast case study of a commercial vs tikanga-based approach, including existing practices that demonstrate tikanga Māori in daily forestry operations.	To be confirmed		Years 2 and 3. Exploring resourcing options
	26. Pilot for training for kaiako (trainers) to train in a culturally responsive way, e.g., clusters and/or whānau.	To be confirmed		Year 3. Exploring resourcing options



Engaged communities

Actions under this priority aim to amplify our pride in being a Centre of Excellence in forestry and wood processing taking a te ao Māori approach while supporting landowners to gain benefit from their forests. We are seeking three outcomes in the next three years to support this priority area. These are outlined in the table below, alongside a set of actions. We will baseline a set of measures to enable us to check in on our progress.

Measure of success

We will know we have been successful in delivering this priority area because our community will continue to support forestry in our region and benefit from forests and ngahere.



THREE-YEAR OUTCOME	ACTIONS	OWNER	SUPPORTING PARTIES	DELIVERY YEAR AND RESOURCING
Forestry's social licences to operate are improved in the Rotorua district.	27. Support improved health and safety in our forestry enterprises so we are the safest region to conduct all forestry activity.	Health and Safety Industry Forum – Central North Island Wood Council		Years 1, 2, and 3. Resourced through existing work by Central North Island Wood Council
	28. Plan and deliver a series of positive news stories to support improved awareness of the benefits of forests and forestry.	RotoruaNZ	Scion and Central North Island Wood Council	Years 1, 2, and 3. Resourced through existing work by RotoruaNZ, Scion and Central North Island Wood Council
	29. Review and respond to the Ministerial inquiry into Tairāwhiti/Gisborne and Wairoa land use.	Central North Island Wood Council	Rotorua Lakes Council	Years 1 and 2. Resourced through existing work by the Central North Island Wood Council
The Rotorua landowners and community continues to benefit from the forests for recreation, rongoā, health and wellbeing.	30. Support forest landowners to realise/ unlock commercial recreational products in their forests, e.g., walking and hiking and mountain biking in forests.	RotoruaNZ	Scion, Forest Owners Association	Years 1, 2, and 3. Resourced through existing work by RotoruaNZ
Rotorua is the place to come to if you want a career in forestry.	31. Work with Central Government to understand how Rotorua can support the delivery of education and training nationally and understand what that means for our local training opportunities.	RotoruaNZ and Rotorua Lakes Council	Central North Island Wood Council	Year 1. Resourced through existing work by RotoruaNZ and Rotorua Lakes Council
	32. Review and refine the Generation Programme so it is well-placed to deliver against industry needs and to understand future options to make funding sustainable.	Central North Island Wood Council		Year 1. Resourced through existing work by Central North Island Wood Council

APPENDIX ONE: TE AO MĀORI²¹

Te ao Māori denotes the Māori world. While simple in definition, it is rich in meaning and vast in breadth and depth. In the context of the Rotorua Forest Futures Action Plan (the Action Plan), te ao Māori includes people, place, and culture.

Tāngata whenua

Tāngata whenua (people of the land) are an intrinsic part of forestry who believe that all people should implicitly be enabled to benefit from forests. Te ao Māori puts people at the centre and tāngata whenua at the heart of the forestry sector.

Embedding te ao Māori in forestry would enable people-centric decision-making in all parts of the forestry value chain.

Climate change

Climate change is impacting our lands and people in many different ways:

- a. Culturally significant places are at risk;
- b. The loss of taonga (treasured) species;
- c. The timing of tohu (environmental indicators) is changing;
- d. Mātauranga Māori (knowledge) may not be passed on to future generations;
- e. The ability to 'take care of' the environment, forests and ngahere is threatened.²²

Māori need to equip themselves and te ao Māori provides a way to frame and manage the effects of climate change on the wellbeing of our tāngata. For example:

- a. With tikanga as a guiding principle, using wood in construction brings the wairua (spirit) of the forest into the built environment. The science is that people experience increased dopamine when surrounded by wood and being in wooden buildings. This demonstrates the crucial role that using wood in construction holds in leading to better physical, mental, and social health outcomes.
- b. Māori role of kaitiaki (custodian) would inform decision-making using mātauranga Māori and tikanga Māori on when to gather seeds, manage indigenous forests, and use existing indigenous undergrowth in exotic forests to transplant indigenous tree species into new forests.

Economic resilience

Māori landowners such as hapū (extended family groupings connected to whenua), land trusts, and incorporations are major players in the forestry sector and economy; with our whenua and investment in people and innovation, delivering impactful economic returns and increasing social goods.

Working to resolve certain challenges can optimise the broad potential of our land, people, and knowledge systems:

- i. "The sector is a significant employer of Māori workers, who, in general, have high rates of temporary employment, face disproportionate safety, health and wellbeing risks, and are less likely to receive training," Forestry & Wood Processing Workforce Action Plan 2022-2024, p11.
- ii. "Māori continue to be disadvantaged and among the first in Aotearoa New Zealand to be negatively affected by climate change due to a close living and working relationship with the environment and its resources," Our Atmosphere and Climate Report 2020, New Zealand Ministry for the Environment.
- iii. Ahi kā (continuous occupation) landowners live proximate to forested lands in highly vulnerable living conditions, in the most disadvantaged districts of the nation. Eighty per cent of Māori land is Land Use Class (LUC) 6-8; broadening options would make around 500,000ha of this land more productive.

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22 <https://environment.govt.nz/facts-and-science/climate-change/how-climate-change-affects-maori/>

