



**FORESTRY AND
WOOD PROCESSING
WORKFORCE
ACTION PLAN**

2020–2024

**TE MAHERE MAHI
MŌ NGĀ KAIMAHI
TUKATUKA
NGĀHEREHERE
ME TE RĀKAU**

2020–2024

CONTENTS

1	FOREWORD
2	INTRODUCTION
4	THE WORKING GROUP
5	OUTCOMES AND SUCCESS MEASURES
6	THE OPPORTUNITIES
14	OPERATING ENVIRONMENT
16	THE WORKFORCE ACTION PLAN
20	FOCUS AREA ONE: KNOWLEDGE
21	FOCUS AREA TWO: ATTRACTION
22	FOCUS AREA THREE: EDUCATION AND TRAINING
23	FOCUS AREA FOUR: EMPLOYMENT
24	GOVERNANCE
25	KEY IMPLEMENTATION MILESTONES
26	APPENDIX ONE: PRIORITY SKILLS GAPS
30	APPENDIX TWO: RELATED PROGRAMMES
34	APPENDIX THREE: FORESTRY AND WOOD PROCESSING WORKFORCE ACTION PLAN DETAILS



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FOREWORD WĀHINGA KŌRERO

We are very pleased to present the *Forestry and Wood Processing Workforce Action Plan 2020–2024*.

The forestry and wood processing sector provides a huge range of economic and social benefits to New Zealand society. The sector provides jobs and generates trade, income and investment. It also provides environmental benefits, such as climate regulation, water purification and erosion control. The value of plantation forests extends to non-material benefits, including opportunities for recreational activities and maintaining biodiversity of native fauna, flora, streams and rivers.

Global trends are driving changes that call for a more skilled and diverse workforce to meet the opportunities and challenges associated with sustainable development. This in turn is stimulating innovation and the growth of new timber-derived products and is resulting in new job opportunities in expanding areas of work.

*E kore e ngawhere,
he mairē tū wao,
mā te toki e tua.*

Individuals and organisations across the forestry and wood processing sector are already taking steps to attract, train and retain a skilled, safe and productive workforce. This Action Plan, developed by the forestry and wood processing sector, government and the education sector, provides a cohesive framework that brings those initiatives together.

The Action Plan is a living document. It provides the flexibility to respond to emerging workforce needs and input from a wider set of sector stakeholders. It builds on work already underway, including the One Billion Trees programme. It also looks to the future and will drive further momentum towards transformational change.

We thank everyone who has contributed to the development of the *Forestry and Wood Processing Workforce Action Plan 2020–2024*. We look forward to working together to build the skilled and sustainable workforce the sector needs now and in the future. As the Māori proverb on this page tells us, the mairē standing alone does not have the strength of one in the forest. Likewise a person with many supporters has more strength than those acting alone.

– *The Forestry and Wood Processing Workforce Action Plan Working Group*

INTRODUCTION

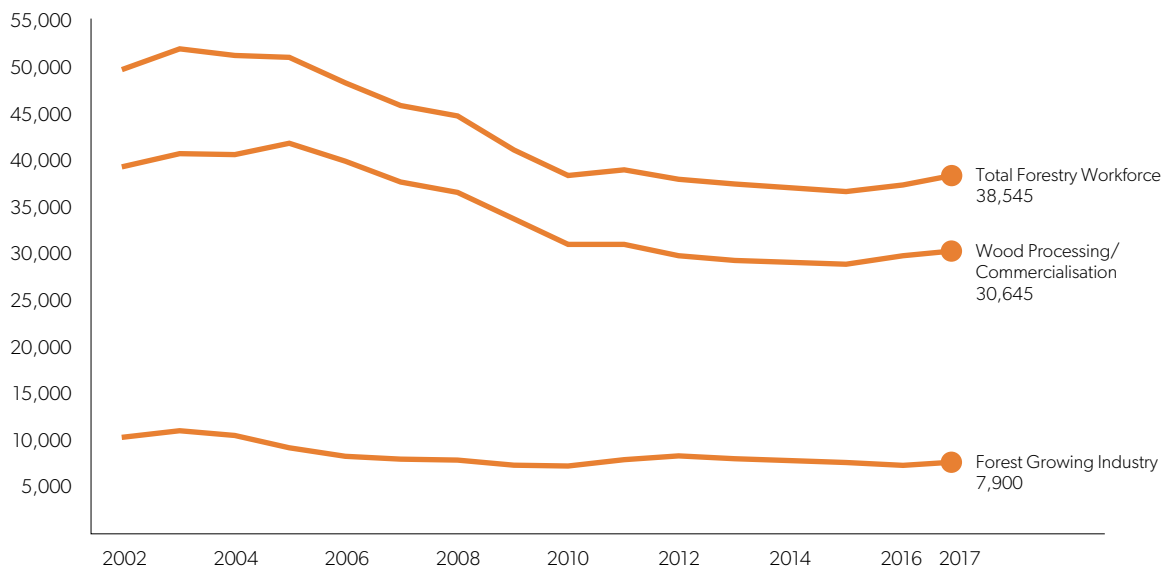
KŌRERO WHAKATAKI

The forestry and wood processing sector is a substantial contributor to New Zealand’s economy and society. Wood products are New Zealand’s third largest export earner, behind dairy and meat. The sector contributes over \$6.9 billion in export revenue¹ and accounts for 1.6% of New Zealand’s GDP.² The environmental, community and social benefits of forests are being increasingly recognised.

Te Uru Rākau is leading the Government’s renewed focus on strengthening the sector. This includes developing a Forest Strategy in collaboration with sector stakeholders. A diverse and skilled workforce will be required to implement the Forest Strategy and meet changing work environments.

The sector is a major employer and key driver of economic activity in regional New Zealand, with a total workforce of over 38,500 people, as shown in Figure 1.

Figure 1: Employment numbers in the forestry and wood processing sector workforce



Source: Stats NZ Integrated Data Infrastructure (IDI)

Note: These numbers do not include cartage and port operation workers involved in moving forestry products but do include secondary processing, such as wooden furniture manufacturing

¹ <https://www.mpi.govt.nz/dmsdocument/37074-situation-and-outlook-for-primary-industries-sopi-september-2019>

² <https://www.teururakau.govt.nz/growing-and-harvesting/forestry/new-zealand-forests-and-the-forest-industry/importance-of-new-zealand-forests/>

The sector is entering an exciting new phase, as forests planted in recent decades reach maturity, increasing production volumes. While the total workforce has declined since the early 2000s, the sector has seen an increase in labour productivity and, more recently, workforce size. In addition to directly providing employment and incomes from operational activities in the forest or mill, the sector has employment links in processing and support industries in nearly all districts, benefitting both rural and urban centres.

Māori make a major contribution to New Zealand's economy through their extensive interests in forestry. Māori participation in forestry, and in protecting and managing the natural environment, will increase as Treaty of Waitangi settlements conclude, offering the prospect of social and economic benefits at a regional and national level.³

However, the sector is facing substantial challenges to recruiting and retaining suitably skilled and qualified workers. The challenges are multi-faceted. They range from an ageing workforce and rural depopulation, to perceptions of the sector as inhospitable, unsafe and lacking professionalism. Challenges and opportunities at the global level include changes in trade, technology, and societal expectations about risks to the wellbeing of workers, communities and the environment. For example, disruptive technology, such as mechanised logging or planting machines, may displace manual workers and affect regional economies. Advances in technology can also guide sector-wide innovation and drive gains in safety and efficiency.⁴ Government, industry, Māori and educational institutions will need to work together to address these challenges and maximise opportunities.

The forest growing and wood processing industries share close connections and interests. These include minimising risks to trees from fire, pests and diseases, reducing costs along the supply chain, and ensuring the health and safety of employees.⁵ While there are difficulties recruiting suitable employees for some wood processing roles (see Appendix One), workforce development issues are not the main focus for the wood processing industry at this point.

Global trends in technology, sustainable development and a movement towards the bio-economy are driving a change in demand for the types of timber-derived and wood waste-derived products manufactured. These developments will result in new job opportunities in expanding areas of work, supplementing the more

This plan is a living document, which builds on work already underway and provides the flexibility to respond to emerging workforce needs.

traditional roles that will continue to underpin a viable sawmilling industry. Future work will be needed to address workforce development needs specific to the wood processing industry.

Recognising the challenges facing the sector, Te Uru Rākau convened the Forestry and Wood Processing Workforce Action Plan Working Group (the Working Group) in May 2019 to develop an action plan aimed at strengthening the sector's workforce. Consultation on the Forest Strategy will provide an opportunity to engage with a wider set of views on how the Action Plan should be implemented.

The Forestry and Wood Processing Workforce Action Plan 2020–2024 (the Action Plan) is a living document, a first step towards addressing sector workforce needs. It covers:

- the forest growing industry, which includes nursery operations and the planting, maintenance, management and harvesting of commercial forests;⁶ and
- some parts of the primary wood processing industry: specifically, sawmilling and wood treatment.

The actions do not cover other aspects of primary wood processing, such as remanufacturing, panel and plywood manufacturing, and pulp and paper manufacturing. Nor do they cover secondary wood processing, such as furniture manufacture, or allied industries such as log transport or port operations.

Roles that are not explicitly covered in the Action Plan, such as log cartage and port operations, will be considered in the forecasting of future workforce supply and demand. More general actions, such as in the attraction area, will assist log cartage. Partnerships with these groups to address workforce issues will be taken into consideration as the plan is implemented and further developed.

³ Scion (2018). *Right Tree, Right Place, Right Purpose: Scion strategy to 2030*.

https://www.scionresearch.com/_data/assets/pdf_file/0014/64310/Scion_strategy_4web.pdf

⁴ Pinkard, E.A. & O'grady, A.P. (2016). Innovation in the forest industry: ready or not!, *Australian Forestry*, 79:3, 153-156. <https://www.tandfonline.com/doi/full/10.1080/00049158.2016.1213622>

⁵ Scion, *op. cit.*

⁶ This definition is consistent with a Westpac report. <https://www.westpac.co.nz/assets/Business/Economic-Updates/2018/Bulletins-2018/Industry-Insight-Forestry-and-Wood-Products-May-2018.pdf>

THE WORKING GROUP

TE RŌPŪ MAHI

The Working Group was formed to develop a workforce action plan for the forestry and wood processing sector. The Working Group was made up of industry organisations and government agencies with an interest and expertise in forestry and wood processing sector skills.

Working Group Members

Sharon Cox	Ministry of Business, Innovation and Employment
Alfred Duval	Future Foresters and Port Blakely Ltd
David Evison	School of Forestry, University of Canterbury and NZ Institute of Forestry
Ruth Fairhall	(Chair, May–August 2019), Ministry for Primary Industries
Fraser Field	Rayonier Matariki Forests
Jivan Grewal	Ministry of Business, Innovation and Employment
Jeff Illott	NZ Timber Industry Federation
Richard Lynch	Ministry for Primary Industries
Glen Mackie	NZ Forest Owners Association
Mark Preece	Competenz
Antonia Reid	(Chair, September–December 2019), Ministry for Primary Industries
Thea Wallace	Ministry for Primary Industries
Prue Younger	Forest Industry Contractors Association

The Working Group members met over a period of eight months to develop priorities and actions that reflect the realities of the New Zealand forestry and wood processing sector. The meetings enabled us to share information and achieve the consensus needed for the successful development of the Action Plan.

OUTCOMES AND SUCCESS MEASURES

PUTANGA ME NGĀ INENGA ANGITU

The Action Plan aims to support the development of a workforce that meets the current and future needs of the forestry and wood processing sector. It does this by delivering on the following focus areas.



1

KNOWLEDGE
MŌHIOTANGA

The forestry and wood processing sector makes good workforce decisions based on robust information and data

We will know we have achieved our goal when:

- forestry and wood processing workforce requirements are anticipated through robust analysis and forecasting; and
- the sector has a good understanding of programmes that eliminate barriers and prepare people for working in the sector.



2

ATTRACTION
WHAKAMANEA

The forestry and wood processing sector inspires and attracts a larger, more diverse workforce

We will know we have achieved our goal when:

- a diverse range of people want to study and work in the forestry and wood processing sector;
- potential new employees understand the range of career paths available and the prerequisites for their areas of interest;
- employers easily fill vacancies with quality, skilled employees and new recruits ready to be upskilled; and
- the public views the forestry and wood processing sector as a respected and attractive career choice.



3

EDUCATION AND TRAINING
MĀTAURANGA ME NGĀ WHAKANGUNGU

People have the right skills, knowledge and capabilities to be successful in the forestry and wood processing sector

We will know we have achieved our goal when:

- the education and training system meets the needs of the sector and of trainees and employees with specific learning requirements;
- individuals on different career pathways are supported to train and gain relevant credentials at any stage of their careers and lives; and
- young people, particularly Māori rangatahi, see forestry and wood processing as viable career choices that are compatible with their cultural values and worldviews.



4

EMPLOYMENT
WHAI MAHI

People thrive in forestry and wood processing workplaces with good practices and conditions

We will know we have achieved our goal when:

- all contractors and forestry employers run sustainable businesses and provide fair pay, stable work, and positive employment experiences;
- forestry is seen as a safe industry to work in; and
- employees remain in the sector because of good conditions and a sense of pride in their work.

A close-up photograph of a pine branch with vibrant green needles, filling the entire frame. The needles are sharp and pointed, with some showing slight yellowing at the tips. The lighting is bright, creating a soft glow around the needles.

THE OPPORTUNITIES NGĀ KŌWHIRINGA

Several innovative initiatives are in place across the forestry and wood processing sector. Working together, we can build on these initiatives and develop the skilled, diverse workforce we need to boost innovation, productivity and sustainability. This will also enable us to take advantage of opportunities associated with changing conditions and demands.

Opportunity one: **Generating accurate and consistent information about our skills and labour needs to underpin education and training settings and make the right decisions about workforce interventions.**

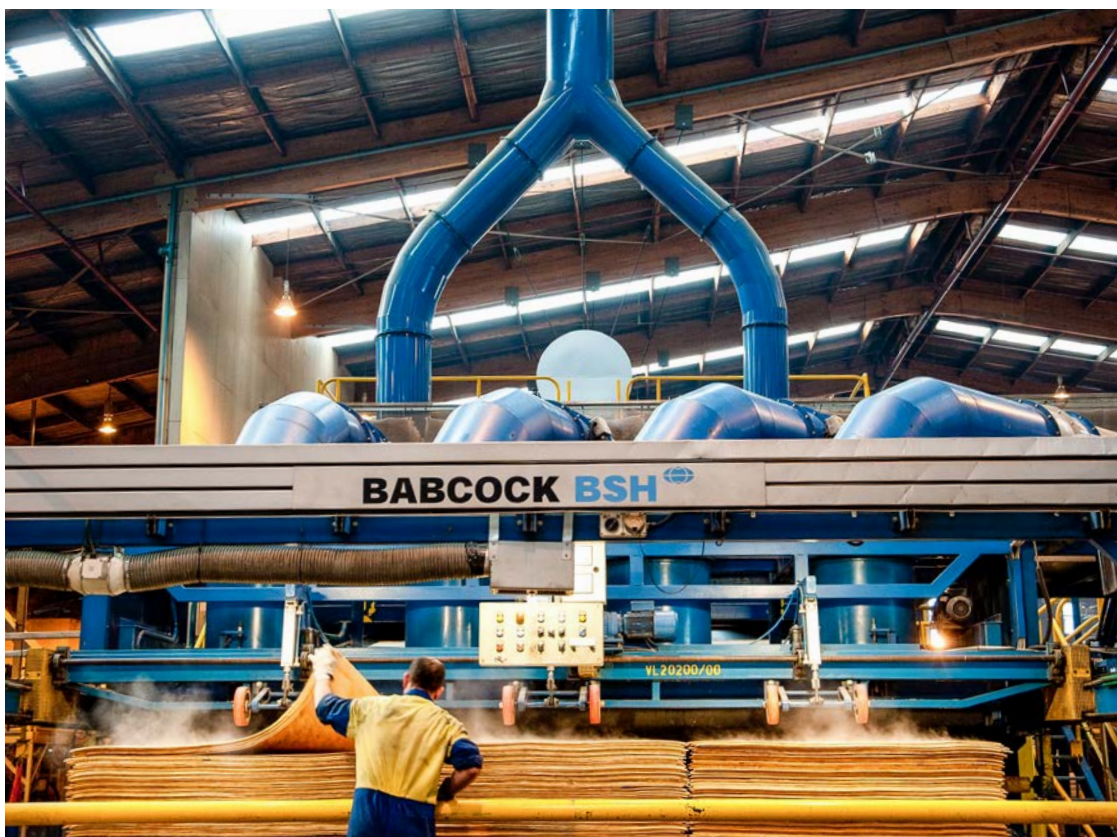
Current and future workforce gaps need to be systematically identified, and corresponding interventions put in place, before workforce shortages have a further impact on business activity. Better data are critical to informing the actions we should take.

Assessments of current and emerging labour and skill needs in the sector are incomplete and often dated. While a 2014 forecast estimated a need for a larger workforce with more diverse skillsets, developments in recent years mean that the forecast needs to be refreshed. Initiatives such as One Billion Trees, for example, will drive demand for more silviculture workers, and technological advancements are creating new jobs requiring different skills.⁷

We have some information about current skill gaps in both the forestry and wood processing industries (see Appendix One for a heat map of skills gaps for the forest growing industry and research findings on skills gaps in the wood processing industry). To accurately forecast workforce skill requirements, we need an up-to-date,

reliable evidence base about workforce numbers, needs and gaps. This may extend to likely measures of productivity gains in mechanised harvesting and the impact of disruptive technologies, such as mechanised tree planting or mechanised pruning. We expect to be able to model the impact of mechanisation, including disruptive technologies, through the forecasting activity referred to in action 1.1 on page 18.

To be well-prepared for emerging challenges, we need to know which qualifications are providing graduates and workers with the skills and knowledge they need to succeed in the sector. We also need to know which workforce interventions and programmes are working and why, and which programmes most effectively eliminate barriers to work-readiness among new employees. A coherent evaluation strategy that addresses these questions and builds on previous work will enable resources to be directed to successful programmes that can be scaled up for a wider group of people.⁸



⁷ The Ministry for Primary Industries (2014). *Future capability needs for the primary industries in New Zealand*. <https://www.mpi.govt.nz/dmsdocument/3893-future-capability-needs-for-the-primary-industries-in-new-zealand>

⁸ Forest Industry Safety Council (October 2014). *Independent Forestry Safety Review. An agenda for change in the forestry sector. Final report*.

Opportunity two: Changing perceptions to attract a larger, more diverse, high-quality talent pool with the right skills for the range of career pathways in the sector.

A dynamic and progressive sector must actively engage with a wider talent pool from non-traditional backgrounds to compete with other sectors and attract the workers it needs.

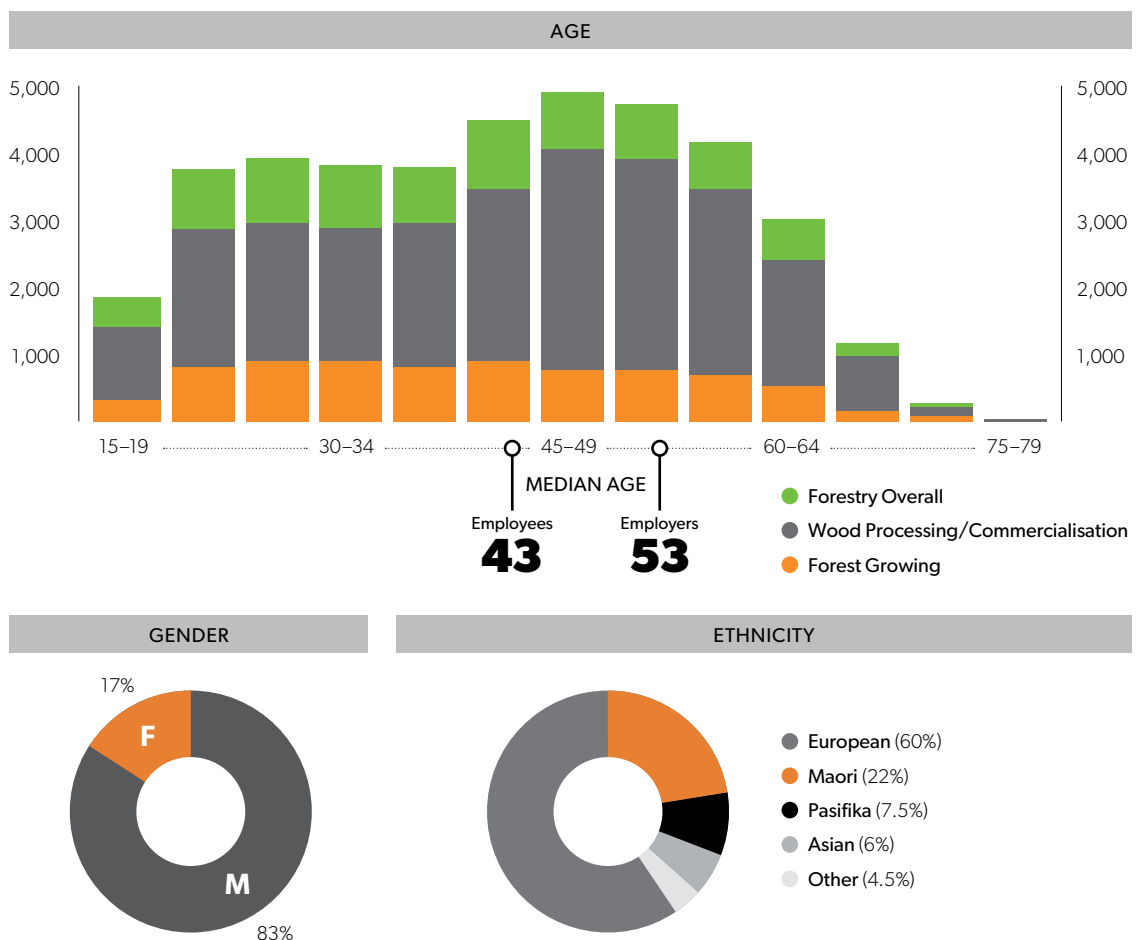
Figure 2 highlights a relative lack of diversity in the sector's workforce, which is mostly male, European and older than the median age of the New Zealand population.⁹ It also shows that forestry is a significant employer of Māori, particularly in the forest growing part of the value chain.

Jobs in the sector provide opportunities for career growth and meaningful work in sustainable industries.

Career opportunities in forestry and wood processing are available in both rural and urban areas. A lack of knowledge among young people about the range of careers in the sector contributes to difficulty in recruiting workers. Technological developments and labour shortages caused by retirements are likely to put pressure on occupations that require highly trained workers and on skills that are sought by other industries.

Views about the sector's desirability as a workplace are sometimes a result of a lack of information or outdated perceptions. This is especially evident in the urban population. Urban dwellers are less likely than

Figure 2: Forestry and wood processing workforce demographics, 2017



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

⁹ In 2015 the median age of the New Zealand population was 37.3 years. <https://www.statista.com/statistics/436388/average-age-of-the-population-in-new-zealand/>



I just want to work in robotics; if robotics is primary industries, then I will work there."

"...I'm mainly attracted to certain careers due to what the job involves, not whether it is in the primary industries."

Source: Growing NZ, December 2016, *Understanding Decision Making that Leads to Careers in the Primary Industries.*

rural dwellers to hold positive views about the forestry industry, agree that businesses in the primary sector are good employers,¹⁰ or consider a career in the primary industries.¹¹

Various existing initiatives are aimed at promoting forestry and wood processing careers. While the focus has largely been on promoting the sector to those who want to work in hands-on, outdoor jobs, potential employees are often attracted to the skills required, rather than to a specific sector or industry. This highlights an opportunity to connect with people who are interested in innovation and technology, or those wanting to establish their own business, who are often career changers.

To meet current and future challenges and opportunities, the sector needs to become more innovative in recruiting people from diverse backgrounds, who bring different capabilities to fill new, emerging jobs, as well as more traditional roles.

To attract a wider range of people, we need to do more to promote the sector as a positive place to work, committed to sustainable business practices, caring for the environment and offering great career opportunities and benefits. We can strengthen the impact of current initiatives by aligning, co-investing and targeting messages to untapped sections of the talent pool.

¹⁰ Ministry for Primary Industries, October 2017, *New Zealanders' views of the primary sector.* <https://www.mpi.govt.nz/dmsdocument/27582-new-zealanders-views-of-the-primary-sector>
¹¹ Growing NZ, December 2016, *Understanding decision making that leads to careers in the Primary Industries.* http://www.growingnz.org.nz/images/ResearchPapers/Understanding_decision_making_that_leads_to_careers_in_Primary_Industries_Summary.pdf



MAX GOMEZ, of Ngāi Tahu descent, has just finished his first year of study at the School of Forestry, University of Canterbury. Max was awarded a Te Uru Rākau Forestry Scholarship to support his studies towards a Bachelor of Engineering (Hons) in Forest Engineering.

"I've always been sporty. I've played all types of sports full-on. When I was at high school in Dunedin I enjoyed science and maths, but I wasn't sure what I wanted to study at university. I was looking at engineering options and I went to an engineering seminar where a faculty member from the University of Canterbury's School of Forestry talked about careers in forestry and opportunities for scholarships.

That's when I realised that forestry engineering would be a good choice for me. And my family supported me too; they think it's a great idea and it fits well with New Zealand's ability to grow trees well and our clean green international image. There's going to be a demand for forestry engineers and opportunities in New Zealand and around the world in the next few years. A lot of work needs to be done before we plant a billion trees. With the world's focus on carbon emissions, New Zealand is well placed to grow trees to help towards becoming carbon neutral.

Forestry isn't just about cutting down trees. It's a massive field with almost endless opportunities for people to take, from planting trees to building roads. There are a few different paths in forest engineering, such as civil or mechanical engineering. Our studies are broad in the first year so I'm not sure yet which way I'll go.

It's a good job. You're not stuck in the office, you're out there doing things. I'm about to start a paid internship as part of my scholarship, working with City Forests in Dunedin. I'm looking forward to working over the summer. It's going to be fun. I'm going to be plotting out where roads need to go in new forests, planning the roads and helping build them. The internships are great and I appreciate the help to get a foot in the door on my chosen career path."



Forestry isn't just about cutting down trees. It's a massive field with almost endless opportunities."

Opportunity three: Providing fit-for-purpose, accessible education and training that are backed by industry, match employers' demands and meet workers' needs.

Enrolments in any field or level of study are ultimately the learners' choice and they will respond to what they see as the opportunities. This will be shaped by how they perceive industries and jobs in relation to safety, pay and working conditions, and progression opportunities, as well as the delivery of careers information that informs their choices.

Gaps in the workforce's capability partly reflect the changing nature of the workplace. Increasing mechanisation has already shifted many jobs from manual to technical skills, shrinking the number of traditional, labour-intensive jobs, but increasing productivity. Sustainable development will drive increased forest planting. Research in innovative areas promises new products, processes and jobs along the entire value chain. Tasks will be increasingly sophisticated, driving demand for a larger and more

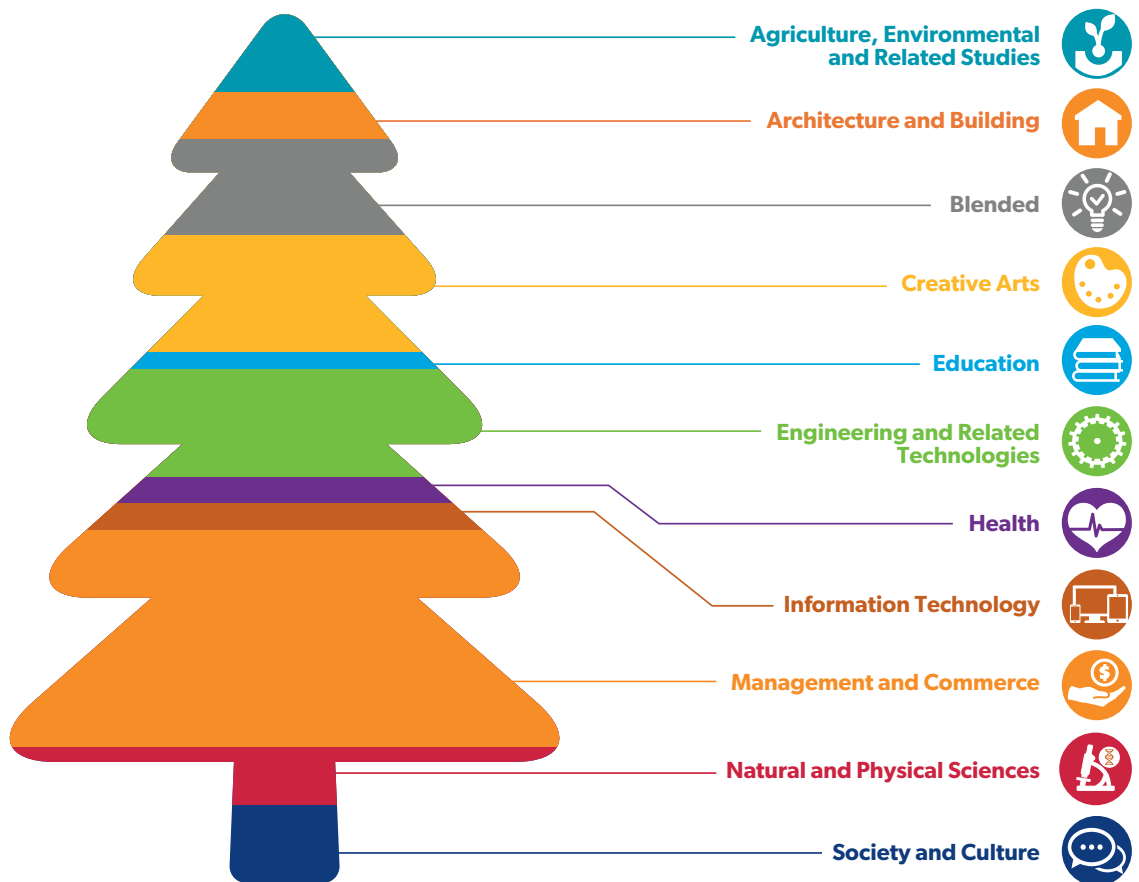
diverse workforce with a wider range of technical skills and expertise and a lift in educational attainment.

The range of formal qualifications in the sector's workforce is varied, but overall the level of formal qualifications is low. Falling enrolments in specialist forestry and wood processing subjects may reflect that current training policy settings are not delivering qualifications matched to industry requirements. Engaging with the Review of Vocational Education process will ensure the new training environment provides the improvements the sector needs to incentivise more formal training.

While forestry-specific qualifications are important, the increasingly multi-disciplinary nature of forestry means that other qualifications are also vital. For example, Figure 3 shows that engineering and management

Figure 3: An illustration of the diversity of qualifications within the forestry and wood processing workforce

Source: Stats NZ Integrated Data Infrastructure (IDI)¹²



¹² Fields of degree study (NZQA level 7 and above) for 15–29 year olds in the forestry and wood processing sector.

and commerce are common qualifications among forestry industry employees. It is also critical to address a capacity and capability gap in frontline supervisor and manager roles, particularly for succession planning in an ageing workforce. This shortage needs to be addressed through higher vocational training at the diploma/ advanced trade level, with a focus on the skills needed for frontline roles.

Planning for training delivery must also take into account that workers can face considerable barriers to moving or stopping work to learn. The workforce is widely dispersed across New Zealand and location is likely to have a significant impact on both access to labour and to education and training. On-site training, short courses and micro-credentials (i.e. training for task) are preferable for staff who experience barriers to being away from home and for business operators who have concerns about being able to cope when staff are at training.

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.¹³ Employers need to build stronger cultural partnerships with Māori workers, whānau and iwi, to co-develop effective approaches to on-the-job training and skills development. Priorities to help Māori learners succeed can include removing barriers to higher education, promoting workplace learning and careers to Māori rangatahi, improving assessment and study materials and processes, building literacy and numeracy skills, providing pastoral care and promoting good work practices.¹⁴

We need to ensure the workforce has the necessary skills to carry out the increasingly complex and skilled tasks associated with sustainable forest management and wood processing. We can do this by improving provision of fit-for-purpose education and training, through a whole-of-career approach that takes into account the practicalities and barriers facing workers in different locations and roles, and the wide range in capability among workers.

¹³ <https://www.mbie.govt.nz/business-and-employment/employment-and-skills/health-and-safety/health-and-safety-strategy>

¹⁴ <https://www.competenz.org.nz/assets/Documents/Helping-Maori-and-Pasifika-learners-build-their-skills-in-the-workplace2.pdf>



GEORGIA PAULSON works as Harvest Forester co-ordinating harvest operations for Forest Enterprises in Gisborne and was named the 2018 COMPETENZ NZ Forestry Apprentice of the Year.

"I was raised around the forestry industry, my father is a logger of 30 plus years. So from a young age I was always very keen to get out there and give it a go. After having worked in logging crews for approximately three years, I decided that forestry is exactly where I want to be. Being a woman in a male-dominated industry doesn't mean too much to me; it's just what I have known for so long.

I mostly love the diversity of hands-on, outdoor and office-based work. I also love being able to work alongside our contractors and being able to support them to excel. A great day at work would involve getting out to our crews and being involved in their operations, along with learning the harvest planning side – planning and marking new infrastructure.

I have a NZ Diploma in Forest Management along with a series of NZ Forest Certificates. The balance of study and hands-on work is what you make it and how you choose to complete your study programme. I chose to complete the first year of my study via night school at Turanga Ararau in Gisborne to enable me to continue logging throughout the day. I completed year two at Toi Ohomai Institute of Technology in Rotorua.

My ultimate career highlights include crossing the stage to receive my NZ Diploma in Forest Management and receiving the NZ Apprentice of the Year Award at the 2018 Eastland Wood Council Forestry Awards. Balancing study with continuing logging, being on the tools, made these overwhelming moments.

Additional to my achievements, finding that the industry supported my mission to develop my career was unexpected and appreciated beyond words, from the likes of PF Olsen, New Zealand Institute of Forestry, Eastland Wood Council and Forest Enterprises.

The term "forestry" is incredibly broad, there are so many branches to our industry. It is a very rewarding industry to contribute to, I believe there really is a career for everyone."

Opportunity four: Creating great workplace conditions to develop and retain the talented workforce we need in the long term.

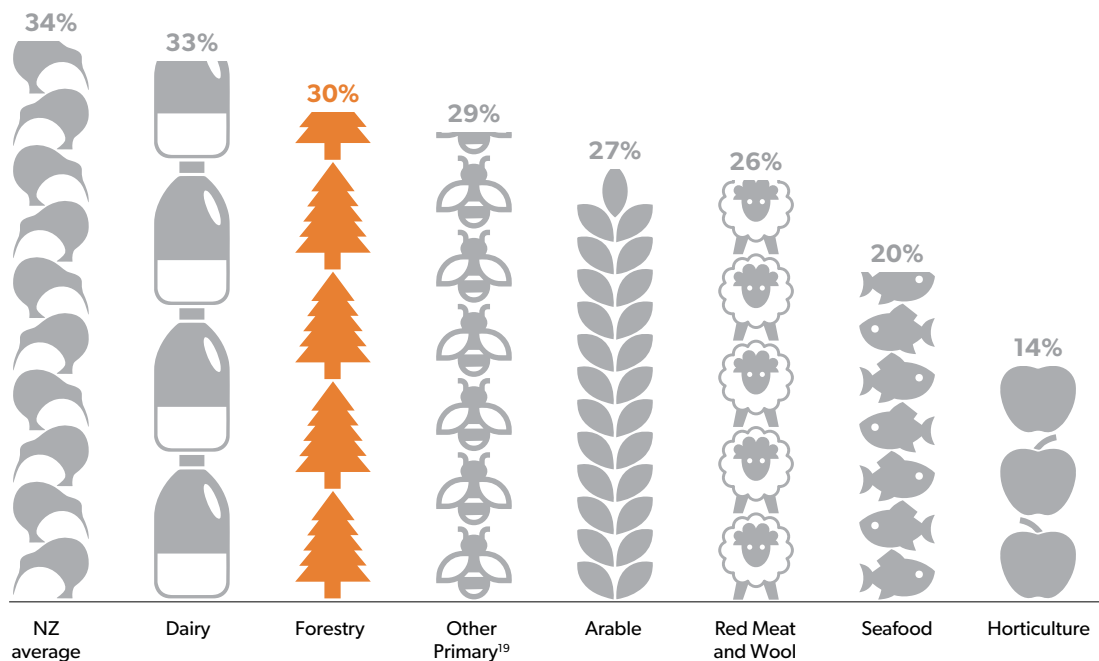
Increased mechanisation and new technology have resulted in a shrinking forestry workforce. In some cases informal labour practices may heighten risks to the safety, health and wellbeing of workers.¹⁵ Poor employment conditions, poorly publicised career paths, and a lack of awareness of employment opportunities in parts of the sector can deter workers from entering and remaining in the sector. Conversely, forest management graduates and professional foresters have well-understood and strong career paths.

Employee retention is important for building a productive, healthy and committed workforce and minimising the direct and indirect costs associated with employee turnover.¹⁶ Retention practices can also keep people in their communities and within networks of whānau, family and friends, with the social, cultural and wellbeing benefits that flow from this.

Figure 5 compares retention rates across various primary industries with the New Zealand average. After three years, 30% of new entrants are still employed in the forestry and wood processing sector. This is slightly lower than the New Zealand average of 34% and above average for the primary industries in general. This figure is an average for the sector and does not necessarily reflect the circumstances of individual employers. Occupations within professional sectors with clear career paths tend to have the highest retention rates.

Workers in the primary industries, among other groups, have been identified as having literacy and numeracy skills below the level required to participate fully in work and daily life. This can affect their employment prospects and productivity, and business performance. It can also create risks and lead to accidents, poor teamwork and low morale.¹⁷ ¹⁸Addressing this challenge is crucial for building a skilled workforce and enhancing employees' social and economic wellbeing.

Figure 5: Retention rates by primary industry sector after 3 years



Source: MPI Website <https://www.mpi.govt.nz/dmsdocument/29270-primary-industries-workforce-fact-sheets>

¹⁵ www.unece.org/forests/areas-of-work/policy-dialogue-and-advice/forestsgreeneconomy/green-jobs-the-ability-to-provide-sustainable-jobs-is-critical-for-the-future-of-the-forest-sector.html

¹⁶ These costs are wide-ranging, from the financial and time costs associated with hiring and training new employees, to lost customers and business, decreased productivity and poor morale.

¹⁷ <https://www.itf.org.nz/sites/default/files/publications/Literary%20Alliance%20brochure%20for%20web.pdf>

¹⁸ The Working Group has also identified the need to gain a greater understanding of the extent and impact of hidden problems such as dyslexia, which is not easily diagnosed and requires access to specialised learning support.

¹⁹ 'Other Primary' includes pork, poultry, equine and beekeeping.

This means that some new workers will require their employers' support to be work-ready. They will be more likely to stay in the sector if they are informed about what they're signing up for and mentally and physically equipped to do the job. Workers in general will stay if they feel valued and safe and are well trained. First steps towards retaining top talent and enhancing the sector's image include good pay and working conditions, job stability, opportunities to upskill, and a focus on health, safety and wellbeing.

There is more we can do, at a systemic level, to improve working conditions, especially in the more traditional jobs that will continue to be very important. Legal minimum standards are unlikely to be enough. Given the challenges of an ageing population, increased urbanisation and competition from other sectors, employers will have to surpass minimum standards to build the workforce they need.

A strategic approach to employee retention may include implementing sector-wide business practices that support fair pay and working conditions. Some Forestry Stewardship Council-certified companies have already committed to paying a living wage as part of a standard that has yet to be finalised. The actions in this plan that relate to a contracting standard are consistent with this approach. Other ways of recognising and responding to workers' needs may include creating flexible work arrangements, implementing wellness programmes, and supporting employee training and development to promote professionalism and pride.

Many contracting businesses are family-run and might not have the same access to business systems and capabilities as larger companies. We need to ensure that employers have the right tools, including people management and business skills, to be successful in their businesses and help them create great workplace conditions.

Employee retention is important for building a productive, healthy and committed workforce.



FOREST PROTECTION SERVICES was the winner of the Ministry for Primary Industries' 2018 Employee Development Award, for their programme Tupu Ake. The award recognises employers who are committed to providing good employment conditions in their business or organisation and have put in place an effective employee development programme. Kevin Ihaka, Managing Director of Forest Protection Services, explains how the programme came about and how it works.

"Over the years we realised we needed to consider the whole person, not just the work requirements. We found that traditional training was only a part of the solution; we needed to support people in a holistic way so they felt supported and accepted by the team.

This led us to come up with the Tupu Ake programme. We partner with many other agencies and groups to deliver the programme and we actively involve whānau and encourage them to help us by supporting the rangatahi.

We employ the trainees from day one, so they have an income to support themselves while learning. After a two-week induction period sorting out issues such as bank accounts, IRD and goal setting, they embark on a 12-month programme to achieve both a Level 2 and Level 3 qualification. This involves one day a week training in a non-production environment and one day a week on pastoral support and personal development: getting a driver's licence, doing community service, cultural activities, fitness and team building. We also provide access to counselling and support for addictions and personal issues.

We're continually developing new ideas and tweaking the process to improve, but we're very proud of the culture we have created. It does require a measure of tough love from time to time; just like any family we have values and rules and expect everyone to stick to them.

We're seeing amazing results that simply couldn't be achieved any other way: highly engaged trainees achieving, thriving and growing in this environment. The trainees integrate quickly into our culture. They truly develop and they stay with us, whereas others struggle to recruit. This initiative improves outcomes for our business, whānau, the industry and society – great result for everyone. We would encourage employers to reach out in their community for support to enable this type of pastoral and cultural care."

OPERATING ENVIRONMENT

NGĀ PĀHEKOHEKO MAHI

This Action Plan complements wider work already underway to support the forestry and wood processing workforce.

Many actions in this plan build on work already underway across government and the sector to address workforce challenges. They range from government initiatives such as the One Billion Trees Programme and the Provincial Growth Fund, to sector initiatives such as Safetree Certification and *A Forestry Roadmap for Aotearoa New Zealand 2020–2050*. The Roadmap sets out a strategic vision for the sector and clarifies drivers and strategic priorities for other stakeholders, including government, science providers and the wider sector.²⁰ Further information on related government and sector programmes is set out in Appendix Two.

The Action Plan brings this work together with new initiatives to form a cohesive and comprehensive way forward that is underpinned by robust governance and funding mechanisms.

In the wider context, a small number of work programmes will have some bearing on aspects of the Action Plan's implementation. These are: the Forest Strategy and the Industry Transformation Plan for the Forestry and Wood Processing Sector; the outcome of the Review of Vocational Education (RoVE); and the *Food & Fibre Skills Action Plan 2019–2022*, recently developed by the Skills Leaders Working Group.²¹

The Food & Fibre Skills Action Plan 2019–2022 focuses on workforce development for the agriculture and horticulture sectors and has some areas of shared interest with this Action Plan. These overlaps have been taken into account in this plan, alongside sector-specific issues.

The Forest Strategy will set the vision and direction for the sector to 2050 and beyond. It will shape final workforce capability and capacity needs and is due for completion by July 2020. Sector stakeholders will have opportunities to discuss how the Action Plan should be implemented during consultation on the Forest Strategy in early 2020.

The Industry Transformation Plan for the forestry and wood processing sector is part of a new approach to industry policy, aimed at growing more innovative industries in New Zealand and lifting the productivity of our key sectors. It will be sector-led and government supported, involving partnership between government, business, workers and Māori. This work will be taken into account when we come to forecast future workforce requirements, for example.

The RoVE aims to create a unified and sustainable system that meets the needs of all learners, employers and communities. Included in the RoVE is the establishment of the New Zealand Institute of Skills and Technology (NZIST); Workforce Development Councils (WDCs), which will give industry greater leadership across vocational education; and Centres of Vocational Excellence (CoVEs), which will bring together experts to grow excellence in the provision of vocational education. Implementation of some of the actions will be dependent on the outcomes of the RoVE.

How the Action Plan will be implemented

The actions in this plan are at different stages of development. Some initiatives are already funded and/or are ready for immediate implementation. Some are contingent on the consultations on the Forest Strategy and decisions about the implementation of the RoVE. Other actions need to be further developed and funding confirmed. As a result we are proposing a three-stage implementation process.

- Stage 1 covers 'quick wins' that have funding, are already underway, or will commence shortly. Quick wins are identified by a ★.
- Stage 2 includes actions that are dependent on or related to the Forest Strategy and the RoVE. They will begin in or after July 2020 and may require new or additional funding.
- Stage 3 comprises longer-term actions, which will require further scoping and a business case to secure funding.

²⁰ <http://www.nzfoa.org.nz/resources/file-libraries-resources/discussion-papers/695-forestry-roadmap-to-2050/file>

²¹ <https://www.mpi.govt.nz/dmsdocument/37751-food-fibre-skills-action-plan-webv2-pdf>



We recognise that this Action Plan will require stakeholders across the system, with their own roles and responsibilities, to work together. These are outlined in the table below.

Stakeholders	Roles and responsibilities
Industry	<ul style="list-style-type: none"> • Fair pay agreements • Sector-community interface • Improving workplace conditions • Financial and in-kind support for workforce development initiatives • Providing input to the RoVE implementation process • Articulating an attractive value proposition to future sector participants and their influencers • Representing the sector in: <ul style="list-style-type: none"> – defining current and future skill needs – design and implementation of future initiatives
Ministry for Primary Industries (MPI)/Te Uru Rākau	<ul style="list-style-type: none"> • Overview of the sector, its structure, dynamics and skill needs • Input into the RoVE and wider workforce development initiatives • Financial and in-kind support for workforce development initiatives • Development of and engagement on the Forest Strategy
Tertiary Education Commission (TEC)	<ul style="list-style-type: none"> • Funding vocational and wider tertiary education • Career initiatives, including primary school through to older learners • Managing the content of a careers hub as a central point for job seekers • Innovation in qualifications and delivery methods e.g. micro-credentials
Ministry of Education (MoE)	<ul style="list-style-type: none"> • Education policy, from early childhood through to tertiary, including the RoVE • Curriculum requirements and resources • Funding settings
Ministry of Business, Innovation and Employment (MBIE)	<ul style="list-style-type: none"> • Regional Skills Leadership Groups • Industry Transformation Plans • Labour market policy development • Labour Inspectorate • Immigration policy changes that aim to balance support for business to employ New Zealanders while ensuring access to migrant labour where needed

THE WORKFORCE ACTION PLAN TE MAHERE MAHI HUNGA KAIMAHI

The Action Plan aims to support the development of a skilled workforce that meets the current and future needs of the forestry and wood processing sector.





Based on the collective input of the Working Group and the opportunities previously outlined, the Action Plan covers four priority focus areas:

- **KNOWLEDGE**
- **ATTRACTION**
- **EDUCATION AND TRAINING**
- **EMPLOYMENT**

This is where we need to focus our efforts if we are to build the capability and capacity of the current and future workforce. The actions are mutually reinforcing.

The following sections address the details of the plan. They provide:

- an overview of the Action Plan – the outcomes we are working towards and the high-level actions that will help us achieve our goals across the four focus areas;
- specifics about each focus area – what we will do and how we will do it;
- information about governance arrangements that will ensure the plan is successfully implemented; and
- an overview of key implementation milestones.

Appendices One to Three provide background details about skills gaps and related work programmes, and more in-depth information about the actions, deliverables, expected outcomes and proposed next steps.

FORESTRY AND WOOD PROCESS

TE MAHERE MAHI MŌ NGĀ KAIMAHI TU

OUTCOME

The forestry and wood processing sector has a

MEDIUM-TERM
OUTCOMES

The forestry and wood processing sector makes good workforce decisions based on robust information and data

The forestry and wood processing sector inspires and attracts a larger, more diverse workforce

FOCUS AREAS

1

KNOWLEDGE MŌHIOTANGA

We will have the information and enabling systems required to develop and evaluate forestry and wood processing workforce development initiatives

2

ATTRACTION WHAKAMANEA

We will strengthen support for initiatives that attract a diverse workforce into forestry and wood processing training and employment

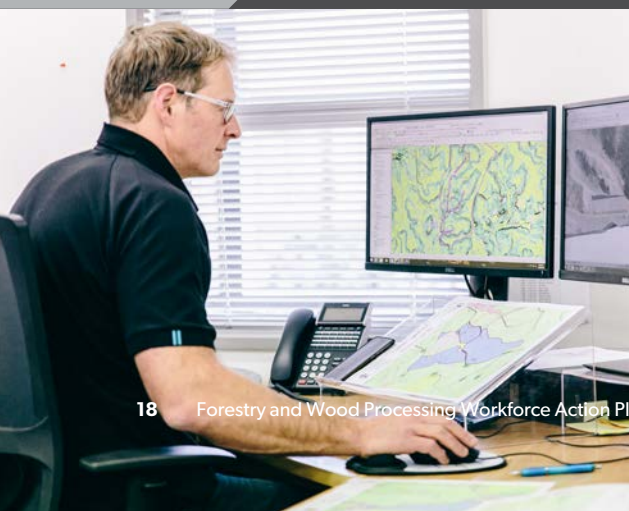
ACTIONS

- ★ **1.1** Forecast workforce demand
- 1.2** Monitor workforce requirements, trends and initiatives
- 1.3** Assess current forestry and wood processing qualifications and programmes to influence vocational training
- 1.4** Update knowledge on, and socialise the benefits, of best practice safety, health and wellbeing workplace initiatives for employers and employees
- ★ **2.1** Progress an aligned and targeted marketing and recruitment campaign
- 2.2** Support teachers and careers advisors to promote forestry and wood processing careers, prerequisites and pathways
- 2.3** Review and refresh curriculum resources to ensure forestry and wood processing is appropriately profiled
- ★ **2.4** Improve access to career pathways information

★ indicates that these actions are 'quick wins' that have funding, are already underway or will commence shortly.

GOVERNANCE

Forestry and Wood Processing Workforce Steering



ING WORKFORCE ACTION PLAN

KATUKA NGĀHEREHERE ME TE RĀKAU

skilled workforce that meets its current and future needs

People have the right skills, knowledge and capabilities to be successful in the forestry and wood processing sector

People thrive in forestry and wood processing workplaces with good practices and conditions

3

EDUCATION AND TRAINING MĀTAURANGA ME NGĀ WHAKANGUNGU

We will help shape the education and training system to produce sufficient learners and workers with the skills required to succeed in forestry and wood processing careers

- ★ 3.1 Ensure that the design of the vocational education and training system meets the needs of the forestry and wood processing sector
- 3.2 Evaluate and scale up culturally appropriate and regionally relevant on-the-job training programmes that support young people, particularly Māori rangatahi, into forestry and wood processing careers
- 3.3 Increase on-the-job training, professional development, and knowledge and application of best practice
- ★ 3.4 Increase availability and accessibility of advanced forestry qualifications

4

EMPLOYMENT WHAI MAHI

We will encourage improvements in workplace employment practices that attract, develop and retain a skilled, safe and productive workforce

- 4.1 Achieve agreement to adopt standards that support fair pay and working conditions
- 4.2 Encourage improvements in workplace employment practices that attract, appropriately remunerate, develop and retain a skilled, safe and productive workforce
- ★ 4.3 Further promote and embed a safety culture across the sector
- ★ 4.4 Strengthen and support professional identity and pride among forestry and wood processing workers

Group, allied to the Food & Fibre Skills Establishment Group





We need a clear understanding of current and future forestry and wood processing workforce needs to underpin decisions and actions.”

FOCUS AREA ONE: KNOWLEDGE MŌHIOTANGA

The forestry and wood processing sector makes good workforce decisions based on robust information and data

A robust evidence base is critical for informing workforce-related education and policy settings as well as the types of workforce interventions that best meet the needs of employees and the sector.

Previous forecasts of forestry workforce demand, in particular, have drawn on classification frameworks that are too broad to permit effective interventions. We don't have a shared understanding of what good employment practice looks like or precisely how it benefits employees and the workplace. There is little information about which programmes are most effective in meeting employee and employer needs.

Workforce needs and gaps should be systematically identified and corresponding interventions put in place before workforce shortages have an even greater impact on business activity.

We can establish greater visibility of good workplace practices, and increase our knowledge of what works and where to direct resources, by systematically collecting and analysing relevant data to inform workforce development decisions.

We will have the information and enabling systems required to develop and evaluate forestry and wood processing workforce development initiatives.

We will support the development of a shared understanding of employment gaps, trends and issues by:

- ★ **1.1** Procuring roles classification and baseline research to underpin robust forecasting of workforce demand for the next 10–20 years.
- 1.2** Modifying and expanding the annual Te Uru Rākau forestry workforce survey to monitor workforce requirements and trends and collect data on employee retention, demographics and initiatives for worker preparedness. Based on those data and supplier evaluations, reviewing, assessing and scaling up pre-employment programmes that promote employee skills and retention, particularly those that are responsive to Māori.

We will ensure that industry and education stakeholders have the information needed to support a successful transition to the RoVE environment by:

- 1.3** Presenting recommendations to the WDC for the primary sector about which programmes should be continued, stopped or started, based on an assessment of current forestry and wood processing qualifications and their delivery mechanisms, including consideration of relevance for Māori and international examples of successful programmes.

We will ensure access to material on safety, health and wellbeing good practice by:

- 1.4** Updating knowledge on, and socialising the benefits of, best practice workplace safety, health and wellbeing initiatives for employers and employees to inform the development of future initiatives, including earlier work commissioned by the Forest Industry Safety Council (FISC) and a focus on what works best for Māori.

2

FOCUS AREA TWO: ATTRACTION WHAKAMANEA

The forestry and wood processing sector inspires and attracts a larger, more diverse workforce

School leavers and career changers are more likely to be attracted to forestry and wood processing careers when they are aware of the opportunities and benefits associated with these industries, know about the foundation skills they need to enter and progress in this sector, and have access to role models in the sector.

Several initiatives to encourage a more diverse range of people into forestry and wood processing careers are already underway. However, they tend not to be aligned and little information is available about their reach and effectiveness.

The sector is facing the same attraction problems as other primary industries and is often competing for the same people, who tend to move across sectors. A joined-up approach to attraction would be more efficient than uncoordinated efforts across either this sector or the primary industries in general.

We need to improve the impact of attraction initiatives by ensuring that effective actions are well supported and target both acute and longer-term skill needs. The success of longer-term attraction and recruitment plans will be helped by the actions in the employment and education and training focus areas.

We will strengthen support for initiatives that attract a diverse workforce into forestry and wood processing training and employment.

We will strengthen efforts to promote forestry and wood processing sector careers by:

- ★ **2.1** Progressing an aligned and targeted recruitment campaign for the forestry and wood processing sector, leveraging existing industry initiatives and evaluating and scaling up government programmes. In the longer term, taking part in a broader food and fibre sector marketing and recruitment campaign.

We will connect the education community to forestry and wood processing careers by:

- 2.2** Supporting teachers and careers advisors to promote forestry and wood processing careers through a Teachers Day Out programme to increase their knowledge of the range of forestry and wood processing careers, career prerequisites and pathways, and by supporting Wood Councils with resources for careers days.
- 2.3** Working with schools that deliver forestry programmes to review existing curriculum resources and refresh them as needed to ensure forestry and wood processing is appropriately profiled.

We will highlight the diversity and benefits of a future in the forestry and wood processing sector by:

- ★ **2.4** Further developing the TEC's Careers Hub to incorporate profiles of a wider range of forestry and wood processing jobs, establishing links with other skills and careers websites, and growing the network of forestry workers to volunteer as role models for 7–12 year olds in the Inspiring the Future programme.



Raising awareness of the diverse careers and career pathways in the forestry and wood processing sector is necessary to strengthen the workforce and address skill shortages."





A high-quality skills pipeline is critical to strengthening the forestry and wood processing workforce and preparing it for future change.”



3 FOCUS AREA THREE: EDUCATION AND TRAINING MĀTAURANGA ME NGĀ WHAKANGUNGU

People have the right skills, knowledge and capabilities to be successful in the forestry and wood processing sector

Educating and training people for and throughout their forestry and wood processing careers is critical for their success and that of the sector. The challenge will be to develop educational programmes for emerging occupations and future needs, as well as accessible and fit-for-purpose training and ongoing skills development to address current skills requirements.

We have observed that it is difficult to retain trainers and assessors, partly because training for these roles is less than optimal and also because the unpredictability of demand for their services makes it difficult to maintain continuous employment, so that they move on to other roles. One way of minimising the sector's skill gaps is to ensure a steady supply of appropriately qualified trainers and assessors.

The increase in numbers of small-scale forest owners points to an opportunity to supplement information that represents their interests. In addition to online resources,²² short courses that support small woodlot owners to learn about and adopt best practice forest management will help them make informed decisions about planting, harvest and sale, and maximise their returns as commercial forest growers. This will further strengthen the industry's success and sustainability.

Given the challenges of an ever-changing work environment, the sector needs to work with education providers to ensure that educational resources and credentials, short courses and on-the-job training meet the needs of both workers and the sector.

We will help shape the education and training system to produce sufficient learners and workers with the skills required to succeed in forestry and wood processing careers.

We will influence the future development of vocational training and system settings, ensuring that training delivery meets the needs of learners and reflects the uniqueness and challenges of the sector by:

- ★ **3.1** Engaging with government on the design of the NZIST, the establishment of a WDC and a CoVE for the primary sector, and on the unified funding system; reviewing barriers to the uptake of trainee and apprenticeship positions; and ensuring that results from pilot programmes for trainers and assessors are shared with the WDC.

We will leverage learnings from successful on-the-job-training programmes that lead to jobs for young people, particularly Māori rangatahi, by:

- ★ **3.2** Evaluating and scaling up culturally appropriate and regionally relevant on-the-job training programmes that provide pastoral care and guaranteed pathways into forestry and wood processing careers through partnerships between employers, iwi, whānau, communities, local education providers and the TEC.

We will support ongoing skills and knowledge development by:

- ★ **3.3** Increasing on-the-job training, professional development and the knowledge and application of best practice through a suite of actions, including promoting uptake of diploma and advanced trade level qualifications to equip future supervisors and managers; developing and delivering priority short courses and micro-credentials; and sponsoring opportunities for workers in the timber construction industry to upskill in areas of identified skill gaps.

We will promote uptake of advanced forestry qualifications for a larger and more diverse group of students and workers by:

- ★ **3.4** Making it easier for workers and students to further their learning through forestry-related scholarships and fit-for-purpose diploma and advanced qualifications; exploring the potential to achieve advanced level forestry qualifications through distance learning; and investigating opportunities for students to more easily advance from non-degree to degree qualifications.

²² For example, Farm Forestry New Zealand provides online information and resources. <https://www.nzffa.org.nz/farm-forestry-model/the-essentials/>

4

FOCUS AREA FOUR: EMPLOYMENT WHAI MAHI

People thrive in forestry and wood processing workplaces with good practices and conditions

While there is no single answer to what attracts and keeps people in any industry, the foundations of a quality workplace rest on the inter-related dimensions of terms of employment, pay and benefits, and health, safety and wellbeing.

Contractors and other employers who have sound business and people management skills provide workers with positive employment experiences. They are also likely to be successful in growing sustainable businesses and providing stable employment, particularly when they operate within a system that recognises and upholds the benefits of fair pay and good workplace conditions. These factors boost the sector's image as a good place to work.

We need to make forestry and wood processing workplaces more attractive and rewarding. We can retain a skilled workforce that is better able to respond to the changing nature of work by promoting best practice management skills, good workplace conditions and occupational health and safety.

We will encourage improvements in workplace employment practices that attract, develop and retain a skilled, safe and productive workforce.

We will promote a more stable and sustainable workforce by:

- 4.1** Achieving agreement to adopt standards that support fair pay and working conditions; endorsing the use of a contract pricing standard that incorporates all elements of the work; and developing the administrative arrangements, certification and audits that underpin implementation.
- 4.2** Encouraging improvements in workplace employment practices, including developing and delivering forestry-specific material that promotes sound business skills and knowledge; scoping and standing up a pilot for flexible working arrangements; and piloting a brokerage service to arrange year-round employment.

We will continue to show we value our workers by:

- ★ **4.3** Further promoting and embedding a safety culture across the sector, reducing barriers to participation in the Safetree Certification programme, and rewarding participation through preferential engagement of Safetree certified contactors.

We will enhance the sector's image as an employer of choice by:

- ★ **4.4** Strengthening and supporting professional identity and pride among forestry and wood processing workers, including scaling up existing social and employment support networks; acknowledging employee and employer achievements; and promoting opportunities for awards and publicising positive stories about workers and employers.

“

Best practice pre-employment and employment conditions are critical for retaining a forestry and wood processing workforce that takes pride in its professional identity.”



GOVERNANCE

TE RŌPŪ WHAKAHAERE

Effective governance, management and funding arrangements are required to ensure we successfully implement the Action Plan and meet the sector's workforce development needs.

It is important that the Action Plan has a life beyond the initial engagement with government agencies to ensure the actions are implemented. We will establish a Forestry and Wood Processing Workforce Steering Group to oversee implementation of the forestry and wood processing-specific actions.

Many of the sector's workforce needs overlap with those of the wider primary industries. The Food & Fibre Skills Establishment Group has been established as an interim measure to oversee the implementation of its Action Plan. The forestry and wood processing sector has joined the Establishment Group. The Steering Group will be allied to the Establishment Group, providing oversight of workforce actions in areas where benefits can be leveraged for the entire primary sector.

The Steering Group, in conjunction with the Establishment Group, will:

- work with key government agencies and wider primary sector stakeholders to oversee the implementation, evaluation and further development of both Action Plans;
- provide input on the implementation of the RoVE and other workforce-related matters;
- consider whether a pan-industry Food & Fibre Skills Partnership Group is needed to provide longer-term oversight of workforce skills and development.

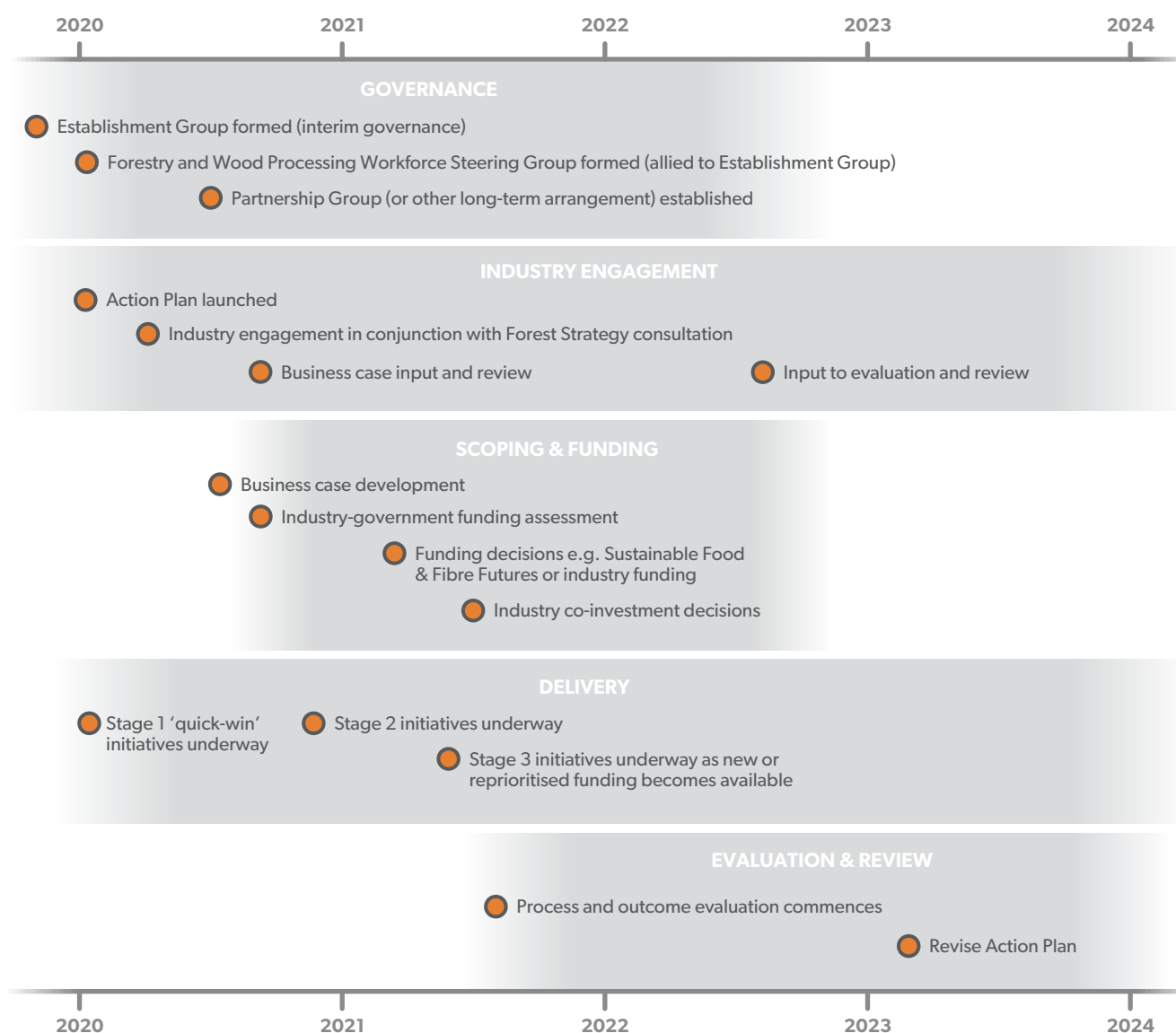
These governance arrangements reflect a commitment to an ongoing partnership, which we believe is the most effective means of addressing the workforce development needs across the wider primary sector.



KEY IMPLEMENTATION MILESTONES

NGĀ WHAKATINANATANGA

To ensure an effective industry-led, government-enabled partnership achieves the Workforce Action Plan’s goals, we have identified the following key implementation milestones:



APPENDIX ONE: PRIORITY SKILLS GAPS

Heat Map – Skills Gaps in the Forestry Growing (Production) Sector 2020–2024 – developed by the Working Group

Grouping	Grouping Description/Coverage	Semi-Skilled (NZQA Levels 1–3)	Skilled (NZQA Levels 4–5)	Highly Skilled (NZQA Level 6 and above)
		Nursery Crew	Skilled Nursery Crew	Nursery Manager/ Owner
All propagation and nursery	The production of more trees. This covers growing seedlings until they leave the nursery.	Nursery Crew	Skilled Nursery Crew	Nursery Manager/ Owner
			Nursery Crew Manager	Technical Research/ Scientist
			Chemical Handler	
			Quality Controller	
		Silviculture Manual	Silviculture Machine Operator	Plantation Manager
Silviculture	Silviculture is the practice of controlling the growth, composition, health and quality of forests to meet diverse needs and values. It covers the planting of a seedling, pruning and thinning of a tree, and fertiliser and chemical application. It includes: forest protection – fire-readiness, prevention, suppression and recovery; biosecurity; security; and research.	Pruning	Mechanised Thinning Machine Operator	Plantation Manager
		Planting	Mechanised Land Prep Machine Operator	Technical Research/ Scientist
		Chemical Applicator		Contractor
		Thin to waste		
		Mensuration Technician	Inventory Crew Manager	
Mensuration	Forest mensuration is a branch of forestry that deals with measurement of forest stands. It covers the measuring of trees until maturity.	Mensuration Technician	Inventory Crew Manager	
		Harvesting Manual	Harvesting Machine Operator/Crew Manager	Harvesting Management
Harvesting	Forest harvesting is the cutting, skidding, on-site processing, and loading of trees or logs onto a truck. It covers activities from the cutting of the tree until it is ready for transportation out of the forest.	Poleman	Log Maker	Operations Manager
		Cross-Cutter	Tree Feller (Advanced)	Harvest Manager
		Production Thinner	Harvesting Crew Manager	Harvest Planner
		Tree Feller	Head Breaker-Out	Forest Manager
		Breaker-Out	Spotter	
		Basic Machine Operator	Mechanised Felling Machine Operator	
		Quality Controller	Mechanised Processing Machine Operator	
			Loader Operator	
			Harvesting Crew Manager	
			Stems Truck/Two Stage Operator	
	Extraction Machine Operator			
	Cable Yarder Operator			

		Roading Machine Operator	Engineering Machine Operator/Crew Manager	Forest Roding Engineer
Roding/ forest engineering	Construction of forest infrastructure, such as the construction of roads, bridges, etc., in forests.	Roding Construction Machine Operator	Road Engineering Machine Operator	Forest Roding Engineer
			Road Engineering Crew Manager	
			Metal Truck Operator	
		Log Scaler	Driver/Machine Operator	Dispatch Manager
Cartage	Forestry cartage is the transporting of logs from the forest to various destinations such as ports, sawmills, rail yards, etc. This covers log collection from the forest through to delivery to a port or sawmill.	Log Scaler	Dispatcher	Dispatch Manager
			Log Truck Driver	Contractor
			Supply Chain Scheduler	
			Logistics	
			Machine Operator	
		Port Log Scaler	Port Machine Operator	Port Operations Management
Port operations	Forestry export port operations are where there is cargo handling equipment to process logs from shore to ships. This will include stevedores, marshallers, fumigation services, etc., and covers activities from receipt of delivery at the port until loaded onto the boat.	Log Scaler	Machine Operators	Port Operations Manager
		Fumigator	Chemical Handler	Logistics
			Forest Middle Management	Forest Senior Management
Forest management	Forest management covers the overall management of forests. It is concerned with administrative, economic, legal, marketing and social aspects, as well as scientific/ technical aspects, such as silviculture, protection and forest regulation. It includes management for aesthetics, fish, recreation, urban values, water, wilderness, wildlife, wood products, forest genetic resources and other forest resource values.		Plantation Manager	Environmental Manager
			Forestry Supervisor	Forest Valuation Manager
			Information Technology	Geographical Information Systems mapping
			Human Resources	Inventory Manager
			Office Manager	Planning Manager
			Finance	Forestry Scientist
			Harvesting Supervisor	
		Quality Controller	Trainers and Qualified Support Staff	Tertiary Qualified Trainers and Support Staff
Cross-functional roles	These cut across all or most areas of forest production.	Quality Controller	Trainers/assessors	Trainers/assessors
			Chemical Handler	Contractors – employers of harvesting and/or silviculture crews
			Quality Controller	Technical Research/scientist

Key: Potential impact on wood production x likelihood of skills shortage, where impact is defined as ‘any workforce shortage or skill gap over the next five years which has the potential to cause a loss of production or which could present a barrier to more efficient production’

- High impact x high likelihood (i.e. highly likely to happen in next five years and to cause a loss of production or present a barrier to more efficient production)
- Medium impact x medium likelihood
- High impact x low likelihood / Low impact x medium likelihood
- Medium-low impact x medium-low likelihood

Skills Gaps in the Wood Processing Industry – Toi Ohomai Research

Current and future needs for specific skill areas

Training area	% of respondents			
	Need now	Need in future	Not needed	Not sure
Automation – e.g. scanning, optimising, robotics	45.83	37.50	8.33	8.33
Business skills – e.g. marketing, sales, finance, negotiation, entrepreneurship	20.83	37.50	37.50	12.50
Business skills – leadership development	52.00	48.00	4.00	4.00
Computer skills – e.g. new software, CNC programming and operation	41.67	33.33	16.67	16.67
Environmental management/sustainability	16.67	54.17	20.83	16.67
Essential skills – e.g. literacy, numeracy, communication, critical thinking, motivation, teamwork	52.00	28.00	16.00	8.00
Innovation skills – e.g. creativity, risk assessment, communication	37.50	33.33	25.00	8.33
Inventory management – log yard, timber yard, wood products warehouse	28.00	32.00	28.00	16.00
Lean – manufacturing, 5S, costing, administration	41.67	41.67	4.17	16.67
Maintenance skills – existing equipment and machinery	60.87	30.43	8.70	4.35
Managerial skills – e.g. supervisor, managing workers, projects, public relations	60.00	32.00	16.00	0.00
Operating existing/new equipment and machinery	45.83	41.67	4.17	12.50
Quality control and management	37.50	41.67	12.50	12.50
Supply chain management	16.67	33.33	25.00	25.00
Technical skills – drying	29.17	41.67	12.50	16.67
Technical skills – engineered wood products – gluing, finger jointing, laminating	31.82	9.09	18.18	13.64
Technical skills – grading	48.00	40.00	8.00	8.00
Technical skills – machining	72.00	32.00	0.00	0.00
Technical skills – other wood products – pallets, furniture, componentry	13.64	4.55	36.36	13.64
Technical skills – sawdoctor	43.48	21.74	13.04	13.04
Technical skills – sawmill operator	54.55	27.27	13.64	4.55
Technical skills – transport, distribution	8.70	17.39	34.78	17.39
Technical skills – treatment	34.78	21.74	17.39	8.70
Workplace health and safety	60.00	36.00	8.00	8.00

Ease and difficulty of filling roles

Role	Very Easy		Easy		Difficult		Very Difficult		N/A	
	%	N	%	N	%	N	%	N	%	N
Administrator	8.00	2	48.00	12	36.00	9	0.00	0	8.00	2
Detailer	6.00	1	6.00	1	12.00	2	6.00	1	71.00	12
Edger/resaw/trimsaw operator	4.00	1	26.00	6	39.00	9	22.00	5	9.00	2
Environmental manager	0.00	0	32.00	7	18.00	4	5.00	1	45.00	10
Engineer/fitter/welder	0.00	0	8.00	2	54.00	13	29.00	7	8.00	2
Forklift operator	4.00	1	25.00	6	58.00	14	13.00	3	0.00	0
Front end loader operator	0.00	0	27.00	6	45.00	10	18.00	4	9.00	2
Headrig operator	0.00	0	23.00	5	32.00	7	36.00	8	9.00	2
Health and safety manager	0.00	0	29.00	7	46.00	11	17.00	4	8.00	2
Kiln operator	0.00	0	18.00	4	64.00	14	18.00	4	0.00	0
Laminating operator	0.00	0	16.00	3	16.00	3	11.00	2	58.00	11
Log yard/timber yard/warehouse manager	0.00	0	26.00	6	43.00	10	13.00	3	17.00	4
Optimiser/finger jointer	0.00	0	17.00	3	44.00	8	22.00	4	17.00	3
Production/operations manager	0.00	0	8.00	2	48.00	12	40.00	10	4.00	1
Quality assurance	0.00	0	14.00	3	62.00	13	14.00	3	10.00	2
Sawdoctor	0.00	0	13.00	3	22.00	5	52.00	12	13.00	3
Sawmill operator/table hand	9.00	2	39.00	9	39.00	9	4.00	1	9.00	2
Supervisor/team leader/foreman	0.00	0	16.00	4	52.00	13	32.00	8	0.00	0
Timber grader	4.00	1	35.00	8	43.00	10	17.00	4	0.00	0
Timber machine specialist	0.00	0	16.00	4	24.00	6	60.00	15	0.00	0
Treatment plant operator	0.00	0	24.00	5	24.00	5	24.00	5	29.00	6
Truck driver	0.00	0	17.00	3	11.00	2	11.00	2	61.00	11

Source: Toi Ohomai Institute of Technology (May 2019). *New Zealand Saw Milling and Wood Manufacturing Business Review: Wood processing review of staff requirements, training needs and skill shortages.*

A total of 33 primary and secondary timber processing organisations participated in this review, representing 47 production sites and more than 4.4m³ of New Zealand's processing capacity. More than 80% of participating businesses classified themselves as sawmills, with facilities such as log yards, remanufacturing, kiln driers, timber yards and timber machining.

APPENDIX TWO: RELATED PROGRAMMES

Current programmes to support people into work

including: Wahine Toa, Ngā Māhuri o Ngāti Hine Mānuka Plantation Training Program, Tane Mahuta, Generation Programme, Manaia Safe, Tokomairiro Training, He Māhuri Toa, Corrections Training Pilot, and Rayonier Matariki Training and Workshops.

Food & Fibre Skills Action Plan 2019–2022: the *Food & Fibre Skills Action Plan 2019–2022* sets out a plan to address challenges to attract, train and retain the skilled workforce needed across the food and fibre sectors. Formally launched in late October 2019, the plan is a first step towards a genuine partnership between the food and fibre sectors and government to achieve positive workforce outcomes for individuals, employers, industry and communities.

Forest Growers Levy Trust Inc.: initiatives funded in part or full by the Forest Growers Levy Trust Inc. including:

- *A Forestry Roadmap for Aotearoa New Zealand 2020–2050*, which outlines the drivers and strategic priorities for stakeholders, to guide investment decisions;
- investigation, development and implementation of an electronic data capture system for the timely and accurate collection of safety, health and wellbeing information (IRIS);
- industry promotion through the Love our Forests – Growing our Forests campaign;
- maintenance and provision of information for the New Zealand Farm Forestry Association website;
- careers promotion, such as InZone, a mobile display unit roadshow that visits high schools, youth centres and large public events throughout New Zealand and provides information about the forest industry and other career paths;
- National Forestry Careers Portal, which provides up-to-date training and career information and is pitched towards a diverse talent pool;
- Grow Me – Forestry Careers Programme, which will show career options and encourage more school leavers to enter the forestry sector, develop relationships with careers advisors and educate them in changing industry trends, and promote the industry to parents and communities.

Forest Industry Safety Council (FISC): a tri-partite, pan-industry initiative to reduce and ultimately eliminate deaths and life-changing injuries in New Zealand plantation forestry by improving leadership of safety, providing easy-to-use resources and increasing capability among companies and workers through Safetree certification, Growing our Safety Culture and focusing on health and worker engagement. FISC owns and operates the Safetree website.

Industry Transformation Plan for the forestry and wood processing sector: the Government has launched a new approach to industry policy aimed at growing more innovative industries in New Zealand and lifting the productivity of our key sectors. Industry Transformation Plans will be sector-led and government supported. They will involve partnership between government, business, workers and Māori. Each will be unique to its industry but will build on any existing work to describe an agreed vision for the future state of the sector, and will outline the actions required to realise this vision, including investment, innovation and skills development.

Manufacturers Network: Competenz and the Wood Processors and Manufacturers Association of New Zealand are affiliates of the Manufacturer's Network. The Manufacturers Network is undertaking a programme of work to address challenges presented by the Skills Shift. The Skills Shift recognises that the more technology increases and changes, the greater the skills of workers need to shift to adapt to those changes, particularly as the demand for physical and manual work declines. Employers will also need to rethink and adjust how work will be structured within their organisations. The Manufacturers Network is helping manufacturers and tertiary and training providers understand what the Skills Shift will mean for them and what measures will need to be taken to prevent further skill shortages in manufacturing, including wood processing.

One Billion Trees programme: the One Billion Trees programme aims to increase tree planting across New Zealand by doubling the current planting rate to reach one billion trees planted by 2028. The programme encourages the planting of both permanent and plantation forests made up of exotic and native tree species, ensuring tree planting is well planned and considers the long-term maintenance and end-use of the trees. Commercial viability for production forests and protection for permanent forests, as well as local social, environmental, cultural and economic priorities will be taken into account.

Primary Industry Capability Alliance (PICA): PICA is a collaborative alliance of industry, educators and government that coordinates food and fibre attraction initiatives through its GrowingNZ brand. These include careers expos, Innovation Challenge Days, and engagement with educators and careers advisors. PICA also carries out research and facilitates the sharing of knowledge in capability building.

Productive and Sustainable Land Use Initiatives: this package of initiatives supports New Zealand's transition to more sustainable land use and a low-emissions and climate-resilient economy. This will be done by providing funding for such things as establishing key institutions and regulations; funding on-the-ground advice to farmers; supporting Māori agribusiness; providing information, tools and advice to support farmers making change to more environmentally sustainable and higher-value production; and ensuring government has the resources to deliver on its obligations and commitments.

Provincial Growth Fund (PGF): the PGF aims to lift productivity in the provinces by, for example, enhancing economic development opportunities, creating sustainable jobs, enabling Māori to reach their full potential, and building resilient communities. PGF funding has been set aside for regional employment, skills and capability through Te Ara Mahi and He Poutama Rangatahi. The PGF has funded a number of forestry and wood processing initiatives including: a Wood Cluster Centre of Excellence in Tairāwhiti; a pilot to test the validity of establishing a sustainable indigenous tōtara wood products industry in Northland; forestry and wood processing initiatives that are part of the Toi Moana Bay of Plenty Regional Growth Strategy Action Plan; and expansion of 3D mapping in eight regions, to support planning and decision making by industry looking to invest in the regions, particularly in the forestry and agriculture sectors.

Reform of Vocational Education (RoVE): The RoVE aims to create a unified and sustainable system that meets the needs of all learners, employers and communities. Included in the RoVE is the establishment of the New Zealand Institute of Skills and Technology (NZIST); Workforce Development Councils (WDCs), which will give industry greater leadership across vocational education; and Centres of Vocational Excellence (CoVEs), which will bring together experts to grow excellence in the provision of vocational education.

Regional Skills Leadership Groups (RSLGs): the Government has announced its intention to establish 15 RSLGs across New Zealand. The RSLGs will identify workforce and skill needs in their region and advise on actions to cultivate these. The RSLGs will feature regional industry leaders, economic development agencies, worker representatives, iwi, and government representatives, who will contribute their knowledge and local expertise. They will develop Regional Workforce Plans which project labour supply needs and outline how to create better and more attractive jobs across the region.

Scholarships and awards to advance education in forestry: these include a range of awards administered by the New Zealand Institute of Forestry; Rayonier scholarships and vacation work for students enrolled in a Bachelor of Forestry Science or Forest Engineering degree; and Te Uru Rākau's Ngā Karahipi Uru Rākau scholarships and internships for Māori and/or women studying towards a Bachelor of Forestry Science, or a Bachelor of Engineering (Hons) in Forest Engineering (BE For).

Secondary education reforms: the NCEA Change Package aims to make NCEA more robust, consistent, inclusive and accessible for students. One key focus is on developing clearer pathways to further education and employment. Another focus is on strengthening literacy and numeracy requirements to better support students into education and work.

Sector Workforce Engagement Programme (SWEP): the SWEP helps employers get access to skilled regional staff working across various industries, giving priority to domestic job seekers including beneficiaries. Industries in the programme currently include horticulture and viticulture, dairy farming, road freight transport, construction, tourism, hospitality and aged residential care.

Social sector initiatives: there are a number of programmes, led by the Ministry of Social Development, that support people into work or to remain in work. For example, the Mana in Mahi programme is designed to support young people into apprenticeships and an industry training qualification pathway.

Sustainable Food & Fibre Futures (SFF Futures): SFF Futures is an MPI administered fund that supports innovative projects that will create value for the food and fibre industries and which has funded forestry projects in the past. SFF Futures is a potential funding avenue for aspects of this plan.

Tertiary Education Commission (TEC) Industry Advisory Group: the TEC identified the food and fibre sectors as one of its key focus areas in 2017 and set up an Industry Advisory Group to provide it with advice on implementation of its Primary Sector Skills, Education and Investment Programme and to connect it with key stakeholders and influencers. The Group's report, *Growing the Future*, has fed into the TEC's Careers System Strategy. The Food & Fibre Careers Hub – part of the refresh of the careers.govt.nz website – and the Inspiring the Future programme are two key initiatives that have been progressed under this strategy to date.

The Training and Careers Committee: The New Zealand Forest Owners Association and Farm Forestry Association established this Committee in 2017 to consult on and develop a coordinated view on plantation forestry standards, qualifications and training needs. It works with FISC, FICA and Competenz as well as funders and training providers to ensure standards and training solutions are delivering on those needs, and promotes forestry careers either directly or by working with and through other agencies. The Training and Careers Committee has published a *Stock take of training options available to forestry industry* <https://www.nzfoa.org.nz/resources/file-libraries-resources/training-and-careers/675-stock-take-of-training-options-available-to-forestry-industry-published-december-2018/file>

Trades Academies and Gateway: Trades Academies provide senior secondary students with an integrated pathway into further education, training or employment through closer alignment of schools, the tertiary sector and industry. Gateway programmes enable secondary schools to arrange, manage and access structured work-based learning placements for students in Years 11–13. The Government has recently announced funding for an extra 4,000 Trades Academy and Gateway places from 2020.



APPENDIX THREE: FORESTRY AND WOOD PROCESSING WORKFORCE ACTION PLAN DETAILS

Stage 1 covers 'quick wins' that have funding, are already underway, or will commence shortly, and are indicated by a ★.

Stage 2 includes actions that are dependent on or related to the Forest Strategy or the RoVE. They will begin in or after July 2020 and may require new or additional funding.

Stage 3 comprises longer-term actions, which will require further scoping and a business case to secure funding.

FOCUS AREA: 1. KNOWLEDGE – The forestry and wood processing sector makes good workforce decisions based on robust information and data

Priority area	Actions and deliverables	Expected outcomes	Proposed next steps	Stage
Support development of a shared understanding of employment gaps, trends and issues	<p>★ 1.1 Forecast workforce demand through a phased approach by:</p> <ol style="list-style-type: none"> Phase 1: Developing a heat map of priority roles and skill gaps (presented in Appendix One). Phase 2: Procuring a refined and verified roles classification framework populated by baseline data on current workforce supply and demand. Phase 3: Commissioning a forecast of workforce requirements for the next 10–20 years based on this roles classification framework and baseline data. <p>1.2 Monitor workforce requirements, trends and initiatives by:</p> <ol style="list-style-type: none"> Modifying the annual Te Uru Rākau forestry workforce survey to collect data on the roles classification framework developed in Phase 2 (1.1.b, above) and to include questions related to employee satisfaction, demographics and the success of initiatives for worker preparedness. Based on those data and supplier evaluations, reviewing and assessing pre-employment programmes aimed at promoting employee skills and retention and scaling up the best models, particularly those that are responsive to Māori. 	<p>Planning to meet future forestry and wood processing workforce requirements is more accurate, as it is based on an up-to-date framework and data.</p> <p>Improved decisions about workforce interventions, based on an expanded, up-to-date and longitudinal evidence base.</p>	<p>Contract research provider to verify roles classification framework.</p> <p>Commission and generate a request for proposal (RFP) to forecast workforce requirements.</p> <p>Modify and roll out Te Uru Rākau annual forestry workforce survey.</p> <p>Establish scope, generate an RFP and commission review and assessment of existing programmes.</p>	<p>One</p> <p>Two</p> <p>Three</p>
Ensure that industry and education stakeholders have the information needed to support a successful transition to the RoVE environment	<p>1.3 Assess current forestry and wood processing qualifications and programmes. Influence vocational training by commissioning and presenting to the WDC for the primary sector a report and recommendations on which programmes should be continued, stopped or started. This will be based on an assessment of all current qualifications and their delivery mechanisms, including consideration of relevance for Māori and international examples of successful programmes.</p>	<p>A successful transition to the new education and training regime under RoVE, which supports sector needs and closes gaps by building on best practice.</p>	<p>Food & Fibre Skills Establishment Group agrees way forward with Primary Sector Workforce Development Council.</p>	<p>Two</p>
Ensure access to material on safety, health and wellbeing best practice	<p>1.4 Update knowledge on and socialise the benefits of best practice health, safety and wellbeing workplace initiatives for employers and employees, ensuring a focus on what works best for Māori, by building on earlier work commissioned by FISC and other agencies.</p>	<p>Future initiatives deliver improved health and wellbeing outcomes, employee engagement and retention rates.</p>	<p>Forestry and Wood Processing Workforce Steering Group and Food & Fibre Skills Establishment Group agree whether this is a standalone action, or links with the workplace good practice benefits analysis proposed by the Food & Fibre Skills Action Plan.</p>	<p>Three</p>

FOCUS AREA: 2. ATTRACTION – The forestry and wood processing sector inspires and attracts a larger, more diverse workforce

Priority area	Actions and deliverables	Expected outcomes	Proposed next steps	Stage
Strengthen efforts to promote forestry and wood processing careers	<p>★ 2.1 Progress an aligned and targeted marketing and recruitment campaign by:</p> <ol style="list-style-type: none"> Rolling out an aligned marketing, promotion and recruitment programme that meets forestry and wood processing sector skill needs, underpinned by research on marketing and best channels of promotion with the option to measure outcomes, including: <ul style="list-style-type: none"> Leveraging industry initiatives e.g. the Forest Careers Portal, Frontline Recruitment Campaign, Share the Road; Conducting a targeted recruitment campaign led by Te Uru Rākau and the Ministry of Social Development; Evaluating and scaling up government programmes e.g. Te Uru Rākau/ Department of Corrections Siwiculture Programme into other prisons, including women’s prisons. Participating in a pan-sector marketing plan and programme including attracting candidates into forestry and wood processing sector-related education, training and employment as part of a broader food and fibre sector marketing campaign. 	Attraction and recruitment initiatives are more effective because the sector has a joined-up approach to marketing and promotion, a common set of key messages, and a coordinated programme, which resonate with prospective learners and employees.	<p>2.1a. Sector stakeholders align timing, scope, target groups and messaging, where appropriate.</p> <p>Agree target groups, advise sector of timing and locations of campaign activities.</p> <p>Disseminate findings of evaluations, discuss and agree how and when programmes will be scaled up.</p> <p>2.1b. Forestry and Wood Processing Workforce Steering Group and Food & Fibre Skills Establishment Group agree on target groups, commission a procurement plan for a marketing campaign and choose the provider. Establish key messages and develop the marketing campaign.</p>	One
Connect the education community to forestry and wood processing careers	<p>2.2 Support teachers and careers advisors to promote forestry and wood processing careers, prerequisites and pathways by:</p> <ol style="list-style-type: none"> Sponsoring and delivering a Teachers Day Out programme that enables teachers and careers advisors to promote forestry and wood processing-related skills development and career opportunities. Supporting Wood Councils with resources for careers days. <p>2.3 Review and develop curriculum resources that ensure forestry and wood processing is appropriately profiled by:</p> <ol style="list-style-type: none"> Working with schools that deliver forestry programmes to review curriculum resources available to teachers and provide recommendations on enhancing the profile of forestry and wood processing. Refreshing curriculum resources to incorporate forestry and wood processing material and examples. 	Increased interest in forestry and wood processing careers as students receive accurate and positive information about the sector and about training, education and careers pathways, from teachers and careers advisors who are better equipped with accurate and up-to-date information.	<p>2.2a. Apply for industry funding (e.g. WIDE Trust), develop forestry-specific programme.</p> <p>2.2b. Disseminate resources to Wood Councils. Forestry and Wood Processing Workforce Steering Group allied with Food & Fibre Skills Establishment Group.</p>	Two
Highlight the diversity and benefits of a future in the forestry and wood processing sector	<p>★ 2.4 Improve access to career pathways information and grow the network of forestry role models by:</p> <ol style="list-style-type: none"> Further developing the TEC’s Careers Hub to incorporate profiles of a wider range of forestry and wood processing jobs and establish links with other forestry skills and careers websites. Building on the Inspiring the Future programme to grow a larger group of forestry workers to volunteer as role models who engage with 7–12 year olds in primary and intermediate schools. 	Primary and secondary school students have the opportunity to relate and apply their learning in a forestry and wood processing-related context. Students are more aware of, and develop a positive view of, the forestry and wood processing sector and the career opportunities within it. Primary, secondary and tertiary students and prospective career changers are more likely to consider a career in the forestry and wood processing sector as a result of improved access to comprehensive skills and career pathways information.	<p>Link with <i>Food & Fibre Skills Action Plan 2019–2022</i>.</p> <p>Agree schools to participate in review of resources, commission a stocktake and assessment of current curriculum material, commission development of a framework for generating and delivering new material.</p> <p>Provide information on a wider range of forestry and wood processing roles to TEC’s Careers Hub.</p> <p>Support development of the Inspiring the Future programme by enlisting volunteers. Forestry and Wood Processing Workforce Steering Group allied to Food & Fibre Skills Establishment Group.</p>	Three

FOCUS AREA: 3. EDUCATION AND TRAINING – People have the right skills, knowledge and capabilities to be successful in the forestry and wood processing sector

Priority area	Actions and deliverables	Expected outcomes	Proposed next steps	Stage
Education and training system meets sector needs	<p>★ 3.1 Ensure that the education and training system meets the needs of the forestry and wood processing sector by:</p> <ol style="list-style-type: none"> Engaging with government on the design of the NZIST. Participating in the design of the unified funding system for the vocational education system, including the level of TEC funding through the Industry Training Fund. Participating in the design and establishment of a WDC for the primary sector. Participating in the design of a CoVE that meets the sector's needs. Influencing system settings by reviewing barriers to uptake of trainee and apprenticeship positions. Ensuring results from pilot programmes inform WDC decisions e.g. FICA/Rayonier Matariki trainers and assessors pilot programme. <p>3.2 Evaluate and scale up culturally appropriate and regionally relevant on-the-job training programmes with guaranteed pathways into forestry careers by forming partnerships between employers, iwi, whānau, communities, local education providers and the TEC.</p>	<p>Optimal transition of learners to the new vocational education system.</p> <p>Forestry and wood processing vocational education and training is fit-for-purpose and responds quickly to changing industry needs.</p> <p>Adequate level of TEC funding.</p> <p>Overall lift in training across the sector, including for trainers and assessors.</p> <p>Vocational education reflects the interests of iwi.</p> <p>More Māori and other rangatahi are prepared for, and given opportunities to, enter ongoing work.</p> <p>Collaboration between employers, education providers and communities/whānau/iwi (a) ensures programmes are relevant and lead to employment, and (b) enhances relationships so that employers understand the significance of forests for Māori.</p>	<p>Support and inform the establishment of a WDC and a prototype CoVE.</p> <p>Agree mechanisms for providing input to the New Zealand Institute of Skills & Technology and feeding in results from pilot programmes.</p> <p>Confirm scope, approach, funding and provider for review of barriers to uptake of trainee and apprenticeship positions.</p> <p>Food & Fibre Skills Establishment Group oversight.</p> <p>Evaluate programmes, gain agreement to replicate the most effective models, identify stakeholders/regions to implement programmes, identify potential funding sources and apply for funding.</p>	<p>One</p> <p>Two</p>
Leverage learning from successful on-the-job training programmes that lead to jobs for Māori and other youth	<p>3.3 Increase on-the-job training, professional development and knowledge and application of best practice by:</p> <ol style="list-style-type: none"> Promoting uptake of fit-for-purpose diploma and advanced trade level qualifications to equip future supervisors and managers. Enhancing design and delivery of micro-credentials and professional development e.g. forest management for small woodlot holders. Sponsoring opportunities to upskill workers in the timber construction industry in areas of identified skill gaps e.g.: <ul style="list-style-type: none"> Sponsor study tours for structural engineers to visit exemplar buildings in New Zealand and overseas and incorporate New Zealand's seismic requirements into building design; Develop a network of engineering mentors to provide in-work learning experiences to those in the profession; and Sponsor workshops that help prefabricators acquire and retain currency in new and emerging techniques. 	<p>The skill base of the existing workforce keeps pace with demands for increasing levels of expertise.</p> <p>Industry sustainability is promoted as small woodlot owners learn about and apply best practice forest management.</p>	<p>Agree most valuable qualifications, identify and minimise barriers to participation.</p> <p>Establish priorities for micro-credentials and short courses. Develop the courses along with a phased delivery programme.</p> <p>Agree priorities with industry, develop business case to confirm scope, approach, cost-benefit and funding sources.</p> <p>Forestry and Wood Processing Workforce Steering Group allied to Food & Fibre Skills Establishment Group.</p>	<p>Two</p> <p>Three</p>
Support ongoing skills and knowledge development	<p>3.4 Increase availability and accessibility of advanced forestry qualifications by:</p> <ol style="list-style-type: none"> Promoting awareness and uptake of government and industry forestry-related scholarships and awards (e.g. evaluating and potentially continuing Te Urū Rākau's forestry science and engineering scholarships for Māori and women) and industry mentorships. Exploring the potential for students to achieve advanced level forestry qualifications through distance learning. Investigating opportunities for students to more easily advance from non-degree courses and qualifications to degrees. 	<p>Future workforce capacity and capability needs are addressed as a larger and more diverse group of students engages in and achieves advanced level forestry qualifications.</p>	<p>Evaluate impact of scholarships, identify funding to continue scholarship programmes, identify industry mentors and publicise availability and benefits for both mentors and mentees.</p> <p>Education institutions to explore factors that would hinder or facilitate easier access to advanced level qualifications.</p> <p>Forestry and Wood Processing Workforce Steering Group allied with Food & Fibre Skills Establishment Group.</p>	<p>One</p> <p>Two</p>
Promote uptake of advanced qualifications				

FOCUS AREA: 4. EMPLOYMENT – People thrive in forestry and wood processing workplaces with good practices and conditions

Priority area	Actions and deliverables	Expected outcomes	Proposed next steps	Stage
A more stable and sustainable workforce	<p>4.1 Achieve agreement to adopt standards that support fair pay and working conditions by:</p> <ol style="list-style-type: none"> Endorsing the use of a contract pricing standard that incorporates all elements of the work, including the range of physical conditions encountered, the need for training, health and wellbeing, cultural safety, pastoral care and fair pay. Developing the administrative arrangements including certification and audits, and obtaining industry agreement to apply the standard. Including a business module in contractor certification to promote negotiation skills and knowledge of legal obligations. <p>4.2 Encourage improvements in workplace employment practices that attract, appropriately remunerate, develop and retain a skilled, safe and productive workforce by:</p> <ol style="list-style-type: none"> Developing and delivering forestry-specific business planning and people management courses and material for forestry contractors. Scoping and standing up a pilot for flexible working arrangements including cost-benefit analysis. Piloting a brokerage service to arrange year-round employment. 	<p>Employers have sufficient margins to provide fair pay and employment conditions to their employees.</p> <p>The workforce has greater levels of retention, leading to reduced recruitment costs and costs of getting employees work-ready.</p> <p>Employers have sufficient margins to provide fair pay and employment conditions to their employees.</p> <p>The workforce has greater levels of retention, leading to reduced recruitment costs and costs of getting employees work-ready.</p>	<p>Agree Terms of Reference, establish Working Group and Secretariat.</p> <p>Identify and implement initiatives that will encourage voluntary adoption of workplace best practice.</p>	Two
Continue to show we value our workers	<p>4.3 Further promote and embed a safety culture across the forestry and wood processing sector by:</p> <ol style="list-style-type: none"> Rolling out a programme of Growing Our Safety Culture²³ workshops and developing and implementing a mechanism to help employers embed their safety, health and wellbeing learnings. Promoting uptake of the Safetree Certification²³ programmes by reducing barriers to participation (cost and time) and rewarding participation (preferential engagement of Safetree certified contractors). 	<p>Safer and healthier employees, including reduced injuries and deaths.</p> <p>Better retention of workers and reduced skill gaps and labour shortages.</p>	<p>Confirm how, when and where programmes will be rolled out, including the need to engage and train more facilitators, confirm funding, identify effective mechanisms for reducing barriers and rewarding participation.</p>	Two
Enhance the sector's image as an employer of choice	<p>4.4 Strengthen and support professional identity and pride among forestry and wood processing workers by:</p> <ol style="list-style-type: none"> Strengthening and scaling up existing social and employment support networks e.g. Future Foresters, FICA, NZIF, FOA, FISC, NZFFA. Acknowledging employee and employer achievements including: <ol style="list-style-type: none"> Profiling national and regional industry award winners; Profiling those nominated for the Primary Industries Good Employer Awards; Introducing an award for silviculture contractor of the year; and Acknowledging new forestry workers as they acquire new skills and competencies. Promoting opportunities for awards and publicising positive stories about workers and employers. 	<p>Employees and employers have a strong sense of commitment to their industry.</p> <p>A more positive image of the sector attracts a wider talent pool.</p>	<p>Identify and implement ways of strengthening support networks.</p> <p>Identify and implement new awards and ways of promoting positive stories about the sector.</p>	One

²³ Existing FISC programme

