

RE-ENERGISE

NGĀ MAHI A MĀUI

VERSION: 01

FEBRUARY 2022



Māui mua, Māui roto,
Māui taha, Māui pae,
Māui tikitiki-a-Taranga.

Creating pathways
for the future of the
energy workforce.



Kia hiwa rā, kia hiwa rā!
Kia hiwa rā ki tēnei tuku,
kia hiwa rā ki tērā tuku.

Kia Māui te tū, kia tika te tū
Kia tū, kia aho, kia mataara!
Tihei Māui ora!

Get ready, switch on,
switch it up, get into gear,
create, innovate and
re-energise.

This report forms the foundation
for an industry-wide electricity
supply industry (ESI) workforce
development strategy.

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Executive summary

The Electricity Supply Industry (ESI) is on a path to substantial growth, with government policy on energy decarbonisation driving transformational change and innovation. As a result, the industry will see increased workloads and skill requirements over the next five years and beyond.

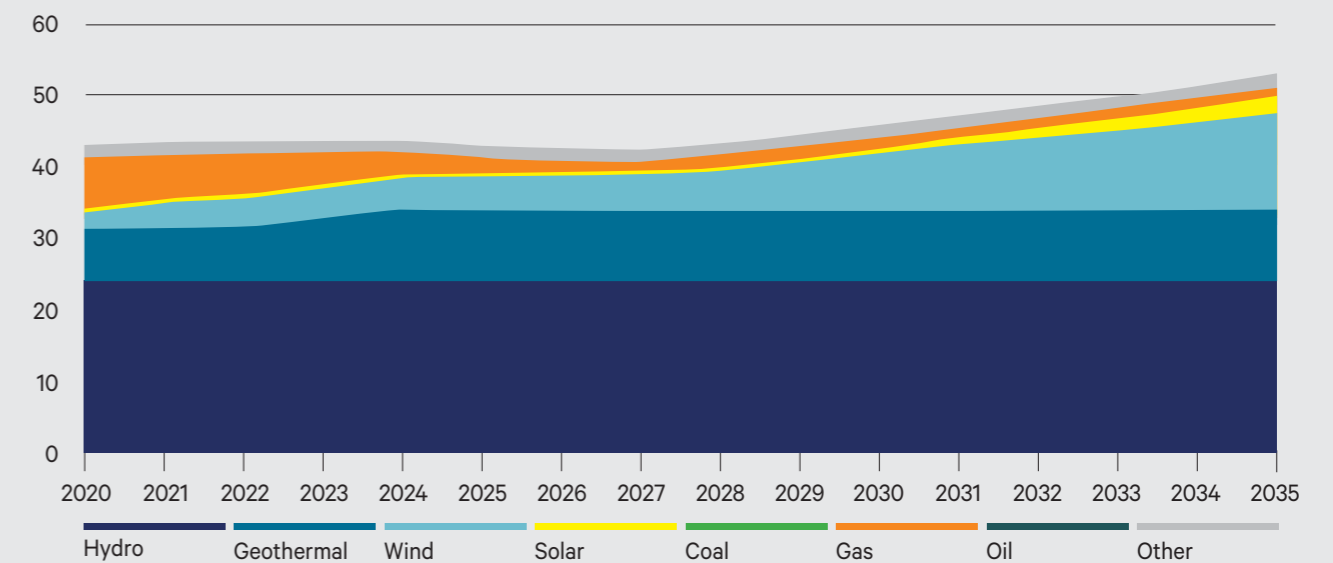
Amid COVID-19 immigration restrictions and wider shortages in construction and infrastructure, the ESI is already facing unprecedented labour shortages; this will only worsen as an ageing workforce begins to retire, and policy on immigration shifts further toward low volume, high skills.

Electricity generation is proposed to grow from 43 TWh in 2020 to 52 TWh in 2035.

The Workforce Development Strategy is a research project that supports Government objectives to sustainably meet growing energy demands. Qualitative data and quantitative insights were gathered, and subsequently analysed, to form strategic recommendations on what changes are required to attract and retain the right ESI workforce, and to secure New Zealand’s sustainable energy future.

CCC proposed electricity generation by type (TWh), 2020 — 35

Source: Climate Change Commission

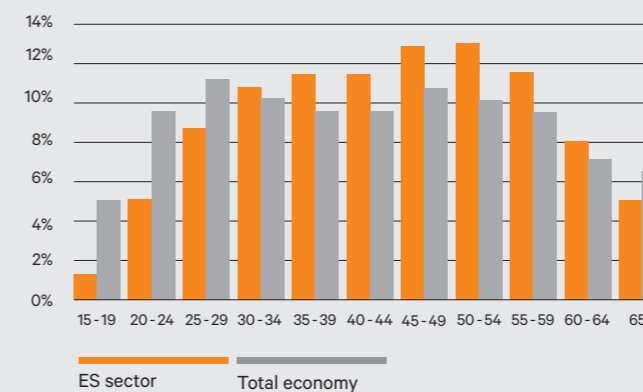


“As much generation will need to be built in the next 15 years as was built in the past 40 years”

Transpower

ES employment by age, 2018

Source: Infometrics



A quarter of the ES workforce is 55+, which is estimated to be 2200 people. That’s a huge number, relative to the rest of the New Zealand economy, meaning that the amount of people in the current pipeline will not cover the amount of people likely to retire in the next 10 years, even if all things stay equal.

Industry insights

Te Tira Hou

Seventy interviews were conducted across the country with industry insiders, employees, trainers, leaders and young people imagining their future careers. A substantial proportion of those interviewed were Māori.

Five insight topics were identified: Alignment, Attraction, Pathways, Training and Māori participation and leadership. The insights are covered in detail in the main document.

Alignment

Kia kotahi te hoe

The industry as a whole lacks a complete picture of its workforce skills and demographics, and on how to project and plan for the future. A lack of aligned vision on sustainability and inclusivity is making it harder to build a unified plan of action, and for candidates to match their values to ESI careers.

Attraction

Piri ki a Papatūānuku

The concept of electricity supply, and the value of sector careers are largely invisible to those on the outside, particularly for young people. The industry could do more to leverage authentic messaging around sustainability, flexible job security, community focus and outdoor lifestyles.

Pathways

Māui te Tipua

Potential and current employees want to be able to visualise and plan for their futures, yet avenues within the industry are either broken, hidden or challenging to access. Family and other personal connections are still the most common entry, but for people on the outside, negotiating pathways is much more difficult.

Training

Kia Māui te tū

Traditional models of engagement around competency building may be inadvertently switching off gen-z digital natives, who are accustomed to flexible learning methods, faster results and recognition. Employees are seeking greater flexibility within their career pathways, but the shared competencies and modes of training that allow transferability are lacking.

Māori participation and leadership

Ka hao, ka hao, e ara e

A key opportunity for ESI workforce development is the growing pool of young Māori talent. In order to attract more Māori, and to build a more equitable future within the electrical industry, companies need to cast aside business as usual and adopt new practices that are effective in recruiting, welcoming, retaining, and scaffolding Māori.

Seventy interviews

Insight topics

70 05



Recommendations

Tūtohunga

Based on the research, four strategic goals and thirteen actionable recommendations were identified. These goals and recommendations were reached through engagement activities with the industry workgroup, and by analysis conducted by Tokona Te Raki.

Strategic goals

Actionable recommendations

04 13

Strategic Goal 1

Increase visibility to attract the right people

Ahumahi kitea nuitia

Tāngata tika Whakapiri mai

- 01 Build a platform for industry growth**
Hanga tūāpapa, e tipu ai te ahumahi
Design for future employment changes and impacts, while showcasing sustainability initiatives via a single, cohesive industry voice on how the sector will address the challenges ahead.
- 02 Build a platform for industry discovery**
Hanga tūāpapa, e kitea ai te ahumahi
Make it easy for people interested in joining the industry to take the first step. Set the right expectations by matching individual potential with industry opportunities via a single, intuitive entry route.
- 03 Raise the profile**
Whakatairanga umanga
Attract both young starters, and career changers, by leveraging authentic value propositions around sustainability, lifetime employment and community care. Build role models that show young people the value and potential of ESI careers.
- 04 Develop community-focused campaigns**
Whakawhanake whakaritenga hapori
Attract and retain local talent by leveraging the industry's unique ability to support, interact and partner with communities.



Strategic Goal 2

Design for intuitive career pathways

Te whakahoahoa umanga pūmanawa

- 05 Highlight careers and pathways**
Te tipako umanga me ngā ara
Make it easy for school careers advisors, job seekers, employees and trainers to understand potential careers and pathways via a sector-wide visual representation of all pathways available.

- 06 Build interoperable standards and competencies**
Te whakatū taumata me te matatau te whakawhiti pukenga
Build an adaptable workforce by enabling employees to transfer across roles within the industry. Create a standardised mapping of transferable skills, and a core foundation of competency recognised by all.



Strategic Goal 3

Build a resilient workforce

Pou tū, pou hinga

Pou hinga, pou tū

Tū tonu

- 07 Find a united vision and shared approach**
Wawata kotahi Mahi kotahi
 Collaborate to measure vital ESI statistics such as workforce numbers, skills and ethnicity. Encourage workforce modelling by building tools and methods of forecasting future skills requirements.
- 08 Commit to growth**
Kia manawanui ki te whakatipu umanga
 Prepare for the future by developing local recruitment and training processes that commit to growth, and are guided by both sector projections and the government's signaled position on reduced immigration.
- 09 Build a platform for rapid training and upskilling**
Māui me te rā
 Increase speed to competency by activating trainees with digital content that is easily digestible, engaging and consistent across all devices and channels.
- 10 Design for workplace diversity**
Whakahoahoa. Māui Māui Māui
 Create better working and training environments by adapting workplace structures and values to support a diversity of genders and cultures. Employ support structures such as tuakana-teina mentoring as a way to help transition workplace culture and welcome more Māori and women to the industry.





Strategic Goal 4

Partner with Māori

Tiriti Tuituia

- 11 Inspire Māori to enter the industry and thrive within it**
Whakaaweawe Uruuru mai Oraora mai
Increase visibility and actively promote careers in the sector to engage and excite Māori, and transition company culture to welcome Māori and women into the industry. Partner with MPTT consortia and conduct further research to better understand training pathways for Māori.
- 12 Develop cultural leadership**
Māui e ara e!
Establish company training programmes to scaffold Māori into industry leadership roles, and to grow non-Māori cultural capability. Partner with an industry caucus of Māori leaders.
- 13 Build partnerships**
Tuakana Taina Tuituia
Prioritise developing relationships with Māori businesses and Māori communities by partnering with iwi and embedding Te Tiriti o Waitangi across ESI organisations.

INTRODUCTION

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Introduction

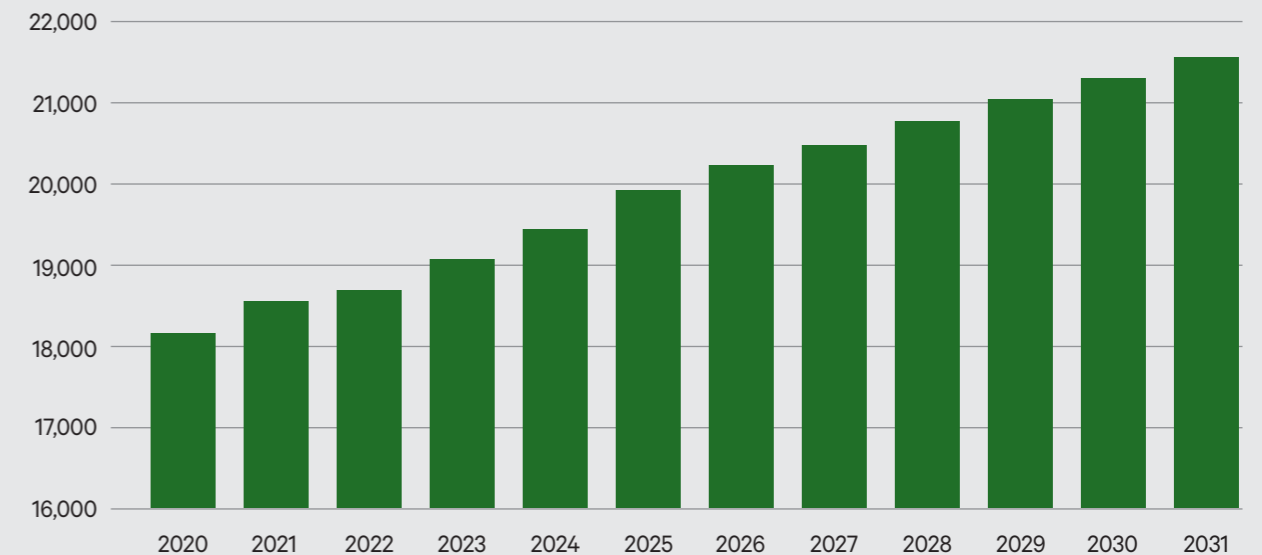
The ES industry is on a path to substantial and transformational growth. In order to secure energy supply for future generations, the ESI needs to re-imagine approaches to attracting, training and retaining the next generation of workers.

Government policy on energy decarbonisation is driving change and innovation, with an ongoing shift towards renewable energy sources across the board. In the next 15 years, a significant portion of New Zealand’s energy will transition to electricity, with an initial focus on the light vehicle fleet and industrial heating processes.

Capacity for generation from renewable sources will need to increase, and current modes of electricity distribution and management will come under added pressure. With increased public awareness, environmental policies will continue to push innovation on the ways we source and distribute energy, and dramatically increase the workloads and skill requirements of the ES industry over the next five years and beyond.

Construction employment, 2020 — 31

Year-ended March; source: Infometrics



This transformational growth is set against a backdrop of unprecedented labour shortages in construction, infrastructure and IT; serious COVID-19 restrictions on workforce immigration, and a change in long-term immigration policy toward low-volume / high-skills. On top of this, a quarter of the ESI workforce will reach retirement age over the next decade.

To safeguard New Zealand’s energy security, the industry must act fast to lift its profile as a great place to build a career; to form new and standardised pathways to compliance; and to help young people and career advisors to understand the value of ESI pathways. It must open the doors to underutilised domestic labour sources: for example Māori, and people wanting to move from the beleaguered tourism sector.

The ES industry must invest now to recruit and retain the next generation of ESI workers.

\$10b

Over \$10b of ES capital improvements and new large-scale projects are already planned for the next decade.

43%

In the December 2020 quarter a net 43% of businesses reported that finding skilled workers had become harder, which marked a return to pre-COVID levels.



In-depth interviews

70

Seventy in-depth interviews were conducted across the country with Gen Z students, learning providers, current learners, employers and Māori stakeholders.

Male participants

42

Female participants

28

Methodology

The following research has been formed through quantitative environmental scans, qualitative collective insights, and the unfiltered thoughts, perceptions and ambitions of industry insiders, employees, trainers, leaders and young people imagining their future careers.

These insights have been collectively refined between industry experts, and research partners Tokona Te Raki (Māori workforce participation), Infometrics (data research) and Assurity Consulting (people research).

INSIGHTS

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Industry insights

We have engaged with a diverse group of individuals to discover common themes related to ESI workforce and training.

Industry insights have been captured under five categories: Alignment, Attraction, Pathways, Training and Māori participation and leadership. Each category offers perspectives towards the challenges and opportunities presented in strengthening the industry workforce.

We encourage you to read, share and challenge these findings so we might together better help the next generation workforce to succeed.



Alignment

How might we work together to better assess the industry's current state, plan for future sustainable growth, and attract (and retain) the workforce of tomorrow?

The ESI has evolved into a fragmented sector, with a myriad of organisations, specialist businesses and training providers. The industry as a whole lacks a complete picture of its workforce skills and demographics, and is unaware how to best project, or plan for, future labour needs. Likewise, the absence of a shared vision on sustainability and inclusivity is making it difficult for candidates to align their values to ESI careers.



1.1 Fragmented vision

How might we build a shared vision of sustainable growth?

New technologies, government agendas, cultures, demographics and existential challenges are coming together to form a maelstrom of potential for industry change. The sector has evolved into a myriad of organisations, specialist businesses and training providers that belie what is, in fact, a rather small industry. By headcount, it is estimated that the sector comprises a mere 6500 core employees nationally.

A continued focus on maintenance is impeding the conversation around a future industry-wide vision of sustainability and growth, and the big-picture thinking needed to meet the labour supply challenges ahead. The lack of an aligned industry vision also means entrants are unable to clearly see and understand the industry's strategic intentions, they cannot be sure they align with their own personal values or aspirations.

1.2 Grow or maintain?

How might we ensure we are engineering resilience into our workforce, to cope with both the needs of today and the unexpected opportunities demanded by tomorrow?

Demand for employees in the electricity sector seems predominantly driven by asset management planning. The industry also displays a maintenance attitude towards the design of its labour market, carrying only the sufficient resources required to sustain current facilities and operations. There is a prevailing sentiment that most demands can be met fluidly with the use of migrant workers, but this notion seems to overlook what might happen if rapid growth or disruption occurs. A need for a shift in thinking toward untapped domestic resources was identified: for example, as the aging Pākehā population growth slows, the Māori population is growing fast, and becoming an increasing percentage of the workforce. However, Māori are currently under-represented in the electricity industry. Globally, electricity demand is increasing roughly twice as fast as overall energy use, due to growth in the world's population, economies and rapid urbanisation.¹

¹ <https://world-nuclear.org/information-library/current-and-future-generation/world-energy-needs-and-nuclear-power.aspx>

It is difficult to find strategies within New Zealand for future-proofing labour supply against any significant shifts from routine operations.

This is in part due to the invisibility of overall industry health: at present there is no integrated framework in place for collecting and sharing data about the industry and its people. This makes it more difficult to reach informed decisions on how to meet high-level strategic goals.

150

Infometrics estimates that to both grow the sector, and to replace workers who leave, could require the ES sector to attract 150 engineers, technicians and tradespeople a year.

700

If we take a broader definition of the sector to include engineers, technical and trade staff working in the sector; as well as engineers, technical and trade staff providing services to the ES sector (but working in contractors and consultancies outside the sector), we estimate that around 700 additional engineers, technicians and trade workers will be required per year.

“We have projected the future and the likely changes with the electrification of transportation. So all of the networks for home charging and so on will need to improve with new technologies. And that will all need support and servicing. Dirty power is getting phased out, and you feel like you are part of the solution here which is really attractive.”

Technical Specialist



1.3 Environmentally sustainable vision

How might we capitalise on green credentials to build a shared vision of sustainability?

The ES industry in New Zealand already has enviable green credentials, and a central role in securing Aotearoa’s sustainable energy future. Aligned communication is needed to share with potential entrants about how working in the ES industry can make them a part of perhaps the most important sustainability initiative of our time.

Employees inside the sector take pride in working towards environmental sustainability, but do not have a clear indication around how a sustainable future might look, or how we might get there. The need for greater support and servicing of sustainable initiatives is imagined, but is not yet translated into planning and functional requirements. A forming vision needs to be activated, not least to help the industry prepare before decarbonisation genuinely impacts workforce demand.

1.4 Cultural vitality

How might we form a shared vision of cultural inclusivity that makes every employee's wellbeing a part of the ESI's DNA?

There is a desire within the ES industry to celebrate cultural diversity, but the operational realities of creating safe and inclusive workplaces are in considerable need of refinement. A number of interviewees shared experiences of being confronted with racism in the ES industry, either directly or by observation. On top of this, some interviewees told how hierarchical structures can make people afraid to call out racism on site because of the perceived fear of losing their jobs. These themes were also anecdotally mirrored by observations of offshore workers who are seen as "safe" targets of abuse because they have "so much more to lose".

At present, the cultural makeup of the ESI workforce is not measured, which makes initiatives to build inclusive workplaces more difficult. The industry is attracting diversity, so there is a clear opportunity to make diversity part of the set-up.

“Sometimes we down tools and roast a pig. We spend time together because we trust each other”

Tradesperson



“The one thing I didn't like is always being like the punching bag... when they have things on the radio, oh 'Māori did this'... and then they're all moaning and you're the only Māori there.”

Tradesperson

“I just thought this is the door you’ve got to get in. I didn’t know that there are all of these other jobs I could have applied for. There’s a lack of information for someone who has zero knowledge of the industry.”

Young apprentice



1.5 Barriers to discovery

How might we build an easily accessible repository of ESI visions and career options?

A recurrent research theme was the difficulty of discovering, and learning about, the electricity sector.

For potential new entrants, access to objective information about working in the electricity sector is limited and often unclear. Both trainees and young employees described gaining industry knowledge through chance interactions, or from family members or peers already in the sector.

For new entrants, there is a need for an industry-wide discovery platform that links career opportunities to the ability to create a sustainable future, and for those already employed or in training, there is a need to highlight career pathways and available parallel opportunities.

When questioned about their experiences when considering an apprenticeship within the sector, interviewees struggled to name a specific source that had either informed them of how to enter the industry, or that had highlighted potential career pathways once they were employed.



Attraction

How might we harness our value, vision and sustainable purpose to attract tomorrow's ESI workforce?

The value of ESI careers, and the concept of what the ESI is, remains largely invisible to those on the outside, and may not be as appealing (or as well understood) to younger workers. The industry could do much more to leverage authentic messaging around sustainability, flexible job security, community focus and outdoor lifestyles.

2.1 An invisible industry

How might we better share the value of ESI careers, and attract untapped workforces?

The electricity sector has been routinely described as an invisible industry. Both the nature of the work, and the careers, pathways and opportunities available are not obvious to those on the outside, and the value propositions that attracted the current ESI workforce are not as relevant to young people today. Visibility within the industry too is lacking, for example there is a lack of available data on ethnicity in the workforce, making it more difficult to quantify where to target initiatives to recruit more Māori.

Young potential employees are not naturally attracted to the ES sector. In schools, the possibilities within ESI careers are generally not understood by careers advisors – or by the vast majority of school-leavers; indeed, pathways to trades in general are often not as highly prized by schools as other tertiary education paths.

“It’s definitely a good paying job, yep. So, it’s a pretty good incentive for young people to come into it especially — like I bought my first house at 20.”

Rangatahi

In terms of the perceived extrinsic value of ESI careers, many people inside the industry take pride in ‘keeping the lights on’, and view this philosophy as both a central motivation and a drive for work. This statement does not resonate with youth, however, or with people considering a career switch from outside of the sector, for whom narratives around sustainability hold more weight.

There is a disconnect between the perception and reality of potential career paths and rewards for ESI work. For example, the Māori ESI staff interviewed shared their positive experiences of being in the industry, the value in the mahi (work) and decent remuneration; on the other

hand, rangatahi Māori were found to have a limited understanding of the electricity sector in general, and little to no understanding of the prospects of an ESI career, or the range of pathways available. Trainees were found to have entered the industry by chance, rather than through any prior knowledge.

“My Dad played rugby with the manager.”

Line Mechanic

In order to recruit new generations into the sector, the multi-dimensional challenge and reality of invisibility must be addressed.

33%

Average individual earnings are ~33% higher than the national average, (99K vs 60K). We see potential earnings as a robust and largely under-utilised attraction point.

2.2 Sustainability

How might we harness our sustainable purpose to attract cause-driven employees?

The most compelling and visible proposition for these audiences is authentic sustainability. Younger audiences are acutely aware of the need to change toward more sustainable ways of living and working, and are seeking roles that contribute towards sustainable initiatives such as decarbonisation. However, few young people are aware of how New Zealand's ESI is uniquely poised to demonstrate global sustainability excellence in transforming energy production and distribution.

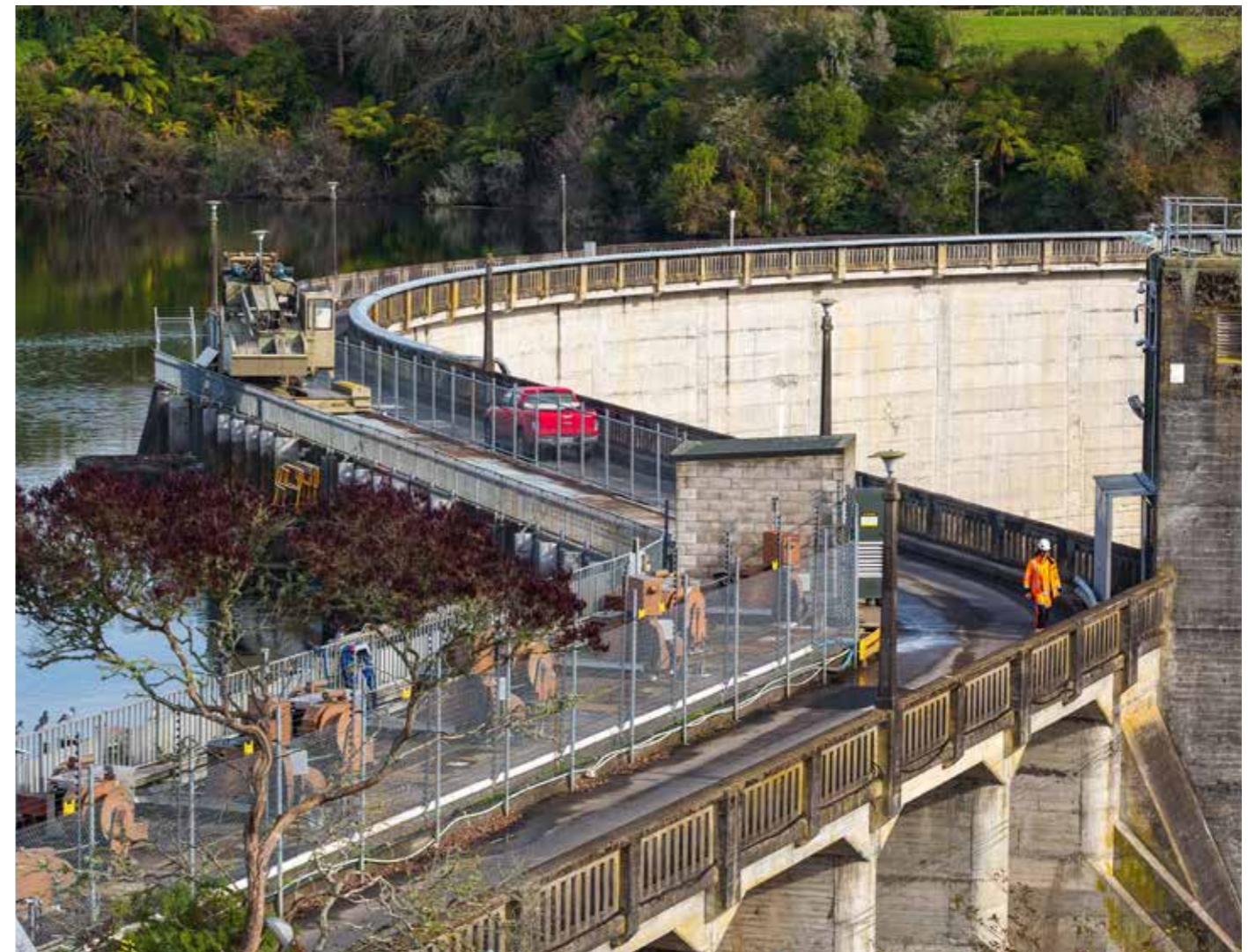
Gen-Z interviewees presented a consistent theme of wanting to affect global change and be part of a more sustainable future. Indeed, for many rangatahi Māori, it was found that sustainable and environmentally friendly practices are essential to the kinds of organisations they want to be a part of. New Zealand's electricity generation story (past, present and future) has the ability to fulfil this need, and to be the greatest value proposition for attracting the new entrants that will help transform the sector.

“Emerging technologies will need support and servicing. Dirty power is getting phased out, and you feel like you are part of the solution here which is really attractive.”

Technical Specialist

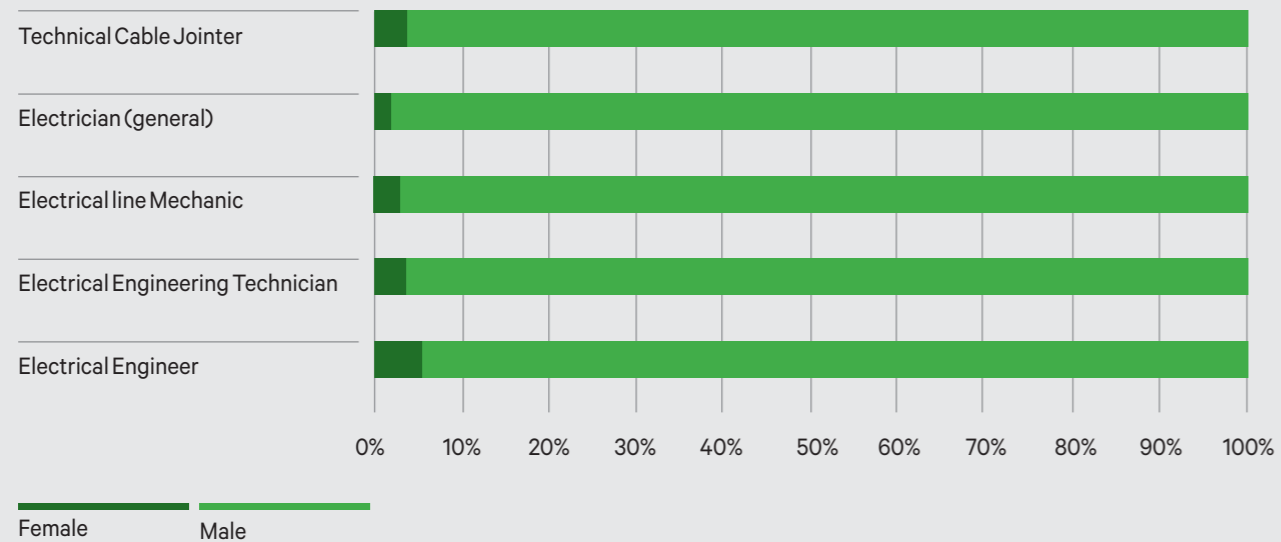
“We're in that movement of climate change. We need to highlight sustainable energy because that would also be a really great selling point for a lot of this generation to be inspired to be a part of that movement as well.”

Rangitahi



Electrical supply occupation employment by sex, 2018

Source: Stats NZ, 2018 Census



“At the start everyone was wary of me because I am the only girl up in my company here. Everyone was tip-toeing around me but now they are all good. Now they know ‘she’s just one of the boys’ kind of thing. But I still get a bit of stick for some stuff like the award thing.”

Line Mechanic

2.3 Shifting stereotypes

How might we better communicate around gender diversity in the ESI workforce of today?

The electricity sector can be perceived as a rugged and hardened outdoor lifestyle that no longer fits within modern workforce practices. Historically the sector (and the roles within it) has been depicted as predominantly male-centric. They noted the lack of female leadership and role models, and of the sheer lack of representation of Māori in the workforce, which creates feelings of isolation.

“For a young person in general going into that environment, let alone female, it can make you feel uncomfortable.”

Rangatahi

Today’s reality, however, seems to be progressing from this perception, with the electricity sector displaying an industry-wide focus on fair opportunities for all genders. Some women we interviewed within the industry were quick to debunk industry stereotypes, suggesting that workplace bullying was more likely to occur in other domestic trades. They described having access to support networks, as well as access to tools designed to eliminate the physicality required for many roles, thanks to advancements in health & safety.

While there is still work to be done, a disconnect exists between the perceived barriers, and the reality of women working as a valued part of the ES industry today.

2.4 Short-term vs. long-term

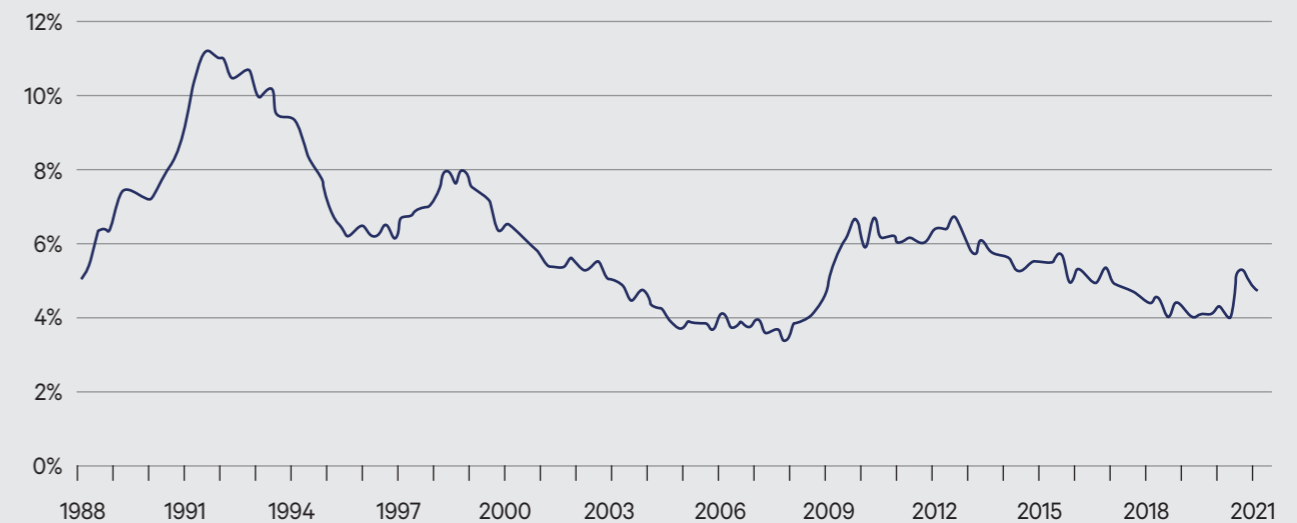
How might we adopt a long-term view of our industry recruitment needs that ensures continuity of labour supply, regardless of economic and societal trends?

The electricity sector is uniquely long-term in nature, offering employees the attraction of lifetime employment within a recession-proof sector. In contrast to this, employment forecasting and entrant intake seems shorter-term in nature, with evidence of long-term planning and workforce modelling difficult to discover. For instance, the industry is discussing decarbonisation, but there is no consensus on the impact this will have on future workforce demand.

When facing shortages in labour, the sector is routinely supplied with migrant workers, even within an extended global pandemic environment. There are questions around both the sustainability and resilience of this approach, with the current government signalling a marked shift towards immigration policies that will reduce availability of lower-skilled offshore workers.

Unemployment rate, 1988 — 2021

Source: HLFS, Stats NZ



“Sectors which rely on migrant labour, like tourism and the primary industries, will look different in future. Some sectors have done incredible work over the past year to think creatively about ways to address labour shortages, with adjustments to wages and working conditions, and changes to job offerings and career paths better suited to local labour.”

Hon Stuart Nash, Tourism Minister and Hon Kris Faafoi, Immigration Minister.

From: Immigration Reset: Setting the scene.

04%

We are experiencing a very tight labour market with the unemployment rate at 4% in June 2021.

“I worked for three years as a sea kayak guide and took kayaking trips guiding people out in the Abel Tasman. I just looked at the pictures, I’m not going to lie – they were climbing up stuff. They were working outside. They were in the middle of nowhere. Yeah, I thought that was cool.”

Tradesperson



2.5 Targeting tourism: life-long employment

How might we help people in the tourism sector restart their careers?

A significant attraction to building a career inside the electricity sector is the opportunity to have a job for life within a recession-proof industry. Critically, the industry also presents many opportunities to live and work locally – both in urban and rural communities.

“You’ll never be short of finding a job, whether you’re a liney or a jointer or a sparky you can get a job pretty much anywhere in the country.”

Tradesperson

This promise of life-long, location flexible job security is a particular draw-card for people working within the tourism sector; many of whom have long endured the peaks and troughs of seasonal employment, and are now seeking a fresh-start career amid the ongoing COVID-19 environment. On top of this, there are similarities between positions in the ES and tourism industries, with both sectors offering outdoor-based, hands-on work.



Pathways

How might we make the range of ESI career pathways accessible and understandable to candidates, employees and institutions?

The prospect of a narrow, life-long career pathway is no longer appealing to younger generations and new entrants, yet avenues within the industry are either broken, hidden or challenging to access. We found that family and other personal connections are still the most common entry into the ESI workforce, but for people on the outside, negotiating pathways is much more difficult.

Both potential and current employees desire the ability to visualise and plan for their futures – through understanding where and how they might enter and progress within the industry, and what opportunities will be available to them over the long-term.

3.1 Pathways from school

How might we match aptitude to opportunity in schools, to trigger industry career pathways?

Due in part to Schools' tendency to focus on academic results and pathways to university, students with an aptitude for roles within the ES industry are largely unaware of the opportunities and industry pathways that exist for them today.

The prevailing sentiment is that the most valued school pathways are still hardened to university, even when students show an interest in pursuing trades. Gateway-based school programmes as a pathway tool deliver mixed results: the programmes perform well when schools have the capacity to match student aptitude and interests with specific Gateway opportunities; however, more often than not those with the competency required for technical roles still end up following the more obvious pathway to university. More generally, Gateway school programmes are perceived by apprentices as an instrument to syphon weaker academic students away from NCEA exams, in order to improve school pass-rate statistics.

“All my mates are in trades. But the most intelligent people I knew at high school did not even consider trades. They are more used to having an iPad in front of them than being in the outdoors.”

Trainee Electrician

12%

Only 12% of people commencing trades training are secondary students. There is a huge opportunity for the ES industry to gain more traction in schools.

05%

Only 5% of people enrolling in ES sector technical jobs were 20 or under, showing that awareness only starts after they left school.



3.2 Apprenticeship pathways

How might we ensure that people are aware of where they are on their learning and employment journey, including the pathways available to them at any moment in time?

On the whole, career pathways are not accessible or understood by young employees and apprentices – even inside organisations that are succeeding in designing and developing pathway programmes. Apprentices exhibited an absolute focus on ‘just getting their ticket’, without acquiring a wider knowledge of the possibilities available to them after doing so.

This is also true for people entering the industry from tertiary providers: industry training organisations have voiced their dissatisfaction with the disconnect between themselves and polytechnics, with acknowledgement that Māori and Pasifika specifically need particular attention with pathways to gain a foothold into the industry. Employees want to understand potential job opportunities, and the pathways required to access them.

“Starting in any trade is hard. You do not know where to start. Right now I am helping a mate getting through it. To be honest, when I started my apprenticeship, even then I didn’t know what to expect.”

Trainee Electrician

3.3 Navigating pathways

How might we provide simple, intuitive and compelling communication that demystifies the complexity of ESI pathways?

When exploring friction within the current industry pathways, communication was a central, recurring theme. At present, pathways are inconsistent across the industry, and are shrouded in complex language, nomenclature, terminologies, frameworks, capabilities, competencies and qualifications – creating a complicated scaffold for the uninitiated to assess and navigate. Learning on-the-job, through competency frameworks, makes pathways and career progression difficult to conceptualise, both inside and outside the industry.

People seem to clearly understand the high level of industry health & safety required, and the role of training in enabling this safety; however, the design of other competency training currently creates confusion.

The advantage of implementing more intuitive and communicable pathways will extend beyond employee attraction: it will also help to ensure long-term employees remain safe and competent at work.



“I think we should look for ways to simplify teaching about the industry. But at the same time, the industry has high safety standards. And, I’m not too sure how to go about it. Find out how to simplify what we learn. Simplify what’s being taught while also maintaining the high standard. This will make it easier for people to come into the electricity industry.”

Trainee Electrician



3.4 Guiding pathways and retention

How might we wrap supportive ecosystems around apprenticeship pathways to improve the training experience?

Eco-systems and support networks were described as vital for a positive apprenticeship experience. There is evidence inside the sector of ‘game-changing’ support networks that allow apprentices to actively build professional workplace confidence. These systems also ensure the apprentice’s well-being is being actively met in terms of balancing the demands of work and study. Direct mentorship was described as critical for improving an apprentice’s analytical skills and practical on-the-job abilities.

“Something that made a real difference early on is this guy just a few years older than me who had been through what I was going through and could answer questions. He really helped me understand what we needed to do with everything.”

Trainee Electrician

Of equal importance to apprentice support networks is the need for specific guidance and tools for the mentors themselves. Support like this would equip mentors with the requisite knowledge and tools to assist young apprentices – especially those who are presenting with non-traditional mindsets and/or training needs. Examples of this include apprentices with a preference for flexible online training formats over traditional training curricula, or young women working within male dominant teams.

3.6 Family matters

How might we widen industry-attraction pathways and reach beyond our family networks?

The majority of people researched were found to have entered the electricity sector through a family member's encouragement, or other personal connections. These people likely had exposure to the industry when they were young, or had 'people on the inside' who were able to connect them to opportunities, arrange apprenticeships, or help to navigate their pathways throughout the qualification journey. For people outside of the electricity community, the entrance pathway is more nebulous and difficult in nature – which in turn hinders their curiosity to explore its career potential.

The lack of appeal to wider networks appears to be due, in part, to the intangible nature of electricity itself: the reality of ESI employees' daily work is not immediately obvious to those outside of the industry, resulting in a lack of interest and engagement with the sector as a whole.

“No one has really gone and showcased our industry. We know about each other within the close-knit (relationships). We all know about each other once you are in. But there are people on the outside who still have no idea of what we do.”

Line Mechanic (Live Lines)

“One of my good friends works here so I was able to ask him about the industry. I also have cousins and uncles who are qualified electricians. Some of them are working here so I can talk to them about this industry.”

Electrical Apprentice





3.7 Community connections

How might we share how being a part of the ES industry is also being a valued member of the community?

The electricity sector offers its employees the unique ability to live and work locally, in both urban and rural communities, for life. The reality of being able to remain in your home region, while still progressing into a high-quality career, is a dynamic and attractive value proposition. Because of this, employees in the electricity sector feel as though they are part of the growth and progression of their local industry and community.

“I switched to this role because I grew up in Turangi and I want to work in my own back yard. I love being involved in the community and I love the fact that Genesis supports my community.”

Electrical Apprentice

“My parents are in their pension age now, it would be good to help them financially. We have a thing called iwi, which is like my tribe. I want to use my expertise at some point to benefit my tribe. It’s my main motivation at the moment.”

Electrical Apprentice

3.8 Working Abroad

How might we retain and attract the best employees by championing the benefits of working in the local ES industry as compared to overseas?

When it comes to pursuing international industry opportunities, the appeal of large salaries is the primary value proposition leading people to look outside of New Zealand. This is described as a central retention challenge, as New Zealand's industry skill sets are highly transferable to other economies. The perception is that the largest salaries are available in Australia, due to its volume of capital works and primary industries activity.

“Work in Australia pays a lot more money than what they do here, so they always know that. Once you have your lines documents here you can go over there straight away.”

Technical Specialist

New Zealand appears to attract its immigrant electricity labour with a markedly different value proposition: the promise of a family-centric lifestyle and reliable work within local communities. This is a value proposition that is just as attractive to migrant workers as it is to local workers. For migrant workers, New Zealand is perceived as a safe destination, fit for family life; by comparison, Australia is perceived as more hostile in nature, with harsher working conditions that offset the higher levels of remuneration.

“I wouldn't really consider working in Australia because I'm thinking about my family. In Australia you cannot just bring your family in. Also, the nature of New Zealand is so good, just like family-orientated. That's why we like it here.”

Transmission Line Mechanic





Training

How might we build a flexible and resilient workforce by offering training that is rapid, relevant, accessible and inclusive?

Standards and methods of training are coming under increasing pressure to adapt. At the same time, workforce diversity is improving, requiring different models of engagement.

Interviews revealed how traditional models of engagement around competency building may be inadvertently switching off young people, who are accustomed to flexible learning methods, and faster results and recognition. Because of this shift, practices designed to ensure competency and safety may be inadvertently switching young demographics off to working in the ESI.

Existing employees are also seeking greater flexibility within their career pathways. Employees want the ability to shift into new roles adjacent to their own; however, a lack of shared competencies, flexible options and training methods is holding many workers back.

“One of the big things is exposing kids to this work. Here at Genesis we run open days, but a solution some of us came up with is to use social media to our advantage. Like ‘talks in Instagram’ because you find that’s where younger generations spend time.”

Senior Manager



4.1 Speed of knowledge

How might we safely transfer deep tacit knowledge, acquired over a lifetime, to people in an instant?

Gen-Z have grown up with online search capabilities, connecting them with instant access to information in any given moment. Traditionally, the trades have worked as a pathway, offering much faster results than tertiary study. Gen-Z behaviours challenge the traditional norms: we found that exams are most commonly sat online (sometimes into the early hours), work moments are shared through social platforms such as Tik Tok, and the preferred method of delivery for information is virtual, visual and in small packets – ‘just-in-time’ for the task at hand.

Traditional time-bound training approaches, designed to ensure competency and safety, are slow compared to non-ESI training methods, and may unintentionally be deterring this demographic from seeking employment within the sector. Tools and processes that have performed well historically must now be reviewed in order to ensure safety, while also addressing the changing needs and expectations of an ‘instant-gratification’ society.

Gen-z digital natives are challenging traditional models of training, engaging with peers, and sharing work experiences. There is a generational collision between the aging workforce and a new generation of apprentices who want faster results and recognition.

4.2 Soft-skills

How might we find time within accelerated training formats to build soft skills and abilities?

While core skills and competencies are well documented within the industry, there was a consistent focus on the need to improve soft skills with training. This was often directed at Gen-Z apprentices who were described as difficult to engage with, weak in the communication skills required for work safety, preferring to work unusual or flexible hours (or ‘non-routine work patterns’), and generally disinterested in pursuing an industry career.

Group learning was a recurrent theme among participants, and cited as an attractive way to inspire engagement and to bring more people safely into the industry. Māori learners, in particular, commented on the strength of studying together as a Māori cohort and the positive impact this has on their learning.

There are concerns that a blinkered competency focus is inadvertently eroding problem-solving abilities in apprentices. True competency was described as having an ability to balance theory with experience and wisdom - coming from understanding the ‘why’ behind the theory.

“Being surrounded by Māori people made me feel – what’s the opposite of not overlooked, like – yeah seen.”

Rangatahi

“Apprentices are being treated like ‘gofers’. It’s worse now because time frames are so short and they don’t get enough time to build relationships with mentors. They need to learn and understand the ‘why’ behind the theory.”

Technical Specialist



“Most of the guys in training are residential sparkies, while Jasmine and I do electricity supply work. We do high-voltage so it would be good if they had learning catered to people in electricity supply. Most of the stuff in my class looks mostly at residential electricity.”

Electrical Apprentice

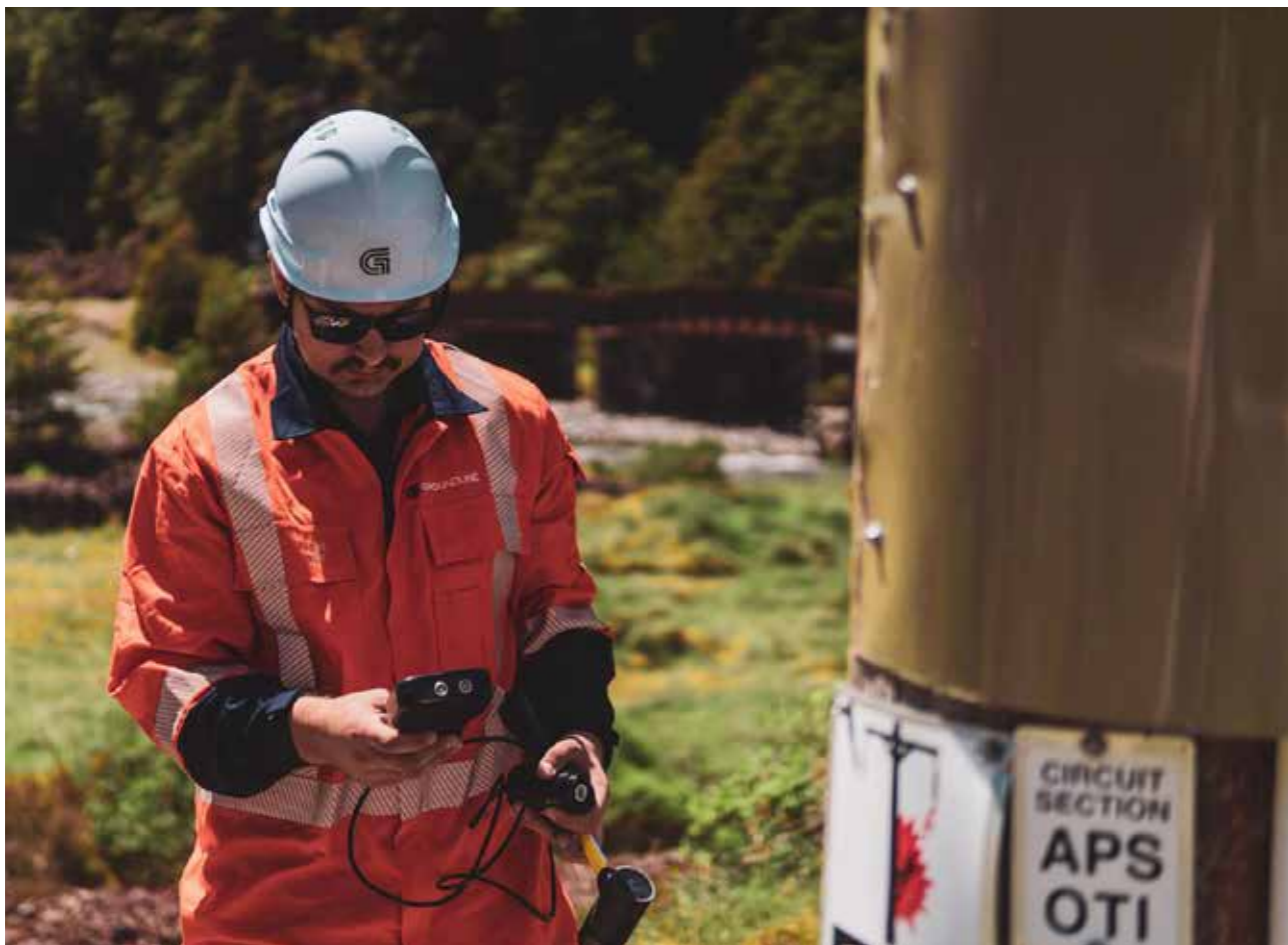
4.3 Fixed standards, flexible options

How might we make training more relevant, affordable and accessible to workers?

Across the electricity sector, the notion of ‘training on the job’ appears fluid in nature, and is conducted in a subtly different manner by each organisation. Employees expressed a desire to have more flexible training that is ‘just-in-time’ in nature, while retaining a highly practical focus.

Once working full-time, it is difficult for employees with families to access existing methods of consolidated, block-style learning; where several weeks’ worth of courses are merged to form a back-to-back learning experience. There appeared to be some tension around the idea that study blocks were mainly for the benefit of the employer, at the expense of the apprentice and their training experience.

Learning in this manner was described as a financial struggle, with employees covering their own tuition and travel costs. Other apprentices described the training content as having a general skew and focus towards domestic electrical work, with information often described as being irrelevant to their role.



4.4 Transferable skills and standards

How might we offer fixed foundational knowledge and flexible specialist skills to create a more flexible and resilient workforce?

Core transferable standards were voiced as a way to create more flexibility inside the industry, which would help to both attract and retain people. Currently, many jobs are highly specific and narrow in scope, creating a sense of career-entrapment amongst younger employees.

“There are training competencies that you can’t take with you to any other industry. It keeps people in the industry; however, you can get stuck. Then I guess for the aging workforce who will get pushed out, they can’t go anywhere else with their tickets. That’s hard for them and it’s hard for us if we push them out.”

Substation Maintainer

Employees are looking for a more coherent, simplistic and intuitive framework that ultimately creates greater flexibility between roles and occupations in the electricity sector. This seems to be a critical step to retain workers, especially those who love the electricity sector and are looking for assurance that they won’t face career penalties as a result of working within a highly specialised role.





Māori participation and leadership

This section of the report presents a collection of qualitative insights toward a better and more equitable future within the electrical industry. A key opportunity identified for ESI workforce planning is the fast-growing and under-utilised pool of Māori talent. The challenge is for companies to cast aside business as usual, and adopt new practices that are effective in recruiting, welcoming, retaining, and scaffolding Māori.

Māori participation and leadership is presented in three insight topics:

- Attracting Māori
- Training Māori
- Changing the ways companies do things

Attracting Māori

5.1 Limited knowledge of the electricity sector

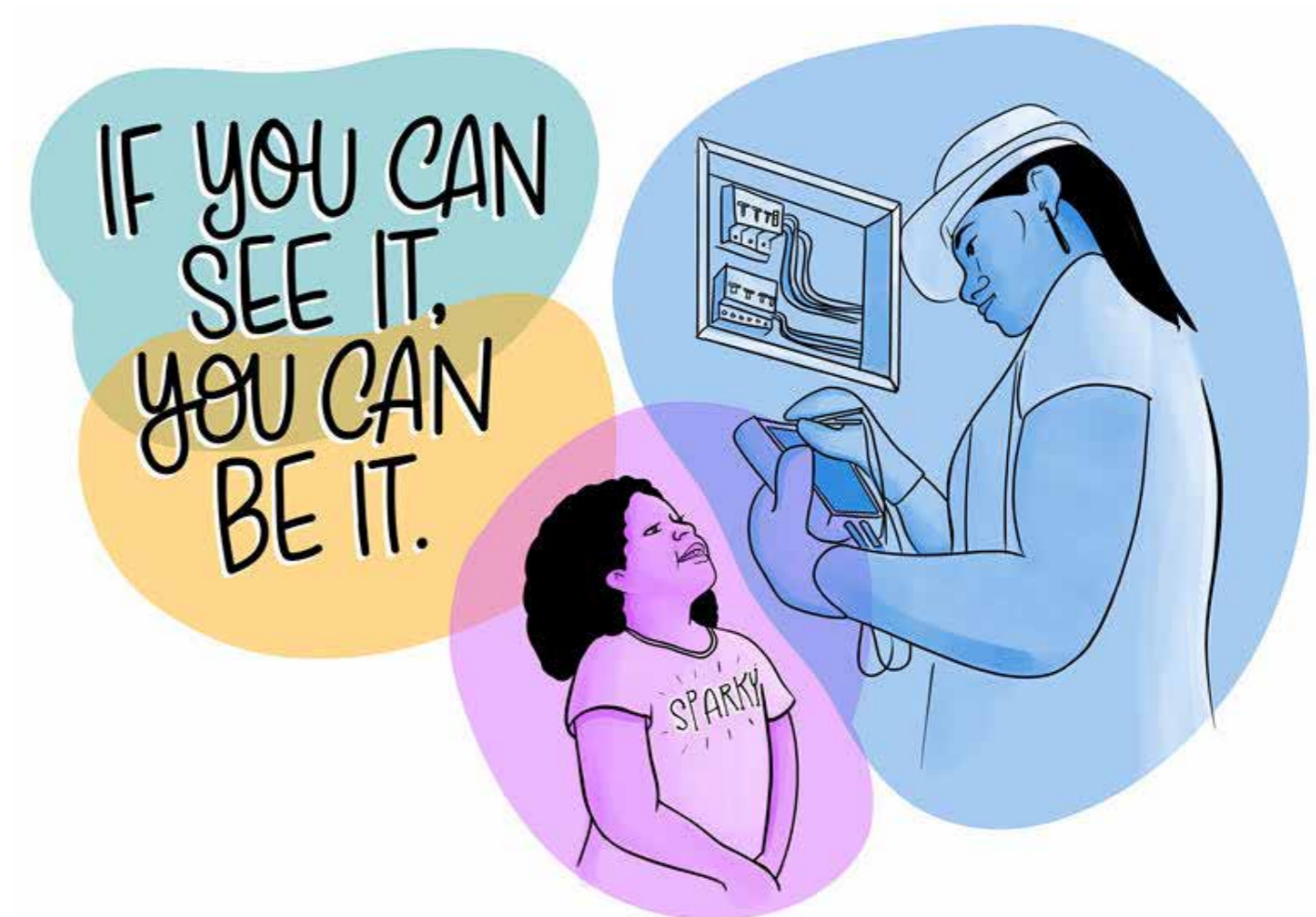
How might we make the ESI and ESI pathways more visible to Māori?

What became evident through the research was that rangatahi (young Māori) have a limited understanding of the electricity sector in general, and little to no understanding of the range of career pathways in the sector. Furthermore, those that were currently training noted that they had no prior knowledge of the industry before enrolling, and it was more by chance that they ended up studying for the qualification.

5.2 Male dominated industry

How might we build Māori and female representation into ESI leadership?

The females we spoke with shared their perceptions and experiences of the industry being male dominated, and at times the environment being uncomfortable for them to be a part of. They noted the lack of female leadership and role models, and of the sheer lack of representation of Māori in the workforce, which creates feelings of isolation.



5.3 Sustainability

How might we champion sustainability to attract rangatahi Māori?

Throughout the interviews, rangatahi told us that sustainability and environmentally friendly practices were essential to the kind of organisations they wanted to be a part of:

“We’re in that movement of the climate change. We... need to highlight the sustainable energy because that would also be a really great selling point for a lot of this generation to be inspired to be a part of that movement as well.”

Rangatahi

5.4 High job satisfaction and boundless potential

How might we share stories of Māori success in the ESI?

The Māori staff we spoke with shared with us their positive experiences of being in the industry, the value in the mahi and the remuneration of the hard work. They note:

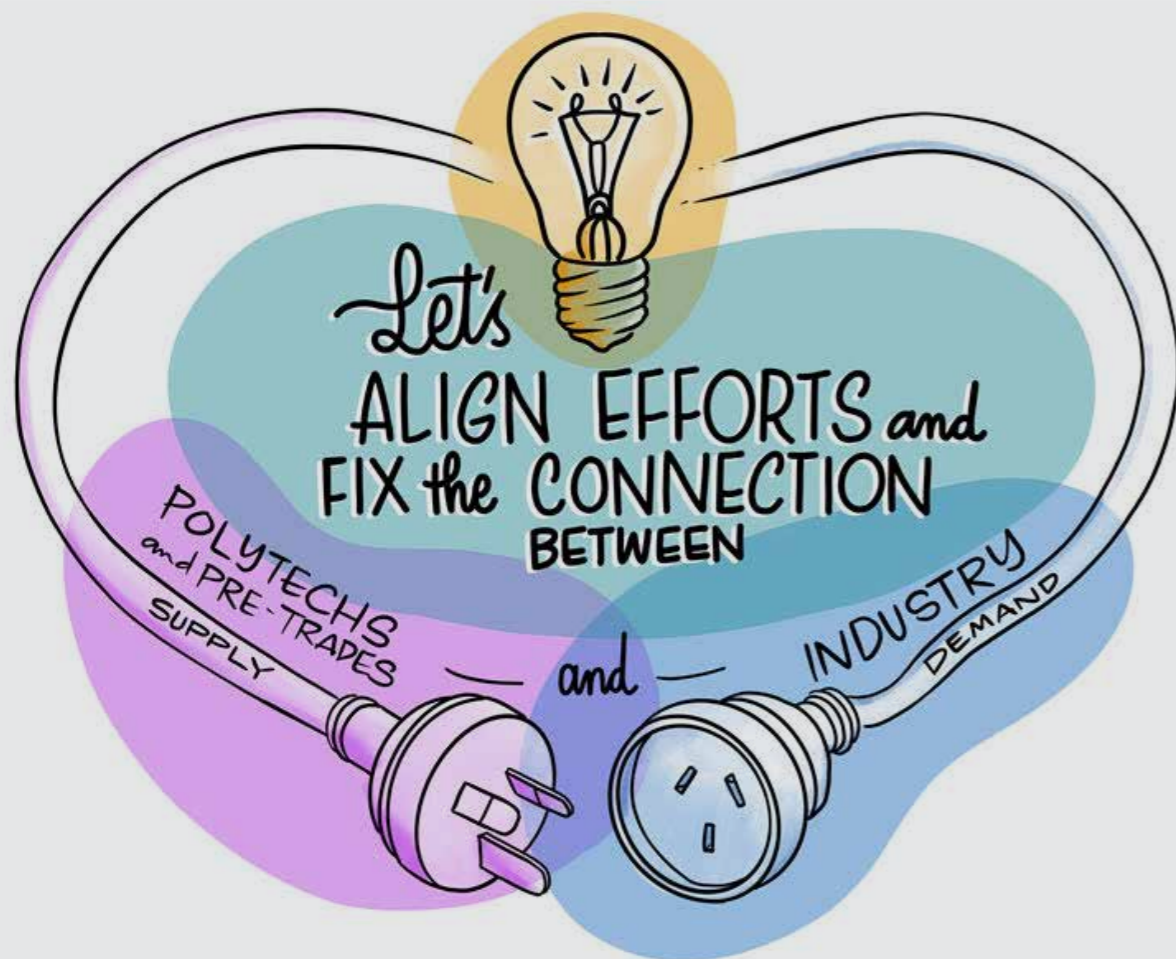
“So, get to see some pretty cool sites and do some pretty cool stuff, like working with helicopters, out of helicopters and it’s just like you get to do a lot of stuff with machinery and just all the stuff you just sort of take for granted, yeah like up rivers and mountains”.

Rangatahi

Maori staff also noted that once you are in the industry, progression is relatively straight forward and so too is job stability and variety – there is plenty of work in the sector and plenty of different kinds of specialty areas you can work within.

Training Māori

In this insights section, frequent references will be made to MPTT. Following the Christchurch earthquakes, the Māori and Pasifika Trade Training scheme (MPTT) was established, funded by the Tertiary Education Commission. Nationwide there are 16 consortia that involve iwi, industry and polytechnics working together. The scheme offers pre-trades courses including electrical engineering.



5.5 MPTT Pre-electrical courses are enjoyable, kickstart careers and provide a rich resource of potential Māori talent to the industry

How might we better partner with pre-trades to build pathways for the next generation of Māori workers and leaders?

MPTT pre-electrical courses provide a rich resource of potential Māori talent to the industry. Students noted that by completing the pre-trade course, they were set up to enter the industry with a solid baseline of knowledge. The Māori MPTT learners we spoke with who were currently studying electrical engineering at polytechnic, spoke highly of the course material, the tutors and the balance between theory and practice.

The MPTT also offers a head start by equipping learners to enter job sites when they first start in the trade. Participants noted the support of the MPTT course grants in enabling them to buy tools, and in some cases to get their license:

“I got my grant and I got all my tools which has been so helpful because I’m doing work experience so being able to go into that and have my own tools is a tremendous help.”

MPTT Student



5.6 Māori student cohorts

How might we employ group learning toward better outcomes for Māori?

The learners commented on the strength of studying together as a Māori cohort and the impact this has on their learning.

5.7 Most Māori males successfully complete apprenticeships

How might we better understand what are the factors that lead to successful Māori apprenticeship outcomes?

Emerging data indicates that for Māori males, successful completions of apprenticeships are high (around 90%), and are likely higher than for many other trades. The same data, however, indicates a much lower completion rate for Māori women. More research is needed to validate these findings, to consider what factors are leading to the success of Māori males, and explore how this might be replicated with Māori women.

90%

Emerging data indicates that for Māori males, successful completions of apprenticeships are high (around 90%), and are likely higher than for many other trades.

5.8 Lack of work experience and apprenticeship opportunities

How might we better partner with MPTT to bridge the gap between pre-trades and work placements?

The current MPTT trainees interviewed told us that getting work experience is tough, and that not many companies are willing to take them on as work experience students. Further to the work experience barriers, the MPTT taura (students) also told us that finding an employer who is willing to take them on as an apprentice is challenging.

The MPTT Evaluation (2017) found only 10% of MPTT students and only 6% of other students went on to gain apprenticeships in the industry.

The Industry Training Organisation (ITO) reported their dissatisfaction with the current model, especially the disconnect between themselves and the polytechnics.

“We finish level 2 & 3 then next year we go into level 4 but you can’t do that without an apprenticeship, but apprenticeships are few and far between. I’m trying to prove myself at the place I’m doing work experience to see if they would potentially take me on. There are four classes this year and by November there will be eighty of us graduating all in the same predicament. You hear on the news they are screaming out for tradies but there’s no work out there.”

MPTT Student

Changing the ways companies do things



TUAKANA-TEINA MENTORING

what can COMPANIES do?



LEADERS CHAMPIONING CHANGE



COHORTS OF MĀORI



COMPANY EMBRACING CULTURE



CHALLENGE DEFICIT ATTITUDES

5.9 Companies are keen to hire more Māori

How might we better connect companies with Māori job seekers?

One of the participants noted the shift in Māori staff he had observed over the years. He described that “Historically, from my time, it was mostly Māori (in the industry)”. Now what he perceived was a reduced number of Māori in the trade because “the numbers who have come to us are mostly Pākehā.” Further he went on to note:

“I think we are very welcoming (to Māori), but they are just not knocking on our door. I’d definitely take on more Māori in a heartbeat.”

Manager

5.10 Companies are keen to hire more women

How might we recruit and retain more Māori women?

Women are a minority in the electricity sector; however, based on the insights from our interviews, the participants acknowledge that there is a willingness across the industry for more Māori and more women:

“I think females would be like a breath of fresh air.”

Manager

“We’ve learnt that they (female), they definitely struggle with the line mechanics side of it - they struggle with the physicality side of it. There are definite challenges. (So) I’d be advising females to go down the electrician / cable jointer pathway as that’s not as physical. With cable jointing and electrician, they’d be fine, if not better than a male because I think females pay more attention to detail.”

Manager



5.11 Moving to bicultural workplaces

How might we address workplace equity and build goodwill among the Māori workforce?

Further to the goodwill to hire more Māori and to encourage women into the industry, an employer spoke to us about creating workplace cultures that reflect the bicultural nature of this country and the need to embed the Treaty of Waitangi into their organisation as a way of addressing equity in the workplace:

“I’m embedding it at the moment, I know what I want to achieve, haven’t got to the end point yet but I’m giving it a crack and we’ll get there hopefully. I’m actually putting it in all my documentation in all different areas. So, whether that’s the induction, the HR, safety, how we conduct ourselves, code of conduct, all that stuff.”

Manager

“It’s a good business decision because of the way the business world is going with the two tender processes now. You know, a lot of the council owned, government owned businesses have to give a certain amount of business to Māori business or to Tiriti businesses, so it was a good business decision that way.”

— Manager



5.12 Tikanga Māori has an important role in the workplace

How might we better celebrate togetherness and tikanga Māori to retain a healthy and engaged workforce?

“If I go back to the culture, actually, we do a lot eh when it comes to tangi and when people that have been here leave. You know we always do haka, we always do speeches and all that, at all the funerals and when people leave if they’ve been here a long time.”

Manager

“One of the main ones I think that (name) really into is our whakawhanaungatanga concept that he’s brought in, the culture here, that’s one of the main reasons I’ve stuck around is the culture. Just the way they put on things for us, you know, like pig on a stick and a whole day you know where we can just all get together and that’s every three months we have, I reckon that helps the culture building with each other.”

Manager

1300 90

1,300 rangatahi reached.

90 students hosted at 4 Girls with High Vis events.

200 800

200 secondary students have attended classroom workshops and/or site tours.

800 secondary and tertiary students at STEM/career events and Pūhoro wānanga.

21 05

21 rangatahi have attended a one-week residential programme, 'KiwiForever', with Ngāti Rangi and DOC.

5 co-design hui held with more than 100 students, school leadership teams, teachers, whānau and others from the mana whenua STEM community.

02

Supporting Pūhoro programmes to launch in two new regions, in three of our local schools.

This initiative is still at the beginning of its journey, however the vision is there for youth in the local communities to pathway into highly-skilled and well-paid jobs where they can directly contribute their innovative ideas and diverse thinking to ensuring a more sustainable New Zealand".

5.13 Community partnerships

How might we build community partnerships?

There are already great examples of community engagement as a way to reach more Māori. Genesis Energy, for example, has created a programme focused on the communities where they generate electricity. Their Pou Hāpori Community Liaison Manager explains: "Ngā Ara – Creating Pathways", is about inspiring young people to become the energy innovators of the future. It aims to give the communities a head-start to fill these future roles with local people and is focused on rangatahi Māori and females. It brings together many organisations collaborating for a common goal.

5.14 We can learn from other industries

How might we replicate the most successful initiatives from other industries?

Hawkins (Construction) found:

“Workplace mentors are crucial to supporting apprentices. We then worked with multiple partners, including schools, iwi and businesses, to create a pipeline for trainees. Once accepted into our programme, successful applicants are matched with an experienced and passionate Hawkins mentor (generally Māori or Pasifika) who offers support and encouragement. Of the trainees, 20% are women which is a leading statistic considering across the construction industry only 3% are female.”

Downer, (Hawkins’ parent company), supports a Māori Leadership Board that is committed to ensuring we create environments where Māori thrive. Many of Hawkins Māori employees have had the opportunity to participate in Te Ara Whanake, Downer’s award-winning Māori leadership programme.

“Our research also showed that a company’s leadership must be strong and committed to supporting and enhancing diversity and organizational change. This has resulted in the creation of a new programme Te Ara Māramatanga. This two-day marae-based immersion programme, designed and facilitated by Downer employees, allows participants to experience Māori culture through living in this environment. Through educating our leaders and managers about the Māori culture, our Māori employees feel acknowledged and valued for who they are and are more confident to step up into leadership roles.

We are seeing our Māori leaders move into more senior positions and our leadership teams are becoming more reflective of the workforce they lead.

A key observation is the need to take everyone on the journey: “in our workplaces we need to focus on taking non-Māori on the journey so that our rangatahi are respected and Te Ao Māori is respected; we will only develop inclusive workplaces when we work towards this.”
Strategic Adviser: Hawkins

Core-Education found:

“Confidence and competence in te ao Māori and whakapapa Māori, those two things, are seen as just as valuable as any other skill. It is seen as one of the most highly valued areas of expertise in our company. Full stop! We grow our Māori staff in their Māoritanga and we’ve become known for that. We provide a full te reo and tikanga programme for every staff member. And we do Te Tiriti training for all our staff. Core creates a space for Māori staff to be a whānau in their own right. We meet together fortnightly, and we have two noho marae a year. The organization will tell you this is the best investment ever because of what comes back from these noho. If you start to see that uniqueness that Māori have as something that will make your organisation and its people better, if you view it like that and you cherish it and grow it – if you do that – then Māori are going to want to come and work for you... If Māori choose to come and work for your organisation, you should be so lucky – so look after them!”

RECOMMENDATIONS

VERSION: 01

FEBRUARY 2022



Recommendations

Based on the research, four strategic goals and thirteen actionable recommendations were identified on the topics of visibility, pathways, resilience and Māori engagement. These goals and recommendations were reached through engagement activities with the industry workgroup, and by analysis conducted by Tokona Te Raki.

Strategic Goal 01

Increase visibility to attract the right people

How might we better share the value of ESI careers, and attract untapped workforces?

01 Build a platform for industry growth

- Create a platform for a singular cohesive industry voice and story, with a mandate to design for future employment changes and impacts.
- Find a common voice to showcase how the industry's different initiatives and activities support the government's targets to address climate change and decarbonisation.

02 Build a platform for industry discovery

- Make it easy for people interested in joining the industry to take the first step by setting the right expectations: both of the different roles available, and of what they can expect after joining the industry.
- Make industry entry routes intuitive, accessible and effective.
- Evolve Gateway programmes to be better placed to match aptitude with industry opportunities.
- Make it cohesive by bringing these dimensions together in one easily accessible industry platform.





03 Raise the profile

- Leverage the industry's authentic sustainability message with other value propositions, such as lifetime employment and community care.
- Create industry role models by profiling actual employees from within the industry, and clearly portraying their career pathways.
- Explore the use of social media campaigns to attract younger generations. Consider using social media platforms such as Instagram, TikTok and Discord to promote the industry.
- Develop an effective communication plan to target different audiences, using specific value propositions designed to heighten engagement and awareness.

04 Develop community-focused campaigns

- Attract more talent from within communities by leveraging the industry's unique ability to support and interact with local people.
- Celebrate and share the long-term value of careers that allow employees to train and work within their home towns.

Strategic Goal 02

Design for intuitive career pathways

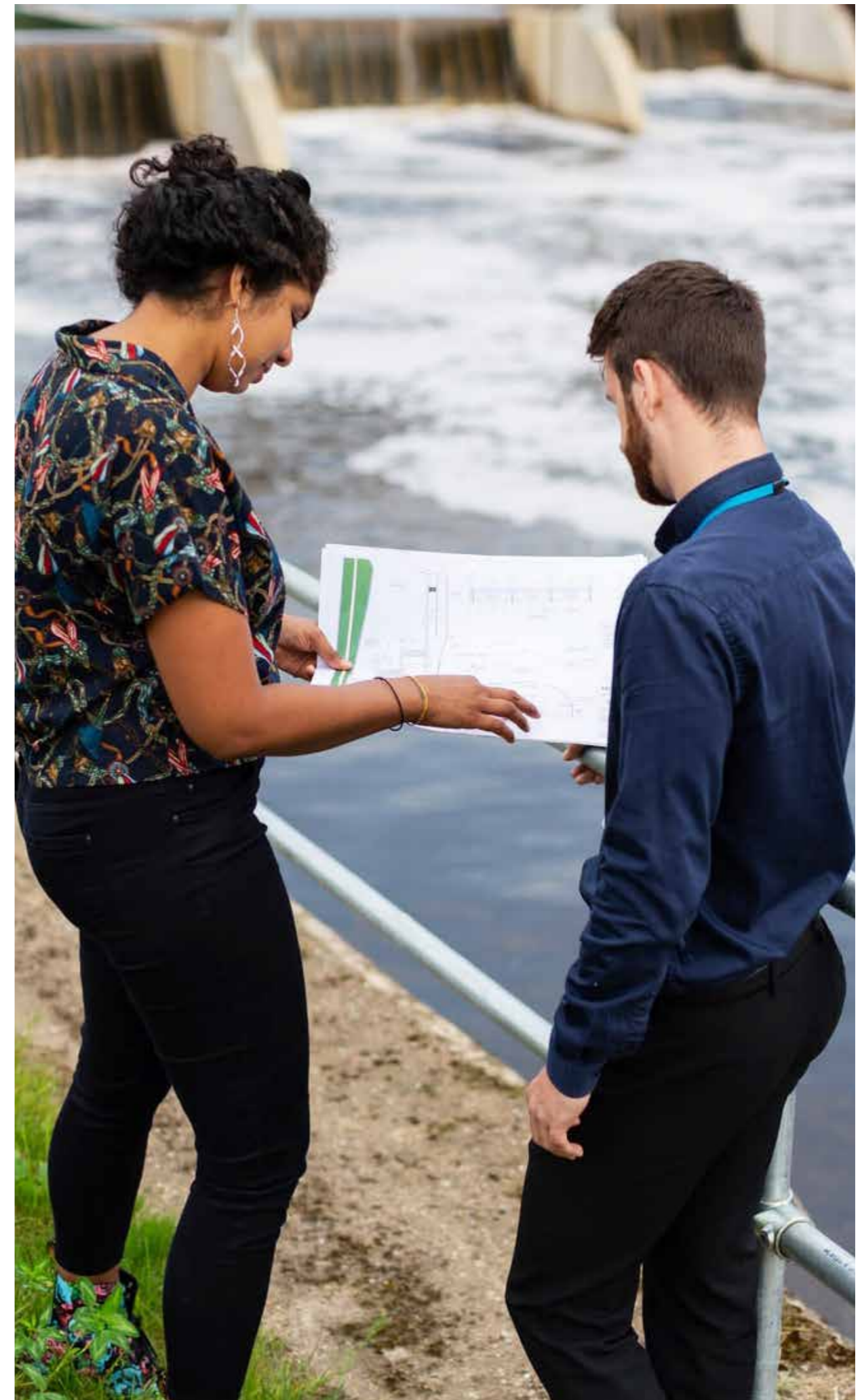
How might we make the range of ESI career pathways accessible, understandable and attainable for candidates, employees and institutions?

05 Highlight careers and pathways

- Allow new entrants to plan for, and navigate, their careers by creating a platform for a singular visual representation of all the careers and pathways available within the industry.
- Improve the visibility of careers and opportunities for experienced people looking for change or progress from their current role, ensuring sector-wide development opportunities are clearly communicated.

06 Build interoperable standards and competencies

- Create ease for employees to move into different roles within the industry, without having to take a step backwards career-wise
- Map out the transferable skills across each of the different technical positions, toward a core foundation of competency recognised by all.
- Make it cohesive by bringing these dimensions together in one easily accessible industry platform.





Strategic Goal 3

Build a resilient workforce

How might we work together to better assess the industry's current state, plan for future sustainable growth, and attract (and retain) the workforce of tomorrow?

07 Find a united vision and shared approach

- Undertake coordinated and sustained efforts to measure vital statistics such as workforce numbers, skills and ethnicity.
- Encourage workforce modelling by developing methods of clearly visualising data, and forecasting skill needs into the future.
- Cooperate on industry training standards that allow greater flexibility to fill identified shortages, as well as meeting current industry skill requirements.

08 Commit to growth

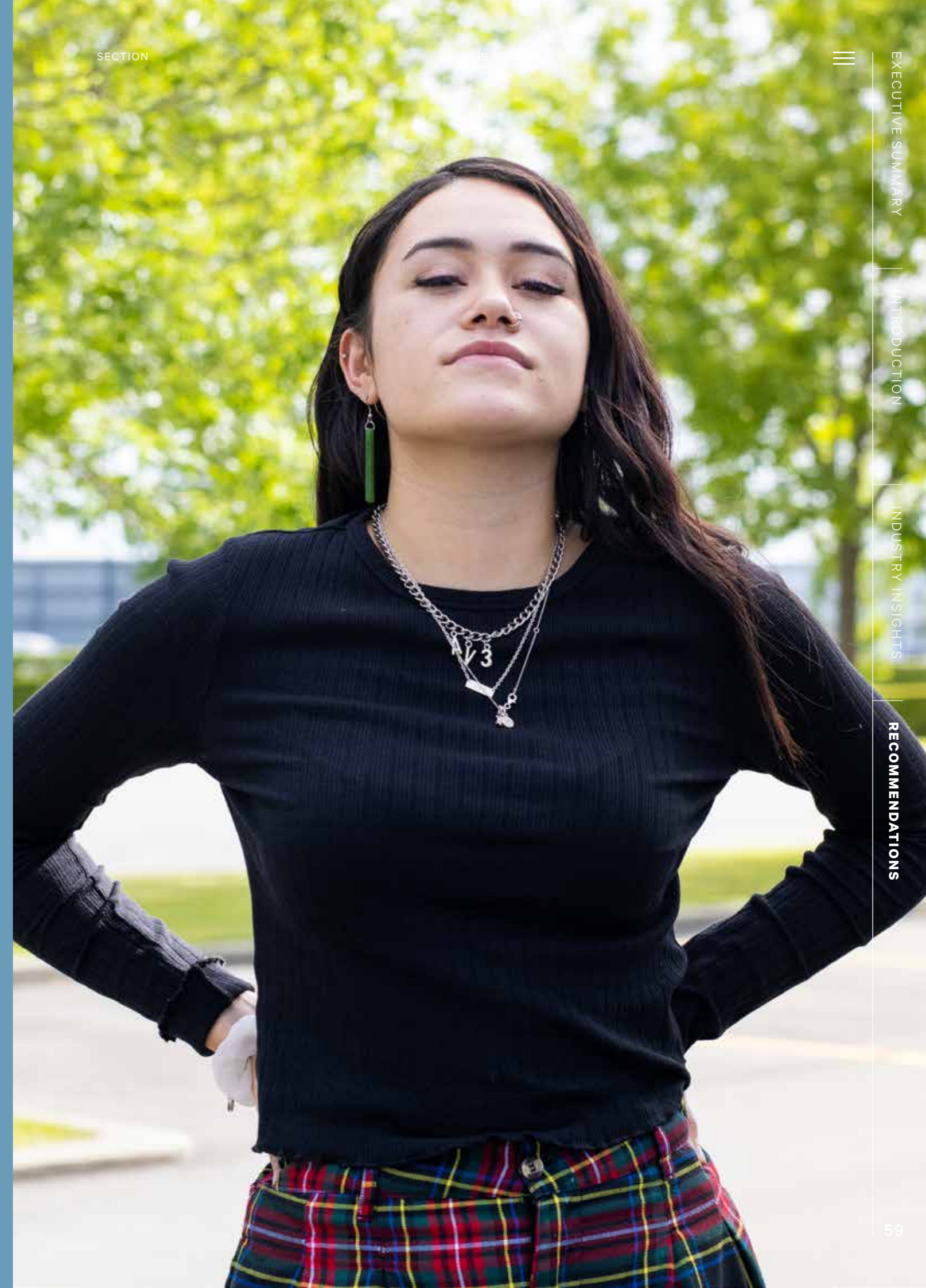
- Engage in long-term workforce planning using future- looking statistics.
- Develop recruitment and training processes, focused on hiring from within domestic communities, to reflect the government's signalled position on immigration.
- Fix short-term contractual arrangements between contractors and asset owners. Create governance frameworks for managing contractors.

09 Build a platform for rapid training and upskilling

- Accelerate the speed of delivery, and evaluate the time taken to reach competency, to ensure new entrants are up and running quickly, effectively and safely.
- Reduce the cost of training apprentices in order to better cope with the increased pressures of domestic worker supply under the changing immigration policies.
- Improve engagement, outcomes and speed to competency by employing 'omnichannel' training frameworks that provide standardised content via tailored learning methods.
- Couple person-to-person support structures with digital 'just-in-time' content delivery in ways that benefit both employee and employer.
- Restructure training to enable interoperability of staff.

10 Design for workplace diversity

- Match industry desire to embrace diversity with the necessary operational realities, for example providing facilities and support structures suitable for both men and women.
- Encourage workplace practices that can adapt to different cultures and rituals.
- Make diversity part of the set-up: by incorporating inclusive working models into operations, organisations have the potential to create better working environments for everyone.





Strategic Goal 4

Partner with Māori

How might we inspire and scaffold Māori to activate a pool of new ESI talent?

11 Inspire Māori to enter the industry and thrive within it.

- Engage and excite Māori, especially Māori women, to pursue careers in the sector
- Increase visibility of and actively promote careers in the sector to Māori
- Transition company culture to welcome Māori and women
- Partner with MPTT consortia
- Conduct further research to better understand training pathways
- Increase Māori presence in the industry

12 Develop cultural leadership

- Establish company training programmes to scaffold Māori into industry leadership roles
- Establish company training programmes to grow non-Māori cultural capability
- Partner with an industry caucus of Māori leaders

13 Build partnerships

- Enhance partnerships with iwi
- Prioritise developing partnerships with Māori businesses
- Prioritise developing partnerships with Māori communities
- Partner with an industry caucus of Māori leaders

Next steps

Takina te kawa
Takina te kawa
Kia rite, kia rite
Tū mai rā Māui
E hihiko nei
Iahaha! Iahaha!
Turou Hawaiki

With the completion of the first phase of this initiative, this report has outlined four strategic goals that will be essential for a truly sustainable workforce. In phase two, our attention turns to activating Ngā Mahi a Māui, designing and delivering programmes to excite and engage the next generation of Aotearoa ESI workforce.

CONTRIBUTORS

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FEBRUARY 2022





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Thank you to our participants, this project would not have been possible without their drive, commitment and contribution.

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Be part of the conversation

We encourage you to read, share and challenge these findings so we might together better help the next generation workforce to succeed.

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Waihanga Ara Rau is one of six new Workforce Development Councils (WDCs), who are industry-led bodies re-shaping vocational education across Aotearoa New Zealand.

Representing industries where construction and infrastructure are at the heart of what they do, Waihanga Ara Rau is part of a system-wide change that is tackling the long-term challenge of skills shortages and the mismatch between training provided and the needs of employers.

Find out more about their work at www.waihanga.nz

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