



Te Pūkenga

Sustainability Stocktake Report

Institutes of Technology and Polytechnics

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Executive summary

One of the eight overarching outcomes of Te Pūkenga is to embed sustainability across our operations in a way that can integrate and support the overall strategic plan of the entire organisation. Overall, if sustainability is defined in terms of environmental, cultural, social and economic wellbeing, Te Pūkenga has a unique national sustainability story to tell.

This report indicates how sustainability is currently understood, resourced, and practised amongst the 16 Institutes of Technology and Polytechnics (ITP) subsidiaries but does not consider the Work Based Learning (WBL) subsidiary, including those Transitional Industry Training Organisations (TITOs) yet to transition to Te Pūkenga. It identifies challenges and assesses current practices for existing strengths and areas for possible improvement.

Many ITP subsidiaries have either a clear sustainability strategy, or policies relating to sustainability principles. Other ITP subsidiaries have shown sustainability values embedded in aspects of their everyday operations. There is an opportunity here for Te Pūkenga to build on this body of existing strategy when forming organisation-wide policy.

Some sustainability stakeholder engagement currently occurs through wider engagement plans. This work could be further enhanced by creating documented processes for this engagement.

There is awareness of the UN Sustainable Development Goals (SDGs) throughout the ITP subsidiaries. Direct alignment of SDGs with organisational strategy could be implemented more widely to further Te Pūkenga commitment to achieving the SDGs.

One ITP subsidiary will be publishing a sustainability report in 2021 using the Integrated Reporting <IR> Framework. Te Pūkenga has an opportunity to further investigate sustainability reporting tools that could be useful for the organisation.

Four of our ITP subsidiaries fully calculate their carbon footprint, and four others conduct partial calculations. Our ability to account for carbon impact and report on meaningful changes would be increased by adopting a unified approach towards carbon footprint calculations. There are numerous accounting tools available, with one ITP subsidiary developing its own personalised tool.

There is a relatively small amount of FTE allocation for sustainability work. Most ITP subsidiary staff involved in their organisation's sustainability work do so voluntarily. This is identified as a key area for improvement, and one which will benefit from a pooling of knowledge and resources to more effectively implement sustainability strategy, operations, and programmes.

Some ITP subsidiaries offer specific sustainability programmes, and others offer programmes that include different aspects of sustainability. There are some key challenges identified in embedding sustainability into programmes which Te Pūkenga will need to overcome. This area would benefit from further investigation and analysis.

There are at least 40 gas, five diesel, and two coal boilers across the ITP subsidiary network. The ITP subsidiary vehicle fleet include 635 vehicles. Of the total ITP subsidiary fleet, two percent are electric vehicles, and eight percent are hybrid vehicles.

With the Energy Efficiency and Conservation Authority (EECA), there are varying levels of engagement. All ITP subsidiaries are encouraged to actively engage in securing EECA funding while the funds are still available.

There are valuable sustainability-related practices, documents, and resources in place throughout the network which Te Pūkenga can utilise and enhance. There are several key challenges identified that the ITP subsidiaries face. Some of these can be largely overcome through combining resources and capacity across the network, while others will require further information and analysis.

1. Introduction

1.1 Creation of Te Pūkenga

Te Pūkenga is a public sector education agency and is Aotearoa New Zealand’s largest provider of vocational education. It has been established to create a unified and sustainable public network of regionally accessible vocational and applied learning. Te Pūkenga brings together New Zealand’s 16 Institutes of Technology and Polytechnics (ITPs) and the majority of Transitional Industry Training Organisations (TITOs) into a single organisation.

In creating this new partnership, we are designing how we bring all our providers together to deliver a new system to meet the needs of all Aotearoa New Zealand learners and employers, both now and in the future. This is underpinned by a relentless focus on equity, accessibility, consistency, and excellence.

1.2 The importance of sustainability

Te Pūkenga is seeking to deliver on eight key outcomes – Ngā Whāinga Matua. One of these outcomes pertains to sustainability:

“8. Become a sustainable network of provision creating social, economic, environmental and cultural wellbeing.”

We have the opportunity to ensure a new sustainable organisation – promoting the total wellbeing (social, economic, environmental and cultural) of our communities. Such an approach recognises that a hierarchy exists between the wellbeings: that a strong economy relies on vibrant communities and culture, who in turn rely on a healthy environment. To varying degrees, sustainability is already a part of each ITP subsidiary. Every learner should also be equipped to support their sector and our country’s future sustainability.

At a global level, in 2015 Aotearoa New Zealand signed up to [Transforming our world: the 2030 Agenda for Sustainable Development](#), which pursues the improvement of life for current and future generations particularly for groups that are more vulnerable.

At a national level, the New Zealand Government seeks to achieve progress within the area of sustainability through multiple fronts such as the Climate Change Response (Zero Carbon)

Amendment Act 2019. In June 2021, He Pou a Rangi Climate Change Commission (CCC) released its final advice to the New Zealand Government, titled 'Ināia tonu nei: a low emissions future for Aotearoa.' In May 2022 the Government will release the first of three emissions budgets, which will outline the first emissions reduction plan to 2035.

The Government has also announced the Carbon Neutral Government Programme (CNGP), which requires public sector agencies to measure and publicly report on their carbon emissions, including offsets, by 2025. Te Pūkenga is currently included in this programme and is “encouraged” to measure and publicly report on its emissions alongside other Tertiary Education Institutions (TEIs), as outlined in the Ministry of Education and Tertiary Education Commission’s letter to TEIs regarding the CNGP on October 19, 2021.

Until now, each ITP subsidiary of Te Pūkenga has developed sustainability practices and approaches independently of each other based on their local context and resourcing. Going forward, Te Pūkenga seeks to develop an overarching sustainability strategy that recognises local differences between organisations whilst also progressing sustainability outcomes in line with national requirements. To do this, information about existing knowledge and practices within ITP subsidiaries was required.

1.3 Approach of this report

We set out to gain a better understanding of what sustainability currently means to Te Pūkenga ITP subsidiaries, how sustainability is practised, and existing capabilities and capacity amongst the ITP subsidiaries to manage all aspects of sustainability. This was done through a stocktake process which involved building a picture of existing sustainability practices and processes across the network.

All 16 ITP subsidiaries completed a questionnaire seeking a range of information around current sustainability frameworks, practices, partnerships, employment, teaching and other matters. For reference, this questionnaire is included in full in Appendix 1. Desktop research on each ITP subsidiary was also undertaken to find further information about ITP subsidiaries, including from the ITP subsidiaries’ web pages and publications.

A snapshot of the summary of findings of the sustainability stocktake is included in the table in Appendix 2. The stocktake consolidates the information gathered around the following key areas regarding current practices pertaining to sustainability:

- sustainability strategy and policy
- stakeholder engagement plan and key regional partners
- alignment with the United Nation’s Sustainable Development Goals (SDGs)
- sustainability reporting and disclosure
- carbon footprint calculations and energy consumption
- FTE employment or dedicated committees to sustainability
- integration of sustainability within teaching and learning
- EECA engagement and funding.

Each sub-section includes a brief explanation of why this area is considered important to Te Pūkenga, a summary of the information gathered, and analysis and findings to inform a Te Pūkenga sustainability strategy.

This strategy will recognise differences across ITP subsidiaries whilst progressing and supporting national drivers to address all aspects of sustainability including climate change.

This document will also provide valuable information to inform the following:

- Te Pūkenga sustainability approach and strategy
- Te Pūkenga decarbonisation action plan
- Te Pūkenga sustainability governance structure
- sustainability risk and opportunity assessment process
- sustainability reporting and disclosure process
- sustainability stakeholder engagement process.

1.4 Limitations of this report

TITOs excluded

Only the 16 ITP subsidiaries are included in this sustainability stocktake. Neither the WBL subsidiary nor the TITOs are included in this report. However, it will be important that TITOs

are included in subsequent sustainability reports by engaging with the business divisions of the new subsidiary Work Based Learning.

Key stakeholder views not assessed

This report does not consider the views of key stakeholders such as ITP subsidiaries' employees, learners, and industry partners. The views of such important stakeholders will be taken into consideration, when drafting the sustainability strategy for Te Pūkenga.

Incomplete information

It is noted that the information gathered in this report is not complete. This report is not intended to be an extensive and definitive account of sustainability practices, but rather an indicative summary to help set a realistic starting point, identify general strengths in current practices, and identify areas of possible improvement. It is anticipated that any omitted information will be collected through future follow-up or other related workstreams or programmes, including sustainability. Such information is expected to feed into future sustainability reporting.

2. Sustainability strategy and policy

2.1 Why this is important

Te Pūkenga intends to create and implement an overarching sustainability strategy. This strategy will be central to guiding the sustainability efforts of Te Pūkenga. As a starting point, details about current ITP subsidiaries sustainability strategies were gathered, including any specific focus on addressing bicultural objectives.

2.2 Information gathered

Dedicated strategy/policy

There is variation in how sustainability is currently implemented and integrated into each ITP subsidiary's strategy.

Seven ITP subsidiaries have either a clear sustainability strategy/policy or have embedded sustainability in different aspects of their overall strategy. Three ITP subsidiaries have environmental sustainability policies in place. One ITP subsidiary has identified sustainability as an aspect of their Development Plan Framework, which will include a sustainability framework.

General strategy/policy

Five of the ITP subsidiaries have implemented sustainability values across different aspects of their operations. This includes adopting sustainable best practice models, sustainability and environmental projects, and working with community, local and regional government.

One ITP subsidiary included environmental objectives within their facilities strategy and is supported by an organisational committee. Other objectives such as reducing poverty, health and wellbeing, and gender equality, are further addressed through a related 'People and Capability' team.

Bicultural objectives

Several ITP subsidiaries have specifically addressed bicultural objectives. An example of this is Toi Ohomai, whose sustainability strategy recognises tikanga as a sustainability dimension

alongside the environment, society, and the economy. Figure 1 below shows the structure of such a strategy.

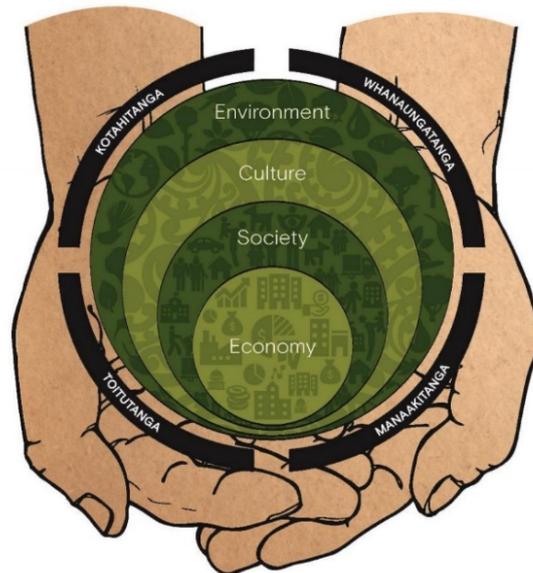


Figure 1. Kaitiakitanga: A framework for sustainability at Toi Ohomai Institute of Technology

Toi Ohomai defines cultural sustainability as “the necessity for a commitment to the maintenance and nurturing of indigenous cultures,” acknowledging that “in Aotearoa New Zealand, Tangata Whenua, and their cultures, are an integral part of the ecosystem which they whakapapa to. The indigenous knowledge that Māori possess is critical to ensuring sustainability in an Aotearoa New Zealand context, and for that reason, Māori culture itself must be sustained”. This reflects a pre-existing understanding of and commitment to cultural sustainability that some ITP subsidiaries have already developed and implemented.

Two ITP subsidiaries have also identified cultural sustainability as a pillar of their sustainability policies. Another believes a bicultural perspective, Te Ao Māori, and Te Tiriti o Waitangi, are integral to the way they view sustainability and sustainable practices.

Two further ITP subsidiaries have aligned aspects of their strategic plan with Te Pae Tawhiti, and Te Pūkenga Tiriti o Waitangi excellence framework.

Resourcing

Several ITP subsidiaries have identified a lack of resources and expertise as the main barriers to doing more to support sustainability initiatives. One ITP subsidiary identified their

primary limiting factor as capacity and not having specific people employed to carry out the work required.

2.3 Analysis

Most of the ITP subsidiaries have a stronger focus on the environmental aspect of sustainability, with a lesser focus on social and bicultural objectives. Some ITP subsidiaries have actively acknowledged their desire to further achieve bicultural objectives in this space.

Having a unified approach to sustainability across the network could assist in identifying, prioritising, and addressing sustainability objectives in a more holistic manner. It is important an overall sustainability strategy for Te Pūkenga is created in collaboration with the subsidiaries to ensure that it is appropriate to each ITP subsidiary, reflecting the operational differences already identified by this stocktake. A unified strategy also allows the network to benefit from shared resources and sustainability capabilities across the network.

There are examples of ITP subsidiaries identifying the cultural dimension of sustainability. This is important as it enables the integration of Te Ao Māori views in all business practices and across other sustainability dimensions (social, environmental, and economic). Such an approach would also align with [the charter](#) of Te Pūkenga as it showcases our commitment to Te Tiriti o Waitangi, by “enabling Māori as individuals, whānau, hapū, iwi, mana whenua, or a combination of these, to be actively engaged and able to participate in decision making” and by extending our partnerships “to the industry including Māori and Pasifika employers, and communities at a local level, including hapū and iwi and Pasifika communities”.

Overall, the existing approach of ITP subsidiaries to sustainability strategy and policy aligns with the sustainability outcome adopted by Te Pūkenga: the four-pillar sustainability approach of social, cultural, environmental, and economic wellbeing. A consideration for Te Pūkenga is whether a hierarchy of wellbeings is created as denoted by the approach used by Toi Ohomai.

3. Stakeholder engagement plan and key regional partners

3.1 Why this is important

A stakeholder engagement process is a crucial part of drafting a sustainability strategy and plays an important role in identifying sustainability related risks. Documenting the process annually will allow Te Pūkenga and subsidiaries to communicate sustainability results and decisions to key partners and stakeholders.

3.2 Information gathered

Internal engagement plans

One ITP subsidiary undertakes sustainability activities through their research and innovation centre, which can be described as a sustainability policy think tank. Activities are also referred to a 'learning in nature' steering group, where external stakeholder input and partnership is invited.

One ITP subsidiary has built sustainability stakeholder engagement into their procurement and Request for Proposal (RFP) process. This requires all participants to explain what their sustainability efforts are, and how they can promote sustainability by their engagement with the ITP subsidiary. When contracts are signed off, staff are required to check alignment with the ITP subsidiary's Procurement Policy and Contract Management Procedure, which refer to sustainability objectives.

Key partnerships

The ITP subsidiaries have also introduced several important strategic and regional partners with whom they have strong relationships. A list of these key partners is included in Appendix 3.

Many of the ITP subsidiaries in our network are also currently members of the following sustainability-related organisations:

- [Sustainable Business Network](#)
- [Sustainable Business Council](#)
- [Sustainability in Tertiary Education in New Zealand \(STENZ\)](#)

- [Australasian Campuses Towards Sustainability \(ACTS\)](#)

Collaborative initiatives

Several ITP subsidiaries have collaborated with other external partners to lead different sustainability initiatives. Examples of this include:

- Two ITP subsidiaries are working in collaboration with public transport providers to encourage use of alternative modes of transport. In one example Unitec and Auckland Transport are working on a ride-sharing mobile app to reduce their carbon footprint. In another example Wintec is funding a new Bee Card subsidy that allows Wintec students and staff to save 50 percent on Bee Card fares, reducing the cost of fares within Hamilton, as well as providing discounts for regional travel.
- Otago Polytechnic was instrumental in setting up Whaiao Education for Sustainability Otago, which is one of two Regional Centres for Expertise (RCE) in New Zealand. These RCEs are United Nations (UN) recognised networks of people and organisations that facilitate learning towards sustainable development in a region and are aligned with the UN's Sustainable development Goals (SDGs).
- EIT is hosting the Food and Fibre Centre of Vocational Excellence (CoVE), and MIT is hosting the Construction CoVE. WITT in collaboration with Venture Taranaki and other regional industry partners are also working towards establishing an energy and engineering CoVE. These CoVEs intend to play a significant role in driving innovation and excellence in vocational education, by strengthening links with industry and communities.
- Ara is a supporting partner for the Aotearoa New Zealand Sustainable Development Goals Summit 2020-2021. This summit brings together people from communities, government, and businesses to help shape Aotearoa New Zealand's response in achieving the SDGs. Te Pūkenga joined the summit in September 2021 to facilitate the discussion on the role of tertiary institutions in the delivery of the SDGs.

3.3 Analysis

While there isn't yet a documented process for sustainability stakeholder engagement within Te Pūkenga network, sustainability related engagements still take place and in some cases are a part of a wider engagement plan.

Introducing a standard for sustainability stakeholder engagement will result in consistency of the data gathered, allowing for comparison with future engagement results. This is part of a wider need for Te Pūkenga to have a strategic approach to stakeholder engagement.

A database of important stakeholders would also be useful to build, including their expectations, their preferred engagement approaches, their relationship with other stakeholders, and their specific perspectives. A stakeholder mapping process would also be helpful to identify any other relevant groups or individuals not already known to Te Pūkenga.

Te Pūkenga may also wish to consider engaging with, and becoming a member of, the above listed sustainability-related organisations.

4. Alignment with the Sustainable Development Goals

4.1 Why this is important

The United Nation's Sustainable Development Goals (SDGs) are a set of goals that act as a blueprint for achieving a sustainable future for all. These are listed in Figure 2 below. The SDGs comprise 17 interconnected goals and 169 targets, with 231 indicators that are adopted by governments and organisations around the world. The New Zealand Government has also adopted these goals, with a target of implementing them by 2030.



Figure 2. The UN's Sustainable Development Goals. To find out more about the SDGs visit the United Nation's [website](#).

4.2 Information gathered

Some ITP subsidiaries actively align their strategic plans with the SDGs, with one ITP subsidiary directly mapping each of their strategic plan objectives against the SDGs. Two ITP subsidiaries refer to the SDGs in their sustainability documents, and link some of the goals to specific objectives in their sustainability strategy. These organisations appear to have a holistic approach to sustainability where they strive to maximise positive outcomes while working to eliminate negative outcomes.

One ITP subsidiary is currently examining how the SDGs align with their strategic planning in.

Course alignment

One ITP subsidiary has woven the SDGs into programmes they offer, namely a Postgraduate Sustainable Practice programme, and a Bachelor of Midwifery and Nursing programme.

External tools

Several tools and frameworks were identified as being used by the ITP subsidiaries to achieve the SDGs and other sustainability objectives. These are:

- [The One Planet Living Framework](#) - consists of ten simple principles, goals, and guidance on achieving the SDGs.
- [The Learning in Future Environments \(LiFE\) Index](#) - designed to support universities and polytechnics to demonstrate their response to environmental and social sustainability.
- [Organisation for Economic Co-operation and Development \(OECD\) well-being framework](#) - measures wellbeing and progress.
- [Treasury Living Standards Framework](#) - draws on OECD analysis of wider indicators of wellbeing.

4.3 Analysis

There is certainly awareness of the SDGs amongst the ITP subsidiaries, with subsidiaries already working towards achieving the SDGs. However, aligning organisational strategy and objectives specifically with the SDGs could greatly improve organisational accountability regarding SDG progression.

For Te Pūkenga and its subsidiaries to be able to truly commit to achieving the SDGs, a holistic approach to sustainability is necessary. A holistic approach will allow us to create a system value (maximise positive outcomes while working to eliminate negative outcomes) rather than a shared value (identifying instances of natural fit of their existing business model with SDG areas, societal and environmental needs). The difference between a shared value and system value are visualised in Figure 3 below.

There are tools, methods and frameworks that can be utilised to support such a holistic approach such as [The Future-Fit Business Benchmark](#) - a business tool designed to guide real progress towards making the SDGs a reality in a holistic way.

Several useful tools have also been identified to assist progress in this area. Te Pūkenga should further investigate these to determine how they may be able to be utilised further.

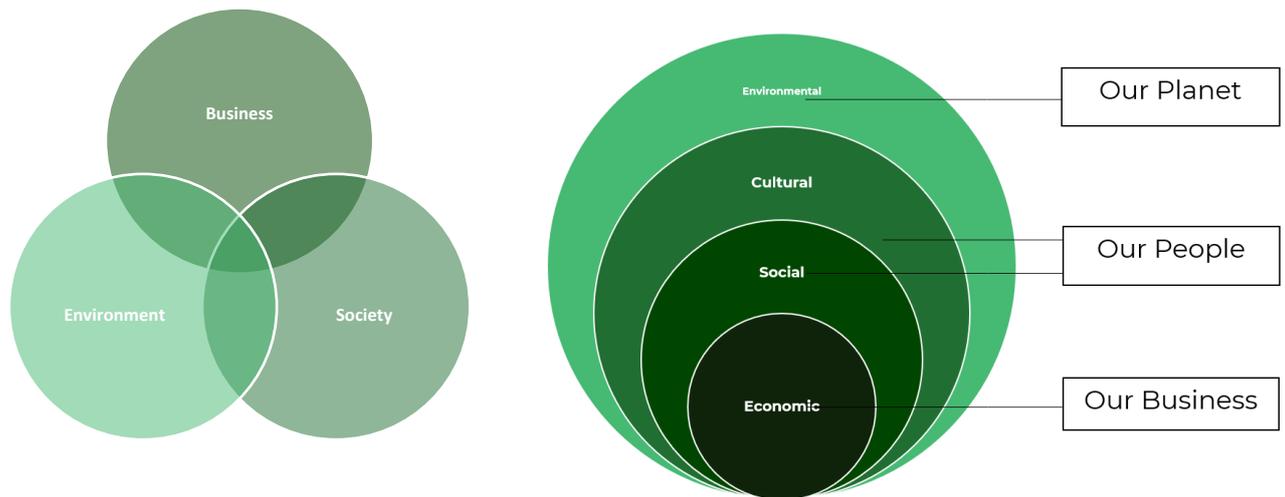


Figure 3. A shared value (left) versus a system value (right)

5. Sustainability reporting and disclosure

5.1 Why this is important

Reporting and disclosure is an important part of ensuring accountability and keeping organisations on track to achieving their overarching strategies and goals.

Given the rise of public awareness and expectations regarding sustainability principles in Aotearoa New Zealand in recent years, Te Pūkenga is interested in disclosing its non-financial performance regularly. There has already been an increase in demand for clarity around the sustainability objectives of Te Pūkenga by different stakeholder groups, and questions have been asked by both internal and external stakeholders about how Te Pūkenga is addressing and managing its social, environmental, and cultural impacts.

A sustainability report can communicate our sustainability strategy, targets, and material topics including our emissions targets. Although producing a report may not be an

immediate strategic priority, setting up the right infrastructure across our network to be able to produce and publish a report in due time will be important.

5.2 Information gathered

Four ITP subsidiaries currently publish sustainability reports to some degree, with the majority of ITP subsidiaries currently not publishing any specific work in this area.

One ITP subsidiary uses Integrated Reporting Framework <IR> which combines financial and non-financial information in one report. Two ITP subsidiaries have previously published sustainability related information as a part of their annual reports. However, this was not done in their latest reports. One ITP subsidiary currently addresses certain aspects of sustainability in its annual report.

5.3 Analysis

Current reporting on sustainability actions is inconsistent across the network. As there is not widespread reporting of sustainability practices currently taking place, Te Pūkenga has an opportunity to create a relatively new path in this area.

There are different tools available for creating such non-financial reporting. The International Integrated Reporting Council (IIRC) Integrated Report <IR> is currently being used by one ITP subsidiary. That, along with the Global Reporting Initiative (GRI) Sustainability Reporting Standards, are the two most used and globally known instruments.

The GRI Standards require the report to have “a balanced and reasonable representation of an organisation’s positive and negative contributions towards the goal of sustainable development”. It may be appropriate to use components of the Integrated Reporting <IR> Framework to showcase the value creation process of Te Pūkenga and its network. This allows the report to be more readable and connect with all stakeholder groups, regardless of their level of current activity. Such a report may still be based on the GRI Standards’ Reporting Principles for defining both report content and quality.

6. Carbon footprint

6.1 Why this is important

The Climate Change Commission's (CCC) advice to Government includes planning and investing in infrastructure for renewable energy. An energy audit advised by the EECA can support ITP subsidiaries that spend more than \$200,000 on energy annually with energy audits. Information from an energy audit can assist in managing our energy more efficiently and understand our carbon footprint.

Calculating an organisation's carbon footprint is a valuable tool for understanding the nature of current carbon emissions, including where they originate from. This understanding leads to a greater ability to reduce emissions and highlights which operations may be high in carbon output, either necessarily or unnecessarily.

There are several ways to calculate carbon footprints, with some professional global standard tools being available.

Te Pūkenga expects that Aotearoa New Zealand's emission budgets will be based around CCC's final advice to the Government. The Government will release Aotearoa New Zealand's carbon reduction plan by May 31 2022. To enhance our ability to achieve these goals, we expect to have our decarbonisation action plan in place by Quarter 3 2022, along with an emissions management guideline which will include recommendations for the parent and each subsidiary based on needs and the resources available to decarbonise.

6.2 Information gathered

Energy consumption

Data collected from different ITP subsidiaries identifies that we are using multiple suppliers and are paying different unit prices for electricity, gas, and fuel. This can make extracting the data needed to measure and manage emissions more challenging.

In 2020, ITP subsidiaries used over 54 million KWh of electricity. This number may be lower than usual, due to the COVID-19 lockdown during March to May 2020. There is a wide price range paid for electricity depending on where the sites are located, the season, time of the

week, and the type of the contract signed with the providers. Several ITP subsidiaries with high energy consumption have managed to secure low rates through buying decisions such as long-term contracts.

The majority of our ITP subsidiaries spend more than \$200,000 on energy annually (threshold to have an energy audit advised by EECA). At least three ITP subsidiaries have completed an energy audit to better understand their consumption habits. Other ITPs have not completed an energy audit in the last five years. Energy audits are amongst the services that EECA funds.

In 2020, ITP subsidiaries paid between 5.96 to 27.7 cents per KWh. Several power suppliers have contracts with the ITP subsidiaries, including Meridian Energy, Mercury Energy, Contact Energy, and The Lines Company.

In 2020, ITP subsidiaries also consumed over 14 million KWh of gas. The price range for gas was between 2.17 to 8.05 cents per KWh. The gas suppliers include TrustPower, Genesis, and ROCKGAS Christchurch.

Other sources of energy for the ITP subsidiaries include LPG gas bottles, diesel, petrol, and coal. However, the amount of energy from these sources is significantly less than electricity and natural gas.

Carbon footprint calculations

Four ITP subsidiaries are currently fully measuring and managing their carbon footprint, with four others conducting partial calculations.

For the ITP subsidiaries that conduct full emissions calculations, the top emissions contributor was found to be energy consumption and travel, particularly by air.

The majority of ITP subsidiaries do not have a formal strategy to calculate, manage and reduce emissions. This is due to the high cost associated with calculating and managing emissions.

Measuring methods

One ITP subsidiary calculates their carbon footprint by collecting data through their monthly invoices on their energy usage, fuel used in fleet cars, air travel and waste. The data is then

converted into tCO₂e using the appropriate emission factor referred from the Ministry for the Environment (MfE).

Two other ITP subsidiaries are using third party professionals ([CarbonEES](#)) to measure their emissions. As an example of practice, Unitec has reported being on track to achieve their 2030 goal to reduce their carbon footprint by 30 percent, as measured from their 2014 baseline. This reduction is also outlined in Figure 4 below. Unitec has stated that due to COVID-19 their carbon footprint has significantly decreased through reduced air travel, paper and fuel consumption.

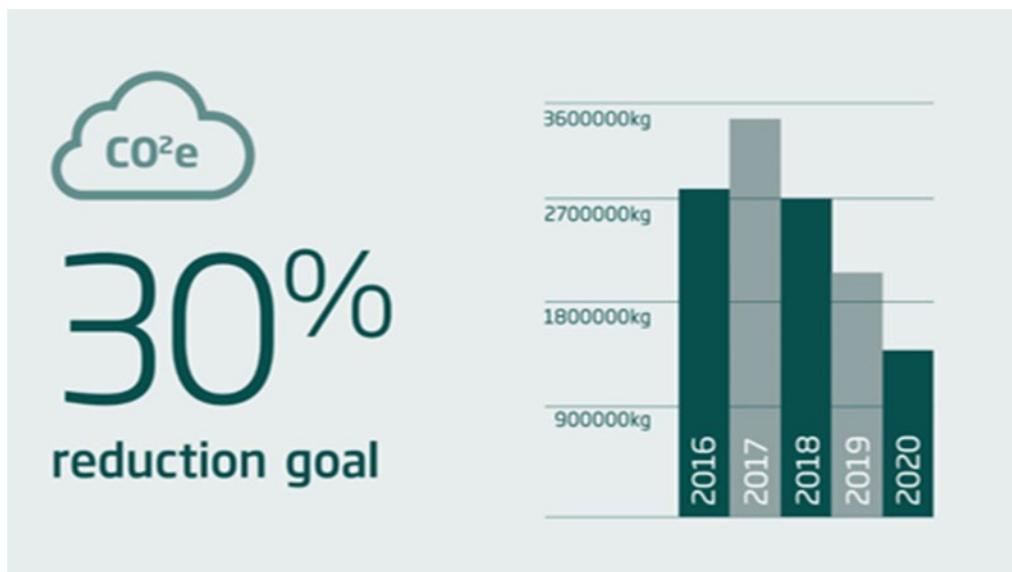


Figure 4. Unitec's carbon footprint 2016-2020.

Another ITP subsidiary has started developing their own emission management system. This was done after assessing other options available and deciding that developing their own would be more cost effective and provide a more accurate approach. Other options considered included using a free spreadsheet-based tool (Catalyst) and contracting third-party providers such as Bravegen, Salesforce, and CarbonEES.

ITP subsidiaries who do have a form of calculation in place may not fully align with global standards such as Green House Gas (GHG) Protocol Corporate Accounting and Reporting Standard, or ISO 14064-1:2018 Greenhouse gases.

6.3 Analysis

Energy

Completing further energy audits can help Te Pūkenga gain a deeper understanding of energy use and enable us to manage our energy more efficiently. Nearly half the cost for such audits could be covered by EECA.

Considering the significant amount of electricity and gas consumed in our network, it may also be beneficial for Te Pūkenga to explore investment options on renewable energy sources such as solar and wind energy. Te Pūkenga could also consider group-buying energy to reduce the cost of numerous separate contracts from different suppliers.

Emissions management

There is already significant work being undertaken by some ITP subsidiaries to calculate their carbon emissions providing a strong platform for Te Pūkenga to build on.

Having a consistent approach across the network and being aligned with global standards for calculating emissions is important. Global standards require independent verification of emission calculations. This will enable us to understand our footprint with confidence and to stay on track to achieve decarbonisation by 2025, complying with climate change regulations.

The Carbon Neutral Government Programme encourages “tertiary institutions (including the New Zealand Institute of Skills and Technology) to report their emissions and publish reduction plans from the 2022/23 financial year”. To meet this deadline, we may need to automate the data consolidation directly from suppliers. Utilising an automated system is likely to reduce barriers for individual ITP subsidiaries, in particular the costs of the emission management system and manual data entry.

Another option could be developing an emission management system using the capabilities available within our network. This would be building on the work already in progress by one ITP subsidiary of creating a unique emissions management system specific for Te Pūkenga. This approach could be a suitable long-term solution, although further investigation would be needed into the potential cost of developing such an energy and emissions system. This cost is expected to be less than the cost of using a third-party provider in the long term,

although the development and set-up of such a system could take up to two years depending on the resources allocated to it. Therefore, developing and implementing an independent emissions management system cannot be expected before 2025.

Another consideration for Te Pūkenga is moving to the same supplier for all ITP subsidiaries where possible for electricity, gas and fuel. This approach could be cost saving and would also allow us to extract usage data more efficiently.

It will be important to develop a procurement framework based on sustainable principles. This framework can help guide the network making decisions on acquiring energy-related assets and aligning with the Carbon Neutral Government Programme.

There are considerations that need to be made at individual subsidiary level. For instance, Whitireia and WelTec now buy electricity from Mercury Energy after a competitive tendering exercise in 2020 along with a large number of other education providers. This approach produced a better outcome than All-of Government (AoG) contracts offerings at the time.

7. FTE employment or dedicated committees to sustainability

7.1 Why this is important

Having sustainability strategies, policies, and reporting in place is important. But often, implementation requires specific staffing to ensure this mahi is continually carried out. This stocktake report gathered information about current sustainability resources throughout the ITP subsidiaries, whether FTE positions, committees, or other structures in place.

7.2 Information gathered

FTE positions

A total of 4.35 FTE is allocated to sustainability strategy and operations across the entire ITP subsidiary network.

Six ITP subsidiaries have allocated specific positions for sustainability operations, with the largest allocation being 1.75 FTE to various sustainability roles.

The next largest allocation 1.5 FTE is for largely social sustainability initiatives including coordinating the wellness programme, delivering workshops on managing risks to mental health, being part of the working groups on workload modelling, flexible work policy, and diversity and inclusion strategies.

Another ITP subsidiary has recently appointed a 0.6 FTE Environment and Sustainability Manager. One ITP subsidiary has a position in their Health Practice with a 0.2 FTE equivalent dedicated to sustainability. Another has a 0.2 FTE allocation for a sustainability coordinator.

Two ITP subsidiaries have a Health, Safety, and Sustainability Manager and one of their health and safety coordinators has a proportion of their time allocated to environmental sustainability.

One ITP subsidiary has 3-4 FTEs allocated to teaching sustainability in some specific programmes (the Bachelor of Sustainability and Outdoor Education and Master of Sustainable Practice programmes), but none specifically for strategy and operations.

Committees

Three ITP subsidiaries have sustainability committees. One of these is a Sustainability Advisory Committee with its membership reflecting the breadth of the organisation, including student representatives. Another has a staff committee for environmental sustainability, with the same ITP subsidiary also having a staff health and wellbeing committee.

Clubs and other groups

Five ITP subsidiaries have other sustainability forums. One ITP subsidiary has a Sustainability Club which aims to bring together likeminded students and staff and action 'small but mighty' changes across their two campuses.

Two ITP subsidiaries have committed sustainability steering groups, one of which drives specific sustainability projects, with a particular focus on learning in nature and waste management.

7.3 Analysis

Overall, almost all ITP subsidiaries have staff who are actively contributing to different sustainability initiatives, often on a voluntary basis. Some of the sustainability committees throughout the network are also managed by volunteers.

If sustainability is to be implemented in a widespread and consistent manner across the network, there needs to be a standard and coordinated approach to allocate the necessary resources. This may include sufficient time for certain staff to be sustainability champions to engage in sustainability related initiatives throughout the network.

Te Pūkenga may also benefit from a Sustainability Committee which includes both staff and student representatives.

The functions of the sustainability committee could:

- provide guidance to Te Pūkenga Council, the Executive Leadership Team (ELT) and each subsidiary
- develop and monitor the implementation of a Te Pūkenga sustainability strategy and framework
- provide specific guidance on sustainability programme development
- coordinate sustainability activities across the network
- identify specific activities for development and funding
- develop sustainability guidelines that are aligned with the strategic objectives of Te Pūkenga
- share initiatives across Te Pūkenga network to further increase the capability of the organisation.

8. Integration of sustainability in teaching and learning

8.1 Why this is important

The education sector plays a critical role in ensuring a sustainable future for Aotearoa New Zealand, including creating a workforce with the skills needed to transition to a low emissions future. The CCC predicts future job losses in certain existing sectors (e.g. oil and gas) and the formation of new sectors (e.g. renewable energy). This will create retraining opportunities for education providers such as Te Pūkenga.

The Productivity Commission also sees the education sector and research as the roots of the solution to improve productivity in Aotearoa New Zealand and ensuring a sustainable economy.

8.2 Information gathered

Specific programmes

A small number of ITP subsidiaries offer specific sustainability programmes. Ara, for example, offers a Bachelor of Sustainability and Outdoor Education, and a Master of Sustainable Practice. Other ITP subsidiaries offer a suite of courses which embed sustainability and/or sustainable practices into their teaching and learning areas. This includes:

- environmental sustainability, primary industry, and forestry programmes, as well as Bachelor and Masters level management courses
- hospitality programmes focused on sourcing local produce using sustainable farmers and growers
- a range of environment qualifications, from degree to graduate level, that have been developed in conjunction with environmental specialists.

Most programmes are Levels 3 and 4, or short courses. A list of programmes offered by the ITP subsidiaries which include sustainability principles is included in Appendix 4.

General / overall integration

Several ITP subsidiaries have integrated sustainability principles into their teaching and learning. Specifically, two ITP subsidiaries have included sustainability attributes as a part of their graduate outcomes.

One ITP subsidiary has been improving their practices to be more sustainable in all teaching areas. This involves actual teaching practices, and the principles that guide their academic, technical and support staff.

Another ITP subsidiary encourages all schools to have sustainability within their annual plans, and some of their Heads of School have embedded this as a goal within individual appraisals.

One ITP subsidiary has mandated sustainability to be integrated into all their programmes and is committed to an “every graduate a sustainable practitioner” approach. This involves not only mandating sustainability through programme documents and course outlines but encouraging students to consider what sustainable practice means in their field.

New programmes

One ITP subsidiary is delivering new e-vehicle mechanical programmes. A second ITP subsidiary is currently creating similar programmes and has recently qualified tutors to deliver them.

The Science and Environment teams of one ITP subsidiary are committed to sustainability research projects.

In collaboration with external partners, one ITP subsidiary is working to embed sustainability in new programmes, and retrospectively embed sustainability to programmes they adapt from other ITP subsidiaries.

Course delivery

A number of ITP subsidiaries undertake practical steps to further their sustainability goals. This includes one ITP subsidiary reducing their copying and printing volumes and planning to purchase more hybrid vehicles for their tutors to travel for apprenticeship and industry engagement.

Another ITP subsidiary is progressively moving towards online teaching and learning, thus reducing print services volumes with a 500 percent reduction in five years. Similarly, within their library services, with a reduction in physical books and an increase in online resources.

A further ITP subsidiary is also embracing a more blended delivery of teaching with a reduced need to be on campus, and more learning time moved online.

Challenges

One ITP subsidiary has identified a challenge of limited confidence and capability to embed sustainability into their learning and teaching practices. As a result, the organisation's different schools operate with various levels of focus on sustainability. However, each faculty has embedded sustainability within their curriculum to some extent.

Other ITP subsidiaries have also identified the challenges of lack of resources, funding, time, and limitations in professional development and research.

8.3 Analysis

There are a range of sustainability courses offered throughout the network. More commonly, ITP subsidiaries embed sustainability aspects into all courses, or into courses at the organisational level. There are also some changes taking place throughout the network to respond to shifts in education delivery and embracing anticipated future change.

There is and will continue to be vast differences between regions regarding which programmes are appropriate to be offered. The CCC predicts that the impacts of job losses related to sustainability changes will differ between regions. Those regions with economies reliant on primary industries (including Taranaki, Southland, Northland, Bay of Plenty, Waikato and the West Coast) are expected to be the most exposed.

There are some key challenges identified in embedding sustainability into programmes which present in complex and varied ways. The following actions may be helpful in overcoming these challenges and integrating sustainability principles in teaching and learning across the network.

- Engaging with relevant stakeholders will be important to identify their expectations on how sustainability should be integrated into our programmes. This includes

different government agencies (e.g., the Climate Change and Productivity Commissions), He Waka Eke Noa – Primary Sector Climate Action Partnership, Energy Skills Aotearoa, and employers and businesses.

- In relation to predicted job losses, Te Pūkenga will benefit from assessing the regional needs for certain programmes to ensure that the best programmes are offered at the best locations.
- Regional differences also inform the need to ensure programmes are delivered using the appropriate modes. Both the CCC and Productivity Commission have identified a need for practical programmes which are focused on specific needs (e.g. creating farm environmental management plans), short courses, and micro credentials.
- Given the wide variance in currently available programmes that include sustainability principles, a more comprehensive assessment of these programmes would be beneficial. This would better identify any beneficial changes that could be made to the wider network.
- Changes to more sustainable practices puts the relevance of certain programmes at risk. These may include programmes relating to the oil and gas industry, traditional automotive industry and gas fitting. Possible ‘at-risk’ programmes will need to be identified and monitored, to assess their ongoing necessity. Conversely, this also means that a need for new or varied courses will arise. Te Pūkenga will need to assess the capabilities needed to design and deliver any new programmes.
- Further assessment of research capacity on sustainability will also be beneficial. Te Pūkenga may benefit from a coordinated effort to identify and link sustainability researchers among ITP subsidiaries.
- The CCC believes that education can play an important role in promoting behaviour change needed to achieve sustainability objectives. In addition, the Productivity Commission sees the education sector and research as the roots of the solution to improve productivity in New Zealand and ensuring a sustainable economy. Consultation with behavioural change professionals may help Te Pūkenga better understand how our programmes can promote long lasting behaviour change to achieve our goal of becoming a sustainable organisation creating social, economic, environmental and cultural wellbeing.

9. EECA engagement and funding

9.1 Why this is important

The Energy Efficiency and Conservation Authority (EECA) is a Crown entity established to encourage, promote and support energy efficiency, energy conservation and the use of renewable sources of energy.

Recently, the Government has announced the [Carbon Neutral Government Programme](#), which requires public sector agencies to measure and publicly report on their carbon emissions, including offsets, by 2025. Te Pūkenga is [listed](#) in the programme and is “encouraged” to measure, verify, and report emissions. The programme’s immediate focus is on:

- phasing out coal boilers
- purchasing electric vehicles and reducing the size of car fleets
- requiring green standards for public sector buildings.

To support the Public Sector to be carbon neutral by 2025, the Government has made funding available through EECA of \$200 million. This may be used to upgrade outdated assets and buildings. In the 2021 budget, the Government made available further EECA funding of \$41 million for Operating Expenses (partly for vehicle leasing) and \$19 million for Capital Expenses.

9.2 Information gathered

Boilers

There are at least 40 gas, five diesel, and two coal boilers across the ITP subsidiary network. Funding is being actively sought to replace these boilers with more sustainable options. Examples include SIT securing funding of \$276,038 to replace two coal boilers, and WITT is in the process of a feasibility study with EECA to replace their gas boilers.

Electric and hybrid vehicles

Table 1 lists the total vehicle fleet size for the different ITP subsidiaries, along with the number of electric and hybrid vehicles. This shows that seven of the 16 ITP subsidiaries have some electric or hybrid vehicles in their fleet. Of the total ITP subsidiary fleet, two percent are electric vehicles (EVs), and eight percent are hybrid vehicles.

ITP subsidiary	Electric vehicles	Hybrid vehicles	Total fleet size
Ara	2	0	59
EIT	1	13	57
MIT	0	0	50
NMIT	1	9	43
NorthTec	0	0	45
Open Polytechnic	1	3	5
Otago Polytechnic	7	1	48
SIT	2	4	59
Tai Poutini	0	0	23 (excl. trucks, diggers)
Toi Ohomai	0	3	97
Unitec	0	0	41
UCOL	0	12	30
Weltec and Whitireia	0	0	33
WITT	1	5	17
Wintec	0	1	28
Total (ITP subsidiaries only):	15	51	635

Table 1. Number of vehicles in our fleets across the ITP subsidiaries.

Two ITP subsidiaries are seeking EECA funding to enhance their electric vehicle fleet. WITT are seeking \$104,593 for three EVs and five charging infrastructures, and NorthTec is seeking \$60,782 for three EVs on lease and five charging infrastructures.

Green standards

Funding is also being sought in relation to green standards. Wintec is seeking EECA funding of \$138,468 for campus lighting upgrades.

EECA has provided grant co-funding for a carbon road map for SIT. Next year, EECA will be looking at a LED lighting project for NorthTec.

9.3 Analysis

A number of subsidiary ITP subsidiaries have good relationships with EECA, obtaining funding to transition to more sustainable practices. It is important that Te Pūkenga network works together to optimise funding opportunities, including EECA's decarbonisation fund. As of 11 November 2021, only \$110 million of the decarbonisation fund (including the additional \$60 million announced in 2021) remained available. It is important that future investments by Te Pūkenga to refurbish or acquire new assets are aligned with decarbonisation goals.

Collectively, Te Pūkenga ITP subsidiaries currently have a large fleet of vehicles. The first step to decarbonising our fleet will be assessing the need for vehicles and reducing the number where possible through an optimisation plan. The plan will also include how our fleets are utilised, assessing where EVs can replace internal combustion engine (ICE) vehicles, and identifying the requirements for charging infrastructure.

Subject to the outcome of this optimisation plan, it is anticipated that the number of EVs in the network will increase in the future. This roll out will need to be planned as the CCC anticipates constraints around the supply of EVs in New Zealand.

EECA can offer technical support and funding (50 percent recovery) for organisations with over 100 vehicles in their fleet. Te Pūkenga could provide a coordination role to support subsidiaries access EECA's decarbonisation funds.

There are several other EECA services and funding streams that Te Pūkenga could benefit from utilising. These are summarised below:

- Energy audit: an expert to evaluate how energy is being used and identify opportunities to save energy and costs.
- Energy management plan: an expert to help make energy saving and emissions reduction part of business as usual.
- Monitoring and targeting: install a system that tracks how buildings are using energy and when things are not operating as expected.
- Energy graduate support: co-funding for an energy graduate's salary costs, to help analyse how energy is being used and find the best ways to make savings.

10. Key findings and recommendations

This sustainability stocktake process sought to build a picture of existing sustainability practices and processes across ITP subsidiaries. The key findings are:

1. The majority of ITP subsidiaries have either a clear sustainability strategy or policies relating to sustainability principles. ITP subsidiaries who do not have a documented strategy or policy have shown sustainability values embedded in aspects of their everyday operations.
2. Across the ITP subsidiary network, sustainability is already implemented in various areas of operations, including teaching and learning, research, procurement and research management, waste management, travel, and campus management. These existing sustainability frameworks form a solid starting point for Te Pūkenga, bringing together the unique elements from each.
3. Some sustainability stakeholder engagement currently occurs. This is through wider engagement plans, with no formal documented processes for sustainability engagement.
4. There is awareness of the United Nations Sustainable Development Goals (SDGs) throughout the network. Direct alignment of SDGs and organisational strategy is not widely implemented and could be improved.
5. One ITP subsidiary will publish a sustainability report this year using the Integrated Reporting <IR> Framework.
6. Four ITP subsidiaries fully calculate their carbon footprint, and four others conduct partial calculations.
7. There is a relatively small FTE allocation for sustainability work across all the ITP subsidiaries. Most ITP subsidiaries' staff involved in sustainability work undertake these tasks voluntarily. This is a key area for improvement, and one which will benefit from a pooling of knowledge and resources to implement sustainability objectives more effectively.
8. Some ITP subsidiaries offer specific sustainability programmes, and many more offer programmes that include different aspects of sustainability. There are some challenges identified in embedding sustainability into programmes which Te Pūkenga will need to overcome.

9. Many ITP subsidiaries have already engaged with the Energy Efficiency and Conservation Authority (EECA), with funding already secured by some ITP subsidiaries or funding applications awaiting approval.

The sustainability stocktake process has illustrated that ITP subsidiaries across the network have developed an extremely valuable pool of sustainability-related information, processes, and networks. Collectively, these form a strong basis upon which Te Pūkenga can build a unified system of sustainable practice and embed sustainability values across our operations. This is intended to be done in a way that can integrate and support the overall strategic plan of Te Pūkenga.

The stocktake has also identified key challenges that ITP subsidiaries and therefore Te Pūkenga face. Some of these may be overcome through combining resources and capacity across the network, while others will require further information and analysis.

Overall, the stocktake illustrates that there are a range of different approaches, challenges and opportunities that need to be considered as Te Pūkenga moves forward with developing an overarching sustainability strategy that includes all aspects of sustainability (social, economic, environmental, and cultural), is aligned and can be integrated into the overall strategy of Te Pūkenga, and responds to national and global requirements.

The sustainability strategy should also establish measurable objectives and goals for each objective aligned with United Nations' Sustainable Development Goals. Drafting an implementation plan to achieve the sustainability objectives is also important.

Until now, each subsidiary of Te Pūkenga has developed sustainability practices and approaches independently of each other based on their local context and resourcing. The ITP subsidiaries are at different stages of their sustainability journey. An overarching sustainability strategy that recognises local differences while also progressing sustainability outcomes in line with national requirements is required.

The outcomes expected from developing Te Pūkenga sustainability strategy will include:

1. a strategy that covers all aspects of sustainability (social, economic, environmental, and cultural), is aligned and can be integrated into the overall strategy of Te Pūkenga and responds to national and global requirements

2. measurable objectives aligned with the United Nations' Sustainable Development Goals
3. a draft implementation plan to achieve the sustainability objectives.

Given the scale, complexity, and range of the subsidiaries of Te Pūkenga, a design-based co-creation approach will be required in which Te Pūkenga will work closely with critical internal stakeholders, such as Te Pūkenga Executive Leadership Team and, subject to its formation, the Sustainability Forum. Given the importance of local buy-in, it is necessary to engage the subsidiaries at the local level, as well as external partners and stakeholders as may be appropriate.

One of the most important areas of improvement identified during the stocktake process was addressing the lack of bicultural objectives throughout the network. It is therefore important that opportunities to engage with, and to seek feedback from, our Te Tiriti o Waitangi partners on our sustainability programme will be sought and incorporated into our sustainability strategy.

The strategy must be developed through the proposed Sustainability Forum which will comprise of 10 members representing the industry, learners, Māori, Pacific people and disabled persons, ITP subsidiaries, and Work Based Learning (WBL). To reflect and uphold our Te Tiriti o Waitangi obligations and Te Pae Tawhiti Tiriti Excellence Framework, the Sustainability Forum will be co-chaired by a Māori representative. Half of the members of the forum will also be Māori.

In addition, to keep up with the requirements of CNGP and to positively contribute to the New Zealand Government's emission budgets, the following sustainability initiatives are also purposed for Te Pūkenga:

Energy and emission management systems

The assets in our network are scattered across over 95 sites containing more than 1,200 buildings. There are at least 40 gas and five diesel boilers across the ITP network. In 2020, our network used over 54 million kWh of electricity and more than 14 million kWh of gas. This number may be lower than usual, due to the COVID-19 lockdown from March to May 2020.

Te Pūkenga can utilise third-party providers that offer energy, emissions, and data management services. It is recommended to utilise an automated system that can consolidate data directly from the suppliers, to reduce barriers for individual subsidiaries in particular the cost of the emission management system and the cost associated with manual data entry. This work can be done in four stages (detailed below and summarised in Figure 5) between 2022 and 2025, with co-funding available through the Energy Efficiency and Conservation Authority (EECA).

Stage 1: Initial carbon footprint calculation and reporting (January 2022-January 2023)

To meet CNGP deadlines, we need to first calculate our carbon footprint across the network and prepare an emissions reduction plan. Identifying emission sources and measuring their impact is expected to commence in Quarter 1, 2022. During this stage, we may need to collect detailed data on energy consumption, travel, transport, and waste management from each subsidiary. A part of this data has already been collected during the sustainability stocktake process or is available through suppliers. Subsidiaries should still expect to be contacted by Te Pūkenga Sustainability Lead or the third-party provider (to be confirmed). This stage is expected to be completed by the end of December 2022.

Stage 2: High-level carbon and energy reduction plan for Te Pūkenga (June 2022-June 2023)

Energy is potentially our biggest source of emissions. Energy reduction plans identify energy cost-saving opportunities. A high-level reduction plan will be designed based on the calculations done in the first stage to identify and prioritise reduction opportunities. The emissions reduction planning that has already been done by the subsidiaries will be incorporated at this stage. Our approach will consist of:

- avoiding emissions generating activities that can be avoided entirely
- reducing emissions by operating more efficiently
- switching to low emissions technology.

This stage which will be completed by June 2023 is also eligible for funding.

Stage 3: Detailed carbon and energy reduction plan for the network (January 2023-January 2025)

In stage 3, an energy transition pathway will be developed which will include all subsidiaries. It is acknowledged that subsidiaries will not exist in their current form throughout the timeline shown in Figure 5. Therefore, the plan to complete this stage will have to be flexible to accommodate our changing circumstances.

Subsidiaries can expect site investigations by energy management experts (third-party) and technical and financial analysis. An energy reduction plan will not only help reduce our carbon footprint but also will result in significant savings. According to EECA, Te Pūkenga can expect energy savings of up to 20 percent which means that the cost associated with this stage will be more than offset by the savings because of completing this stage. This stage is expected to be completed over a two-year period.

Stage 4: Energy and carbon business cases (from January 2024)

A complete investigation is done at this stage to validate the projects identified in the previous stage, estimate capital costs, process applications for State Sector Decarbonisation Fund (SSDF), and develop action plans for recommended solutions.

Continuous monitoring

Energy consumption and emission management journey will be continuously monitored and improved using a subscription-based software. In addition, monitoring and support from energy management experts is needed to flag potential irregularities in energy consumption and provide the necessary support to solve the issues that arise throughout the network.

Emissions management and reduction timeline

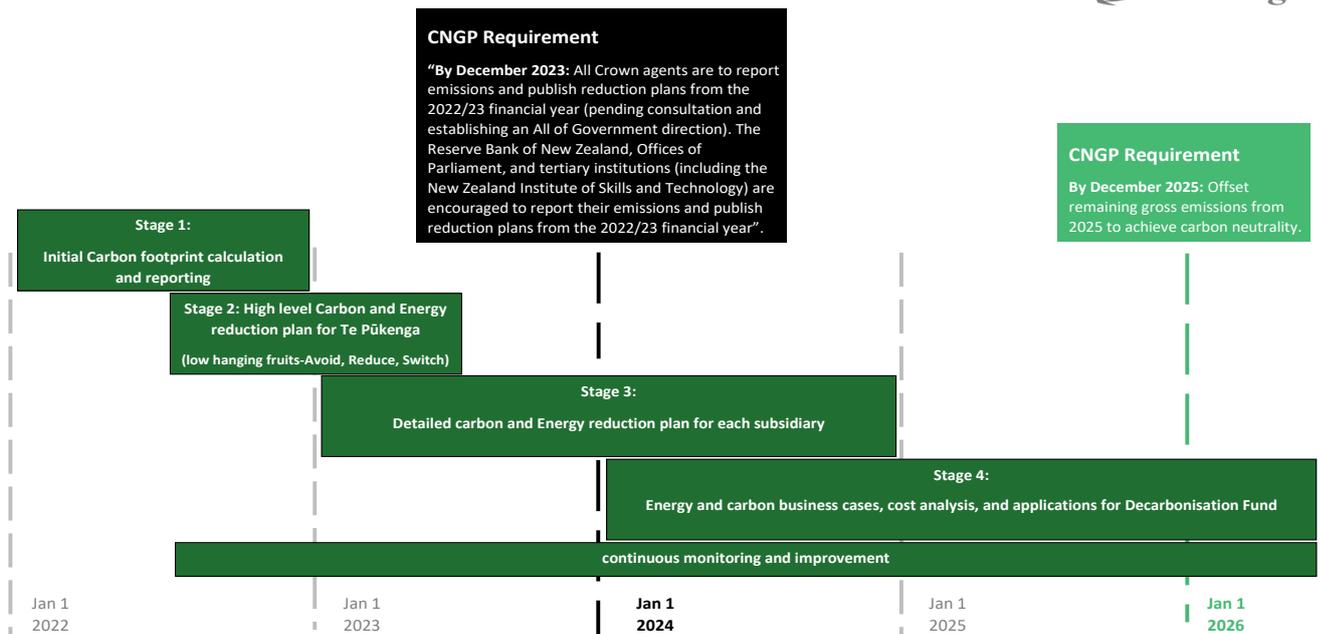


Figure 5. Emission management and reduction timeline for Te Pūkenga

Fleet transition

There are over 635 vehicles in our fleets across the ITP network (1,100 including WBL business divisions). Less than eight percent of our fleets are currently plug-in hybrid electric vehicles (PHEV) or standard electric vehicles (EV). To smoothly transition our fleet to zero emissions in accordance with the CNGP requirements, Te Pūkenga should conduct a baseline assessment to build an in-depth understanding of utilisation by subsidiaries and their users to identify where individual vehicles can be optimised, redeployed or eliminated from the fleet. Transitioning our fleet to zero emissions in accordance with the CNGP requirements will be completed in two stages, both of which attract co-funding from EECA.

Stage 1: Baseline assessment and optimisation plan (January 2022 – December 2022)

The fleet baseline assessment includes:

- Vehicle optimisation plan: building an in-depth understanding of utilisation by subsidiaries and users to identify where individual vehicles can be optimised, redeployed or eliminated from the fleet.
- Financial analysis: establishing the most appropriate vehicles and financially beneficial method of procurement, total fleet replacement cycle planning (next five

years) for Te Pūkenga, optimal leveraging of EECA funding, and Total Cost of Ownership (TCO) analysis.

- Emission reduction: individual vehicle emissions comparisons and total fleet carbon footprint, as well as emission reduction planning for our fleet, following the CNGP requirements.

The establishment of a charging infrastructure plan is outside of the scope of this baseline assessment. However, some of the preparatory information will be gathered through this process including:

- number of sites per entity with vehicles stationed
- total number of sites that are owned vs sites that are leased
- consolidation of any previous charging related investigations.

Stage 2: Transition planning and implementation (Jan 2023 – December 2023)

Based on the assessment done in stage 1 a transition plan will be developed for Te Pūkenga fleet which includes:

- commencement of reduction of vehicles in our fleets
- EV charging site and power analysis
- implementation of initial chargers and EV training/behaviour management

Carbon reduce certification

Once Te Pūkenga is on its carbon reduction journey, we need to seek certification in accordance with ISO 14064-1. The certification will allow Te Pūkenga to make carbon reduction claims with confidence.

Appendix 1: Sustainability stocktake questionnaire

Sustainability Stocktake

Name: Click or tap here to enter text.

Title: Click or tap here to enter text.

Organisation: Click or tap here to enter

Date: Click or tap here to enter text.

text.

1. Does your organisation have a sustainability strategy? If yes, please provide a link or attach a copy of your organisation's sustainability charter or overall strategy. If your organisation has embraced the Sustainable Development Goals (SDGs) in any way, please specify.

Click or tap here to enter text.

- To what extent does your sustainability plan address bicultural objectives?

Click or tap here to enter text.

2. Does your organisation have a committee/group dedicated to sustainability? If yes, please provide the contact details of the chairperson.

Click or tap here to enter text.

3. Are there any FTEs allocated specifically to sustainability in your organisations? If yes, please identify the FTE allocation.

Click or tap here to enter text.

4. Does your organisation publish a sustainability/non-financial report? If yes, please provide a link or attach a copy of your latest report. If no, to what extent have you included sustainability in your annual reporting process?

Click or tap here to enter text.

5. Does your organisation have a stakeholder engagement plan? If yes, please provide a link or attach a copy.

Click or tap here to enter text.

6. Are you aware of any partnerships in your region to address a range of sustainability issues? If yes, please specify.

Click or tap here to enter text.

7. Has your organisation embedded sustainability principles in teaching and learning practices? If yes, please specify.

Click or tap here to enter text.

8. Is your organisation currently in or planning discussions with the Energy Efficiency and Conservation Authority (EECA)? If yes, please describe the purpose of such discussions.

Click or tap here to enter text.

9. Does your organisation have any existing plans to replace or acquire new major energy-related assets? If yes, please specify.

Click or tap here to enter text.

10. Does your organisation undertake carbon footprint calculations?

Click or tap here to enter text.

- If yes, please provide the method used to calculate your carbon footprint, and your emissions (tCO₂e) for the past 12 months. If the calculations are done by an external firm, please identify them.

Click or tap here to enter text.

- If your organisation has set targets and KPIs to reduce its carbon footprints in the future, please also provide that information.

Click or tap here to enter text.

11. Please provide the data available on the following for the past 12 months:

- The energy types being used & approximate spend by type (i.e. Coal, Natural gas, LPG, Diesel, Electricity)
- Water usage
- Waste
- Travel and transportation information including the number of vehicles and their type

Click or tap here to enter text.

12. What are the main sources of heating and cooling in your organisation? (e.g. Number of boilers, HVAC, HeatPumps etc.). Please provide an estimation of the remaining useful life for each of these assets.

Click or tap here to enter text.

Thank you for supporting our sustainability journey. If there is any other information relating to your sustainability practices that you would like to share with us, please provide it below.

Click or tap here to enter text.

Appendix 2: Summary of sustainability stocktake (ITP responses)

ITP subsidiary	Summary response							
	Clear sustainability strategy, policy or framework	Alignment with the SDGs	Dedicated sustainability committee or FTE	Integration of sustainability in teaching/learning	EECA engagement and funding	Carbon footprint calculations	Sustainability stakeholder engagement plan	Sustainability reporting and disclosure
Ara	Sustainability Charter	In teaching	Sustainability Advisory Committee 3-4 FTE teaching	Specific graduate attributes and part of two programmes	Engaging	Yes In-house	No	No
EIT	Sustainability Policy	Partial-Policy linked to the SDGs	Small steering group 0.6 FTE	Part of graduate outcome and certain programmes	Engaging	Yes E-bench	Not formally	No
MIT	Embedded in the strategic plan	No	Sustainability Group No FTE	Not currently, Identified as objective	Engaging	Yes Partial	No	No
NMIT	No	No	No committee nor FTE	In delivery and embedded in specific programmes	Engagement to be scheduled	No Data available	Not formally	No
NorthTec	No	No	No committee nor FTE	Certain programmes	Funding awaiting approval	No	Not formally	No
Otago Polytechnic	Embedded in the strategic plan	Yes-Strategic objectives in plan mapped against SDGs	Sustainability Steering Group 1.75 FTE	Mandated through all programmes	Engaging	Used to	Not formally	Not currently Used to be covered in annual reports
SIT	No	No	No committee nor FTE	Certain programmes	Secured funding	No	Not formally	No
Tai Poutini Polytechnic	Environmental Responsibility Policy	Plans to assess this year	No committee nor FTE	Not formally	Yet to engage	No	Work in progress	No
Open Polytechnic	No	Integrated into planning	Other related committees No FTE	Certain programmes	Engaging	No	Not formally	Certain aspects covered in annual reports
Toi Ohomai	Sustainability Framework	Partial-Framework linked to the SDGs	Sustainability committee 0.2 FTE	Certain programmes	Phone engagement	Yes Catalyst/ own solution	Not formally	Not currently Used to be covered in annual reports

ITP subsidiary	Summary response							
	Clear sustainability strategy, policy or framework	Alignment with the SDGs	Dedicated sustainability committee or FTE	Integration of sustainability in teaching/learning	EECA engagement and funding	Carbon footprint calculations	Sustainability stakeholder engagement plan	Sustainability reporting and disclosure
Unitec	Sustainability Strategy	Considered in planning objectives	Sustainability club 1.5 FTE	Embedded into teaching and learning strategy	Yet to engage	Yes E-bench	Not formally Partnership strategy Centre level	Yes Integrated Report <IR>
UCOL	Included in 2021 Campus Development Plan Framework	No	Energy and Carbon Management Team No FTE	In delivery and embedded in specific programmes	Yet to engage	Yes Partial (gas and electricity)	Not formally	No
Wintec	No	No	No committee nor FTE	Not formally	Funding awaiting approval	Yes Partial (travel and waste)	No	No
WITT	Embedded in the strategic plan	No	No committee nor FTE	Not formally	Funding awaiting approval	Yes Partial	Not formally	Work in progress
Weltec & Whitireia	Environmental Sustainability Policy	No	No committee Around 0.3-0.5 FTE	Work in progress	Engagement to be scheduled	No	Work in progress	No

Appendix 3: Important regional partners identified by the ITP subsidiaries

Untouched World Charitable Trust (Ara)	Kaibosh Food Rescue (Open Polytechnic)	Southland Chamber of Commerce (SIT)
Department of Conservation (Ara and EIT)	The Common Unity Project Aotearoa (Open Polytechnic)	Tauranga City Council (Toi Ohomai)
Christchurch City Council (Ara)	Regional Centre of Expertise (RCE) Otago-Whaiao (Otago Polytechnic)	Sustainable Bay of Plenty (Toi Ohomai)
Project Lyttleton (Ara)	Great South ICC (SIT)	Auckland Transport (Unitec)
The Green Building Council (Ara)	Southland District Council (SIT)	Auckland Council (Unitec)
Aotearoa/New Zealand Sustainable Development Goals (Ara)	Environment Southland (SIT)	Critical (Unitec)
Biodiversity Hawkes Bay (EIT)	Federated Farmers (SIT)	Para Kore (Unitec)
Hawkes Bay Airport (EIT)	Southern District Health Board (SIT)	New Zealand Demolition & Asbestos Association (Unitec)
Ngāti Pārau (the mana whenua hapū) (EIT)	WellSouth Primary Health Network (SIT)	BRANZ (Unitec)
Hawke's Bay Regional Council (EIT)	Community Trust South (SIT)	Waikato Chamber of Commerce (Wintec)

Enviroschools (EIT)	Ngā Waik a Te Tūi (Unitec)	Energy Efficiency and Conservation Authority (Te Pūkenga)
Northland Regional Council (NorthTec)	RCE Waikato (Wintec)	Waikato Wellbeing Project (Te Pūkenga and Wintec)
The Tai Tokerau Climate Change Project (NorthTec)	Waikato District Health Board (Wintec)	Victoria University (WITT)
University of Canterbury (WITT)	Ara Ake (WITT)	Waka Kotahi- NZTA (WITT)
New Plymouth District Council (WITT)	Venture Taranaki (WITT)	National Advisory Group for NZIHT (WITT)
EnergySkills (WITT)	Balance Agri Nutrients (WITT)	Beach Energy (WITT)
First Gas (WITT)	Fonterra (WITT)	Hiringa (WITT)
Methanex (WITT)	OMV NZ (WITT)	TODD Energy (WITT)
Nelson City Council (NMIT)	Business for Climate Action (NMIT)	

Appendix 4: ITP subsidiary programmes that include sustainability principles

Ara Institute of Canterbury (Ara)

- Bachelor of Social Work
- Certificate in Health and Wellbeing (Level 4) - Social Services
- Study and Career Preparation - Support Work and Social Work Pathway (Level 3)
- Certificate in Health and Wellbeing (Level 4) - Community Facilitation
- Certificate in Health and Wellbeing (Level 4) - Mental Health and Addiction Support
- Bachelor of Applied Science (Health Promotion)
- Certificate in Samoan Language (Gagana Sāmoa)
- Workskills Term 1: Communicating with Others (specifically for individuals with intellectual or learning disabilities)
- Graduate Diploma and Bachelor of Sustainability and Outdoor Education
- Certificate in Skills for Living for Supported Learners with an optional strand in Skills for Working
- Workskills Term 3: Emotions and Life Issues
- Beginners Te Reo Māori - Te Kaupae 2
- Sustainability and Outdoor Education Level 3 (Dual Enrolment)
- Pacific Cultural Competency Workshop

Eastern Institute of Technology (EIT)

- NZ Certificate in Land Based Sustainability Practices (Level 3)
- NZ Certificate in Sustainable Primary Production (Level 4)
- NZ Diploma in Environmental Management (Terrestrial strand) (Level 5 and 6)
- Sustainable Horticulture
- Short courses in Soil Management, Irrigation, Workplace Safety, Plant Propagation, Resource Management, Sustainable Technologies, Plant/Crop Health, Hydraladas

- Farming Workplace Operations (Level 3)
- Bachelor of Social Work
- NZ Certificate in Health and Wellbeing (Social and Community Services) (Level 4) with a strand in Mental Health and Addiction Support
- NZ Certificate in Health and Wellbeing (Support Work) (Level 3)
- New Zealand Diploma in Addiction Studies (Applied) Te Ara Pourewa
- Graduate Diploma in Heritage and Museum Studies (Level 7)
- Te Whakangungutanga ki Ngā Tāiro a Kupe Bachelor of Arts (Māori)
- NZ Certificate in Health and Wellbeing (Social and Community Services) (Level 4)

Manukau Institute of Technology (MIT)

- New Zealand Certificate in Te Reo Māori (Rumaki, Reo Rua) (Level 2)
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4)
- New Zealand Certificate in Outdoor and Adventure Education (Multi-skilled) (Level 4)
- New Zealand Certificate in Health and Wellbeing (Level 3)
- Bachelor of Applied Counselling (Level 7)
- Graduate Certificate in Cross-Cultural Supervision (Level 7)
- Certificate of proficiency in the introduction to psychology
- Certificate of proficiency in whakatō: foundations of Te Tiriti ō Waitangi in practice
- New Zealand Certificate in Te Reo (Rumaki, Reo Rua) (Level 3)
- New Zealand Certificate in Pacific Language (Tonga) (Level 3)
- New Zealand Certificate in Pacific Language (Samoa) (Level 3)
- Certificate of proficiency in diversity and sociological principles

Nelson Marlborough Institute of Technology (NMIT)

- STCW Personal Safety and Social Responsibility (PSSR) (Level 3)
- Postgraduate Diploma in Sustainable Aquaculture

- Bachelor of Aquaculture and Marine Conservation
- Sustainable Aquaculture (Level 3 and 4)
- New Zealand Certificate in Ngā Toi
- Preparation for Independent Living A Training Scheme (Level 1)
- Bachelor of Social Work (Level 7)
- Te Reo Māori me ngā Tikanga o Te Tauihu (Level 1)

NorthTec

- New Zealand Diploma in Environmental Management (Level 5)
- New Zealand Diploma in Environmental Management (Level 6)
- New Zealand Certificate in Study and Career Preparation (Level 4) – Applied Science, Conservation and Environment
- Bachelor of Applied Science (Biodiversity Management) (Year 3 only)
- Ko Te Ha o Te Reo (Introductory Māori)
- New Zealand Certificate in Study and Career Preparation (Level 4) – Community and Social Services
- New Zealand Certificate in Te Reo Māori (Reo Rua) (Level 2) Te Pōkaitahi Reo (Reo Rua) (Te Kaupae 2)
- New Zealand Certificate in Commercial Road Transport (Heavy Vehicle Operator) (Level 3)
- Introduction to Infection Prevention
- New Zealand Certificate in Agriculture (Level 4)
- New Zealand Certificate in Conservation (Operations) (Level 4)
- New Zealand Certificate in Sustainable Primary Production (Level 4)
- New Zealand Certificate in Workplace Health and Safety Practice (Level 3)
- Bachelor of Applied Social Work
- New Zealand Certificate in Study and Career Preparation (Level 4) – Community and Social Services
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4) with

strand in Mental Health and
Addiction Support

- New Zealand Certificate in Study and Career Preparation (Level 4) - Applied Science, Conservation and Environment
- Working in Silviculture Operations

- Ko Te Ha o Te Reo (Introductory Māori)
- New Zealand Certificate in Workplace Health and Safety Practice (Level 4)
- Maunga Kura Toi - Bachelor of Māori Art

Open Polytechnic

- Graduate Certificate in Sustainable Management
- Bachelor of Applied Science (Environment)
- Bachelor of Applied Science (Communication and Environment)
- Graduate Diploma in Sustainable Management
- Graduate Diploma in Mental Health Sector Leadership
- Bachelor of Social Health and Wellbeing (Disability)
- Bachelor of Social Health and Wellbeing (Mental Health and Addictions)
- Bachelor of Social Work
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4)
- Graduate Diploma in Mental Health Sector Leadership
- New Zealand Diploma in Psychology (Level 5)
- Bachelor of Arts (Humanities)
- Bachelor of Social Health and Wellbeing (Disability)
- Bachelor of Social Health and Wellbeing (Mental Health and Addictions)
- Bachelor of Applied Science (Communication and Psychology)

Otago Polytechnic

- Graduate Diploma in Sustainable Practice
- Bachelor of Leadership for Change
- Sustainability and Biculturalism short course

- New Zealand Certificate in Land Based Sustainability Practices (Level 3)
- Graduate Diploma in Business Transformation and Change
- Introduction to Te Tiriti o Waitangi workshop
- Sustainability and Biculturalism short course
- Graduate Diploma in Sustainable Practice
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4)
- Bachelor of Social Services (with specialities in Career Practice, Counselling, Disability Support and Coordination or Mental Health Support)
- Graduate Diploma in Social Services (Career Practice), (Disability Support and Coordination) or (Mental Health Support)
- Certificate in Bicultural Competency (Level 4)
- Sustainability and Biculturalism short course

Southern Institute of Technology (SIT)

- New Zealand Certificate in Sustainable Primary Production (Level 4)
- New Zealand Certificate in Land Based Sustainability Practices (Level 3)
- Bachelor of Environmental Management
- Environmental Management (Level 4)
- New Zealand Certificate in Study and Career Preparation (Level 4) - Environmental Management
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4) with strand in Social Services
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4) with strand in Mental Health and Addiction Support

Toi Ohomai

- Bachelor of Science (BSc), Majoring in Ecology and Biodiversity
- Graduate Diploma in Resource Management
- New Zealand Certificate in Conservation (Operations) (Level 4)
- New Zealand Diploma in Environmental Management (Level 5), Marine Strand
- New Zealand Diploma in Environmental Management (Level 6), Marine Strand
- New Zealand Diploma in Environmental Management (Level 6), Terrestrial Strand
- New Zealand Certificate in Primary Industry Skills (Level 2)
- New Zealand Diploma in Forest Management (Level 6)
- New Zealand Certificate in Workplace Health and Safety Practice (Level 4)
- Graduate Certificate in Infection Risk Management
- Graduate Diploma in Health and Rehabilitation Studies
- Master of Applied Professional Studies (Infection Prevention and Control)
- Postgraduate Certificate in Applied Professional Studies (Infection Prevention and Control)
- New Zealand Certificate in Te Reo (Reo Rua) (Level 3)
- New Zealand Certificate in Te Reo (Rumaki, Reo Rua) (Level 4)
- STCW-10 Standards of Training Certification and Watchkeeping for Seafarers
- New Zealand Diploma in Environmental Management (Level 5 and 6), Marine Strand
- Graduate Diploma in New Zealand Immigration Advice
- Bachelor of Social Work
- New Zealand Diploma in Whānau Ora (Level 5)
- New Zealand Certificate in Youth Work (Level 4)
- New Zealand Certificate in Commercial Road Transport (Operations Management) (Level 5)

Unitec Institute of Technology (Unitec)

- Bachelor of Social Practice

- Liaison Interpreting Contexts (Social Systems, Culture and Ethics) Masters
- Master of Applied Practice (Social Practice)
- New Zealand Certificate in Health and Wellbeing - Social Services
- New Zealand Certificate in Study and Career Preparation (Level 4) - Social Work
- New Zealand Certificate in Health and Wellbeing - Community Facilitation
- New Zealand Certificate in Health and Wellbeing - Mental Health and Addiction Support
- New Zealand Certificate in Health and Wellbeing - Social Services
- Bachelor of Applied Science (Animal Management and Welfare, and Biodiversity Management)
- Bachelor of Applied Science (Biodiversity Management)
- Conservation and Biodiversity Management
- Master of Applied Practice (Social Practice)
- New Zealand Certificate in Study and Career Preparation (Level 4) - Social Work
- Design for Sustainable Environments
- Sustainable Resource Utilisation

University College of Learning (UCOL)

- New Zealand Certificate in Health and Wellbeing (Social and Community Services)
- New Zealand Certificate in Health and Wellbeing (Support Work)
- Bachelor of Social Work Level 7
- New Zealand Certificate in Conservation (Operations) (Level 4)

Weltec

- New Zealand Certificate in Emergency Care (First Responder) (Level 3)
- New Zealand Certificate in Study and Career Preparation (Level 3) – Social Science

- New Zealand Certificate in Te Reo (Rumaki Reo Rua) (Level 3)
- Bachelor of Social Work
- Postgraduate Health and Social Science
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4) (Community Health Work)
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4) (Mental Health and Addiction Support)
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4) (Social Services)

Western Institute of Technology at Taranaki (WITT)

- New Zealand Certificate in Maaori Governance (Level 4)
- New Zealand Certificate in Health and Wellbeing (Social and Community Services) (Level 4)
- With Strand in Mental Health and Addiction Support
- New Zealand Certificate In Skills For Living For Supported Learners (Level 1)

Waikato Institute of Technology (Wintec)

- New Zealand Certificate in Health and Wellbeing (Social and Community Services)
(Level 4)
- Postgraduate Certificate in Health and Social Practice
- Postgraduate Diploma in Health and Social Practice
- Bachelor of Social Work