

# Waitākere Ranges Local Board Workshop Record

Workshop record of the Waitākere Ranges Local Board held at the Waitākere Ranges Local Board office, 39 Glenmall Place, Glen Eden, Auckland on Thursday 2 May 2024, commencing at 12.45pm.

## PRESENT

**Chairperson:** Greg Presland

**Members:** Michelle Clayton  
Mark Allen  
Linda Potauaine  
Liz Manley  
Sandra Coney

**Apologies:**

**Also present:** Adam Milina, Brett Lane, Natasha Yapp, Nataly Anchicoque and Rebecca Winham

Workshop Item	Summary of Discussions
Passenger Rail between Swanson and Kumeū Siobhan O'Donovan, Stakeholder Relationship Advisor Aaron Rodrigues, Principal Transport Planner, Strategic Projects, Auckland Transport Matthew Rednall, Manager Strategic Projects, Auckland Transport Adrienne Darling, Manager, Network Strategy, KiwiRail Gwyneth MacLeod, Head of Network Strategy and Investment, KiwiRail 12.45pm – 1.30pm	Board provided with an update on the Passenger Rail between Swanson and Kumeū Project.
Waitākere Ranges Climate Action Plan Taylor Farrell, Relationship Advisor Robert Sutherland, Low Carbon Specialist 1.30pm – 2.30pm	Staff facilitated the discussion on the Waitākere Ranges Climate Action Plan, seeking the Board's agreement to move forward with public consultation.

The workshop concluded at 2.30pm.



# Rail network upgrades required to enable frequent daily passenger services to operate beyond Swanson

March 2024

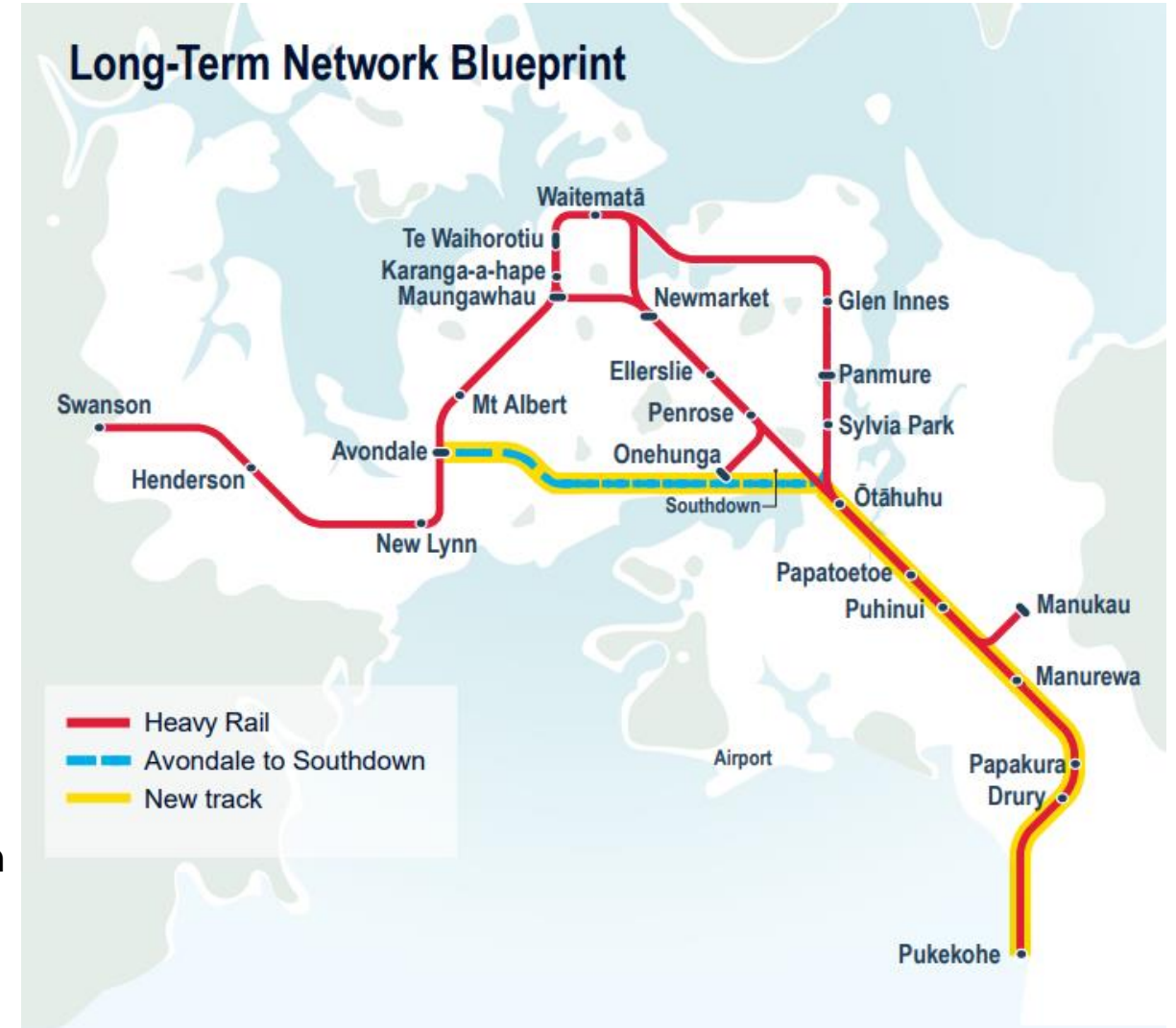






# Current planning for the rail network in Auckland focuses on the existing metro-enabled area

- KiwiRail and Auckland Transport undertook a Programme Business Case across 2021-23 that has produced a 30-year programme for the further development within the metro-enabled network, including new track
- Whilst the programme is focused on the existing metro-enabled network, it in no way limits future development beyond the current metro-enabled boundaries – subject to investment
- Some Local Boards and TIC members queried *what changes or upgrades to KiwiRail's network infrastructure would be required to enable extension of passenger services beyond Swanson to Huapai*
- **This presentation by KiwiRail seeks to provide information to answer that question.**
- It does so with reference to different types of services and rolling stock options but does not include any consideration of the costs and interoperability of such services. It is also independent of any consideration of demand or modal choice, which is beyond KiwiRail's scope



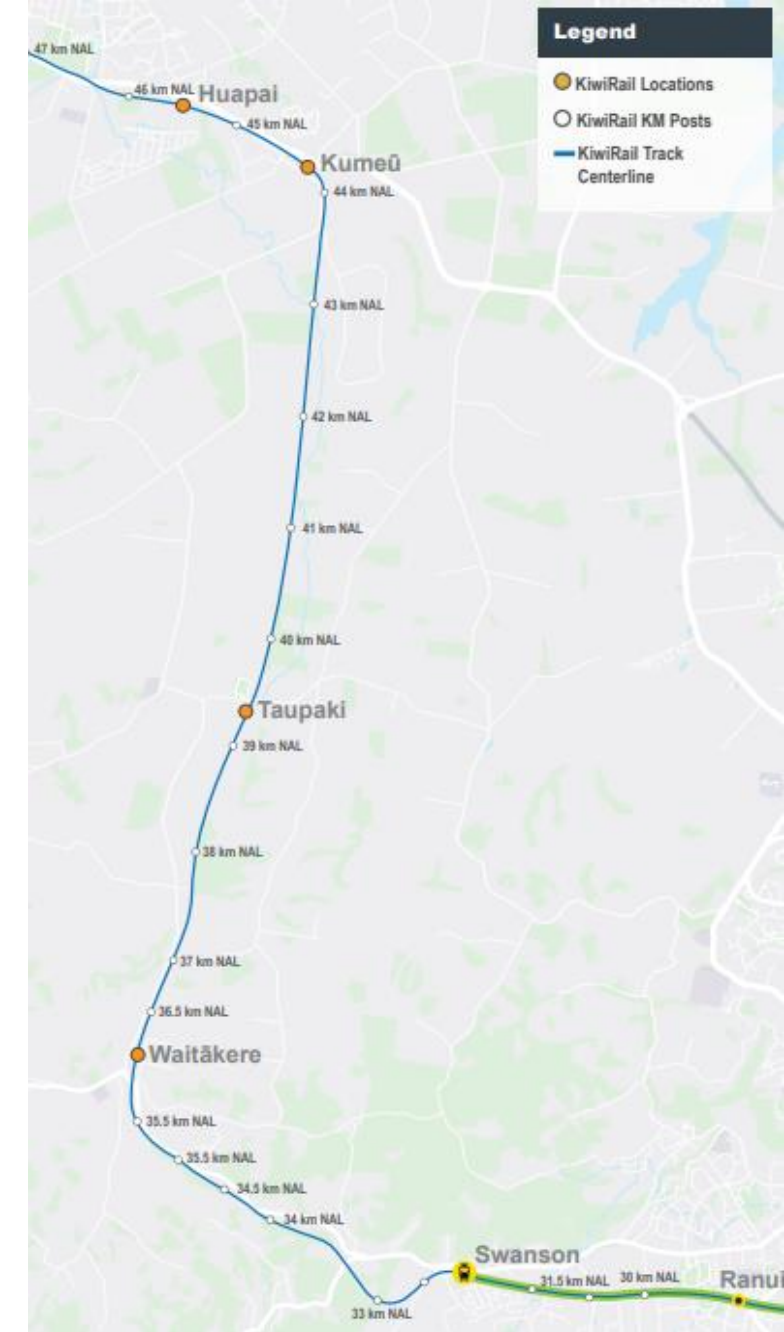


# Extending the metro-enabled rail network is feasible - but would require investment across multiple infrastructure components

- The existing metro-enabled rail network in Auckland is a double-tracked and electrified portion of the national network that extends from Pukekohe in the south to Swanson in the northwest
- The network beyond Swanson is single track only, non-electrified and with rail asset conditions that would need to be remediated or upgraded to enable regular daily passenger services to operate

## Rail and related infrastructure requiring work

For any passenger service	Additional if electrified
<ul style="list-style-type: none"> <li>• Track &amp; formation</li> <li>• New passing loops or double track</li> <li>• Tunnel</li> <li>• Bridges</li> <li>• Culverts &amp; drains</li> <li>• ETCS</li> <li>• Level Crossings</li> </ul>	<ul style="list-style-type: none"> <li>• Signalling</li> <li>• Substation Modifications</li> <li>• Overhead Lines</li> </ul>







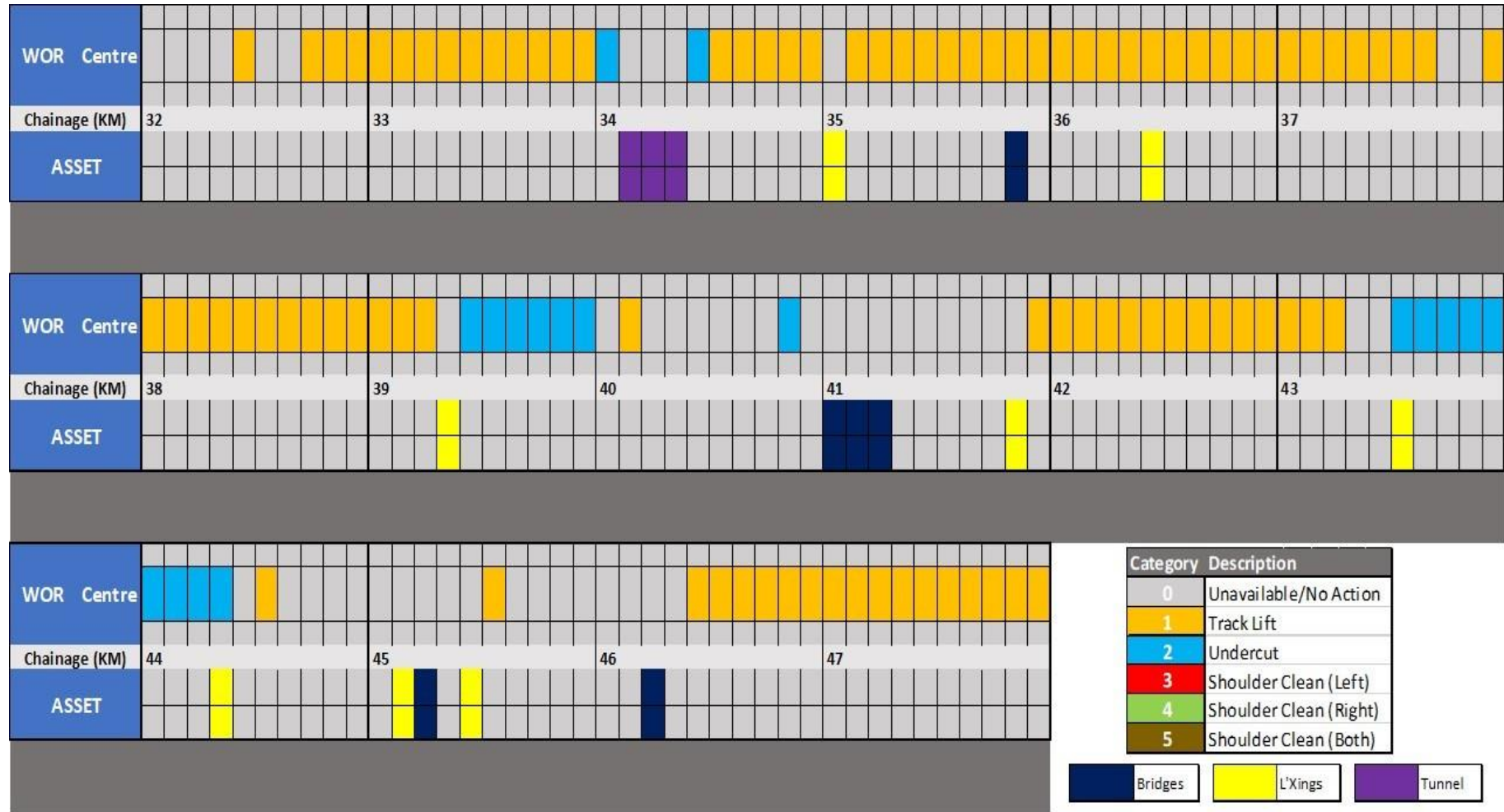
# Formation would need upgrading...

## Existing track and formation

- Single track with an existing siding and passing loop at Waitakere station

## Condition

- Sleeper condition shows high priority replacement extending to ~1.5km of track, similar pattern of poor condition aligning with track index results
- Gauge faults also align with areas of sleeper degradation
- Substandard clearances between track centrelines at Waitakere





# ...and new track would be needed

Introducing passenger services in addition to freight would require a minimum of 3 additional passing loops for a 2 tph service. 4 tph would require double tracking

## Existing infrastructure

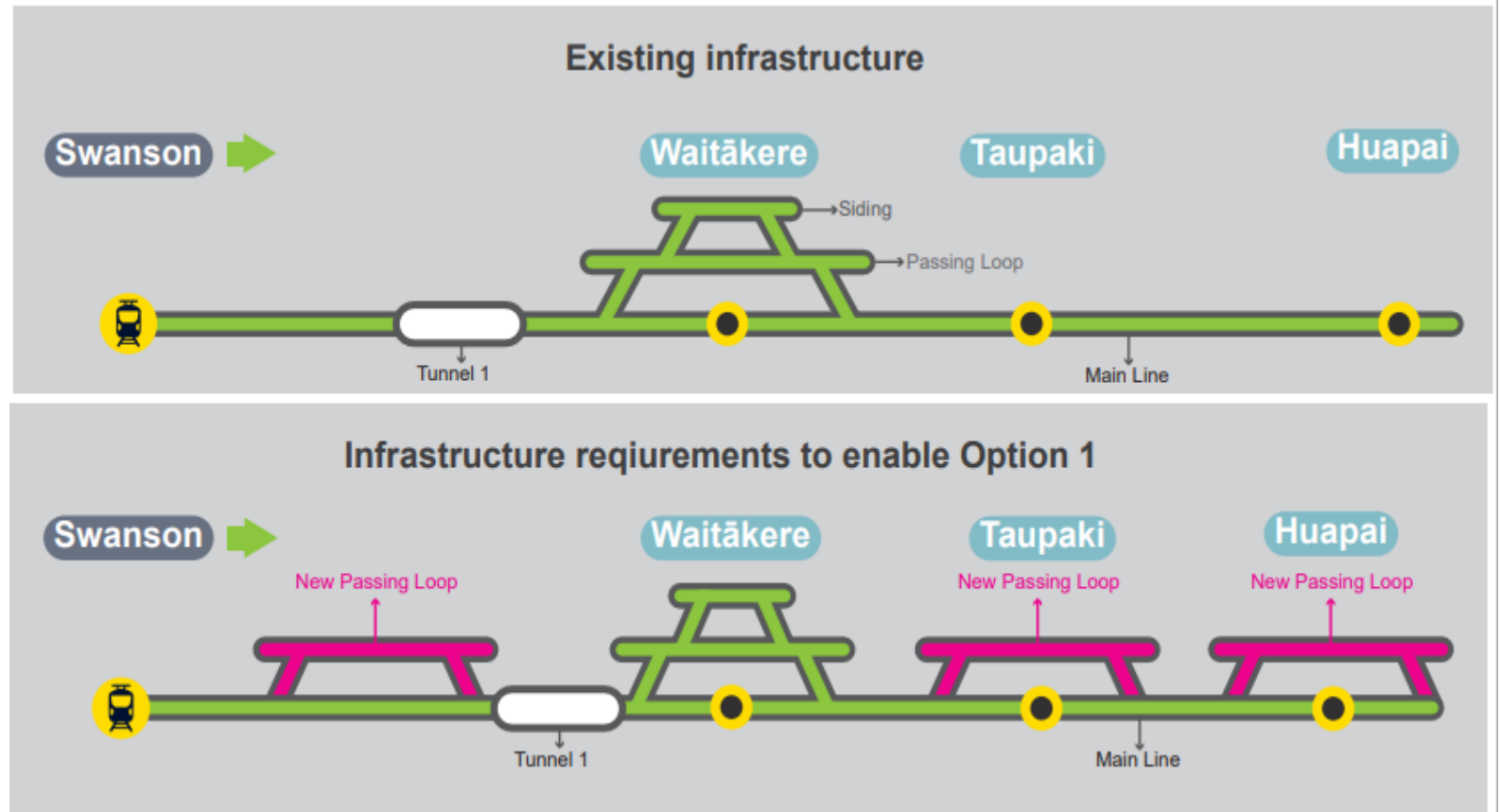
- Single track with an existing siding and passing loop at Waitakere station

## Minimum requirement for a 2 tph service

- 3 x additional passing loops would be required to accommodate addition of 2 tph passenger services on this line

## Minimum requirement for a 4 tph service

- A 4 tph service would require **double tracking** of the whole route, including a second tunnel or a tunnel bypass





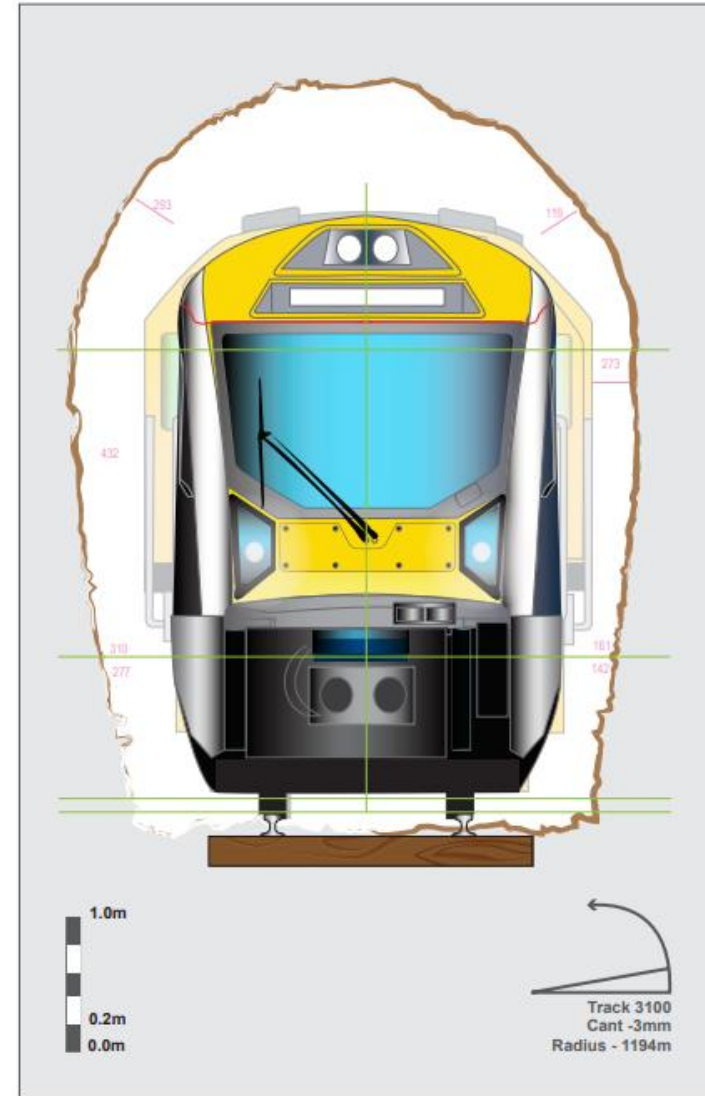


# NAL Tunnel No.1 (Waitākere) is a significant constraint to passenger services

- The Waitākere Tunnel is a 251m long horseshoe section brick lined tunnel with a single rail track on a straight alignment, south of Waitakere station (approximate chainage NAL 34.10km – NAL 34.35km).
- Recent freight upgrading works included lowering the tracks through the tunnel to allow clearance for freight trains with hi-cube shipping containers, as well as track, sleeper and ballast replacement.
- This is sufficient height clearance for passenger trains (including OLE if needed).

However:

- There are no openings or recesses along its length to provide refuges outside of the path of oncoming trains, no evacuation walkways or ventilation shafts. Tunnel clearance on either side is too low to permit a person, limiting train lengths to enable emergency evacuation via front and rear only.
- **Minimum viable 2 tph** limited-length (max. 3 car) service (non-electrified) would require construction of ventilation shafts and a passing loop in the vicinity of the tunnel.
- **A 4 tph service** and/or longer trains (e.g. 6 cars) would require a different solution, either a parallel (second) tunnel or a bypass of the existing tunnel.

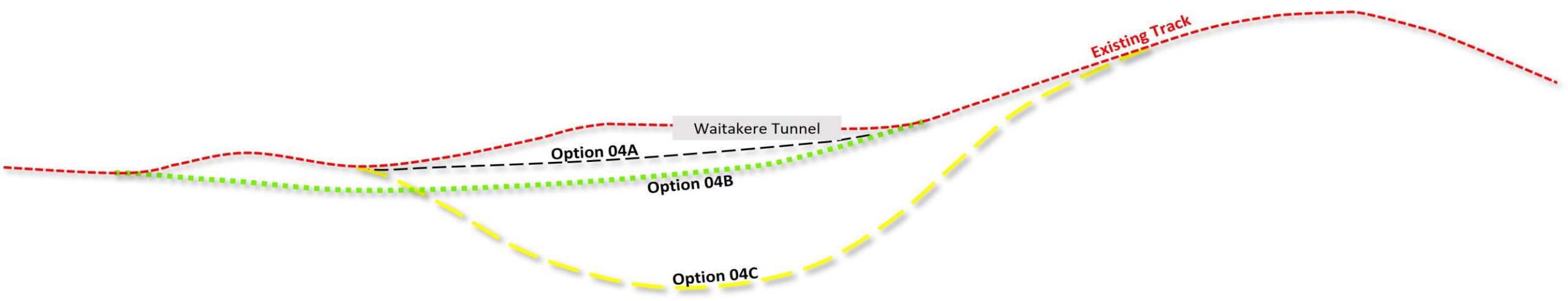


## Clearance (mm)

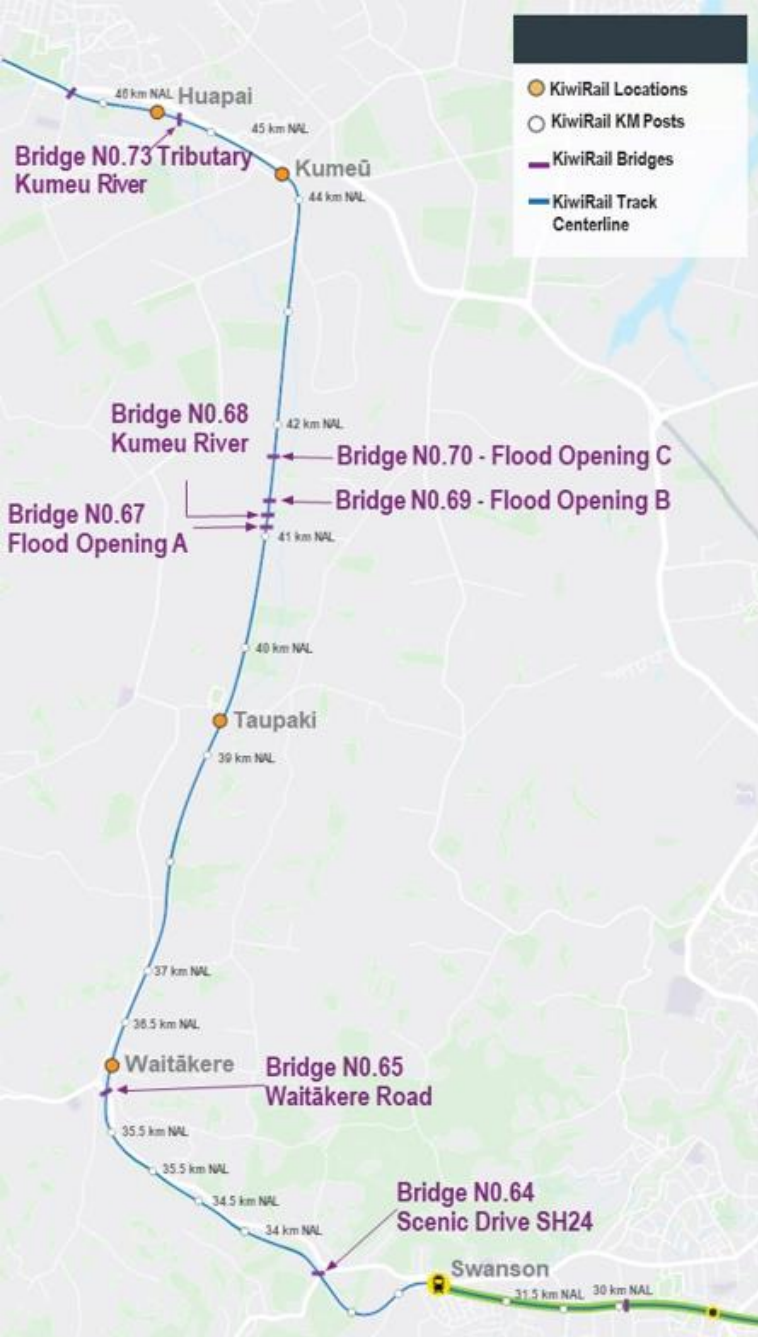
Left	Band(from)	Right
293	3000	119
432	2000	273
310	1000	161
277	100	142
-	0	-



# Tunnel options include use with passing loop (limited to 2 tph), tunnel duplication or a range of tunnel bypass options







# Bridges and culverts will also require upgrading / remedial works

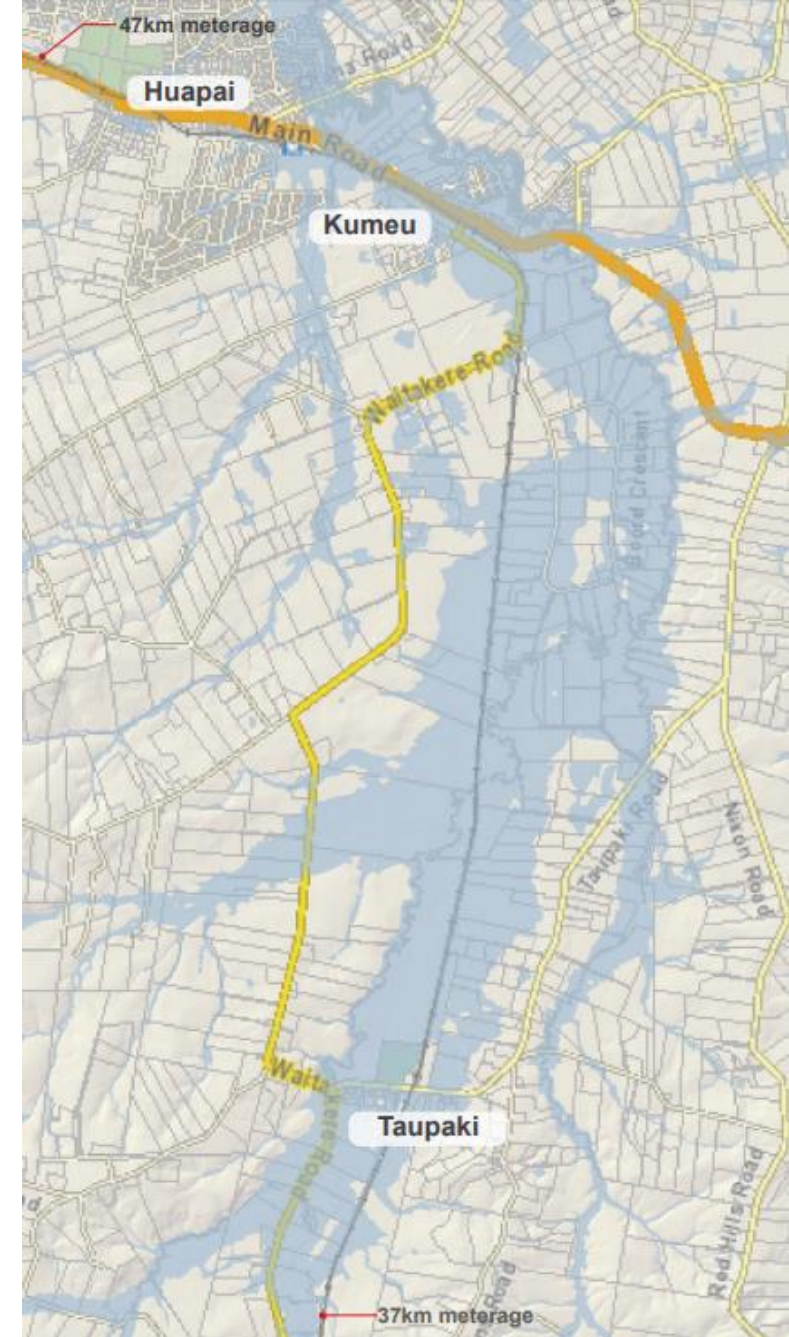
## Bridges

- There are six KiwiRail bridges on the route (5 rail over river, 1 rail over road)
- All have low health ratings that would drive the need for remedial work for passenger services
- Two are scheduled for replacement in 2025/26, leaving four needing investment

## Culverts

Post-Auckland floods resilience work has assessed condition and capacity of culverts and identified works

- Six culverts need replacement
- A number of other culverts are below KiwiRail minimum capacity or size requirements





# Other upgrades and replacements

## Switches, crossovers, possible electrification

### Existing

- Existing switches & crossovers confined to existing passing loop & siding at Waitākere
- Crossover for reversing movements just north of Swanson
- All infrastructure at Waitākere & Swanson approaching end of life
- Should be prioritised for early replacement

### Electrification

- Electrification and OLE would be needed to run an integrated service using existing fleet

## Level crossings

### Public

- Four public level crossings
- Two would need upgrading to full protection
- Access Rd, Kumeu- consider closure or grade separation

### Private

- Six private level crossing, none have safety protection
- Need review in priority order and consideration of need for removal or mitigations via active warning systems (note: aim is to remove all level crossings within the metro-enabled network)

## Signalling and ETCS

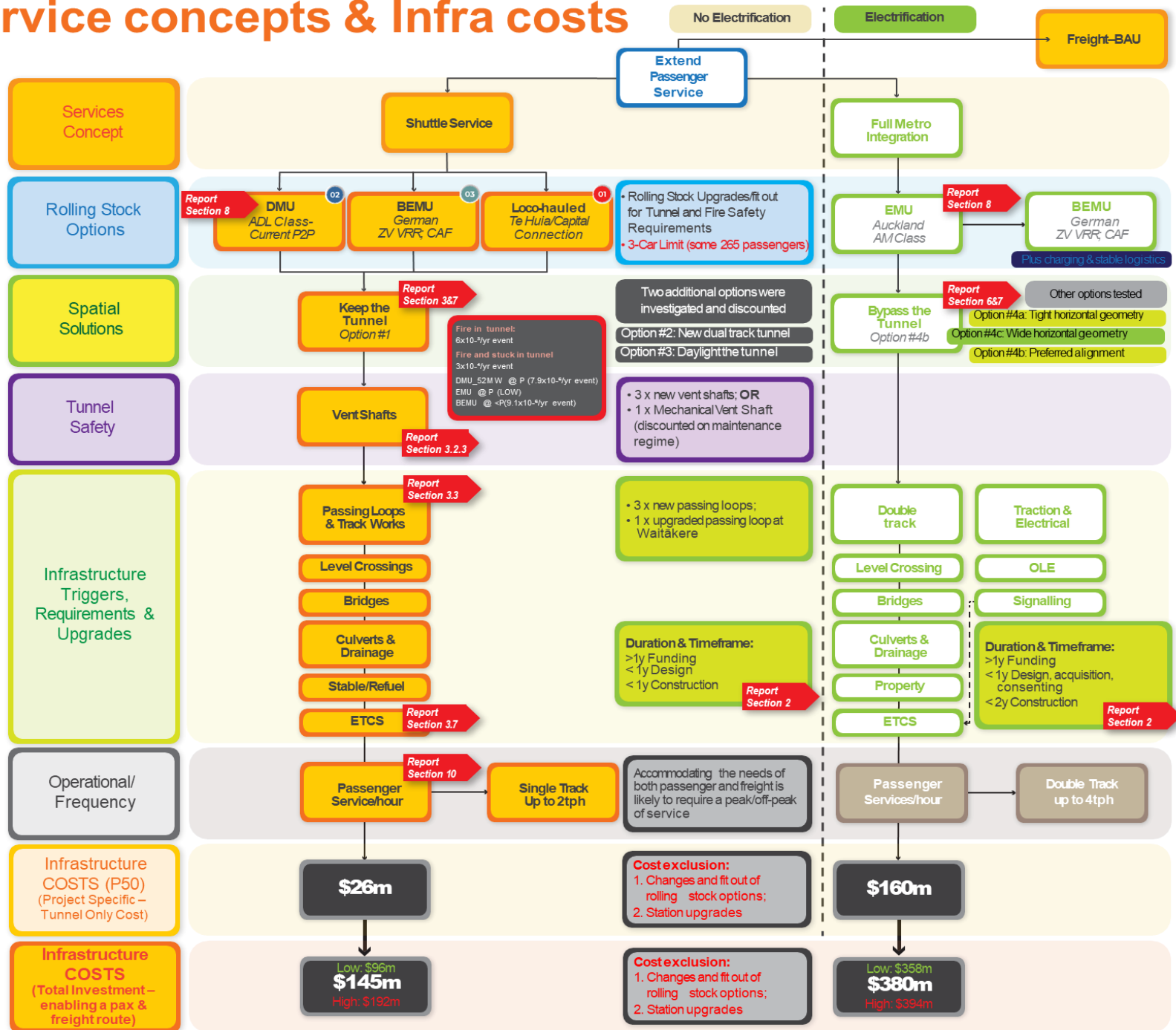
Low density freight trains on the NAL are currently controlled by a warrant system. This is not suitable for more intensive services.

### Options:

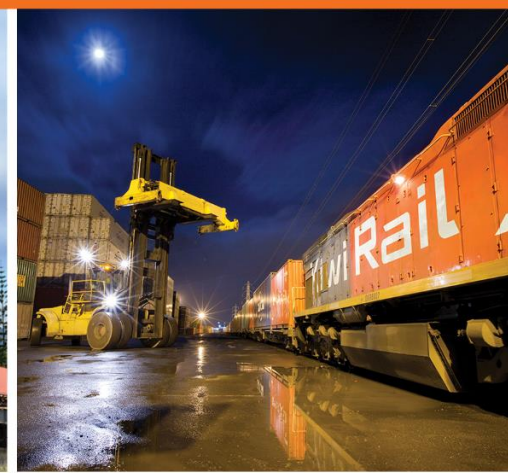
- Extend existing ETCS Level 1 system used within the Auckland Metro area network
- Station and passing loop signalling to allow simultaneous approach
- New object controllers required at stations and other locations
- Existing interlocking modified to interface with the new Swanson to Huapai network
- Electrical power utilities & supplies for new signalling equipment
- Full integration of signalling with the National train control system



# Service concepts & Infra costs







# Thank you





# Waitākere Ranges Climate Action Plan

Robbie Sutherland, Low Carbon Specialist

2 May 2024



## Workshop purpose

- Review changes made to draft Climate Action Plan since June 2023 workshop with the board
- Confirm a draft of the Climate Action Plan for public consultation
- Discuss timing and feedback options for the Have Your Say consultation
- Discuss face-to-face events to complement the online Have Your Say process



## Amendments to plan since June 2023 workshop

- New flagship action to provide landowners in the foothills with information about native forest regeneration and the Emissions Trading Scheme
- New action to advocate for low carbon transport connections to ecotourism destinations, including dark sky sites
- Wildfire and increasing hot days risks now included
- New action to include potential sites for community gardens in the new Waitākere Ranges Local Parks Management Plan
- Updated text highlighted in green in the latest version of the draft plan (Attachment A)
- Summary of board member feedback and how this was incorporated (Attachment B)





# Next steps to finalise the climate action plan

Based on process used for Waiheke Climate Action Plan

Date (indicative)	Activity
2 May 2024	Local Board workshop to approve draft climate action plan for consultation
13 May 2024 – 20 June 2024 (TBC)	Consultation Period – Have Your Say Survey open Multiple feedback options including online Have Your Say, email, hardcopy, and face-to-face at events
24 June 2024 – 19 July 2024 (TBC)	Consultation responses summarised, workshopped with the Local Board, and edits made to action plan
August 2024 (TBC)	Final version of action plan presented to Local Board for adoption at a business meeting





# Have Your Say process

- Draft Have Your Say questions (Attachment C) based on those used for Waiheke
- Feedback accepted via Have Your Say portal, email, hardcopy, and at events
- Examples of potential event options to supplement Have Your Say:

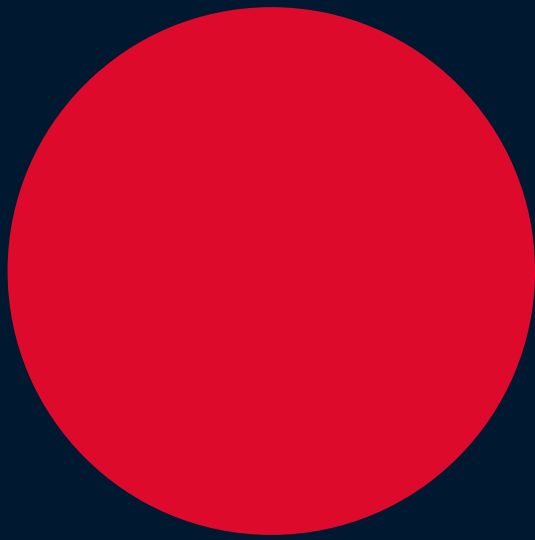
Event (illustrative)	Date and Time	Venue
<b>Drop-in sessions</b>	TBC	Piha (TBC), Swanson (TBC), Glen Eden (Library), Titirangi (Library)
<b>Titirangi Village Market</b>	TBC – operates last Sunday of the month 10am – 2pm	500 South Titirangi Road, Titirangi
<b>Shed Collective Farmers Market</b>	TBC – operates every Saturday 8:30am – 12pm	99 Parrs Cross Road Oratia
<b>Swanson Station Market</b>	TBC – operates first Sunday of the month 7am – 12pm	760 Swanson Road, Swanson
<b>Regenerate Kids Market</b>	9 June 2024, 10am-1pm (TBC)	Titirangi War Memorial Hall, 500 South Titirangi Road, Titirangi
<b>Ae Ka Taea e Koe – Māori-led event</b>	(TBC)	(TBC)





# Feedback and questions





# Waitākere Ranges Climate Action Plan



January 2024, Version 3.0









# Chair's foreword: A climate action response

*"We do not inherit the Earth from our ancestors; we borrow it from our children"* - American Indian proverb

I was first elected to public office in 2001.

Back then we were aware that climate change presented an existential threat to humanity. The scientists had been telling us for decades that increasing levels of CO<sub>2</sub> and greenhouse gasses in the atmosphere would destabilise the climate and cause extreme weather events, increasing sea levels and a fundamental change to the world that we grew up in.

Waitākere Eco City did its best. The western rail line was double tracked and electrified. Walkways and cycleways were built. Intensification around New Lynn, Glen Eden, Henderson and Swanson occurred meaning that the need to drive cars was reduced. Buildings were made more environmentally friendly and solar panels were placed prominently on civic buildings. The Waitākere Ranges Heritage Area Act was passed to make sure that a magnificent carbon sink that provides us with fresh water, artistic inspiration and intrinsic beauty was protected as far as possible.

But looking back it is now clear that we needed to do more. And that in the next decade all of us need to transform the way that we live to avoid the worst effects of climate change.

At a high level the changes that we need to make are straight forward. Tamaki Makaurau Auckland needs to reduce its production of greenhouse gasses by half during this decade. To help achieve this transport greenhouse gas production needs to be reduced by two thirds.

There needs to be much greater reliance on walking and cycling. Less car trips and more use of public transport. Greater use of technology and more remote working and less car trips to the office. Less international travel and less consumption of meat. Simpler living.

To get there will require significant action by Central Government and by Local Government but most importantly by local communities, villages, whanau, households and westies.

The intent of this plan is to invite us westies to think about what we can do locally to meet the International goal to stop global warming beyond 1.5 degrees celsius so that the Pacific is not flooded, our extreme weather events are not catastrophic, and our current way of life can continue. It outlines some of the things we can do to achieve this goal. Your comments and suggestions and passion are welcome and absolutely essential.

And as a reminder we do not inherit this world from our parents, we borrow it from our mokopuna.

Greg Presland, Chairperson, Waitākere Ranges Local Board

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# 1. Introduction

The Waitākere Ranges Local Board area is unique, with the Waitākere Ranges a defining feature protected by the Waitākere Ranges Heritage Area Act 2008. The **largest town centre is** Glen Eden, which is surrounded by suburban areas. Laingholm, Oratia and Waitākere are in very different settings, and long-established rural communities are clustered around Huia, Parau, Piha, Karekare and Bethells Beach. Titirangi and Swanson are established villages with strong local characteristics, with Swanson expanding rapidly. The Waitākere Ranges Climate Action Plan focuses on climate actions that contribute to achieving Auckland's climate goals within this unique context.

The Waitākere Ranges Climate Action Plan is based on the strategic principles of The Auckland Plan and Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan. These lay the foundation for Auckland's transformation into a resilient, zero-carbon community which is actively adapting to the impacts of climate change. Te Tāruke-ā-Tāwhiri sets out two core goals:

- To reduce our greenhouse gas emissions by 50 per cent against a 2016 baseline by 2030 and achieve net zero emissions by 2050;
- To adapt to the impacts of climate change by ensuring we plan for the changes we face under our current emissions pathway.

This action plan sets out how Waitākere Ranges communities can make this a socially, economically and environmentally positive transition, by focusing on actions we can begin now. The plan also has medium-term targets that create a pathway towards zero carbon.

The action plan prioritises carbon reduction measures set out in Te Tāruke-ā-Tāwhiri, which identifies eight priority areas under the goal of halving emissions by 2030 and preparing for change.

The table below shows the relationship between plans, our carbon goals, and our priority areas, which are drawn from Te Tāruke-ā-Tāwhiri and underpin development of this Waitākere Ranges Climate Action Plan, for action and implementation.



Plans	Our goals	Our priority areas	Implementation
<ul style="list-style-type: none"> <li>• <a href="#">Auckland Plan</a></li> <li>• <a href="#">Te Tāruke-ā Tāwhiri: Auckland's Climate Plan</a></li> <li>• <a href="#">Long-term plan 2021-2031</a></li> <li>• <a href="#">Waitākere Ranges Local Board Plan</a></li> <li>• Local Climate Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>• Halving emissions by 2030</li> <li>• Zero carbon by 2050</li> <li>• Adapting to the impacts of climate change</li> <li>• Our people are connected to, and care for, the environment</li> <li>• Our communities are thriving, resilient and adaptable</li> </ul>	<ul style="list-style-type: none"> <li>• Natural environment</li> <li>• Built environment</li> <li>• Transport</li> <li>• Economy</li> <li>• Community and coast</li> <li>• Food</li> <li>• Te Puāwaitanga o Te Tātai</li> <li>• Energy and industry</li> </ul>	<ul style="list-style-type: none"> <li>• Working together, community and business partnerships</li> <li>• Governance, funding and engagement</li> <li>• Local climate <b>action programme</b> to support community activity</li> <li>• Demonstrating and measuring progress</li> </ul>

Working together we can enhance the essential character of the Waitākere Ranges Local Board area, protecting and restoring areas from the land to the seas as we take action to address climate change.

Respecting the local ecology and our rich cultural heritage are paramount. We can become a more resilient and innovative community that is celebrated for its pest free, circular and regenerative economy. Many initiatives are already underway to make these goals a reality.

At a global level, through the Paris Agreement, nations have set a goal to ensure temperature rises are below 1.5°C to avoid the most severe consequences of climate change. Waitākere Ranges communities must do our fair share to contribute to reaching these targets and prevent further catastrophic climate impacts.

Tāmaki Makaurau is already beginning to experience localised effects like heavy rain events, storm surges and coastal inundation, extreme heat events and drought. These are likely to increase in frequency and severity.

This action plan includes actions to build our resilience and adaptations that must be taken to protect against the unavoidable and harmful effects of climate change. It also addresses how the Waitākere Ranges Local Board and community can both continue and enhance their valuable work to offset and capture carbon through the restoration of our taiao / environment.

#### **Waitākere Ranges Local Board will continue to:**

- robustly and visibly incorporate climate change considerations into work programmes and decision-making
- advocate strongly for **greater leadership and effective action on climate change by the Governing Body, council-controlled organisations, and central government**
- connect community members and leaders who are working on climate change, particularly where this can help scale up or amplify innovation
- increase the visibility of local climate change innovation and action
- lead by example in reducing the council's greenhouse gas emissions
- include meaningful climate impact statements on all local board reports
- ensure that carbon emission reduction opportunities are identified and achieved, and greater resilience built.

The local board will work with iwi and Māori, local and central government and community partners to ensure a collaborative response. This action plan can only be successfully implemented with the support and participation of the Waitākere Ranges community, with iwi, businesses, community groups and residents continuing to lead our transition towards a zero carbon future in the Waitākere Ranges Local Board area. **Implementation of this action plan also relies on decisions and investment by central government, the Governing Body, and council-controlled organisations that are beyond the local board's direct control.**

Some actions in this action plan can be readily progressed and others will take significant time and investment.

Progress towards achieving this plan could include increased tree canopy cover on local parks, an increasing number of urban trees planted annually, reduced climate emissions from community facilities, increased uptake of electric vehicles, increased public transport use and a reduction in distance travelled in light vehicles, more businesses measuring carbon footprints and reducing their emissions, an increasing number of schools involved in sustainability education programmes, and an increase in local food production. We will monitor progress against this action plan regularly using the 'demonstrating progress' column of each action table within the plan, and the climate monitoring framework in Section 9.

As international and local knowledge and learning increases, and as new opportunities are identified, this action plan will be reviewed every five years. It will be a living document that informs the local board and community's response to climate change.



## 2. Auckland's sources of carbon

### Production emissions

Greenhouse gas emissions produced in Auckland can be broken down into various sectors as shown in Figure 1 below. An understanding of the key sources of carbon helps inform actions that can be taken to reduce these emissions<sup>1</sup>.

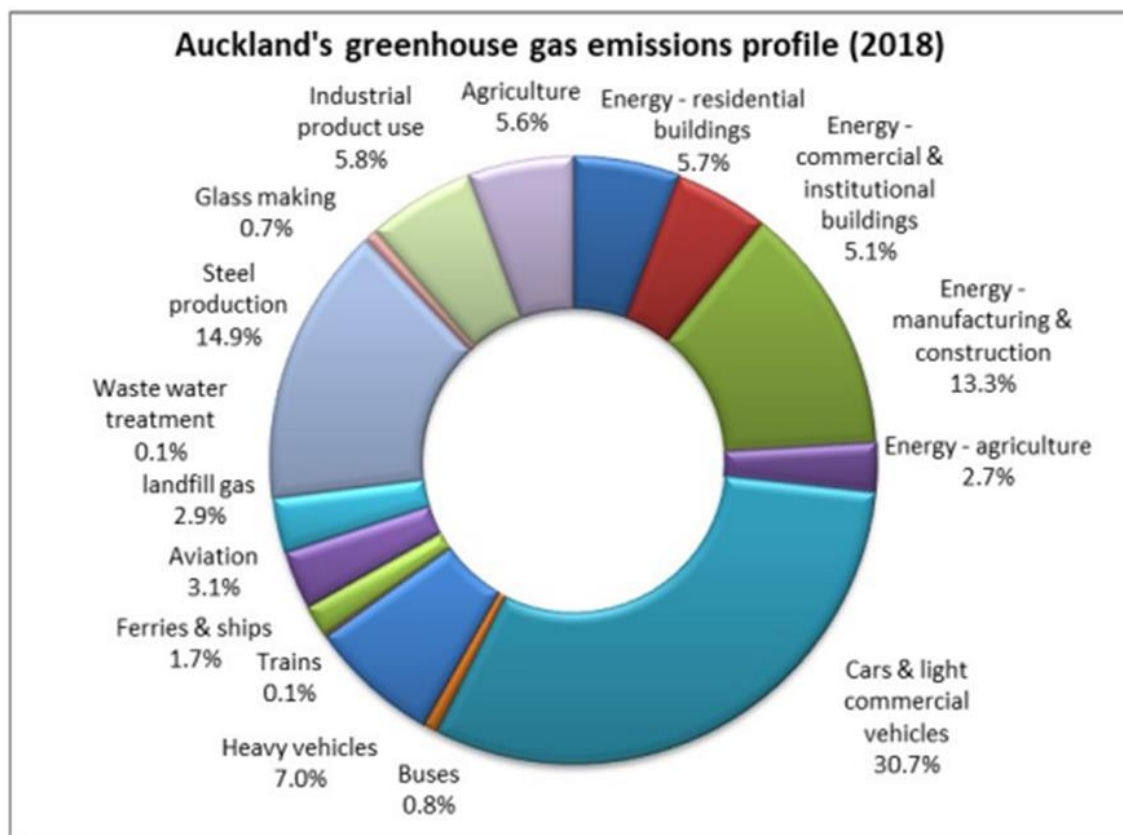


Figure 1 - Auckland's gross greenhouse gas emissions

Overall, the largest source of production emissions in Auckland comes from **transport**, which generates 43.4% of Auckland's emissions, with 88.7% of this from travel by road. This includes emissions from private and light commercial vehicles, trucks, buses, trains, ferries and other ships, and aviation.

The second largest source of emissions is **stationary energy**, which generates 26.8% of Auckland's emissions. This includes emissions from electricity and natural gas consumption in residential and commercial buildings and energy use in manufacturing and construction. Transport and stationary energy are likely to be the highest sources of emissions from the Waitākere Ranges Local Board area by some margin.

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<sup>1</sup> Auckland's Greenhouse Gas Inventory to 2018

Industrial processes and product use generate around 21.4% of Auckland’s emissions, which in Auckland are mainly associated with steel production. Emissions from landfilled waste and wastewater treatment (3%) and agriculture (5.6%) are much lower and less of a priority for the board area.

### Consumption emissions

Another way to measure emissions and prioritise our actions to reduce them is through considering consumption emissions – emissions from the products and activities that households buy and do. The chart below (Figure 2) shows the carbon footprint of an average New Zealand household (Stats NZ, 2019).

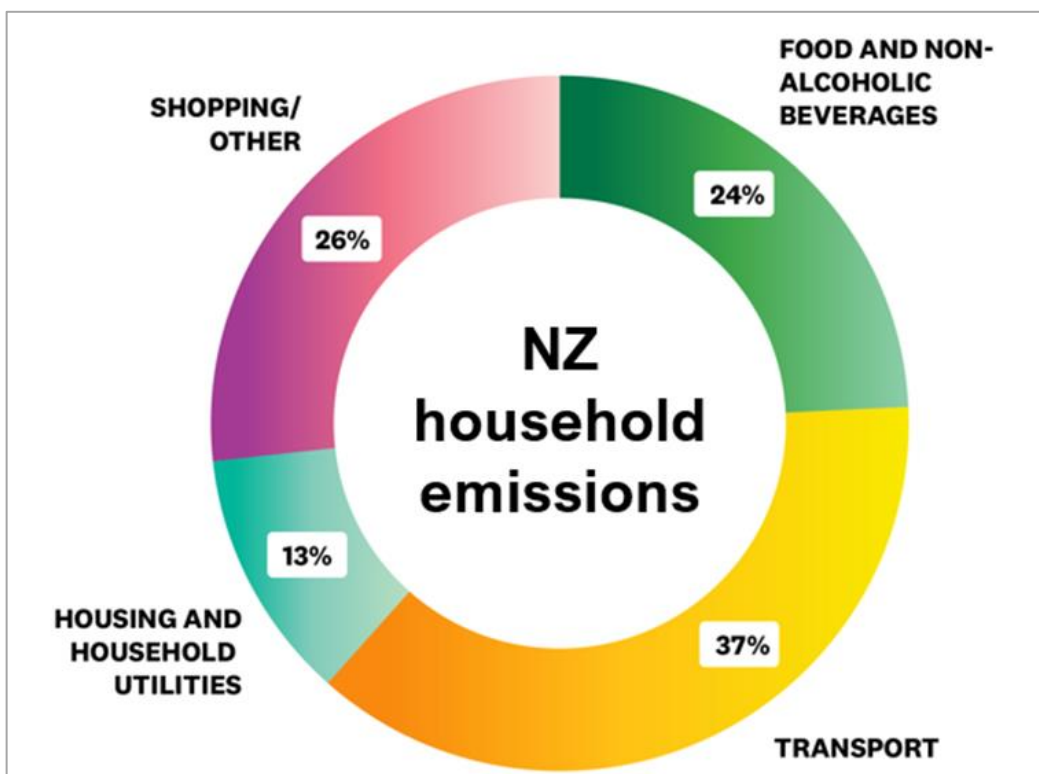


Figure 2 - New Zealand household emissions by category (Stats NZ consumption emissions 2021 with most recent data from 2019)

As Figure 2 shows, when considering what households and communities can do to reduce consumption emissions at a local level, transport is still the largest source of emissions and a top priority for action. Waitākere Ranges residents can also reduce consumption emissions in other areas. For example, projects that support residents to make sustainable low carbon food choices (24% of footprint), save energy in their homes or purchase second-hand clothes, furniture and appliances, can also have an impact.

Some variations in these emissions profiles will be evident across local board areas, but priority areas for action, such as transport, food and stationary energy use, will remain consistent.

### 3. A Te Ao Māori lens

We have used a Te Ao Māori lens to help frame our thinking about, and approaches to, climate change. It helps ensure that taiao / environment, whenua / land, and tangata / people remain the focal point for all climate-related decisions.

The Te Ora o Tāmaki Makaurau Wellbeing Framework was developed by the Mana Whenua Kaitiaki Forum in response to *Te Tāruke-ā-Tāwhiri*. These include:

- manaakitanga
- kaitiakitanga / tiakitanga
- whānaungatanga
- rangatiratanga
- mātauranga
- ōritanga
- tōnuitanga.

These principles can be applied as we develop and implement this action plan, remembering the world is a dynamic and complex ecosystem of whakapapa interconnections and interdependencies. All things – people, birds, fish, trees, weather patterns – are members of a cosmic family. It is critical we recognise the rights and interests of nature, place and people using a whole living systems approach. Further detail is provided in Chapter 8.7 Te Puāwaitanga o Te Tātai of this action plan. Key concepts are described below.

Ngā Aho Taiao	The ability and capacity of ngā taiao / nature anchor to sustain and maintain whole living systems and regenerate its own mauri, while contributing to the mauri of people and land.
Ngā Aho Whenua	The ability and capacity of the whenua / land anchor to sustain and maintain whole living systems and regenerate its mauri, while contributing to the mauri of people and nature.
Ngā Aho Tangata	The ability and capacity of the tangata / people to sustain and maintain their mauri, while contributing to the mauri of the land and nature.

### 4. What are climate actions?

Climate actions are projects, initiatives and activities which better connect us to the taiao / environment and whenua / land.

Climate actions aim to reduce our greenhouse gas emissions to achieve a better balance and reciprocity between the carbon we emit and the carbon that our environment is able to absorb or sequester.

They will:



- result in changes to our lifestyles, businesses, infrastructure, buildings, consumption patterns, behaviour and environment, which reduce or eliminate greenhouse gas emissions
- help restore the taiao / environment, whenua / land, seas / tangaroa, and awa and puna / waterways
- increase our ability to respond to the climate changes already locked in by helping us prepare, adapt and become more resilient

This action plan highlights existing climate action activity in Waitākere Ranges and where this activity could be expanded to enhance outcomes. It also identifies new climate actions that could be undertaken to support climate change mitigation and adaptation.

## 5. Developing the plan

The development of this climate action plan included a stocktake of local and Auckland-wide low carbon initiatives that are either making a positive contribution towards reducing the Waitākere Ranges Local Board area’s carbon footprint, building community resilience, or supporting climate adaptation. Waitākere Ranges has strong business, iwi and community organisations that support these climate goals, with over a hundred existing initiatives identified that are already underway. A summary of these initiatives is provided in Appendix 1. This action plan aims to accelerate or expand these.

Representatives of the organisations involved in existing Waitākere Ranges-based initiatives were invited to participate in workshops to develop this plan. Eight engagement events were held between May and September 2022, canvassing the views of 52 people to help understand climate action priorities of the community. The eight events included five public focus groups held across Glen Eden, Titirangi, Swanson and Piha. The other three engagement events were a hui with the West Auckland Māori Thought Leadership Collective, an online discussion with the Combined Residents and Ratepayers groups, and a stand at the Living Lightly event in Titirangi where an “ideas wall” was used for the community to suggest priority actions.

One-on-one interviews were also held with key community stakeholders, Auckland Council staff, and council-controlled organisations. An acknowledgement of the contributions of community stakeholders is contained in Appendix 2.

This action plan also draws strongly on the consultation undertaken for other plans and on insights drawn from community initiatives including:

- Waitākere Ranges Local Board Plan 2020
- Te Tāruke-ā-Tāwhiri: Auckland’s Climate Plan 2020
- Other existing plans and initiatives highlighted within each section of this action plan.

Several workshops were held with mana whenua through the Infrastructure and Environmental Services Mana Whenua Forum to seek their feedback on development of local climate action plans.

Feedback that mana whenua have provided to Auckland Council on previous consultations, such as the Ten-Year Budget 2021-2031, was also reviewed. Key documents developed with and by West Auckland Māori such as Waitākere ki tua and the Māori Thought Leadership Collective West Auckland COVID-19 Impact Report also guided development of the plan.

## 6. Adapting to climate change

Auckland Council has produced a Climate Change Risk Assessment (CCRA) technical report series to assess the impacts of climate change on people, environment and infrastructure<sup>2</sup>. The CCRA takes into consideration climate predictions, our current understanding of climate change impacts, and Auckland's current environment in order to better understand the key risks and vulnerabilities for Auckland. The CCRA assessed our vulnerability to climate change in Waitākere Ranges<sup>3</sup>, examining the degree to which our communities are susceptible to, and able to cope with, the impacts of climate change.

The CCRA methodology produces a high-level description of vulnerability for each local board area that may not sufficiently identify specific drivers of vulnerability for locations within each local board area. For example, the extreme weather events in January and February 2023 indicate a need for a more in-depth approach to vulnerability assessment to reflect the impact from landslips within the Waitākere Ranges Local Board area. **Factoring in the likelihood and consequence of uncontrolled wildfires is a further consideration, particularly for communities on the west coast.**

The Waitākere Ranges Local Board area is dominated by extensive tracts of forest, which generally reduces the Impact Index Scores generated by the CCRA. Areas subject to climate impacts include Laingholm Bay, which is vulnerable to coastal inundation. Households in the Waitākere Ranges Local Board area have on average relatively high incomes, which generally increases the Adaptive Capacity scores. However, averages do not reflect individual differences in household adaptive capacity and the ability to adapt varies across the board area, ranging from low to very high. The more urbanised neighbourhoods in the east of the local board area, including Glen Eden, have lower average household incomes and are identified as having low adaptive capacity.

Some of the key risks we need to consider and respond to include:

- **Increased frequency and severity of high intensity rainfall events and extended droughts will increase the likelihood of flooding, landslips and wildfires posing risks to people, infrastructure and services**
- Sea level rise will put infrastructure and ecosystems at risk while flooding inundation poses direct and indirect risks to people, infrastructure and services

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<sup>2</sup> [Climate Change Risks in Auckland](#)

<sup>3</sup> [An Assessment of Vulnerability to Climate Change in Auckland](#)

- The changing climate will create an environment that allows water and vector-borne diseases to thrive, which will affect people and ecosystems
- Terrestrial and freshwater ecosystems are at risk and face a combination of stressors
- Changes to these ecosystems are likely to impact on human wellbeing and the economy
- Increasing hot days pose a risk to the health and wellbeing of people.

The ability of people and households to adapt and respond to these risks is dependent on many factors, such as:

- Where people live, their socio-economic circumstances, their support networks, their occupations and their ability to have options can impact their vulnerability. Areas of the board with higher levels of socio-economic deprivation in the east of the local board area, as well as areas impacted by the extreme weather events in early 2023, will need more support to be resilient to climate risks.
- Children and older people will be more vulnerable to some effects.
- Māori (12.7% of people living in the board) and Pacific peoples (11.7%)<sup>4</sup> may be more affected than others by some climate effects, due to their generally younger age structure as well as other factors.
- Targeted programmes to support the diverse ethnic groups living in Waitākere Ranges to understand and respond to climate impacts will also be needed, particularly for those who do not speak English (around 4% of the board’s population).

The extreme weather events in early 2023 and loss of lifeline utilities for extended periods highlight the importance of all Waitākere Ranges communities working to build greater climate resilience. The Tāmaki Makaurau Recovery Plan and “Making Space for Water” initiatives will enable continuing recovery from the devastating impacts of the 2023 weather events, as well as preparations for the future. Owners of properties affected by the 2023 extreme weather events will be working through the implications of the property risk categorisation process, including the buy-out programme for Risk Category 3 properties.

## 7. Implementing the plan

This action plan builds on Waitākere Ranges’s existing environmental and sustainability initiatives, and the commitment in the Waitākere Ranges Local Board Plan 2023 to take action on climate change. It focuses on the priority areas from *Te Tāruke- ā-Tāwhiri*, which include natural environment, built environment, transport, economy, community and coast, food, Te Puāwaitanga ō Te Tātai, and energy and industry. The plan identifies goals for each priority area, and actions that contribute to achieving those goals.

<sup>4</sup> [2018 Census Results, Local Board special information sheets](#)



There are a range of different mechanisms the Local Board can take to enable implementation of this plan, including:

- **Leading** – including delivering council projects within the board area and using powers available to drive change (including landowner approvals). This action area also includes Local Board members leading by example and includes ensuring that climate actions are considered and emphasised in all local board decision-making.
- **Funding** – provision of funds through grants and other mechanisms to support delivery of community or Māori-projects.
- **Partnering** – including building relationships with key organisations and individuals who can help deliver action.
- **Advocacy** – including to the Governing Body and other organisations such as Waka Kotahi NZ Transport Agency and Auckland Transport.
- **Recognition** – including promoting actions and recognising others.
- **Supporting** – providing assistance for existing or emerging action such as letters of support and staff time.

**The local board must ensure it is using all available levers to tackle the climate crisis.**

A local climate activation work programme will amplify collective climate action and strengthen relationships between community groups and networks. This work programme will be designed with the local board community broker and strategic partnerships broker to complement other community-focused activity within the local board area. This community activation will support the local board to deliver on the actions that relate to leading or funding tangible low carbon activities in the Waitākere Ranges Local Board area. The partnering, advocacy, recognition and support actions in the plan will be undertaken by local board members.



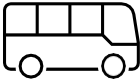
Progress updates will be prepared, setting out progress on each of the eight priorities, and will provide comment in relation to the ‘demonstrating progress’ column for key actions, as well as any targets and metrics identified for each outcome area. Further detail is contained within Section 9 – Monitoring **Framework**.

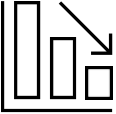
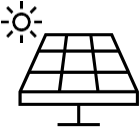
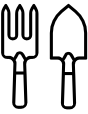
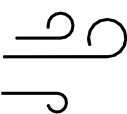
**Key partners that will support delivery of this plan include:**

- mana whenua and Māori communities
- Glen Eden Business Association
- private businesses including small and medium-sized enterprises (SMEs) and multi-nationals
- community organisations
- schools and tertiary providers
- central government, including Kāinga Ora
- Eke Panuku Development Auckland
- utility providers and renewable energy businesses

## 8. Flagship projects

A flagship project tackles climate issues distinct to each Local Board area using the unique strengths and character of the board and community. Projects are particularly impactful in reducing carbon emissions and/or empowering community resilience within key priority areas.

<p>1. Taiao māori Natural environment</p>		<p>Join the Urban Ngahere Programme to better understand levels of tree cover in the urban areas of the board area through LiDAR analysis of tree coverage</p> <p>Provide information about native forest regeneration and the Emissions Trading Scheme to landowners in the Waitākere Ranges Foothills</p>
<p>2. Taiao hanga Built environment</p>		<p>Investigate installing solar on facilities with significant solar potential, including:</p> <ul style="list-style-type: none"> <li>• Titirangi War Memorial Library and Hall</li> <li>• Glen Eden Library</li> <li>• Glen Eden Recreation Centre</li> <li>• Lopdell House and Te Uru Waitākere Contemporary Gallery</li> <li>• Ōkaurirahi Ceramco Park Recreation Centre</li> </ul>
<p>3. Ikiiki Transport</p>		<p>Work with Auckland Transport to secure better bus services to the western line train stations including investigating feasibility of mini-bus services to and from coastal communities and trialling an electric on-demand rideshare service in Glen Eden.</p> <p>Champion opportunities for improved active travel within the Waitākere Greenways Plan, such as the cycleway from Henderson to New Lynn.</p> <p>Identify the need for secure cycle and scooter parking at public transport access points.</p> <p>Advocate for more electric vehicle charging carparks in the Waitākere Ranges Local Board area and adjacent board areas particularly in Glen Eden and Henderson.</p> <p>Hold a local challenge to reduce single person car trips by promoting alternatives</p>

<p>4. Ōhanga Economy</p>		<p>Host a programme for local businesses in partnership with the Sustainable Business Network, Glen Eden Business Association and local businesses to support local businesses in:</p> <ul style="list-style-type: none"> <li>• understanding climate change</li> <li>• preparing to measure, reduce, certify and offset emissions</li> <li>• planning for climate risk and a just transition</li> <li>• preparing for emergencies and developing resilient infrastructure and processes.</li> </ul>
<p>5. Ngā hapori me te tahatai Community and coast</p>		<p>Fund establishment of a community climate <b>action programme</b> to support community activities to implement the action plan</p> <p>Support development of Shoreline Adaption Plans for the northern Manukau Harbour and western coast of the board from Whatipu to Te Henga / Bethells Beach</p> <p>Support communities to develop their own disaster resilience plans and deliver disaster preparedness workshops with interested communities and neighbourhoods</p> <p>Share the Lifestyle Block resilience handbook to increase the resilience of lifestyle block owners</p>
<p>6. Ngā kai Food</p>		<p>Support implementation of Mana Motuhake o te Kai, the West Auckland Kai Sovereignty Plan, which aims to support the localisation and creation of a kai ecosystem, leveraging ancestral practices to inform community-led solutions and enabling whānau and community wellbeing</p>
<p>7. Te puāwaitanga o Te Tātai</p>		<p>Identify opportunities to support the five pou identified by the Māori Thought Leadership Collective</p> <p>Identify opportunities to partner with mana whenua <b>and marae</b> on new climate action and environmental projects</p>

\*Further details of flagship projects are within each section of the action plan and are shown as Year 1 projects.

## 8.1 Taiao māori - Natural environment

*Toitū te marae a Tane-Mahuta, toitū te marae a Tangaroa, Toitū te tangata*  
*If the land is well and the sea is well, the people will thrive*

Taiao māori – Natural environment is a priority of Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan because 'the quality of our beaches, harbours, bush, streams and maunga are dependent on how we treat them'. Whilst the natural environment is an interconnected ecosystem, made up of each of these parts – it is the bush which is the focus of this section of our climate action plan because of the impact trees can make in sequestering carbon. The oceans also sequester carbon, and we know that responsible land management supports catchment and ocean health.

The Waitākere Ranges is classified as a heritage area by the Waitākere Ranges Heritage Area Act 2008 and is of national, regional and local significance. The heritage area contains approximately 21,200 hectares of indigenous forest, of which approximately 9,500 hectares (45 per cent) is kauri-podocarp forest. This is one of the largest blocks of continuous indigenous vegetation remaining in Auckland. Two of the most significant wetlands in Auckland are also located within the heritage area; at Te Henga / Bethells Beach and at Whatipu. The indigenous terrestrial and aquatic ecosystems in the heritage area are heritage features.

The forest of the heritage area (Te Wao Nui ā Tiriwa – the great forest of Tiriwa) is a taonga (treasure) that has significant cultural and spiritual values for mana whenua. For Te Kawerau ā Maki iwi, the death of the forest is an existential threat. Kauri are the tupuna (ancestors) and the rangatira (chiefs) of the forest. Their health is linked to the health of numerous other plants and animals within the ecosystem, and to the health of the iwi. Kauri dieback disease is a major threat to the kauri forest ecosystem of the heritage area. In response to the spread of kauri dieback, in 2017 Te Kawerau ā Maki placed a rāhui (customary prohibition) over the Waitākere forest restricting use of, and access to the forest to safeguard it both physically and spiritually. This was supported by a Controlled Area Notice under the Biosecurity Act 1993.

Outside the Waitākere Ranges in some of the more urban areas of the board, street tree coverage is low, which increases the risk to people from hot days. The variations in tree cover present opportunities, both for planting in areas of low cover, and protection in areas of strong tree cover. The local board could invest in the Urban Ngahere programme to better understand tree coverage areas across the board area as a whole. Pest control and measures to manage kauri dieback are also critical in managing the natural environment to maximise carbon uptake.

There is also concern that while community groups are working hard to plant trees, we are losing more unprotected trees on private property as housing development accelerates. The role of responsible pet ownership in protecting the Waitākere Ranges ecosystem is also important. Education and awareness of the need to protect existing trees and carry out responsible pet ownership is required. The local board can also advocate for regional or national mechanisms to provide better protection for existing trees.

There is a network of effective community conservation groups in Waitākere Ranges. Pest Free Waitākere Ranges Alliance provides a coordinating role for over 70 groups across the local board area, who undertake a variety of biosecurity activity and biodiversity restoration initiatives. The North-West Wildlink is creating safe, connected and healthy habitats for native wildlife across



Auckland. These act as stepping stones where wildlife can travel and breed safely between conservation hotspots such as the Hauraki Gulf Islands and the Waitākere Ranges. Extensive work to create this green corridor has been underway since 2006. EcoMatters Environment Trust deliver a range of programmes and services such as supporting community nurseries, and **community** weed bins where residents can dispose of invasive weeds free of charge and help prevent pest plants from spreading into the native bush we love. The Our Backyard and Buffer Zones projects involve supporting removal of pest plants on private property to prevent garden escapees into the Waitākere Ranges. The local board provides approximately \$460,000 of funding a year to support community conservation activity in the board area.

**Together with sustainable land management, the activities identified below will:**

- help keep us cooler in summer
- reduce the effect of heavier rainfall and flooding from climate change
- support our native ecosystems.

### Goals

- protect existing ngahere
- increase tree cover in areas of low coverage
- enhance existing open space
- enhance community understanding of the role of trees in sequestering carbon.

**Current activities, actions, programmes and plans:**

- [Waitākere Ranges Heritage Area Monitoring Report](#)
- [Waitākere Ranges Strategic Weed Management Plan](#)
- [Big Blue Waitākere: Coastal and Marine Information Report](#)
- [Pest Free Waitākere Ranges Alliance](#)
- EcoMatters Environment Trust

### Opportunities and benefits

**These actions will have much broader positive impacts:**

- Carbon sequestration
- More shelter and sunshade provided
- Less overheating
- Biodiversity increased
- Air quality improved
- Local sources of food
- Prevents erosion and improves water quality
- Improved health and wellbeing
- Increased property values
- Reduced flood risk
- Sustains and enhances mauri
- Increased resilience

Climate actions all add up. Actions we take as individuals, families, communities and businesses all contribute towards our collective climate goals. The actions each of us takes depends on our individual circumstances, including where we live, our financial situation, employment context, skills, physical ability, and time availability. Your actions may be focused on other action areas within this plan, as not all of us can contribute to all action areas. The following table outlines actions you can take to contribute to the Taiao māori – Natural environment priority:

### What you can do

- Plant trees and plants to support birds, bees, and native wildlife in your garden
- Retain existing trees on your property
- Control pest plants and animals on your property
- Join a local restoration group or look out for restoration events in your community
- Seek funding for your restoration project through:
  - Local Board Community Grants
  - Regional Environment and Natural Heritage Fund



Figure 3 – Kauri Dieback protection measures

## Taiao māori - Natural environment actions

Goal	Action	Who	Timing	Demonstrating progress
Protect existing ngahere	Continue to fund and support community conservation groups through the Pest Free Waitākere Ranges Alliance to protect and restore the local ngahere, and restore slip sites	Waitākere Ranges Local Board Environmental Services	Ongoing	Funded conservation activity
	Continue to support measures to minimise the spread of kauri dieback disease, including bush track upgrades, hygiene procedures and training for volunteers and contractors, messages around respecting temporary and permanent track closures, and support for installing and using hygiene stations	Environmental Services Parks and Community Facilities Waitākere Ranges Local Board	Ongoing	Funded kauri dieback measures
	Advocate for the adoption of regional or national mechanisms which introduce greater protection for trees on private land	Waitākere Ranges Local Board	Year 2	Evidence of advocacy (submissions, emails, letters)
	Publicise Auckland Council's responsible pet ownership collateral to ensure people understand the impact of pets on the natural environment and how to reduce impacts through responsible behaviours	Waitākere Ranges Local Board Environmental Services Parks and Community Facilities Connected Communities	Year 2	Shared responsible pet ownership collateral
Increase tree cover in areas of low coverage	Join the Urban Ngahere Programme to better understand levels of tree cover in the urban areas of the board area	Waitākere Ranges Local Board	Year 1	Investment in Urban Ngahere Programme and LiDAR analysis of tree coverage in urban areas of the board
	Develop and deliver a programme of funded tree plantings to increase tree coverage in areas of low cover	Waitākere Ranges Local Board Parks and Community Facilities	Years 2-4	Completed tree planting programme with funding allocated

	Offer grants, incentives and support for tree planting on private land, particularly in urban areas and in the Waitākere Ranges Foothills surrounding the Regional Park, and provide information on what to plant where and how to grow native plants	Waitākere Ranges Local Board Environmental Services	Ongoing	Evidence of grants, incentives, support provided
	Provide information about native forest regeneration and the Emissions Trading Scheme to landowners in the Waitākere Ranges Foothills	Environmental Services	Year 1	Information provided to landowners
	Advocate for national and regional funding (e.g. Natural Environment Targeted Rate) to enable more tree planting	Waitākere Ranges Local Board	Ongoing	Evidence of advocacy
	Offer grants, incentives and support to encourage low carbon initiatives in schools, such as growing trees and tree planting in school grounds	Waitākere Ranges Local Board Environmental Services	Ongoing	Evidence of support
Enhance community understanding of the role of trees in climate change mitigation	Use planting days and weeding bees as an educational opportunity for local residents and schools to learn about the climate issues we face and available solutions	Waitākere Ranges Local Board Environmental Services Parks and Community Facilities Community Groups	Ongoing	No. of planting and weeding days with a climate education component

### Delivering on the actions and monitoring progress

The key internal Auckland Council departments involved in delivering these actions with the Local Board are Environmental Services, and Parks and Community Facilities.

Regular progress updates, setting out progress on this priority and key actions will be prepared. The metrics set out below will also be used to measure progress against the Natural Environment outcome area of this plan. Refer to Section 10 – Monitoring Framework for more information.

- Retention of % canopy cover in public open space
- Increase in % of canopy cover in areas of low coverage
- Number of trees planted
- Number of community weeding bees.



## 8.2 Taiao hanga - Built environment

*Ehara tāku toa i te toa takitahi, engari he toa takitini*  
*My strength is not as an individual, but as a collective*

**The built environment:** *Te Tāruke-ā-Tāwhiri* defines the built environment as including ‘the buildings where we live, work and learn, the infrastructure systems that enable the region to function, and the urban spaces that shape our city.’ The overarching goal for Taiao hanga - Built Environment in *Te Tāruke-ā-Tāwhiri* is to achieve a low carbon, resilient built environment that promotes healthy, low impact lifestyles. Our buildings are responsible for significant climate-changing pollution. Emissions from the construction sector have leaped 66% in a decade. Constructing and renovating New Zealand buildings now produces climate-changing pollution equivalent to the emissions from one million cars on the road every year<sup>5</sup>.

In addition to buildings, the built environment also includes the urban spaces that shape our city and the spaces between buildings. Significant carbon reduction can occur through quality urban planning which considers access to sustainable transport and amenities which reduce the need to travel. The 15 minute city model ensures access to services and amenities within a 15 minute walk.

**Local opportunities:** Large-scale development has been enabled through the Auckland Unitary Plan and National Policy Statement on Urban Development, meaning there is either the potential to add significant carbon to the atmosphere, or to reduce carbon through careful planning, design and action. The board will continue to work with developers and organisations such as Kāinga Ora, Eke Panuku, Auckland Council, Watercare, Auckland Transport, Waka Kotahi NZ Transport Agency, KiwiRail and Transpower to support carbon reduction actions.

Te Kawerau Iwi Tiaki Trust have recently received funding for a feasibility study report, concept design and planning to develop a marae and papakāinga in Te Henga. This provides an opportunity for iwi to showcase kaitiakitanga through a regenerative innovative design.

**Auckland Council provides a Home Energy Advice service about how to make an existing home or new build warmer, drier and more energy-efficient.** This, and other programmes focusing on healthy homes, particularly rental homes, helps to reduce environmental impacts and minimise health risks, enabling people to keep their homes healthy, comfortable and dry.

**Greenhouse gas emissions from local council facilities:** Auckland Council has targets in the Long-Term Plan to halve operational greenhouse gas emissions by 2030. Local facilities including community facilities and local parks contribute almost half of Auckland Council’s operational emissions. This is mostly from the combustion of natural gas for heating aquatic centres and emissions related to electricity consumption.

Regionally funded programmes to reduce greenhouse gas emissions include the Aquatic Centre Boiler Phaseout, Building Management system upgrades (includes Lopdell House), Gigawatt (investment in solar photovoltaics) and the Sustainable Asset Policy which requires green star

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<sup>5</sup> <https://www.nzgbc.org.nz/zerocarbon>

ratings for major facility upgrades and decarbonisation of major existing facilities (includes Waikumete Cemetary).

As local boards have decision making authority for community facilities, libraries and parks, local boards have direct control over actions to reduce greenhouse gas emissions from these facilities. Initiatives like phasing out fossil fuels, improving energy efficiency and investing in renewable energy, typically reduce the operating costs of local facilities. Under the governance framework review, operational savings will be available to the local board to re-invest in services.

**Measuring carbon reduction:** The Ministry of Business, Innovation and Employment Building for Climate Change programme will set targets around energy use and carbon emissions. To meet the goals, changes will be made to current building laws; both the Building Act and the Building Code. The greatest carbon reductions will be seen when Life Cycle Assessment and carbon reduction is a requirement of the Building Code. Therefore, the Local Board will advocate for changes to the Building Code as soon as possible.

Ahead of Life Cycle Assessment and carbon reduction being a requirement of the building code, green building frameworks can be used to help us design and build better. The most commonly used green building frameworks are the IS Rating Schemes by the Infrastructure Sustainability Council and those managed by the New Zealand Green Building Council; the most commonly used being Greenstar (for commercial / community buildings) and Homestar (for homes) and more recently Greenstar Communities (for urban scale developments).

## Goals

- Reduce carbon emissions from community facilities by 50% by 2030
- All new buildings operate at net zero carbon by 2030 and all existing buildings operate at net zero carbon by 2050<sup>6</sup>
- Reduce waste generation through community facility operation and renewals
- Achieve greater water efficiency
- Support more transit orientated development

## Current activities, actions, programmes and plans

National frameworks:

- [MBIE Building for Climate Change Programme](#)
- [A Zero Carbon Road Map for Aotearoa's Buildings](#)
- [NZGBC Zero Carbon Certification](#)
- [Infrastructure Sustainability Council's Rating Schemes](#)
- [Place Based Approaches to Net Zero](#)

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<sup>6</sup> World Green Building Council global project goal

Residential:

- [Warmer Kiwi Homes Grants](#)
- [Healthy Homes Standards](#)
- [Kainga Ora Retrofit Programme](#)
- [Free Water Checks](#)
- [Create a Healthy, Energy Efficient Home](#)

### Opportunities and benefits

These actions will have much broader positive effects including:

- lower power, water and waste bills
- warmer, drier, healthier homes
- healthier more productive work environments
- cleaner air
- buildings durable and adaptable enough to meet the needs of future generations of occupiers
- reuse of construction materials and a circular economy for construction materials
- employment opportunities for a skilled sustainable construction sector.

Climate actions all add up. Actions we take as individuals, families, communities and businesses all contribute towards our collective climate goals. The actions each of us takes depends on our individual circumstances, including where we live, our financial situation, employment context, skills, physical ability, and time availability. Your actions may be focused on other action areas within this plan, as not all of us can contribute to all action areas. The following table outlines actions you can take to contribute to the Taiao hanga – Built environment priority:

### What you can do at home

- ❑ Complete a Life Cycle Assessment to understand the carbon footprint of your development and take steps to reduce embodied and operational carbon when building new or renovating.
- ❑ Warmer Kiwi Homes Grants. Homeowners can access funding for up to 90 per cent of the cost of insulation and energy efficient home heating. See [eeca.govt.nz/our-work/programmes-and-funding/efficient-homes/](https://www.eeca.govt.nz/our-work/programmes-and-funding/efficient-homes/)
- ❑ Borrow a HEAT Kit (Home Energy Audit Toolkit) from an Auckland Library to check your home insulation and find out how to save on your power bill
- ❑ Do an online HomeFit assessment to check how easily a home can be kept warm, dry and safe. See <https://www.nzgbc.org.nz/homefit>
- ❑ Talk to Auckland Council's Home Energy Advisor to get advice on the right materials and strategies to create a warmer, drier and more sustainable home. Call 09 3010101
- ❑ Building or buying new? Look for Homestar certification. See <https://www.nzgbc.org.nz/>

### What you can do at work

- ❑ Office space. Assess the energy efficiency of your business with NabersNZ. See <https://www.nzgbc.org.nz/>
- ❑ Need energy efficiency expertise? For programmes and funding, see <https://www.eeca.govt.nz/our-work/programmes-and-funding/productive-and-low-emissions-business/>
- ❑ New space? Look for NabersNZ or Greenstar certifications. See <https://www.nzgbc.org.nz/>



## Taiao hanga – Built environment: Actions

Goal	Action	Who	Timing	Demonstrating progress
Reduce carbon emissions from community facilities by 50% by 2030	Assess utilisation of community facilities. For any underutilised facilities, assess required upgrades to make buildings fit for purpose, or consider divestment	Parks and Community Facilities	Year 2	Completed assessment report
	Ensure the planned and regionally funded programme to upgrade building management systems that control heating, ventilation, cooling and other mechanical systems within Lopdell House goes ahead	Parks and Community Facilities	Year 5	Project completion by 2027
	Investigate installing solar on facilities with significant solar potential, including: <ul style="list-style-type: none"> <li>• Titirangi War Memorial Library and Hall</li> <li>• Glen Eden Library</li> <li>• Glen Eden Recreation Centre</li> <li>• Lopdell House and Te Uru Waitakere Contemporary Gallery</li> <li>• Ōkaurirahi Ceramco Park Recreation Centre</li> </ul>	Parks and Community Facilities	Year 1	Feasibility Assessment completed by end 2023
	Require that the local board’s work programme prioritises projects that decarbonise council-owned facilities. In particular, advocate for the use of alternative fuels for cremations at Waikumete Cemetery	Waitākere Ranges Local Board Parks and Community Facilities	Ongoing	Local Board work programme
	Request that officers assess replacing gas water heating at the Craw Homestead and Kettle House with solar electric heating	Waitākere Ranges Local Board Parks and Community Facilities	Year 2	Completed assessment
	Request officers assess the feasibility of upgrading lighting, heating, water heating and insulation in Waitākere Ranges facilities. Where cost effective, these upgrades are to be prioritised within the Customer and Community Facilities work programme.	Waitākere Ranges Local Board Parks and Community Facilities	Year 2	Completed assessment
	Target greenstar greenhouse gas	Waitākere	Ongoing	Number and

	emissions and life cycle impacts credit for any new community facilities under local board decision making authority	Ranges Local Board Parks and Community Facilities		address of projects targeting Greenstar credits
All new buildings operate at net zero carbon by 2030 and all existing buildings operate at net zero carbon by 2050	Advocate to Ministry of Business, Innovation and Employment for changes to the building code to require life cycle assessment as soon as possible	Waitākere Ranges Local Board	Year 2	Evidence of advocacy (submission, letter, email)
	Advocate for the reduction of embodied and operational carbon in major infrastructure projects, renovations and new developments that the board is consulted on and for low carbon builds to be included in the Waitākere Ranges Foothills Design Guide	Waitākere Ranges Local Board	Ongoing	Number and address of projects where carbon reduction was advocated for
	Support programmes focused on healthy homes, particularly rental homes, to reduce energy costs and emissions, and improve health outcomes	Waitākere Ranges Local Board Environmental Services	Year 2	Evidence of support
Divert a minimum of 75% of construction and demolition waste generated through Community Facilities work programme from landfill	Ensure waste minimisation targets are included in contracts for community facility renewals: <ul style="list-style-type: none"> <li>For renewals involving capital works and generating construction and demolition waste – 75% diversion rate.</li> <li>For operational waste minimisation – 40% waste reduction by 2040.</li> </ul>	Parks and Community Facilities	Year 2	Number and % of renewal projects containing stated targets
	Require all local facilities to have recycling and food waste collection services	Waitākere Ranges Local Board Parks and Community Facilities	Year 2	Evidence of contracted recycling and food waste collection services at all facilities where Local Board has decision making authority
Achieve greater water efficiency	Continue to support household water efficiency and increased water storage through the provision of	Watercare	Ongoing	Funded community activity

	educational programmes			
	Assess the feasibility of water efficiency upgrades in parks and community facilities. This includes upgrading irrigation controls, irrigation systems, installing flow restrictors and low-flow faucets and shower-heads. Prioritise these upgrades within the Customer and Community Facilities work programme.	Parks and Community Facilities	Ongoing	Completed assessment
	Assess the feasibility of installing rainwater harvesting on council owned buildings within Waitākere Ranges and prioritise these upgrades within the Customer and Community Facilities work programme.	Parks and Community Facilities	Year 2	Completed feasibility
	Assess the feasibility of installing bores at the following sportsfields where water use is high: <ul style="list-style-type: none"> <li>- Parris Park (24 million litres in FY22)</li> <li>- Harold Moody Reserve Duck Park (6 million litres in FY22).</li> </ul> Where feasible, prioritise investment within the Customer and Community Facilities work programme.	Parks and Community Facilities	Year 2	Completed feasibility
<b>Support more transit orientated development</b>	Advocate for policies which support transit-orientated development and a more compact urban form.	Waitākere Ranges Local Board	Ongoing	Evidence of advocacy (submissions, emails, letters)
	Support quality proposals for new medium and high-density development in the board area and engage with local residents to explain the rationale for these developments	Waitākere Ranges Local Board	Ongoing	Evidence of support (submissions, emails, letters)
	Engage with residents on unitary and other plan changes intended to support modal shift and work with communities to support them to understand and adjust to these changes	Waitākere Ranges Local Board Auckland Council	Ongoing	Evidence of engagement



## Delivering on the actions and monitoring progress

The key internal Auckland Council departments involved in delivering these actions with the Local Board are Parks and Community Facilities, Chief Sustainability Office, Regulatory Services and Waste Solutions.

Regular updates setting out progress on this priority and key actions will be prepared. The metrics set out below will also be used to measure progress against the Built Environment outcome area of this plan. Refer to Section 10 – Monitoring.

- % reduction in community facilities carbon emissions
- Number of zero carbon developments completed
- Number of community facility renewals projects meeting construction waste diversion targets.



Figure 4 - Opening of the Rangatū playground in the new Penihana subdivision in Swanson

## 8.3 Ikiiki - Transport

The ultimate goal of the Ikiiki (Transport) priority within Te Tāruke-ā- Tāwhiri: Auckland's Climate Plan is 'a low carbon, safe transport system that delivers social, economic and health benefits for all'.

Transport accounts for nearly half (44 per cent) of Auckland's greenhouse gas emissions. People living in Waitākere Ranges usually get to work by private vehicle (62 per cent) or company vehicle (12.6 per cent)<sup>7</sup>.

There are strong links between the built environment and transport in planning for low carbon communities. Waitākere Ranges contains a network of peri-urban centres in the east of the board area including Laingholm, Titirangi, Glen Eden, Oratia and Swanson, through to the more isolated coastal settlements of Te Henga (Bethells), Anawhata, Piha, Karekare, Whatipu, Huia and Little Huia, Cornwallis and Parau. The transport challenges for the coastal settlements differ greatly from the more urban centres, and require different approaches to encourage low carbon modes of transport. Some of the challenges to low carbon transport in the board area include:

- Only part of the area being served by public transport, with the Western Line providing the only Rapid Transit Network. Stations are located at Glen Eden, Sunnyvale, Henderson, Sturges Road, Ranui and Swanson (some stations are in the neighbouring Henderson-Massey Local Board)
- Limited Park and Ride capacity at Glen Eden, Sunnyvale and Swanson
- The isolated location of west coast communities relative to train stations
- Cycling infrastructure is limited. The local centres of Glen Eden, Titirangi and Swanson are not connected to the wider cycling network
- Public safety concerns for takeup of active transport options
- Visitor management to remote West Coast beaches; no public transport and constrained parking.

Major infrastructure investment is identified in the Regional Land Transport Plan 2021-2031 (RLTP) to improve Auckland's transport network to accommodate growth, increase travel choice, provide better access and connectivity, improve the resilience and sustainability of the transport system and significantly reduce the greenhouse gas emissions it generates. Whilst the projects identified within the RLTP will improve transport throughout wider Auckland, there are no projects specifically identified that focus on transport within the Waitākere Ranges local board area.

The RLTP also includes a \$200 million local board initiatives fund to be split between Auckland's 21 local boards. These provide for an ongoing programme of smaller-scale local transport improvements. Each local board decides on its own investment initiatives.

Equitable access to sustainable travel options is a key issue. Auckland's current car dependent transport systems mean that many Aucklanders who cannot drive or afford to own a private vehicle have limited mobility. More active transport modes like walking and cycling also aren't workable for

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<sup>7</sup> <https://www.stats.govt.nz/tools/2018-census-place-summaries/waitakere-ranges-local-board-area#transport>

everyone. Providing convenient, frequent and affordable public transport services will help address these issues. Supporting the transition to affordable low emission vehicles is another important part of the transition to a zero-carbon transport system. Provision for electric vehicle charging in new developments will also be important.

## Goals

- Improve local infrastructure for active and low carbon travel
- Support community action on sustainable travel
- Advocate for and champion low carbon transport connections within Waitākere Ranges and to wider Auckland
- Improve ability to work from home through enhanced internet access and speed

## Current activities, actions, programmes and plans

- [Auckland Regional Land Transport Plan 2021-2031](#)
- [Waitākere Ranges Greenways Plan](#)
- [Auckland's Low Emission Bus Pathway](#)
- [Travelwise Programme for Schools](#)
- [Walking school bus](#)
- [Bike safe training](#)
- [Travelwise Choices Programme for Organisations](#)
- [Transport Emissions Reduction Pathway](#)

## Opportunities and benefits

The actions below will have much broader positive effects including:

- Improving air quality
- Improving public health
- Creating more car-free public spaces to enjoy
- Making cycling and active commuting safer and making us healthier
- Making it cheaper and quicker to get around

Climate actions all add up. Actions we take as individuals, families, communities and businesses all contribute towards our collective climate goals. The actions each of us takes depends on our individual circumstances, including where we live, our financial situation, employment context, skills, physical ability, and time availability. Your actions may be focused on other action areas within this plan, as not all of us can contribute to all action areas. The following table outlines actions you can consider taking to contribute to the Ikiiki – Transport priority:

### What you can do at work

- Sign your workplace up to the Auckland Transport Travelwise Choices programme
- Join Love to Ride, the Aotearoa Bike Challenge
- Join the Walk to Work Challenge
- Choose an electric vehicle
- Access personalised journey planning, cycle and public transport promotions, events and resources at [www.at.govt.nz/choices](http://www.at.govt.nz/choices)

### What you can do at home and in the community

- Walk or cycle more - try out local cycle and walkways
- Join a local bike group like Bike Glen Eden
- Plan your bus or train trip at [at.govt.nz](http://at.govt.nz)
- Find someone to share a ride with at [smarttravel.org.nz](http://smarttravel.org.nz)
- Set up a flexi workspace so you can work from home
- Have a staycation or offset carbon emissions if you fly
- Seek funding from the AT Community Bike Fund: <https://at.govt.nz/cycling-walking/at-community-bike-fund/>





Figure 5 – Glen Eden Train Station

## Ikiiki - Transport actions

Goal	Action	Who	Timing	Demonstrating progress
Improve local infrastructure for active and low carbon travel	Champion opportunities for improved active travel within the Waitākere Greenways Plan, such as the cycleway from Henderson to New Lynn	Waitākere Ranges Local Board	Year 1	Prioritised and funded projects from Greenways Plan
	Identify the need for secure cycle and scooter parking at key transport hubs	Auckland Transport Waitākere Ranges Local Board	Year 1	Completed assessment
	Support developments incorporating bike and scooter parking, and e-vehicle charging and rapid transit bus stops, particularly in high density residential and town centre regeneration projects	Waitākere Ranges Local Board Auckland Council	Ongoing	List of developments supported
	Advocate for more electric vehicle charging carparks in the Waitākere Ranges Local Board area and adjacent areas particularly in Glen Eden and Henderson.	Waitākere Ranges Local Board Auckland Transport Eke Panuku Parks and Community Facilities	Year 1	Evidence of advocacy with Auckland Transport, Eke Panuku and other site owners
Support community action on sustainable transport	Hold a local challenge to reduce single person car trips by promoting alternatives	Waitākere Ranges Local Board Environmental Services Auckland Transport	Ongoing	Holding and showcasing challenge
	Support targeted programmes which encourage mode shift for journeys, such as bike to sport programmes, Travelwise or personal journey planning	Waitākere Ranges Local Board Auckland Transport	Ongoing	Funded projects, increase in number of schools and businesses participating in such programmes
	Showcase electric vehicles at existing car focused events such as Wheels out West and	Environmental Services	Year 2	Completed showcase event and social media

	the Hot Rod Clubs that meet at Swanson RSA on Saturdays	Connected Communities Community Groups		sharing of event
	Promote car free days and carpooling to school and sports training and events (e.g. Parrs Park and Harold Moody Park are near train stations).	Environmental Services Auckland Transport Waitākere Ranges Local Board	Ongoing	Promotion through social media, support for working from home or working locally in shared office spaces
	Update the Waitākere Ranges Local Grant outcomes and funding priorities to require applicants to encourage low carbon transport options for events	Waitākere Ranges Local Board	Year 2	Updated grants policy
	Support local active transport initiatives such as low traffic neighbourhoods, tactical urbanism and street closures (such as Streets for People)	Waitākere Ranges Local Board Auckland Transport Environmental Services	Ongoing	Evidence of support
	Promote and support the use of community decarbonisation funds to test innovative community led low carbon transport projects	Environmental Services Waitākere Ranges Local Board	Ongoing	Evidence of promotion and support
Advocate for and champion low carbon public transport connections within Waitākere Ranges and to wider Auckland	Advocate to Auckland Transport for a fair share of transport and public transport investment in the next Regional Land Transport Plan and Regional Public Transport Plan	Waitākere Ranges Local Board	Ongoing	Evidence of advocacy action, such as letters, meetings
	Advocate for faster electrification of buses	Waitākere Ranges Local Board	Ongoing	
	Work with Auckland Transport to secure better bus services to the western line train stations including investigating feasibility of bus services to and from coastal communities, advocating for	Waitākere Ranges Local Board Auckland Transport	Year 1	

	funding to trial a bus service between Glen Eden and Piha, and trialling an electric on-demand rideshare service in Glen Eden			
	Advocate for low carbon transport connections to local ecotourism destinations such as regional park access points as outlined in the Regional Parks Management Plan 2022, including public transport between Glen Eden and Arataki, and dark sky sites	Waitākere Ranges Local Board Auckland Transport Local tour operators	Ongoing	
	Support and champion policy enabling low carbon travel	Waitākere Ranges Local Board	Ongoing	
Improve ability to work from home through enhanced internet access and speed	Work with providers to explore potential to: <ul style="list-style-type: none"> <li>- Improve wireless internet in Karekare</li> <li>- Improve wireless network capacity at Piha</li> <li>- Fund fibre rollout at Cornwallis.</li> </ul>	Waitākere Ranges Local Board Community Groups Telcos and Chorus	Year 2	Infrastructure installed. Funding leveraged.

### Delivering on the actions and monitoring progress

The key internal Auckland Council departments involved in delivering these actions with the Local Board are Transport Strategy, Environmental Services and Chief Sustainability Office. Auckland Transport will deliver most of the actions outlined above.

Regular updates setting out progress on this priority and key actions will be prepared. The metrics set out below will also be used to measure progress against the Transport outcome area of this plan. Refer to Section 10 – Monitoring Framework for more information.

- % of people getting to work by transport mode
- Number of schools and businesses participating in mode shift programmes such as Travelwise.



## 8.4 Ōhanga - Economy

*He aha te kai a te Rangatira? He kōrero, he kōrero, he kōrero*  
*What is the food of the leader? It is knowledge, it is communication*

**Regenerative local economy:** Our economy can currently be described as predominantly linear; where we take materials from the earth, make them into products, and discard them as waste. This drives climate change, biodiversity loss, waste production and pollution. A circular economy offers an alternative, whereby resources are never abandoned to become waste or pollution. The growing network of Community Recycling Centres in Tāmaki Makaurau contribute towards a more circular economy, providing spaces where residents can drop off unwanted items and materials for reuse and recycling. The Waitākere Community Recycling Centre, or the Tipping Point, is located within the Waitākere Refuse and Recycling Transfer Station in Henderson and is operated by the McLaren Park Henderson South Community Trust. The site will be upgraded over the next two years into a Resource Recovery park to increase the range and quantity of materials diverted from landfill, including more space for the Tipping Point. MPHS Trust also provides community education and awareness about waste management in places where dumping and waste disposal is an issue. Residents can also book inorganics collections through the Auckland Council website.

There are also organisations within the board area working to create a circular economy. The ReCreators provide upcycling workshops and after-school programmes in collaboration with library, community centres and schools through the Glen Eden Activation Programme. Prospect School in Glen Eden deliver the West Tech Project where tamariki learn to repair Chromebooks and laptops for use within whānau that don't have access to digital devices. As well as important upcycling skills, rangatahi learn about social enterprise.

The Western Initiative was established in 2019 and is part of the Community and Social Innovation department of Auckland Council. The purpose of the Western Initiative is to demonstrate innovative economic development initiatives that are just, inclusive, circular and regenerative across the west Auckland sub-region, including the Waitākere Ranges, Whau and Henderson-Massey Local Boards. The remit is to focus on population groups most at risk of entrenched, poor economic outcomes. Its activities are delivered through partnerships with colleagues across the Auckland Council family, central government, NGOs, community groups, education providers and businesses.

**Measuring carbon reduction:** There are over 5,000 businesses based in Waitākere Ranges<sup>8</sup>, with the largest number of local businesses in construction, hiring and real estate services and professional, science and technical services. These businesses provide over 9,000 jobs with the highest areas of employment within the construction, health care and social assistance and education and training sectors<sup>9</sup>.

There is a significant opportunity to measure and reduce the carbon emissions created by these local businesses. There are a range of tools available to help businesses measure their carbon emissions and create an action plan for reduction. The appropriateness of each tool will depend on the sector and size of each business. Carbon certification and offset providers that are generally

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<sup>8</sup> <https://ecoprofile.infometrics.co.nz/Waitakere%20Ranges/Businesses>

<sup>9</sup> <https://ecoprofile.infometrics.co.nz/Waitakere%20Ranges/Employment>

used by larger businesses include Toitu, Ekos, CarbonClick and COGO. FutureFit in business, by Auckland Council, is a comprehensive staff engagement programme that equips businesses with a suite of resources to deliver on corporate sustainability objectives, and support staff to take climate action. The Sustainable Business Network also has a Climate Action Toolbox and emissions calculator for businesses that is available online free of charge.

Disruptions such as climate change and the global pandemic have highlighted vulnerabilities in our regional and global economy. These disruptions have demonstrated the need for a more resilient economy that is local, circular and regenerative. Planning to respond to the risks created by climate change is an essential part of continuity planning and risk management. Auckland Council, Tātaki Auckland Unlimited and EECA have many existing resources and programmes which can support our businesses.

## Goals

- By 2025 local businesses have:
  - measured their carbon emissions and reduced them by 25 per cent
  - set targets to halve their footprints by 2030 and reach carbon zero by 2050 and
  - identified and planned for climate risks.
- Creation of a circular economy by minimising waste and maximising recovery of materials
- Businesses in Waitākere Ranges have risk management and continuity plans in place.

## Current activities, actions, programmes and plans

- [FutureFit in Business](#)
- [Sustainable Business Network Climate Action Toolbox](#)
- [EECA Energy Efficiency Technical and Funding Support](#)
- [Climate Leaders Coalition](#)
- [McLaren Park Henderson South Community Trust](#)
- [Waitākere Community Recycling Centre](#)
- [The Western Initiative](#)
- [The ReCreators](#)
- [Fair Food](#)
- [Work Ready – Business Continuity Planning](#)
- [Hazard Viewer](#)
- [Mandatory Climate Related Financial Disclosure](#)

## Opportunities and benefits

The actions below will have much broader positive effects including:

- Increased profitability
- Improved efficiency
- Greater levels of innovation
- Greater access to capital
- Lower operating costs
- Better air quality
- Higher sales
- More productive workforce
- Better work-life balance
- Less risk for businesses
- Business better prepared for emergencies and climate impacts

Climate actions all add up. Actions we take as individuals, families, communities and businesses all contribute towards our collective climate goals. The actions each of us takes depends on our individual circumstances, including where we live, our financial situation, employment context, skills, physical ability, and time availability. Your actions may be focused on other action areas within this plan, as not all of us can contribute to all action areas. The following table outlines actions you can consider taking to contribute to the Ōhanga – Economy priority:

### What you can do at work

Climate change will affect every aspect of our society and economy. You can make a difference by asking about, and planning for, climate change in your workplace.

Be a voice for change. Here are some questions to ask your employer or any businesses that you purchase products from:

- Have you measured your carbon emissions as a business?
- Do you have a target to reduce your carbon emissions?
- What are you doing to support government policies that limit carbon pollution across the economy and cut emissions in your sector?
- Does your business or trade association have a climate programme or policy in line with your agenda and values?
- How else is your company engaged in fighting climate change? (e.g. innovation in green tech)
- How does your company empower employees to fight climate change?
- Have we identified climate change risks for the business and created a business continuity plan?

## Ōhanga -Economy actions

Goal	Action	Who	Timing	Demonstrating progress
Business decarbonisation and business resilience	<p>Host a programme for local businesses in partnership with the Sustainable Business Network, Glen Eden Business Association and local businesses to support local businesses in:</p> <ul style="list-style-type: none"> <li>• understanding climate change</li> <li>• preparing to measure, reduce, certify and offset emissions</li> <li>• planning for climate risk and a just transition</li> </ul> <p>Share information about businesses participating to encourage buying local and supporting businesses that are working to decarbonise</p>	<p>Environmental Services</p> <p>Waitākere Ranges Local Board</p>	Year 1	No. of businesses involved in programme and measuring/reducing carbon and developing risk management and continuity plans
	<p>Work with Auckland Emergency Management and local businesses to develop risk management and continuity plans in response to climate change and extreme weather events</p>	<p>Auckland Emergency Management</p> <p>Environmental Services</p> <p>Waitākere Ranges Local Board</p>	Year 2 and beyond	
Regenerative, Circular economy	<p>Support initiatives working to create a regenerative, circular economy, such as The Western Initiative, West Tech Project, The ReCreators, Fair Food</p>	<p>Environmental Services</p> <p>Waitākere Ranges Local Board</p> <p>Customer and Community Services</p> <p>Waste Solutions</p>	Ongoing	Evidence of support provided to such groups
	<p>Support the upgrade of the Waitākere Resource Recovery Park and Community Recycling Centre and the activities of McLaren Park Henderson South Community Trust as it expands its operations and reach into the community.</p>	<p>Waste Solutions</p> <p>Waitākere Ranges Local Board</p>	Year 2	Upgrade completed

Delivering on the actions and monitoring progress



The key internal Auckland Council departments involved in delivering these actions with the Local Board are Waste Solutions, Auckland Emergency Management and Environmental Services. Tātaki Auckland Unlimited provide regional economic programmes that the board can access to support their local communities.

Regular progress updates, setting out progress on this priority and key actions will be prepared. The metrics set out below will be used to measure progress against the Economy outcome area of this plan. Refer to Section 10 – Monitoring Framework for more information.

- Number of businesses in the board area that have measured their carbon footprints and set reduction targets
- Number of businesses in the board area that have developed business continuity plans.

## 8.5 Ngā hapori me te tahatai - Community and coast

*He waka eke noa*

*We are all in this together*

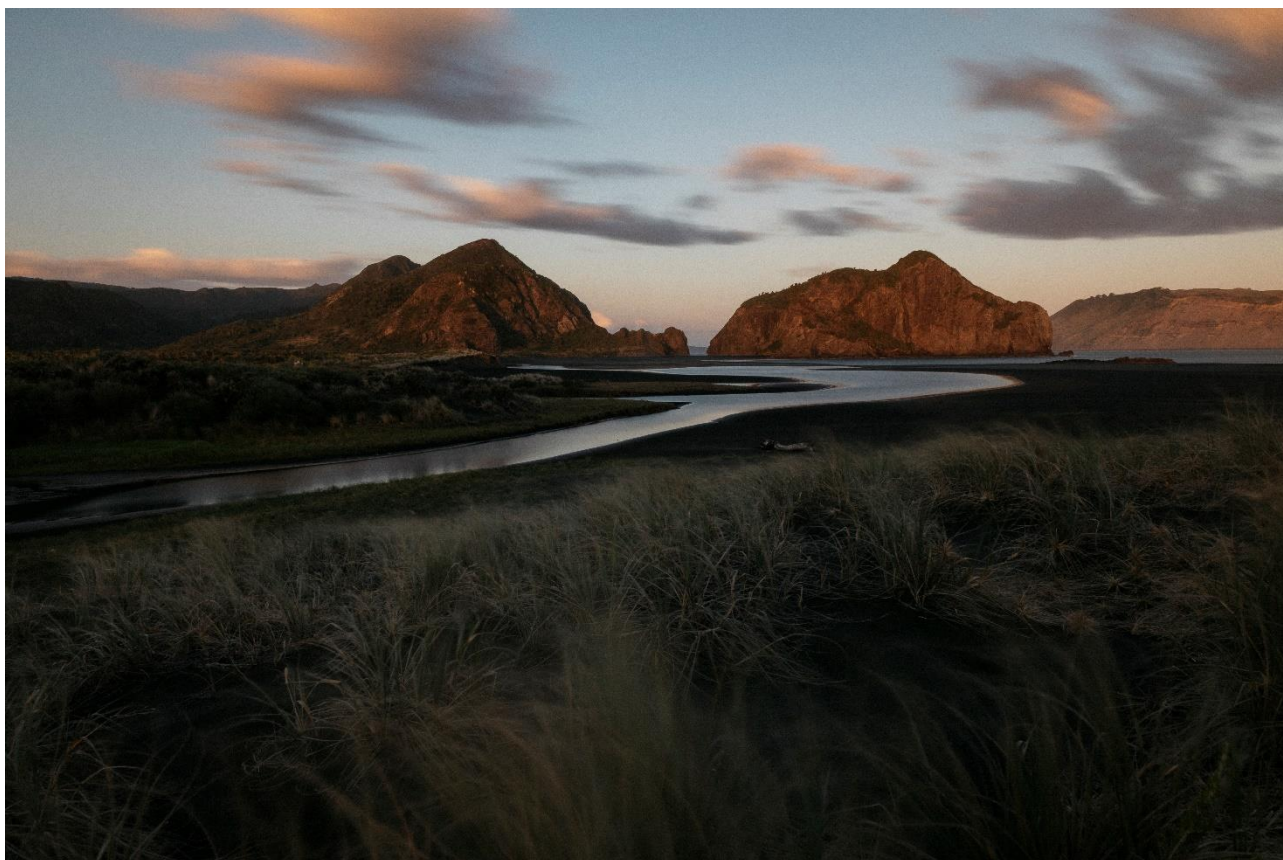


Figure 6 - Whatipu

The Waitākere Ranges Local Board area encompasses approximately 58km of coastline, extending from Raetahinga Point (north of Te Henga Bethells) to the west coast to the east of South Titirangi, French Bay and Wood Bay within the Manukau Harbour. The area is intrinsically linked to the coastal and marine environment, with its diverse habitats, plants, birds, marine mammals and fish. Auckland's west coast faces the exposed Tasman Sea and is dominated by black sand beaches and jagged rocky shores. The sheltered northern coast of the Manukau Harbour features a combination of muddy sand flats, boulder beaches, large shore platforms, pockets of rocky coast and extensive mangrove areas. Some of the greatest threats to the diversity and resilience of marine and coastal habitats are ocean acidification and sea level rise associated with climate change.

Auckland Council has identified coastal and major waterway sites within the Waitākere Ranges Local Board area that are vulnerable to coastal inundation (flooding). Sea level rise resulting from climate change increases the risk of coastal inundation. Residents can see a coastal inundation map, showing which places are at risk, on the Auckland Hazard Viewer<sup>10</sup>. Sea level rise of up to 1 to 2

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<sup>10</sup> <https://www.arcgis.com/apps/MapSeries/index.html?appid=81aa3de13b114be9b529018ee3c649c8>

metres<sup>11</sup> is predicted over the next 100 years based on the projections by the Intergovernmental Panel on Climate Change. The council is developing shoreline adaptation plans to address these impacts within the coastal marine area. The area is also prone to localised flooding and landslip events from heavy rainfall, which can put pressure on roads and lifeline utilities, damage homes, and isolate residents.

A number of communities are undertaking community resilience, response planning exercises to prepare for emergency situations caused by natural disasters which will be exacerbated as a result of climate change (Te Henga, Piha, Karekare, Henderson Valley, Laingholm). Resilience planning can cover the 4 'R's of emergency planning, which includes being prepared before an emergency, knowing what to do during an emergency, and planning for successful recovery. Reduction activities, that reduce the risk of events can also be covered.

Preparing for the impacts of climate change and reducing emissions requires major system changes. Community connectedness or high social capital is shown to be the key factor which enables communities to support each other and respond to natural disasters, such as major storms and floods. For this action area, programmes and policies that focus on building social capital – the relationships, connections, and community participation that occurs on the ground between individuals and groups, will also improve resilience to climate impacts. Targeted programmes to help residents understand climate risks and prepare for them will also be valuable.

Individual, rangatahi/youth and community action is vital in influencing our everyday choices and driving the changes we need. EcoMatters Environment Centre is a community climate action hub for West Auckland, there are fourteen schools and kindergartens participating in the Enviroschools programme, and libraries are fostering sustainable behaviours through hosting seedbanks and organising sustainable living events. Our formal education sector and community groups play an important role in enabling climate awareness and action.

Throughout West Auckland many community groups, organisations, individuals, businesses and government bodies are working to build thriving communities and a healthy environment. Community Waitākere is a community development organisation strengthening the links between these groups by promoting and modelling collaboration, enhancing networking and communication, developing community projects and helping foster collective visions of positive change. The Local Board funds Community Waitākere's Resource Centre to deliver capacity and capability building activities for community groups including training opportunities and networking events with West Auckland Together, Māori and Pasifika leadership groups, Hoani Waiti marae and other West Auckland Māori organisations.

As described below, and in the Natural Environment section of this plan, there is a range of existing community-led climate change activity underway in the board area. Also refer to the energy and industry section of this plan for actions regarding sustainable and resilient energy production and use.

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<sup>11</sup> One-metre sea-level rise is representative of the upper bound scenario to 2115. Two-metre sea-level rise is representative of potential, longer term sea-level rise (2120 to approximately 2200).

## Goals

- Increase our communities' understanding of and capacity to respond to climate change
- Strengthen the resilience of our communities, people and places
- Reduce the risk of flooding and hazards to properties and infrastructure.

## Current activities, actions, programmes and plans

- [Glen Eden Transition Town](#)
- [Community Waitākere](#)
- [Ecofest West](#)
- [Community Resilience Plan – Auckland Emergency Management](#)
- [Auckland Hazard Viewer](#)
- [Live Lightly](#)
- [FutureFit](#)
- [Sustainable Schools](#)
- [Enviroschools and Te Aho Tū Roa](#)
- [King Tides Auckland](#)

## Opportunities and benefits

The actions below will have much broader positive effects including:

- Understanding current and future impacts of extreme weather events and climate change
- Creating resilience in communities and business
- Reducing negative social and financial effects of climate change
- Protection of culture, taonga and sacred sites that may be affected.

Climate actions all add up. Actions we take as individuals, families, communities and businesses all contribute towards our collective climate goals. The actions each of us takes depends on our individual circumstances, including where we live, our financial situation, employment context, skills, physical ability, and time availability. Your actions may be focused on other action areas within this plan, as not all of us can contribute to all action areas. The following table outlines actions you can consider taking to contribute to the Ngā hapori me te tahatai - Community and coast priority:



### What you can do at work

- Hold a FutureFit.nz corporate challenge
- Check the local hazards viewer
- Create a climate risk management plan and a business continuity plan
- Invest in more resilient infrastructure

### What you can do at home

- Attend EcoFest West events to learn more about sustainable living
- Visit [livelightly.nz](http://livelightly.nz)
- Measure your carbon footprint at [futurefit.nz](http://futurefit.nz)
- Check the local hazards viewer

## Ngā hapori me te tahatai - Community and coast actions

Goal	Action	Who	Timing	Demonstrating progress
Increase our communities' understanding of and capacity to respond to climate change	Resource and support a climate action programme to enable and amplify community initiatives to implement the Waitākere Ranges Local Climate Action Plan, create opportunities for the community to learn about climate change and reduce their carbon footprints. Example opportunities include: <ul style="list-style-type: none"> <li>• Using Future Fit to help people understand their climate impact and ways to reduce it</li> <li>• Highlighting climate actions at events such as EcoFest West</li> <li>• Working with EnviroSchools and King Tides Auckland to grow the capacity of school staff, students and teachers to reduce emissions and increase resilience</li> <li>• Supporting the development of community climate action hubs, such as through schools, libraries and Community Houses</li> <li>• Supporting residents to use their voice to advocate for systematic change. E.g. submission to local and central government.</li> </ul>	Waitākere Ranges Local Board Environmental Services Connected Communities Community Groups	Year 1	Climate action programme developed and work plan implementation underway
	Funding community-led activation events for local residents and schools to learn about climate issues we have and how to take action	Waitākere Ranges Local Board Environmental Services	Ongoing	Funded events
	Support a Sustainable Villages initiative to catalyse local climate action	Waitākere Ranges Local Board Environmental Services	Year 2	Established initiative taken up by Waitākere Ranges communities

	Promote the Waitākere Ranges Local Climate Action Plan through existing networks and platforms such as community groups and the Local Board Facebook page	Waitākere Ranges Local Board Environmental Services Connected Communities Community Groups	Ongoing	Evidence of promotion
Strengthen the resilience of our communities, people and places	Deliver disaster preparedness workshops with interested communities and neighbourhoods in the board area that support them to become more resilient to climate-induced hazards. Support communities to develop their own disaster resilience plans, and finalise the adoption of the Piha Plan.	Auckland Emergency Management Waitākere Ranges Local Board	Year 2	Completed workshops and resilience plans
	Support networks and initiatives that strengthen strong, positive and cooperative community connections which help in a response to climate impacts (such as Community Waitākere)	Waitākere Ranges Local Board Auckland Emergency Management Connected Communities Environmental Services	Ongoing	Evidence of support provided to such networks
	Share the Lifestyle Block resilience handbook to increase the resilience of lifestyle block owners in the board area	Waitākere Ranges Local Board Auckland Emergency Management Environmental Services	Year 1	Evidence of sharing and publicising handbook
Reduce the risk of flooding and hazards to properties and infrastructure	Support regional actions to inform property owners and occupiers about potential climate change hazards, particularly those within identified areas of low adaptive capacity and those impacted by the changing coastline	Waitākere Ranges Local Board Auckland Emergency Management Environmental Services	Year 2	Evidence of communications regarding climate change hazards
	Support development of Shoreline Adaption Plans for the northern	Waitākere Ranges Local	Years 2-3	Completed plan

	<p>Manukau Harbour and western coast of the board from Whatipu to Te Henga / Bethells Beach that assess coastal hazards and the impacts of climate change on the coast, discussing adaptation options for the future with mana whenua, communities and asset owners</p>	<p>Board Resilient Land and Coasts Auckland Emergency Management Environmental Services</p>		
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### Delivering on the actions and monitoring progress

The key internal Auckland Council departments involved in delivering these actions with the Local Board are Environmental Services, Auckland Emergency Management, and Resilient Land and Coasts.

Regular updates, setting out progress on this priority and key actions will be prepared. The number of schools engaged in Sustainability Education programmes will also be monitored over time. Refer Section 10 – Monitoring Framework for more information.



## 8.6 Ngā kai - Food

*Nau te rourou, naku te rourou, ka ora te manuhiri*

*With your food basket and my food basket, together we will feed the people*

Our kai / food is central to life, the health of our taiao / environment, our bodies, our cultural traditions and our resilience. In Tāmaki Makaurau, food and non-alcoholic beverages make up 26% of Aucklanders' carbon emissions, second only to transport. To reduce these emissions, we need to make more sustainable choices around the foods that we consume. By creating a more sustainable and regenerative food system, we can reduce the emissions we create through food production, distribution, processing and disposal.

Local networks : The Waitākere Ranges local board area has a well established, dedicated network of individuals and organisation working to create a local, sustainable food future for the area.

Kai West is a collective made up of people working on community-based initiatives that focus on the local food system. The collective is made up of West Auckland Enterprise Skills and Training (WEST), MPHS, Community Waitākere, Massey Matters, Healthy Families Waitākere, Eke Panuku Development Auckland, Auckland Council Waste Solutions, Garden to Table and EcoMatters. The shared vision is a strong local food system supported by community partnerships that increase access to local, affordable, fresh food and supports the health of the community.

In July 2021, the Future of Food for West Auckland event was held to bring together a diverse range of people to share their experiences and perspectives to co-create a pathway for West Auckland's food future, in a way that builds connection, commitment and community spirit, so that all life within our living environment will be nourished. The discussion at the event was collated and summarised under key themes and suggested actions from that event have been used to inform this action plan. Kai West Collective is now working with those who attended the event to turn the suggestions into reality.

In 2021, in response to the Covid 19 pandemic, Healthy Families Waitākere partnered with Hoani Waititi Marae and Community Waitākere and were successful in securing a Food Secure Communities Grant from the Ministry of Social Development (MSD). The overarching goal is to support the localisation and creation of a food ecosystem which leverages ancestral practices to inform community led solutions and enables whānau and community wellbeing.

**Sustainable food choices:** A key action for the local board will be showcasing sustainable food choices at events and through communications, as well as supporting community initiatives which encourage and enable people to make these choices, such as cooking classes focused on plant-based meals. One of the most effective ways of reducing our carbon emissions from food is shifting to a plant rich diet.

**Eating local and growing your own food:** Eating food that is grown and consumed in season and locally helps to avoid the use of energy-intensive hothouse growing and freight. Supporting community gardens and enabling people to grow their own food can contribute to this goal.

Glen Eden Pātaka Free Pantry Group is part of Auckland's Pātaka Kai Open Street Pantries – a grassroots, crowdsourced solution to immediate and local need, and a Glen Eden Residents Association Initiative. The Pātaka kai receive donations of food and other supplies from individual residents and local businesses, as well as landfill rescues. Community gardens are also located throughout Waitākere Ranges, including at Lucinda Place, Savoy Road, Bishop Stream and Owens Road and school gardens are located at many schools and kura throughout the board area. These provide a teaching opportunity, as well as access to fresh local produce for whānau.

These actions also have many other sustainability benefits, in terms of community connectedness, wellbeing, and resilience. The local board can provide space for these projects and support them to build their capacity through grants.

**Reducing food waste:** Encouraging 'food rescue' and reducing food wastage, at household, community and business level, helps to reduce emissions. Key actions the local board could support include working with producers and distributors to redirect unsaleable food via a network of charities, community groups, and Pātaka Kai. At a household level, key actions are only buying what you need (for example, through meal planning and using shopping lists) and eating what you buy, to avoid wasting food.

**Composting and promoting our food-scrap collection:** When disposing of unused food and garden waste, composting will generate less carbon emissions than sending these items to landfill. Programmes should be supported which encourage households to compost food scraps at home, or to use community compost hubs if space is not available at home. In addition to encouraging local composting, Auckland Council is also introducing a food scraps collection. The local board can support this service by spreading the word about it and helping residents in collection areas understand how to use it.

The food scraps service is not an individual benefit, rather it is a collective benefit as it benefits the whole region in helping us to reach our emissions reductions targets. Every ratepayer will help pay for the service in their rates even if it's not available in their street or if they decide not to use it where it is available in their neighbourhood. The service will be available in suburban areas, but not available to more rural or isolated communities (some parts of the Waitākere Ranges Local Board area will not have a food scraps collection). Expected emissions savings have been conservatively modelled and the modelling independently audited by Toitū. The food scraps service is expected to reduce Auckland's CO<sub>2</sub> emissions between 18,000 to 24,000 tonnes per year, which is equivalent to taking 11,000 to 14,000 cars off the road. Two thirds of the emissions reductions will be achieved through not sending the food scraps to landfill, and one third of the emissions reductions will be achieved through the anaerobic digestion process itself enabling beneficial reuse of the food scraps resource.

## Goals

- Support and enable sustainable food choices
- Increase the ability of residents to enjoy seasonal and locally produced food with a low carbon footprint
- 100 per cent Waitākere Ranges food waste composted by 2030 including:

- composting facilities or services at all community facilities, local food markets and schools by 2023.
- food waste collections for all applicable homes by 2023
- business food waste collections and composting.

#### Current activities, programmes and gardens

- [Kai West](#)
- [Mana Motuhake o te Kai – Kai sovereignty in West Auckland](#)
- [Garden to Table](#)
- [Glen Eden Pātaka Kai Free Pantry](#)
- [Perfectly Imperfect Food Rescue](#)
- [Fair Food](#)
- [Aotearoa Food Rescue](#)
- [Love Food Hate Waste](#)
- [Food Scraps Collection](#)

#### Opportunities and benefits

The actions below will have much broader positive effects including:

- Developing a vibrant and diverse sustainable food economy
- Nurturing skills and awareness that build greater self-sufficiency
- Reviving Māori food practices
- Self-determining and mana enhancing community participation in local food systems
- Building community knowledge, sharing, skills and resources
- Reducing hunger and food poverty
- Reducing the costs of living
- Improving access to healthy affordable food
- Improving health
- Improved soil health
- Reduced food waste

Climate actions all add up. Actions we take as individuals, families, communities and businesses all contribute towards our collective climate goals. The actions each of us takes depends on our individual circumstances, including where we live, our financial situation, employment context, skills, physical ability, and time availability. Your actions may be focused on other action areas within this plan, as not all of us can contribute to all action areas. The following table outlines actions you can consider taking to contribute to the Ngā kai - Food priority:

#### **What you can do at work**

- Choose organic, local, seasonal food for kitchen and catering
- Share food and host a low carbon cooking demonstration
- Set up a compost collection for coffee grounds and food waste

#### **What you can do at home**

- Plan meals and choose local seasonal food
- Join a community garden and learn how to grow your own veges
- Try a plant-based diet or introduce more meat free meals
- Use up leftovers and reduce food waste
- Learn to compost at a free workshop
- Use food scaps service if available in your area

## Ngā kai - Food actions

Goal	Action	Who	Timing	Demonstrating progress
Support and enable our residents to make sustainable food choices	Lead by example, by choosing sustainable catering options at local board events and meetings	Waitākere Ranges Local Board	Ongoing	Evidence of leading by example
	Support Kai West in creating new food narratives for West Auckland focusing on an abundance of local healthy seasonal food that is available in our urban and natural environment through local food initiatives	Waitākere Ranges Local Board Environmental Services Connected Communities Community Groups	Ongoing	Evidence of support for the actions set out in Kai West's 'Future of Food for West Auckland Key Themes and Suggested Actions'
	Support Hoani Waititi Marae, Community Waitākere and Healthy Families Waitākere to implement Mana Motuhake o te Kai, the West Auckland Kai Sovereignty Plan which aims to support the localisation and creation of a kai ecosystem, leveraging ancestral practices to inform community-led solutions and enabling whānau and community wellbeing	Waitākere Ranges Local Board Environmental Services Connected Communities Hoani Waititi Marae Community Groups	Year 1	Evidence of actions to support implementation
	Support a Zero Carbon Food Challenge as part of EcoFest West	Waitākere Ranges Local Board Environmental Services EcoMatters	Annual	Evidence of Zero Carbon food Challenge
	Support a 'meat-free' day campaign	Waitākere Ranges Local Board Environmental Services Connected Communities	Ongoing	Completed campaign
Increase the ability of residents to enjoy seasonal and locally produced food with a low carbon footprint	Support community-led low carbon food initiatives such as community gardens, markets, cooking lessons, plant-based meal choices, Pātaka kai and garden projects	Waitākere Ranges Local Board Environmental Services Connected Communities	Ongoing	Evidence of support – e.g. funding, land owner approval



	Support the use of marae kitchens for whānau solutions	Waitākere Ranges Local Board Environmental Services Connected Communities	Ongoing	Evidence of support (e.g. grants)
	Support Kai West to implement a localised food village / hub concept	Waitākere Ranges Local Board Environmental Services Connected Communities	Year 2	Evidence of support for the actions set out in Kai West's 'Future of Food for West Auckland Key Themes and Suggested Actions'
	Work with Place Creative and Healthy Families Waitākere to advocate for changes to the Unitary Plan to enable urban farming in the next plan review	Waitākere Ranges Local Board Chief Sustainability Office Environmental Services	Year 3	Evidence of advocacy
	Require that the Waitākere Ranges Local Parks Management Plan has sites identified for new community gardens	Waitākere Ranges Local Board Parks and Community Facilities	Year 1	Sites for gardens identified in Waitākere Ranges Local Parks Management Plan
	Provide subsidies for rainwater tank installation to allow sufficient water storage for food production in times of drought	Waitākere Ranges Local Board Environmental Services Connected Communities	Ongoing	Evidence of subsidies provided
100 per cent Waitākere Ranges food waste composted by 2030	Support the sharing of surplus or waste food through the network of charities and community groups	Waitākere Ranges Local Board Environmental Services Connected Communities	Ongoing	Evidence of support – e.g. funding
	Support residents to use the new regional kerbside food scraps collection when this is rolled out to all eligible Waitākere Ranges households	Waste Solutions Waitākere Ranges Local Board	Years 2-4	Kerbside collection operational
	Advocate for the introduction of composting services at all community facilities	Waitākere Ranges Local Board Parks and Community Facilities	Year 2	Community Facility composting operational

		<b>Environmental Services</b>		
	Promote the Love Food Hate Waste Fund, and supplement with additional local board grants for local food waste prevention projects	Connected Communities Waste Solutions Waitākere Ranges Local Board	Ongoing	Evidence of promotion – e.g. social media, and support. e.g. grants

### Delivering on the actions and monitoring progress

The key internal Auckland Council departments involved in delivering these actions with the Local Board are **Environmental Services**, Parks and Community Facilities, and Waste Solutions.

Regular progress updates, setting out progress on this priority and key actions will be prepared. The metrics set out below will be used to measure progress against the Food outcome area of this plan. Refer to Section 10 – Monitoring Framework for more information.

- Number of community gardens and urban agriculture areas
- No. and % of community facilities composting food waste.



Figure 7 – Oratia Farmers' Market

## 8.7 Te Puāwaitanga o Te Tātai

*Te puawaitanga o te tangata*

*If Māori are flourishing, we are all flourishing*

Māori, the indigenous people of Aotearoa New Zealand, have lived in Tāmaki Makaurau for over 1000 years. Te Tiriti o Waitangi recognises the rangatiratanga of Auckland's mana whenua and the inseparable bond between Tāmaki Makaurau the people and Tāmaki Makaurau the place. Tāmaki Makaurau embraces its uniqueness sourced in the cosmological traditions and guardianship of mana whenua. The establishment of Auckland is founded on Te Tiriti o Waitangi and is shaped by its Māori history and presence.

Our tūpuna have provided rich legacies of knowledge and practices that nurture whakapapa and reaffirm Māori ways of collective action. These can guide our responses today. Learning from these intergenerational relationships and practices allows us to plan for what our unique places and communities will face over the next few generations and beyond.

Mana whenua play a significant role in sustaining the region and the region's identity. Their responsibilities and obligations as kaitiaki of te taiao, our precious natural environment, must be upheld. Mataawaka make a significant contribution to the wellbeing of the region and add to the economic, cultural and social richness. The strengths and contributions Māori bring to Auckland will advance cultural, social, economic and environmental wellbeing for all Aucklanders.

Te Tāruke-ā-Tāwhiri is a narrative of climate change that speaks to the struggles of the ātua (primordial ancestors) as a result of human behaviour that is out of balance with the world around us. Climate change is a threat to the whakapapa connections of nature, people and place.

Māori exercise tino rangatiratanga and kaitiakitanga through Te Tiriti based relationships with Auckland Council to enhance the mauri of te taiao. Projects which enable Mana Whenua to enact kaitiakitanga responsibilities to enhance the mauri of te taiao o Tāmaki Makaurau - waterways and treasured environments - are an important goal to work towards.

The Waitākere Ranges Local Board area is home to over 6,600 Māori, making up 12.7 per cent of the population (compared to 11.5 per cent in Auckland)<sup>12</sup>. Te Kawerau ā Maki whakapapa to the west Auckland area.

**Existing networks:** In response to the Covid 19 pandemic the Māori Thought Leadership Collective evolved to focus on Māori-led aspirational approaches to supporting community in their recovery and having a collective impact. Observations of the collective throughout the Covid response identified initiatives to implement long term changes that would benefit Māori communities in terms of wairua, hauora, mātauranga and tikanga well-being. Healthy Families Wāitakere worked with the Māori Thought Leadership Collective through a co-design process to identify kaupapa that would support Māori whānau to build their resilience to an impending second wave of Covid 19. This exercise identified five focus areas (pou) which included:

- Kai Sovereignty

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<sup>12</sup> <https://stats.govt.nz/tools/2018-census-place-summaries/waitakere-ranges-local-board-area#ethnicity-culture-and-identity>

- Community led economic development
- Māori sustainable leadership
- Opportunities with 13 West Auckland marae
- Rangatahi.

West Auckland Together are a collective of west Auckland organisations with a focus on working for Māori and Pasifika communities. It is founded on a history of strong collaboration and whakapapa of innovation and aims to contribute to “a thriving West Auckland”. West Auckland Together is purposely set to “hold the space” for organisations to participate and be involved in collective mahi as appropriate. By building on the cultural capability of partners and growing the capacity of Māori and Pacific leadership, West Auckland Together’s goal is to support community-led approaches that enhance wellbeing in a way that is culturally responsive and appropriate.

Waitākere ki tua is a guide that was developed from kōrero shared by the west Auckland Māori community through the West Auckland Mataawaka Report 2014 and the Toitū Waitākere Report 2017. Its intent is to provide the west Auckland local boards with guidance, and support to inform decision-making on matters that are important to west Auckland Māori.

The local board’s role for this priority is to build on existing relationships with local iwi, marae and west Auckland Māori organisations. Building on existing connections, co-designed projects can be developed which deliver kaitiakitanga outcomes. The key characteristics of these projects would be:

- co-designed with mana whenua
- design uses Mātauranga Māori
- provides training and employment opportunities for rangatahi Māori
- promotes kaitiakitanga and incorporates te reo Māori.
- Informed by the Māori Thought Leadership Collective West Auckland Covid 19 Impact Report.

## Goals

- Māori culture informs our climate actions and is accessible and visible in these
- Rangatahi are leaders in climate solutions
- Māori, taiao (the natural environment), whenua (land), and tangaroa (sea) are flourishing and able to support people for generations to come (intergenerational equity).

## Current activities, actions, programmes and plans

- [Māori Thought Leadership Collective](#)
- [West Auckland Together](#)
- [Toitū Waitākere Report 2017](#)
- [Waitākere ki tua 2019](#)
- [Mana Whenua Kaitiaki Forum](#)



- [Te Ora ō Tāmaki Makarau](#)
- [Youth Taiao Monitoring Programme](#)

### Opportunities and benefits

The actions below will have much broader positive impacts:

- Wellbeing enhanced
- Kaitiakitanga obligations are met
- Mauri of taiao, whenua and tangata is enhanced
- Better health, housing, employment, career and business opportunities



Figure 8 – Hoani Waititi Marae



## Te Puāwaitanga o Te Tātai actions

Goal	Action	Who	Timing	Demonstrating progress
Māori culture informs our climate actions	Identify opportunities to support the five pou identified by the Māori Thought Leadership Collective	Māori Thought Leadership Collective Waitākere Ranges Local Board Environmental Services Connected Communities	Year 1	Opportunities identified and supported
	Identify opportunities to partner with mana whenua and marae on climate action and environmental projects	Te Kawerau ā Maki Waitākere Ranges Local Board Environmental Services Hoani Waititi Marae Customer and Community Services	Year 1	Opportunities identified and supported
	Continue to support mana whenua to tell stories of Māori cultural heritage and knowledge in public spaces, reflecting tikanga and Mātauranga Māori	Te Kawerau ā Maki Waitākere Ranges Local Board Customer and Community Services Environmental Services	Ongoing	Māori culture is visible
Rangatahi are leaders in climate solutions	Identify and invest in rangatahi Māori climate-related representation and development opportunities, including supporting rangatahi Māori-led projects in the board area	Environmental Services Customer and Community Services Waitākere Ranges Local Board Hoani Waititi Marae Kura Kaupapa	Years 2-4	Rangatahi-led projects
Taiao is flourishing	Continue support for projects outlined in the Natural Environment section of the Local Climate Action Plan which increase the health of te taiao and restore significant ecological areas	Waitākere Ranges Local Board Environmental Services Customer and Community Services	Ongoing	Supported projects
	Support local activities that connect people with the land and its history	Waitākere Ranges Local Board Environmental Services Customer and Community Services	Year 2	Evidence of support

### What you can do

- Learn te reo, tikanga and Māori culture
- Learn about Tāwhirimātea
- Learn about the maramataka calendar and its role in our wellbeing
- Check out the EcoMatters website for Te Ao Māori events e.g. Rongoā, weaving

## 8.8 Te ngao me te ahumahi - Energy and industry

*Hurihia tō aroaro ki te rā tukuna tō ātārangi kia taka ki muri i a koe*  
*Turn your face to the sun and the shadows fall behind*

Energy provides the electricity in our homes, fuel for our transport system and the heat that manufactures the products we need<sup>13</sup>.

- 84 per cent of New Zealand’s energy is currently produced from renewable energy sources.
- current national energy targets aim for 90 per cent renewables by 2025 and 100 per cent renewable energy by 2035
- 66 per cent of Auckland’s energy emissions are from primary fuel combustion within the region from fuels including natural gas, coal and liquid petroleum gas (LPG).

This section of the plan focuses on identifying opportunities to increase the proportion of renewable energy used and reduce energy consumption. The focus is on switching energy sources, such as from coal to biomass or natural gas to electricity, while we continue to improve energy efficiency and ensure a just transition for affected businesses and organisations.

Process heat is the steam, hot water or hot gases used in industrial processing, manufacturing and space heating. Process heat has been identified by the Energy Efficiency Conservation Authority (EECA) as New Zealand’s second biggest opportunity after transport to reduce energy-related carbon emissions. Half of New Zealand’s process heat demand comes from burning coal or natural gas. Businesses can reduce their energy costs and carbon footprint by running boilers and process heat systems efficiently or switching to innovative new heating technology. The council has already begun phasing out gas boilers and improving energy efficiency in its community facilities. Further information is contained within the built environment section of this plan.

Many of the steps that can be taken to change our levels of energy consumption or proportion of renewable energy require action at the national or regional level. Within Waitākere Ranges, there are opportunities to work with businesses and EECA to identify and accelerate opportunities for businesses that use coal or natural gas in their industrial processes to reduce emissions. There are also opportunities to explore decentralised renewable energy to enhance energy resilience for the more isolated coastal settlements of Te Henga (Bethells), Anawhata, Piha, Karekare, Whatipu, Huia, Little Huia and Cornwallis. Certainty of power supply which enables reliability of communications and broadband can also reduce transport emissions by supporting more working from home.

As well as improving the energy efficiency of their own buildings, the local board can also support the community to reduce energy consumption in their homes, for example by promoting the FutureFit carbon footprint calculator, Auckland Council’s home performance advice service, Home Energy Audit Toolkits (HEAT kits) available through libraries and the Live Lightly resources.

### Goals

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<sup>13</sup> Auckland Council. (2020). *Te Tāruke-ā-Tāwhiri: Auckland’s Climate Plan*

- Renewable energy generation
- Developing decentralised renewable energy
- Reducing natural gas, coal and liquid petroleum gas (LPG) use and emissions
- Reducing non-renewable process heat and industrial process heat emissions and reducing refrigerant related emissions
- Promote energy efficiency initiatives

#### Current activities, actions, programmes and plans

- [Co-funding for Process Heat Projects](#)
- [Low Emission Vehicles Contestable Fund](#)
- [New Zealand's Energy Strategy 2011-2021](#)
- [Industrial Pollution Prevention Programme](#)
- Refer to [Built Environment](#) for other building related initiatives

#### Opportunities and benefits

The actions below will have much broader positive effects including:

- Growing a reputation as a leading sustainable community
- Attracting investment into sustainable infrastructure
- Improving indoor air quality as unflued gas heating is removed
- Reducing energy costs for local businesses and residents
- Increasing energy security through local low carbon energy generation

Climate actions all add up. Actions we take as individuals, families, communities and businesses all contribute towards our collective climate goals. The actions each of us takes depends on our individual circumstances, including where we live, our financial situation, employment context, skills, physical ability, and time availability. Your actions may be focused on other action areas within this plan, as not all of us can contribute to all action areas. The following table outlines actions you can consider taking to contribute to the Te ngao me te ahumahi - Energy and industry priority:

### What you can do at work

- Find out more about the support available from EECA for reducing emissions from process heat, industrial processes, refrigerants and vehicles
- Purchase electricity that is certified as zero carbon
- Get quotes to check the return on investment of solar or wind generation for your business

### What you can do at home

- Book in for a [Home Energy Advice](#) consultation
- Purchase electricity that is certified as zero carbon
- Choose heat pump solutions for water and space heating
- Get a quote to check the feasibility of solar for your home
- Ensure your next vehicle is electric or has a five-star fuel efficiency rating



## Te ngao me te ahumahi - Energy and industry actions

Goal	Action	Who	Timing	Demonstrating progress
Promote renewable energy generation	Advocate to central government for the acceleration of renewable energy as a percentage of grid supply	Waitākere Ranges Local Board Auckland Council	Ongoing	Evidence of advocacy – submissions, emails, letters
Decentralised renewable energy	Support community-led initiatives to implement sustainable energy solutions, particularly for coastal communities to enhance energy resilience	Waitākere Ranges Local Board Environmental Services Auckland Emergency Management	Ongoing	Evidence of support (submissions, letters, funding)
Reduction in natural gas emissions	Support programmes targeting the uptake of heat pump water and space heating and showerhead efficiency (e.g. through grants)	Waitākere Ranges Local Board Environmental Services	Ongoing	Evidence of support
Reduction in process heat, industrial process and refrigerant emissions	Work with businesses in Waitākere Ranges and EECA to: <ul style="list-style-type: none"> <li>Identify and accelerate the uptake of support for industrial processors or users of process heat derived from coal or natural gas to reduce emissions</li> <li>Reduce emissions from refrigerants</li> <li>Support the installation of distributed renewable energy generation including solar PV generation.</li> </ul>	Environmental Services	Year 2	Establishment of working group Identification of participating businesses Identification of opportunities to reduce emissions
Support households to reduce energy consumption	Support educational programmes to help residents to understand their home energy usage and give them tools and advice to reduce it	Waitākere Ranges Local Board Environmental Services Connected Communities	Year 1	Services such as Home Energy Advice promoted to residents

### **Delivering on the actions and monitoring progress**

The key internal Auckland Council departments involved in delivering these actions with the Local Board will be **Environmental Services** and Auckland Emergency Management.

Regular updates, setting out progress on this priority and key actions will be prepared. The percentage of renewable energy generation nationally will also be monitored.

# 9. Monitoring framework

We will monitor progress against this action plan regularly using the ‘demonstrating progress’ column of each action table within the plan, and the climate monitoring framework below.

Theme	Target / metric	Monitoring method	Baseline	Frequency
Natural environment	Retention of % canopy cover in public open space	LiDAR survey - parks	unknown	Once every 3 years
	Increase in canopy cover in areas of low coverage	LiDAR survey - parks	unknown	Once every 3 years
	Number of urban trees planted annually	Urban Ngahere (Parks, Sports, Recreation)	NA	Annual
	Number of community weeding bees annually	Parks, Sports and Recreation, Community organisations such as EcoMatters	NA	Annual
Built environment	% reduction in community facilities carbon emissions	Carbon monitoring – community facilities	Unknown	Annual
	No. zero carbon developments completed	New Zealand Green Building Council	To be determined	Annual
	Number of community facility renewals projects meeting construction waste diversion targets.	Community facilities	NA	Annual
Transport	% of people getting to work by transport mode	Census	Private vehicle 62% Company vehicle 12.6% (2018)	Once every 5 years

	Number of schools and businesses participating in mode shift programmes	Auckland Transport	Establish baseline	Annual
<b>Economy</b>	No. businesses in the board area that have measured their carbon footprints and set reductions targets	Toitu/Ekos/Local Board data	unknown	Annual
	No. businesses in the board area that have developed business continuity plans	Local Board data	Unknown	Annual
<b>Communities and Coast</b>	Number of schools engaged in Sustainability Education programmes	Sustainable Schools		Annual
<b>Food</b>	Number of community gardens or other urban agriculture areas	Survey of community groups	To be established	Annual
	Number and percentage of community facilities composting food waste	Local board information and Community Facilities	NA	Annual
<b>Te Puāwaitanga ō Te Tātai</b>	No numeric metrics for this outcome area. Action table identifies how progress against actions can be demonstrated over time.			
<b>Energy and Industry</b>	100% renewable generation by 2035	Central Government	84%	Annual

# 10. Definitions

Definitions of some common climate terms	
Active transport	Relates to physical activity undertaken as a means of transport and not purely as a form of recreation, e.g. commuting to work by bike or walking to school.
Adaptation	Actions taken to help communities and ecosystems cope with changing climate conditions.
Adaptive Capacity	The ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences.
Carbon sequestration	A natural or artificial process by which carbon dioxide is removed from the atmosphere by the activities of people, organisations and communities e.g. tree planting, regenerative farming.
Embodied and operational carbon	<p>The total carbon footprint of the built environment is made up of two categories of carbon; embodied and operational.</p> <p>Embodied carbon is essentially the sum of the carbon in all the materials and products used in the creation or renovation of a built asset.</p> <p>Operational carbon is the carbon emissions attributable to the operation of buildings, meaning the carbon emitted through the use of energy for things like lighting, heating, cooling, ventilation and water systems. In the case of buildings, those which are designed to be naturally thermally comfortable, dry and with sustainable water systems are likely to require less carbon to operate.</p>
Low-Traffic Neighbourhood	A low-traffic neighbourhood is a group of



	residential streets where through-traffic is discouraged. Instead, buses, trucks, and other vehicles driven by non-residents travelling through the neighbourhood stick to identified main roads which border the low- traffic area. People who live inside the low-traffic neighbourhood can drive directly to and from their homes, arrange deliveries, and be accessed by emergency services, but non-residential traffic is discouraged.
Mitigation	A reduction in greenhouse gas emissions which reduces the severity of climate change.
Net zero	Where the amount of greenhouse gases emitted into the atmosphere equals the amount sequestered or offset (e.g. by forestry).
Resilience	The ability of a system, community or society exposed to the effects of climate change to resist, absorb, accommodate, adapt to, transform and recover. Including preserving and restoring essential basic structures, services and functions.
Universal design	The process of creating buildings and products accessible to people with a wide range of abilities, disabilities, and other characteristics. For example, hallways and doors in homes wide enough for wheelchair access.
Vulnerable communities	Communities at higher risk for poor health because they face barriers to social, economic, political and environmental resources, as well as limitations due to illness or disability. Children, pregnant women, elderly, malnourished people, and those who are ill or immunocompromised are particularly vulnerable when a disaster strikes, and take a relatively high share of the disease burden associated with emergencies. Poverty and its common consequences such as malnutrition, homelessness, poor housing and destitution is a major contributor to vulnerability.

# 11. Appendices

## Appendix 1: Climate action stocktake Waitākere Ranges

Appendices to this report can be found online on the Waitākere Ranges Local Board Website at [www.aucklandcouncil.govt.nz/waitakereranges](http://www.aucklandcouncil.govt.nz/waitakereranges) under 'Waitākere Ranges plans, agreement and reports'.

## Appendix 2: Contributors to this action plan

We would like to thank community members for their contribution to the development of this plan. Community organisations that contributed include:

Community Waitākere

EcoMatters Environment Trust

Glen Eden Community Pataka

Healthy Families Waitākere

Hoani Waititi Marae

Kai West

Sport Waitākere

West Auckland Māori Thought Leadership Collective

Find out more: phone 09 3010101

or visit [aucklandcouncil.govt.nz](http://aucklandcouncil.govt.nz)



## Adjustments to draft Waitākere Ranges Climate Action Plan following board member feedback in June 2023

Section	Board member feedback	Adjustment made
Introduction	Glen Eden isn't the only town centre	Re-worded to remove reference to only town centre.
Introduction	Make it clearer that the board does not control AT and other CCOs	Council-controlled organisations added to the advocacy bullet point
Introduction	Make it clearer that the board does not control AT and other CCOs	Sentence added that implementing the plan relies on decisions and investment from Governing Body, CCOs and central government that the board does not control
Introduction	Include statement in the intro section that "progressing the plan could look like..."	New paragraph added indicating what implementing the plan could look like
Adapting to Climate Change	Delete reference to Piha coastal inundation risk	Deleted
Adapting to Climate Change	Climate Change Risk Assessment maps do not reflect lived experience of communities during 2023 weather events	Maps removed from the document. Replacement maps showing lived experience are not yet available
Adapting to Climate Change	Include wildfire risk	Included
Adapting to Climate Change	Lots of new plans and consultations that the Climate Action Plan should align with / refer to, including Recovery Plan, Making Space for Water, and government buy backs of properties	New paragraph added to reference these recent plans and initiatives
Adapting to Climate Change and Natural Environment	Risk from extreme heat and increasing number of hot days needs emphasising and well as the importance of tree cover to mitigate	Increasing hot days added to list of key risks and the link between low tree cover and risk to people from hot days made clearer in the Natural Environment section.
Natural environment	Check alignment of plan with 2023-2024 local board work programme	Deleted reference to War on Weeds and changed 'permanent' weed bins to 'community' weed bins
Natural environment	Include a more explicit action about ETS native forest regeneration in the Waitākere Ranges foothills and consider including in the Economy section and flagship actions.	Standalone action included in the Natural Environment section and also included as a Natural Environment flagship initiative.
Natural environment	Planting trees is emphasised but no mention of learning how to grow native plants	Support for growing native plants now included, and growing trees (in addition to planting them) now listed as an activity for schools e.g. Trees for Survival programme
Natural environment	Update link to most recent 2023 Waitakere Ranges Heritage Area Monitoring Report	The 2023 report is not yet published online. Link will be updated when the 2023 monitoring report is published
Built environment	Delete specific references to EcoMatters Healthy Homes on a Budget programme is this is not being funded by the board in 2023/2024	Specific reference to Healthy Homes on a Budget removed and replaced with the regionally funded Home Energy Advice programme
Built environment	Note new name of Ōkaurirahi Ceramco Park	Updated in the document
Transport, Economy, Community & Coast, Food, Energy & Industry	Remove references to Climate Action Activator as there is uncertainty about future budget availability for this programme	Climate Action Activator' replaced with 'Environmental Services' in the 'Who' column in the action tables.
Transport	Remove reference to The Falls carpark in Henderson for EV charging, as need to consider a range of potential EV charge sites across west Auckland	Reference to The Falls carpark deleted (in both transport section action table and flagship actions table)



	<p>Include action for low carbon transport to local ecotourism destinations, including dark sky sites, and regional park access points as outlined in the Regional Parks Management Plan 2022.</p> <p>Include reference to Glen Eden to Arataki shuttle.</p>	<p>New action added to action table</p>
Transport	<p>Include an action to extend the food scraps collection service to community facilities</p>	<p>No adjustment made. Businesses, institutions and schools are not covered by this service - they have their own waste minimisation regulations to follow</p>
Food	<p>Make more sites on local parks available for community gardens</p>	<p>New action added to identify sites for gardens on local parks within the new Waitākere Ranges Local Parks Management Plan</p>
Food	<p>Include references to Hoani Waititi Marae as climate action collaborators</p>	<p>Hoani Waititi Marae now referenced in the action table and also acknowledged as a contributor to the development of the action plan</p>
Te Puāwaitanga o Te Tātai		



# Waitākere Ranges Climate Action Plan

Feedback must be received by **20 June 2024 (TBC)**

The Waitākere Ranges Local Board is developing a Climate Action Plan to identify opportunities and priorities for local action to reduce emissions and enable community resilience.

Waitākere Ranges is the ninth local board to develop a local response to [Auckland's Climate Plan: Te Tāruke-ā-Tāwhiri](#). The Waitākere Ranges Climate Action Plan identifies flagship projects and actions we can take locally that contribute to the regional goals of halving carbon emissions by 2030 and achieving net zero emissions by 2050.

The Waitākere Ranges Local Board area has strong foundations, with over one hundred climate action-related projects already underway. The local Climate Action Plan incorporates these community-led initiatives, along with actions that the local board, businesses, Council and CCO's are leading, into one cohesive action plan for a local response to [Auckland's Climate Plan: Te Tāruke-ā-Tāwhiri](#).

We want to hear what you think about the proposed goals and actions. It will take all of us working together to take bold and ambitious action on climate change. Let us know what you think we should prioritise or change. Your feedback will help us finalise the Waitākere Ranges Climate Action Plan by the end of 2024.

**We strongly encourage you to read the proposed approach and accompanying information before answering any of the following questions.**

We encourage you to give feedback online at [akhaveyoursay.nz](http://akhaveyoursay.nz), or you can:

**Scan and Email your completed form to:**

[project\\_email@aucklandcouncil.govt.nz](mailto:project_email@aucklandcouncil.govt.nz)

**Post your completed form to:**

**Project name**

Auckland Council

Private Bag 92300, Victoria Street West

Auckland, 1142

## Your details

**Your name and feedback will be included in public documents. All other personal details will be kept private.**

First name:

Last name:

Email address or postal address:

Your local board:

Is your feedback on behalf of an organisation or business? (If yes, this confirms you have authority to submit on the organisation's behalf)

Yes

No

Name of organisation/business: \_\_\_\_\_

## Important privacy information

The personal information that you provide in this form will be held and protected by Auckland Council in accordance with our privacy policy (available at [aucklandcouncil.govt.nz/privacy](https://aucklandcouncil.govt.nz/privacy) and at our libraries and service centres) and with the Privacy Act 1993. The privacy policy explains how we can use and share your personal information in relation to any interaction you have with the council, and how you can access and correct that information. You should familiarise yourself with this policy before submitting this form.

## These questions are optional but will help us understand which groups of the community are engaging with us.

What gender are you?

- Male       Female       Another gender (please specify): \_\_\_\_\_

What age group do you belong to?

- Under 15       15-17       18-24       25-34       35-44  
 45-54       55-64       65-74       75+

Which ethnic group(s) do you feel you belong to? (Please select as many as apply)

- Pākehā/NZ European       Other European       Māori  
 Cook Islands Māori       Samoan       Tongan  
 Indian       Chinese       Southeast Asian  
 Other (please specify): \_\_\_\_\_

## Would you like to subscribe to any of the following (tick all that apply):

- People's Panel – to take part in council surveys  
 Our Auckland – your weekly guide to what's happening in Auckland  
 Auckland Conversations - free public events, offering ideas, inspiration and action for world-class cities

You can also visit AK Have Your Say at [akhaveyoursay.nz](https://akhaveyoursay.nz) to find out about, or register to receive regular updates on, consultation activities happening across Auckland

## Your feedback (all questions are optional)

### 1. Overall, what is your opinion of the Waitākere Ranges Climate Action Plan?

- Support  
 Do not support  
 Other  
 I don't know

Tell us why

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**2. The plan outlines local goals under the eight priority areas of Auckland’s Climate Plan: Te Tāruke ā Tāwhiri. Overall, what do you think of the proposed goals?**

- I support all goals
- I support most goals
- I do not support most goals
- I do not support any goals
- I don’t know

Tell us why

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**3. Many projects are already underway or being piloted, including the following flagship projects:**

- **Investigate installing solar on facilities with significant solar potential (pg 21-22, 25)**
- **Champion opportunities for improved active travel within the Waitākere Ranges Greenways Plan (pg 33)**
- **Identify the need for secure cycle and scooter parking at public transport access points (pg 33)**
- **Host a sustainable business programme for local businesses (pg 36-37, 39)**
- **Fund establishment of a community climate action programme (pg 45)**
- **Shoreline Adaptation Plans (pg 46)**
- **Supporting communities to develop disaster resilience plans (pg 46)**
- **Distributing the Lifestyle Block Resilience Handbook (pg 46)**

**We are interested in which flagship projects you think should be prioritised next.**

**How important are the following projects to you?**

**(Refer to the pages shown in the Climate Action Plan for more detail)**

	Very important	Fairly important	Less important	Not important
1. Join the Uban Ngahere Programme (pg 16, 19)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Provide information about native forest regeneration and the Emissions Trading Scheme to landowners (pg 20)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Work with Auckland Transport to secure better bus services to train stations, including feasibility of mini-buses to and from coastal communities, and trialling on-demand rideshare in Glen Eden (pg 34-35)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Advocate for more electric vehicle charging carparks in Waitākere Ranges Local Board area and adjacent local board areas (pg 33)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Hold a local challenge to reduce single person car trips by promoting alternatives (pg 33)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Support implementation of Mana Motuhake o te Kai, the West Auckland Kai Sovereignty Plan to increase local food growing (pg 48, 52)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Identify opportunities to support the five pou (focus areas) identified by the Māori Thought Leadership Collective (pg 55-56)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Identify opportunities to partner with mana whenua and marae on new climate action and environmental projects (pg 58)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**4. Are there any other actions listed in the draft Waitākere Ranges Climate Action Plan that you think should be prioritised, and why?**

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**5. Do you have new ideas for local climate actions that are not included in the Waitākere Ranges Climate Action Plan?**

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**6. Do you have any other feedback on the goals or actions in the plan?**

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**Need more room? You can attach extra pages.**