

### Climate Report 2024-25









### National Commitment

# Te ao Māori View of Climate Change

The Climate Change Response (Zero Carbon) Amendment Act 2019 provides a framework by which the country can develop and implement clear and consistent climate change policies. This legislation contributes to the global effort under the Paris Agreement and sets a domestic greenhouse gas emission reduction target for Aotearoa of net zero by 2050 (except biogenic methane).

In May 2022, the Government released Aotearoa's first emissions reduction plan (ERP1) which contains strategies, policies and actions that contribute to global efforts to limit the global temperature rise to 1.5°C above pre-industrialised levels. Aotearoa's Second Emissions Reductions Plan (ERP2) was published in December 2024. With this plan the Government has reiterated its commitment to reducing emissions and managing the impacts of climate change. The plan sets out the policies and strategies that enable New Zealand to meet its target for the second emissions budget period (2026-2030).

The Government introduced a regime making climate-related disclosures mandatory for some organisations from financial years commencing on or after 1 January 2023. While Ngāti Whātua Ōrākei Whai Rawa (Whai Rawa) is not legally required to report, we have chosen to do so to demonstrate our commitment to ngā uri o Tuperiri and making a positive contribution to the global climate challenge. This is our fifth such report.



Climate change has the potential to greatly impact the cultural, environmental, economic, and social wellbeing of Māori. The impacts of climate change are complex for Māori given their intrinsic bond with te taiao (the natural world) and role as kaitiaki (guardianship), cultural values and economic vulnerabilities. These factors all influence a Māori approach and capacity to dealing with climate related risks and opportunities.

Māori see the world as a unified whole, where all elements including tangata whenua are genealogically interconnected. This viewpoint retains a multi-generational perspective, based on the responsibility to our tupuna (ancestors) and future generations. Emphasis is placed on the balance of cultural and spiritual values in the environment while utilising resources for social and commercial purposes. For many Māori, climate change is not an isolated risk. It is intrinsically linked to issues, such as social development, housing, environmental degradation, and hardship.

# Ngāti Whātua Ōrākei Climate Action

### Governance

Our group Foundational Climate Position Statement acknowledges the environmental crisis that we are currently in, sets our strategic focus areas, and declares our group level commitment to reach net zero emissions by 2030.

1. Board's oversight of climate related risks and opportunities



Our Position Statement is supported by the Ngāti Whātua Orakei Group Climate Action Plan which details the key programmes of work toward achieving our objectives. In pursuit of these goals, Ngāti Whātua Orakei have engaged environmental consultants, the Lever Room, to support the delivery of these objectives and planned scope of work.

Whai Rawa's strategy with regards to climate change is consistent with the seven major areas where Ngāti Whātua Ōrākei can lead in the restoration of mauri of te taiao through climate action, as per the Climate Action Plan, namely:

Protect intact and functional ecosystems and biodiversity in the rohe.

Reduce transport use and emissions.

Reduce emissions related to energy and gas use.

Investing in initiatives related to kai production.

Effective management of our assets and land holdings to reduce risk and reduce emissions.

Support healthy, energy efficient and affordable homes for whānau.

Develop a resilient water access scheme and effectively manage wastewater at the papa kāinga.

importance of proactively identifying and managing risks and opportunities, including those related to climate change.

Climate risk is included as one of Whai Rawa's primary risk categories and is captured in our Enterprise Risk Register

Whai Rawa's Board of Directors is responsible for governance

and oversight of Whai Rawa's risks and recognises the

categories and is captured in our Enterprise Risk Register which is assessed quarterly and presented to the Board. The Board received regular updates on the potential short, medium, and long-term impact of a sea level raise on the Te Tōangaroa precinct, this being our primary exposure to climate risk.

Climate-related objectives and targets have been identified in our Annual Plan and the Board are kept across the progress made through reporting against strategic objectives and Key Performance Indicators (KPIs).

The Board supports Whai Rawa's ongoing participation in the Toitū carbon reduce programme which requires setting of climate-related targets and actions. Annual certification through this programme provides the Board with assurance that targets are set, and actions are underway to achieve these targets.

Our mātāpono guide us in all that we do as a business. In particular, kaitiakitanga and rangatiratanga inform our commitment to identifying and proactively managing climate and environmental related risks and opportunities in connection with our business operations and the fulfilment of our purpose.

Climate risk and climate related initiatives and targets, including resourcing and expertise required, are discussed at Whai Rawa's Risk Committee, with matters of relevance elevated to the Whai Rawa Board. The Risk Committee is a monthly committee that supports the Board and consists of all senior members of Whai Rawa's management team.

Whai Rawa's Risk Manager is responsible for overseeing climate change initiatives and risk and reporting on progress to the Risk Committee. Senior management are responsible for managing the emission reduction initiatives relevant to their division.

 Management's role in assessing and managing climaterelated risks and opportunities

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# Strategy & Risk Management

 The intersection of strategy and risk management

2. Identifying our climate related risks and opportunities

Whai Rawa's risk assessment framework (Te Tātua) was developed to identify the potential impacts and consequences of our business operations and decision-making, and to assist when assessing potential opportunities or courses of action being considered.

Climate change is included as a primary risk category under the Te Tātua framework and practical application of this framework therefore ensures that climate and environment-related risks are considered during strategic planning and decision-making. The application of Te Tātua allows management and the Board to assess, weigh and balance competing priorities, as well as guide consideration of various factors at play over and above a typical cost/benefit analysis.

An initial climate risk assessment of our business was done in 2021 which involved climate risk modelling for key Whai Rawa assets, and a qualitative assessment in relation to other physical and transitional risks for which modelling was not available.

In addition to quantitative scenario modelling, qualitative assessments were also undertaken in relation to identified climate-related risks and opportunities in connection with access to capital, insurability, tenancy and revenue risk, coastal erosion, and storms. Transitional risks such as climate change policy and regulation, increasing costs of supporting infrastructure, and speed of action, were also assessed.

Construction and Property Sector Climate Scenarios

In 2023 the construction and property sector released three climate change scenarios to help guide the industry on how they assess and report on what climate change means for their business. Climate-related scenarios for scenario analysis are not intended to be probabilistic or predictive, or to identify the 'most likely' outcome(s) of climate change.

The Construction and Property Sector is associated with long-lived assets that will still be subject to the long-term impacts of climate change. Five main drivers of change for the sector were identified as being:

- increasing frequency and severity of extreme weather events
- availability of low carbon materials
- regulatory change
- pressures on centralised infrastructure / aging infrastructure
- carbon price

In addition to the above drivers for change a total of three Construction and Property scenarios have been identified each with a different narrative and emissions trajectory:

#### Orderly

An 'Orderly' 1.5°C scenario where decarbonisation policies are enacted immediately and smoothly (globally, in Aotearoa New Zealand, and within the sector). Whole of life carbon emissions reduction requirements for buildings is at 90% by 2050.

#### Disorderly

A 'Disorderly' scenario where significant decarbonisation is delayed until 2030 (globally, within New Zealand, and within the sector). This leads to global warming being limited to <2°C by 2100. The sector faces high transition risk after 2030 as entities rush to decarbonise.

#### Hot House

A 'Hot House World' scenario where global warming reaches >3°C above pre-industrial levels by 2100. No further decarbonisation policies are enacted (globally, within New Zealand, or within the sector). Emissions continue to rise.

In addition to undertaking flood modelling in relation to Te Tōangaroa, Whai Rawa is utilising the forecasting of climate related risks and opportunities presented in these industry wide scenarios to test our investment strategy.

We look forward to increasing the depth of our disclosures in subsequent reporting periods and support the shift toward a greater level of publicly available climate-related information. We understand the need for an efficient allocation of capital to help smooth the transition to a more sustainable, low emissions economy.

#### Te Tōangaroa Risk Assessment

The outputs from our initial climate risk assessment indicated that the physical risk to our landholdings at Te Tōangaroa poses the greatest potential impact from the effects of climate change, given the asset's proximity to the Tāmaki Makaurau coastline.

During 2023, Whai Rawa engaged professional advisors to provide an updated physical risk assessment related to the sea level rising in the Te Tōangaroa precinct and to provide a floor level flood risk assessment for six properties owned or partly owned Whai Rawa.

Four scenarios were considered for three timeframes (0.2m, 0.5m, 1.0m and 1.5m relative sea level rise over the short, medium, and long-term). These were added to the present day Highest Astronomic Tide (HAT) and to the 1%AEP (Annual Exceedance Probability) storm tide to provide an understanding of permanent sea level rise (i.e., what will be tidal) and the effect of sea level rise on storm tides, in the short (0 – 20 years), medium (20 – 60 years), and long term (60 – 100+ years). The projected sea levels were then compared to the surveyed floor levels and basement entry levels of our buildings.

The assessment indicated that our buildings are not at risk of flooding in the short and medium term (< 60 years), even when considering the inundation levels of the most extreme scenarios. However, raised sea levels, due both from climate change and storm surge, could increase the frequency and extent of rainfall flood events with the higher sea levels reducing the outflow of stormwater to the sea. Protective measures have been taken to mitigate the risk of flooding in low level areas during extreme weather events i.e. deployment of sandbags if necessary and raising of basement flood barriers.

The anticipated financial impacts of climate related risks have not yet been quantified. However, we acknowledge the importance of documenting the anticipated impacts of climate- related risks and opportunities and look forward to advancing this work with the increasing availability of data. Given assessments undertaken to date, the impact is expected to be minimal in the short term (< 20 years).

#### Whai Rawa Transition Planning

#### Our Business Model & Portfolio

Whai Rawa is the commercial investment company of the Ngāti Whātua Ōrākei Group and is a wholly owned subsidiary of the Ngāti Whātua Ōrākei Trust. Whai Rawa is primarily a property development and investment company, whose principal objective is to maximise the financial or economic returns to the Ngāti Whātua Ōrākei Group. Funds generated by Whai Rawa are used to support the tribal development goals of charitable entity Ngāti Whātua Ōrākei Whai Māia Limited, set up as a charitable entity. Whai Māia is the Tribal Development arm that is responsible for portfolios including environment, education, health and wellbeing, sporting and cultural activities.

With over 160 hectares of commercial and cultural whenua in our portfolio, we have acquired properties across Tāmaki Makaurau to develop and generate revenue to invest in our hapū. These commercial ventures allow us to achieve our tribal development aspirations, finance positive social services and deliver housing solutions for whānau within our papa kāinga.

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#### Whānau Housing

Our whānau housing portfolio currently consists of over 100 properties primarily based on the Ōrākei papa kāinga. It is our aim to ensure that our homes are warm, dry, healthy and safe.

- Our homes at Hawaiki include a shared ownership option, making homeownership more accessible and achievable for our whānau.
- Over the last decade we have invested in our residential upgrade and compliance programme to bring our residential stock up to our new Housing Standard.

#### Te Tōangaroa

Today, Te Tōangaroa is our single largest commercial asset. Located on the Eastern end of the City Centre and adjacent to the land currently occupied by the Ports of Auckland. A key landmark within the precinct is Spark Arena and Māhuhu ki te Rangi Reserve named after our ancestral waka. Not only does Te Tōangaroa help to re-establish our presence in the City Centre, but it also provides important income from its annual rent to be able to reinvest into our hapū.

In August 2023, we formed a partnership with Precinct Properties to acquire two buildings in Te Tōangaroa. Precinct have made contributions to the vibrancy of the city and the partnership will provide us with greater influence to revitalise Te Tōangaroa. Ownership of the land remains with Ngāti Whātua Ōrākei with the investment partnership holding a 123-year prepaid ground lease.

Te Tōangaroa is Whai Rawa's main asset and as such we recognise that the adoption of sustainable practices and solutions for the precinct can act as both a mitigant to climate-related risks, and an opportunity to positively contribute climate solutions. To this end, we are committed to the identification and assessment of potential opportunities for Te Tōangaroa, including building management systems, energy monitoring systems, installation of EV charging stations, solar solutions, transport planning, and installation of end of trip facilities.

#### Capital Deployment and Strategic Planning

While Te Tōangaroa is our main asset, we acknowledge that the changing climate brings risk and opportunity to the entirety of our asset and landholding portfolio. Given our principal objective to maximise the financial and economic returns to the Ngāti Whātua Ōrākei Group, it's vital that we assess and anticipate climate-related impacts across time horizons. Not only will this strengthen the on-going financial sustainability of our work it will support the transition to a climate-resilient, low-emissions future.

Our Foundational Climate Position Statement: Hā Tuamatangi (2022) identifies seven areas where Ngāti Whātua Ōrākei can lead in the restoration of the mauri of te taiao through climate action.

In relation to investment activities, we are specifically committed to the effective management of our assets and land holdings to reduce risk and reduce emissions. This includes understanding how Ngāti Whātua Ōrākei best manage the impact of rising sea levels on land holdings.

As property developer all development opportunities undergo robust risk assessments at the acquisition and design stages, to determine best practice strategies to mitigate environmental-related risks, both in relation to the development itself and the resultant build.

Keeping abreast of the climate risk and opportunity landscape will continue to inform our acquisition strategy and decision-making processes.

#### Group Transition Planning

In addition to the positioning and processes of Whai Rawa, across the Group, Ngāti Whātua Ōrākei is supporting the transition through:

- Focus on our own whare. Evaluating risk and reduce emissions across the papakāinga and the iwi. This includes reducing our major emission areas — transport use and energy use.
- Leveraging the power of our assets, our landholdings, and our procurement.
- Supporting whānau to advance climate solutions, such as changes in consumption (such as diet), home improvement (such as energy source) and day to day behaviour (such as transport), and parakore.
- Demonstrating and funding practical and/or innovative solutions to climate issues.
- Advocating to persuade, support and compel others to change through communication, lobbying and working with central and local government.

#### Physical Risks

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Physical Climate Risks	Risk Statement	Strategic and financial impacts/insight	
Coastal inundation	Increased frequency and severity of inundated buildings due to a combination of sea level rise, tides, and storms.	Te Tōangaroa is Whai Rawa's main asset at risk of the effects of climate change, given its proximity to the coast and the fact that it is reclaimed land. We have worked with an external expert to understand the risks involved so that long-term decision making, strategy setting and financial planning for Te Tōangaroa can be considered.  We recognise that the adoption of sustainable practices and solutions can act as both a mitigant to climate-related risks, and an opportunity to positively contribute to climate-related impacts.  To this end, we are committed to the identification and assessment of potential opportunities for Te Tōangaroa, including identifying best practice solutions and building management systems, energy monitoring systems, installation of EV charging stations, solar solutions, transport planning, and installation of end of trip facilities to name a few. We will continue to demonstrate reductions in waste management for Whai Rawa owned buildings at Te Tōangaroa and are committed to ensuring that these buildings remain green rated and are operated and managed accordingly.  Tenancy and revenue risks arise from the potential risk of coastal inundation and erosion on the Tāmaki Makaurau waterfront. Given the nature of land and building ownership at Te Tōangaroa, including the dispersed responsibilities for maintaining public spaces, we recognist that there is a high degree of stakeholder dependency (including local and central government) on our ability to mitigate Te Tōangaroa's climate-related risks and maximise potential opportunities. This stakeholder dependency is in itself a risk for Whai Rawa.  All development opportunities undergo robust risk assessments at the acquisition and design stages, to determine best practice strategies to mitigate environmental-related risks, both in relation to the development itself and the resultant build. We engage relevant experts throughout the process to ensure the development is designed in a robust and sustainable way and to	
Dependency risk	Risk of disruption in transport, energy, communications, and other lifeline services impacting the operation and usability of assets.		
Loss of building function due to heat, based on a 25°C threshold	Increased average temperatures threaten the ability for buildings to maintain acceptable levels of operation for safe occupation.		
Tenancy and revenue risk	The potential for physical climate impacts and/or secondary effects (access, energy, water, or food		
	insecurity, etc.) to reduce demand for tenancies and revenues.		
Coastal erosion	Rising sea level and changes in storm frequency and intensity accelerating erosion of beaches, estuarine shores and cliffs threatening the structural integrity and safety of nearby buildings.		
Access to capital (debt and equity)	The risk that lenders downgrade their valuation or investment in coastal land assets, due to impairments (real or perceived) resulting from climate change.		
Insurability	The potential for physical climate impacts to render buildings uninsurable.	fully understand the land and surrounding area upon which the development is constructed.  We recognise the uncertainties surrounding the extent of climate change. This requires that our financial modelling and planning takes the potential effects and impacts of climate change into account. We will continue to assess potential opportunities to account for medium and long-term climate change impacts, strategies and mitigants.	
Transition Climate Risks	Risk Statement	Strategic and financial impacts/insight	
Climate change policy and regulation	Aotearoa expects increasingly heavy-handed policies to address climate change. This includes	Whai Rawa has achieved Toitū certification under the carbon reduce programme for the 2024 reporting year.  All development opportunities undergo robust risk assessments	
	increased costs to comply with climate-resilient building codes and regulations.	to determine best practice strategies to ensure compliance with environmental-related requirements. We engage relevant experts throughout the process.	
Increasing costs of supporting infrastructure	Aotearoa expects increasing costs of carbon-intense energy sources. Market demands for alternative fuel, energy and transport systems require significant upgrades to properties and supporting infrastructure.	AECOM House is reliant on gas as an energy source. We are reviewing possible steps to switch to an alternative energy source.	
		We will continue to demonstrate Kaitiakitanga and Rangatiratanga, as we strive to raise awareness, influence and effect positive change related to climate change.	
	The Government is developing a Gas Transition Plan that manages the gas industry's transition to a low emissions future.		

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# Metrics & Targets

A Greenhouse Gas (GHG) Inventory is the measurement of emissions generated by an organisation, this covers 6 main gas types, Carbon Dioxide (CO2), Methane (CH4), Nitrous Oxide (N2O), hydrochlorofluorocarbons (HFCs), perfluorocarbons (PFCs) & sulphur hexafluoride (SF6) that are usually reported as a carbon dioxide equivalent or CO2e.

GHG Emissions are reported across 3 scopes based on the type of activity and where in the organisation's value chain it took place.

A combination of data sources were used to calculate an inventory, activity data such as power consumption from electricity invoices, industry average values from \$ spent and modelled assumptions. We have chosen to have our GHG Inventory certified.

Whai Rawa was first Toitū certified under the Toitū carbon reduce programme in December 2021 for the 2021 reporting year. This certification was again achieved for the 2022, 2023, and 2024 reporting years. The 2024 certification was obtained in June 2025 and confirmed our compliance with the revised ISO standard for quantification and reporting of greenhouse gas emissions (ISO14064-1:2018).

Whai Rawa's total recognised emissions for 2024 increased considerably (from 2278 tCO2-e in 2023 to 3603 tCO2-e in 2024). The emissions increase for 2024 was largely due to increased development activity for the year. Reductions were however attained for emissions from electricity use, natural gas, water usage, and waste at Eastcliffe Retirement Village and the Whai Rawa office.

Our emissions targets for 2025 have again been centred around emissions arising from Eastcliffe Retirement Village and the Whai Rawa office. Measurement of emissions against targets for Eastcliffe Retirement Village will cease in

FY2026 given the sale and transfer of control of the village to Generus Living. From FY2026 we will look to improve our measurement of scope 3 emissions arising from development activities and plan to include specific targets for sources of emissions arising from our development activities, commercial building (AECOM House), residential property stock, and employee commuting.

We have set short term goals (3-year goals) of reducing our total carbon emissions from electricity, gas, water, and waste by 10% from our base year measurements (2022). By 2031, we aim to have decreased our total carbon emissions by 25% from our base year reading. Keeping in line with the Paris Agreement and the Climate Change Response Amendment Act 2019, it is our mission to be carbon-zero by 2050 at the latest. Thereby ensuring Whai Rawa meets national and international standards.



In partnership with Toitū, we have outlined key emissions reduction goals. We are closely monitoring existing energy use where invoices are reviewed monthly, and data is entered into the Toitū system for monitoring short term specific goals agreed in our Emissions Management and Reduction Plan, as well as our long-term carbon emission reduction targets which are as follows:

#### Total Emissions (Toitū Certified)

Category	tCO2-e 2022 (base year)	tCO2-e 2023	tCO2-e 2024
Scope 1	203.48	180.08	180.10
Scope 2 (market-based method)	25.30	8.98	0.00
Scope 3	3554.68	2089.12	3422.48
Total	3583.46	2278.18	3602.58

10%

DUE - MID 2025

25%

DUE - MID 2031

Zero

**DUE - MID 2050** 

## Carbon Free Future

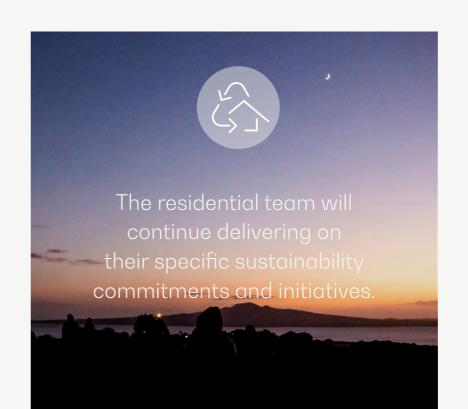
Our group level emissions targets are more ambitious, so these targets will be seen as minimum.

In part, we plan to achieve these goals through engaging suppliers who have proven sustainable operations in place, upgrading machinery to energy efficient options, and improving sourcing across Whai Rawa. Planned initiatives to advance these outcomes include the following:





Our development team aims to align with Healthy Home standards, incorporate sustainable initiatives in designs, and minimise waste and emissions at sites.





Consider initiatives such as rubbish collection and recycling, rainwater collection and EV chargers to improve the NABERs star rating for AECOM house.



Engaging external consultants to assist with quantification of carbon emissions from our NZDF and UNITEC stage 1 developments and establish targeted reduction strategies on these projects.





Engaging external consultants
to perform a baseline
assessment of our emissions
from employee commuting and
build a transition pathway to
a lower emissions mobility plan.

