



# NURTURING LIVEABLE, THRIVING, AND CONNECTED COMMUNITIES AMIDST CLIMATE CHANGE

#### A message from the Mayor and Chief Executive

We have a clear vision to build "liveable, thriving and connected communities". This vision guides our approach and response to climate change.

Climate change brings big challenges and changes. We have to plan well, move fast, work together, and be fair.

This Strategy guides our thinking, actions and responsibilities to respond to climate change. We know the challenges, and we're helping our communities to be stronger, adapt, and grow in a good way.

To help drive the Strategy we will work with our community, iwi, and haapu to develop a Climate Action Plan, so we all know what we need, how we will do it, and what we can achieve together.

Around the world, in our country, and in our own backyard, we are seeing and experiencing the impacts of climate change. This affects our environment, our economy, culture, and our wellbeing.

Many councils in New Zealand and beyond are working hard on climate change. We need to act quickly. We have to cut down on things that make

climate change worse. If we don't, it'll cost us a lot more later, and things will be much harder for our councils and communities. This strategy sets the vision and targets, and the plan is how we will get there.

But our strategy isn't just a project on paper. We're committed to making real progress. We want to work with you to create a future that's good for everyone. We want a future that's low on pollution, strong against challenges, resilient and fair for all of us.



Her Worship, Jacqui Church

Mayor

g. J. Is

**Gavin Ion**Chief Executive

# CLIMATE CHANGE How do we respond?





### **Council's Vision**

LIVEABLE, THRIVING, CONNECTED COMMUNITIES
HE NOOHANGA AAHURU, HE IWI WHAI ORA, HE HAPORI TUUHONO TAHI

### **Climate Response & Resilience Strategy Outcome**

WE AND OUR COMMUNITIES ARE BUILDING RESILIENCE AND ACTIVELY MITIGATING AND ADAPTING TO CLIMATE CHANGE

### **Target**

Support a reduction in district emissions by 25% by 2030

### **Target**

Reduce organisational emissions by 50% by 2030

### Aims =

### **Aim - 1**

By **connecting** with the community we collectively address our emissions targets.

### **Aim - 2**

Our climate change responses enhance our community's ability to be **resilient** and provide equitable outcomes for all.

### Aim - 3

The Waikato district is an adaptable, **liveable** and low carbon community.

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### 1. PURPOSE TOITUU TE WHENUA, TOITUU TE TANGATA

#### Climate change is one of the most critical issues of our time.

We recognise the significance and broad impacts of climate change and understand that we have a statutory and moral responsibility to act to mitigate and adapt to climate change. A climate lens will be applied to our planning and

decision-making processes; aiming to balance our communities' current needs and economic stability with a sustainable future.

The Climate Response & Resilience Strategy provides direction for Waikato District Council to:



Provide actions and support to mitigate and adapt to climate change



Outline projects that deliver on measurable targets that reduce emissions



Meet our audit and statutory obligations



Set timelines and targets for Co<sub>2</sub>e emission reduction



Build resilience and support community response



Deliver on responsibilities & community expectations

#### Figure 1. Purpose of strategy.

We want to work with our communities to understand what the priorities and needs are in response to climate change and to develop a community Climate Action Plan together which will drive the Strategy.

This Climate Response & Resilience Strategy supports the Climate Response & Resilience Action Plan by providing a roadmap with targets and timelines that align to key annual projects.

THE STRATEGY WILL
BE LED BY THE CLIMATE
RESPONSE & RESILIENCE
ACTION PLAN IN
COLLABORATION WITH OUR
COMMUNITIES.



## 2. CLIMATE CHANGE HURINGA AHUARANGI. KIA HIWA RAA!

The Intergovernmental Panel on Climate Change (IPCC) warns that global warming should be limited to 1.5° C, and that we have a small window in which to act before the effects of climate change become irreversible.

SCIENCE TELLS US THAT LIMITING GLOBAL WARMING TO 1.5°C ABOVE PRE-INDUSTRIAL LEVELS IS ESSENTIAL.

However, it is likely that this threshold will be breached sometime in the next decade.

The number of climate-related disasters has tripled in the last 30 years.

SEA LEVEL IN PARTS OF NEW ZEALAND IS RISING TWICE

AS FAST AS PREDICTED

In Aotearoa, the past 10 years have been among the warmest on record and extreme weather events have occurred four to five times more frequently.

We know that extreme weather events are going to become more frequent and severe, and we need to be better prepared. We are likely to experience more storms, floods and drought, warmer temperatures, increased health issues, impacts to agriculture, horticulture, biodiversity, supply chains, and infrastructure, which in turn will impact inequality and hardship as the costs for food, petrol, gas and electricity will likely rise.

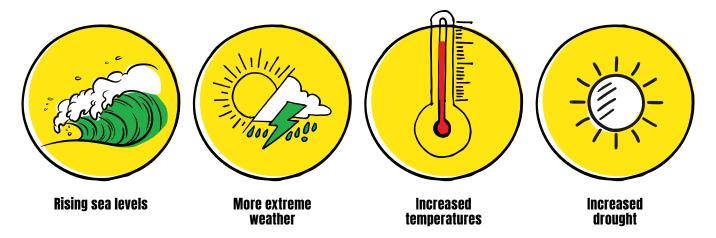


Figure 2. Climate Change projections for our district.

# 3. LEGISLATION TE WHAKATURETANGA

New Zealand signed up to the Paris Agreement (an international climate treaty) along with 195 other countries in 2016 and also strengthened our commitment at Cop26\* (2021), to a 50% reduction in  $Co_2$  by 2030 and carbon neutrality by 2050.

The key acts, conferences, and strategies to meet this target are outlined below. An explanation of the acts and agreements can be found on the councils climate action webpage.

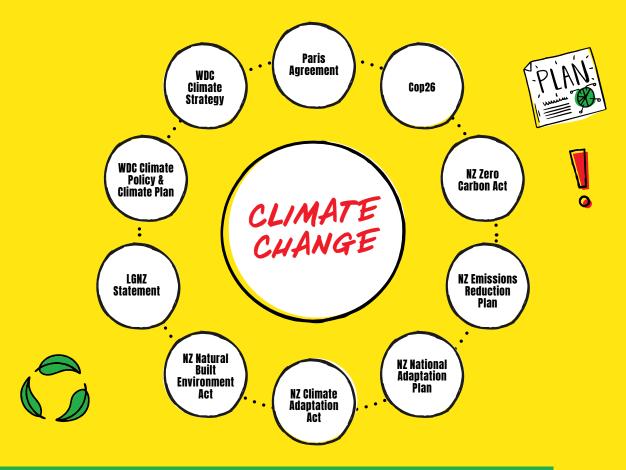


Figure 3. Framework of International and National Acts and Plans to deliver on Climate Change.

The NZ Emissions Reduction Plan (ERP), released in 2022, is the first statutory plan under the Climate Change Response Act, which requires the Government to act to reduce emissions. Councils across the country will play a vital part in achieving the ERP targets.

\*COP is an international climate summit held each year by the United Nations. COP is short for "Conference of the Parties," meaning those countries who joined the international treaty called the U.N. Framework Convention on Climate Change.

# 4. TOOKU KURA TAIAO, TOOKU ORANGATONUTANGA. OUR CLIMATE CHANGE STRATEGY IS OUR WAY OF LIFE.

He koutu whenua te taea ai te parepare, he koutu taiao whakamaua, he koutu taangata ka herea.

Maaori believe that humans are tightly connected to the land and the natural world

Te Rangi e tuu, Te Papa e takoto, Ngaa Wai e horahia, maaku hei kumanu

The Heavens above – The Earth Below – The widespread waters - For me to tend carefully!

Te ao Maaori views of relationships with the environment, are based on the notions of whakapapa, kaitiakitanga and whanaungatanga.

Whakapapa recognises the connections between everything that exists including people and the natural environment. Kaitiakitanga is guardianship and protection, usually referring to a responsibility to care for the environment. Whanaungatanga is the connection with people.

Partnership with iwi and hapu must be interconnected with wellbeing and climate action, and acknowledge Te Tiriti o Waitangi obligations and partnerships.

#### Maatauranga maaori | Our world

Maatauranga Maaori is a term for the unique combined knowledge of ancestors and the experiences of Maaori living in Aotearoa.

Maatauranga Maaori, although different from Western Science, is needed and acknowledged to provide a more holistic view and understanding of our environment and relationship with it.

We are currently supporting community and marae resilience.

#### The term includes many forms, such as:

- te reo (language)
- maatauranga (education)
- taonga tuku iho, maatauranga o te taiao (traditional environmental knowledge)
- rongoaa (traditional knowledge of cultural practice, such as healing and medicines)
- hii ika (fishing)
- mahinga kai (cultivation)
- whakapapa (geneology), and also,
- manaakitanga (generosity)
- mauri (life force)
- kaitiakitanga (guardianship) to affirm Maaori roles as environmental custodians
- Oranga (wellbeing and good health for people, communities and the environment)
- Mana (customary authority, status, a responsibility to look after and care for a rohe.

Climate change impacts will disproportionately affect Maaori wellbeing, health, taonga, traditional practices, cultural and spiritual sites, mahinga kai, hunting and gathering sites and places of historical significance. This in turn will also adversely affect the customs, spiritual, physical, intellectual, and social values that are vital to the health and wellbeing of Maaori identity.

#### Te whakanui i te ao Maaori

Te ao Maaori interconnectedness and interrelationships between people and the environment will inform our decision making and actions.

#### Te Ture Whaimana

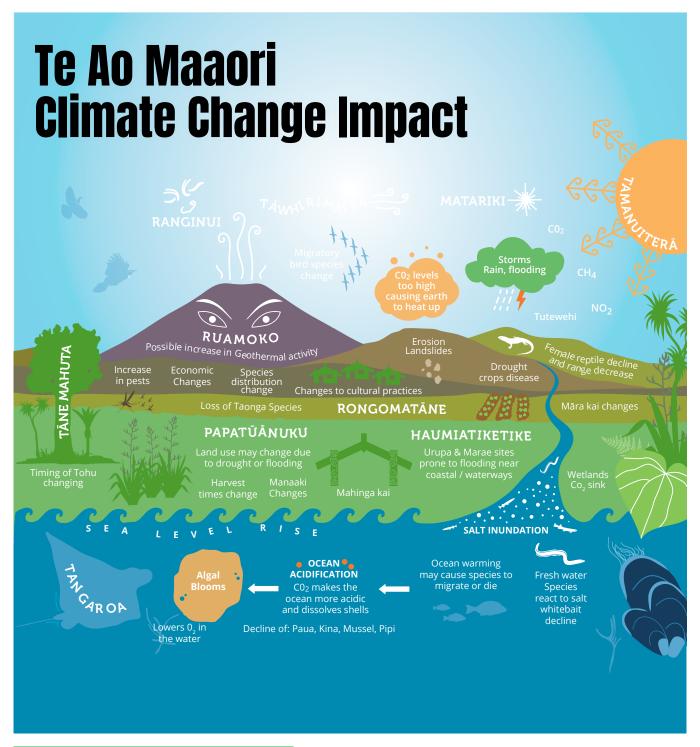
We give recognition to the strategic importance of the Waikato River, to cultural, environmental and economic wellbeing, and that restoration, protection of the health and wellbeing of the Waikato River is key. Climate change may impact the river via erosion, temperature and salinity changes, migration of species and increase in pest species.

Approximately 80% of marae are located in lowlying, coastal areas or near flood-prone rivers. Marae, waahi tapu, and urupaa are at increased risk from climate change impacts such as erosion, storms, sea level rise etc (see Te Ao visual). "WE ACKNOWLEDGE THE IMPORTANCE
OF SAFEGUARDING THE UNIQUE
CULTURAL HERITAGE AND HERITAGE
OF OUR DISTRICT, AND WILL VALUE
AND RESPECT BOTH TANGIBLE AND
INTANGIBLE HERITAGE (I.E. CULTURAL
PRACTICES, TIKANGA, TE AO MAAORI,
KNOWLEDGE SYSTEMS, HISTORIC
PLACES) THROUGHOUT ADAPTATION,
MITIGATION, AND RISK MANAGEMENT
AND NATURAL DISASTER AND
EMERGENCY RESPONSE."



THE DIAGRAM BELOW PROVIDES A TE AO MAAORI LENS ON HOW THE BROAD ASPECTS OF CLIMATE CHANGE RELATE TO AND INFLUENCE OR IMPACT THE REALMS SOME OF THE ATUA.





# 5. THE SUSTAINABLE DEVELOPMENT GOALS NGAA WHAAINGA ATAWHAI

The Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet and improve the lives and prospects of people.

The 17 Goals were adopted by all United Nations Member States, including New Zealand, in 2015.

Key SDGs are included in this strategy to help understand the broader context and where our actions fit or can influence. We acknowledge the pivotal work that the Waikato Wellbeing Project is driving to create a more environmentally sustainable, prosperous and inclusive Waikato region by 2030. waikatowellbeingproject.co.nz/detailed-targets/

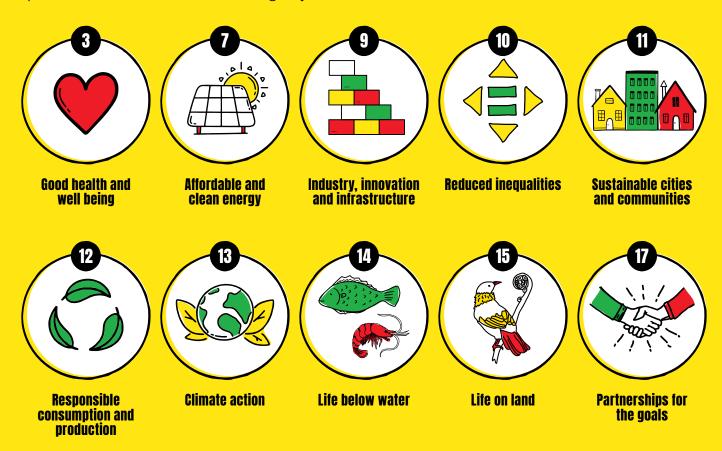
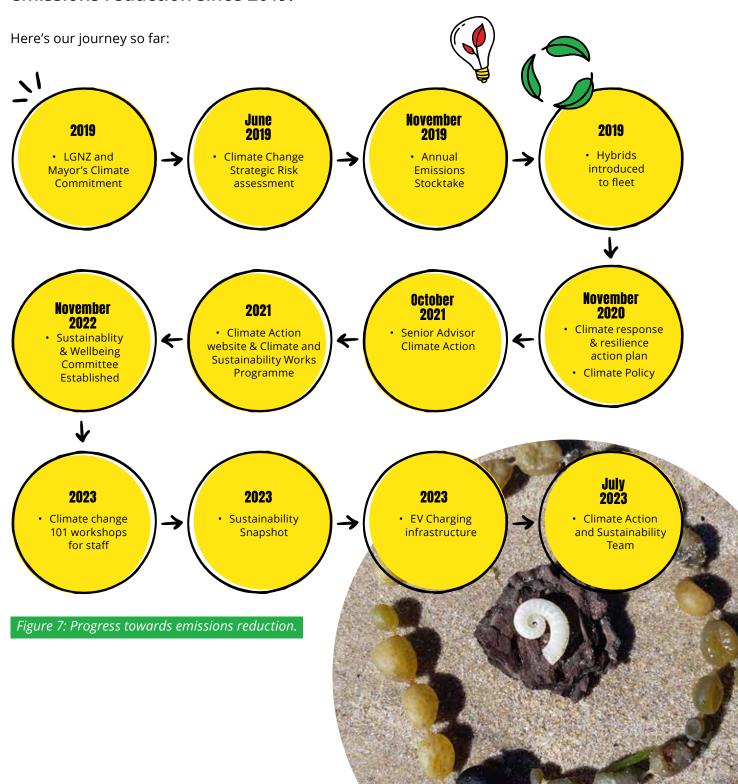


Figure 5. SDG's.

# 6. PROGRESS SO FAR NGAA TAPUWAE

Waikato District Council has actively and purposefully worked towards emissions reduction since 2019.



## 7. MITIGATION & ADAPTION OBJECTIVES AND TARGETS E TIMU TE TAI, E PARI TE TAI

For this strategy to be impactful and actionable, objectives and targets must be ambitious for both mitigation and adaptation.

In the diagram below adaptation relates more to water (floods, sea level rise, increases in groundwater, droughts, fires, famine, heat stress).

#### **Mitigation**

CO2

Low carbon economy

- Reducing carbon emissions and building community resilience will be a key consideration in policies, plans and services.
- Scientific data and maatauranga Maaori should guide decision making on mitigation and adaptation.

#### **Adaptation**

Resilient communities

Figure 8. Image from WRC climate change roadmap

MITIGATION: IS ACTION TO MINIMISE CLIMATE CHANGE BY AVOIDING, REDUCING AND REMOVING GREENHOUSE GAS (GHG) EMISSIONS.

ADAPTATION: TO ANTICIPATE, PREPARE FOR, ADJUST AND COPE WITH THE UNAVOIDABLE IMPACTS OF CLIMATE CHANGE.

# CLIMATE CHANGE How do we respond?

### **Mitigation targets**

- **a. Our Organisation:** aims to reduce emissions by up to 50% by 2030 in line with science-based targets of 1.5C warming.
- **b. Our Organisation:** aims to be carbon neutral by 2050 in line with Government commitments and expectations.
- **c. Community:** with our communities, we will identify, develop and enable the use of our collective tools, programmes and knowledge to reduce greenhouse gas emissions, aiming for a district wide reduction in emissions by 25% by 2030.

#### **Adaptation objectives**

- **d. Our Organisation:** will prepare, respond and plan for the effects of climate change on our organisation, assets, infrastructure, and our communities.
- e. Our Organisation: we will embed climate change/action in our organisation, strategies and plans.
- **f. Community:** we will support our communities, in partnership with others, to prepare and adapt to the effects of climate change, aiming to strengthen our climate resilience.



# 8. RESILIENCE HE TOKA TUU MOANA

Resilience is our ability to prepare, respond and adapt to our changing environment, and also recover from events. In the short term we need to respond to disruptive, and high impact emergency events, and also the longer term effects that we are seeing with the changes to our climate.

It is important we also assess risk. This ensures we understand the threats we face in the future and assists us to take a proper approach to decision-making using good data, reporting and evidence.

Resilience is important for the safety and wellbeing of our communities, and the ability to continue in the face of change. We have an important role to play as Council in supporting this with our planning, decision-making, emergency response and community engagement activities.

The 3 key areas
of risk for us to address
are the resilience of
our infrastructure, our
communities and our
organisation.

#### **How do we become more resilient?**

We support the development of resilience and response plans with our communities. These plans aim to identify and assess climate risk impacts, threats, hazards and vulnerability and preparedness. We enable and support community resilience by building awareness of the risks we face, build relationships and connections and develop plans to enable our communities to support each other in the event of disruption.

We aim to take a multi-faceted approach that will consider changes in policy, planning, infrastructure, services, risk management, and overall, the way we do things. They key is reducing greenhouse gas emissions (Co<sub>2</sub>e) and adapting to the impacts of climate change.

A key consideration is our infrastructure, where and how we build, including our pipes, structures, houses, roads, bridges etc, allowing for increased climate change projections and planning accordingly. We need to take into consideration the affordability of investing in quality and robust infrastructure now, balanced against the high cost of responding to damage and repairing infrastructure as weather events become more frequent.

The most vulnerable in our communities are often disproportionately affected by change and natural hazards.

Our approach will consider and listen community to needs and priorities.



# 9. WHAT WILL WE DO? KIA MAU KI TE AKA MATUA

WDC have a key role to play in leading by example and also supporting our communities to prepare and respond to climate change.

We can have a direct effect on emission reduction and preparedness via our Long Term Plans, Annual Plans and resource consents, planning, building, infrastructure, waste, procurement and committing to reducing our operation emissions. Indirectly we can influence and support by collaborating, listening to our communities needs, submissions to Government, supporting, educating and advice.



Commit to reducing our operational Co<sub>2</sub>e emissions annually and supporting the Waikato district to do the same.



Collaborate with iwi, community, councils, businesses, youth and other stakeholders to educate, prepare, adapt and mitigate the impacts of climate change and work together on your priorities for a Climate Action Plan.



Make climate resilience a strategic objective and embed climate change and action in our plans, policies, decision making, infrastructure and mahi.



Support the development of community resilience and response plans that assist communities to respond to disruptive events.



Assess projects and procurement that have good sustainability outcomes and lessen the impacts of climate change.



Collect and track robust data and report on our climate change targets, whilst providing education for our staff and communities on climate change and taking action.



Invest in organisational resilience to position ourselves to support our communities including risk management, business continuity and disaster preparedness.



Make climate change and sustainability part of our organisational culture, creating an understanding and participation that makes it part of our everyday thinking and decision-making.

# 10. PRINCIPLES WHICH GUIDE OUR RESPONSE TE MIRO MAA, TE MIRO PANGO, TE MIRO WHERO

#### Interconnected

Our response will value Te Ao Maaori and the concept of interconnectedness of our people and environment, enabling understanding and developing respect for the natural environment and our relationship with it. We acknowledge maaori as guardians of the land and the importance of whakapapa.

#### **Future focused**



We will be focused on building resilient communities now and into the future.

#### **Community centred**

Our approach will take into consideration the impacts and benefits of our actions for our communities. We will consider environmental, social, economic and cultural impacts in our efforts to build an equitable and engaged low carbon future for the Waikato District.

#### **Evidence based**



Our response will be relevant, and evidence based through research and understanding.

# 11. KEY TARGETS AND CLIMATE ROAD MAP

The diagram illustrates how we intend to achieve our targets for reducing emissions over time, and some of the key activities and projects that will assist deliver these.

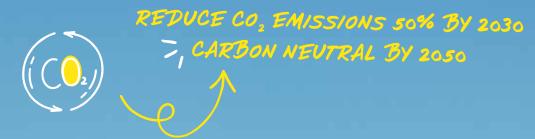








Figure 9. Road map

# 12. EMISSIONS & IMPACT AREAS NGAA TUKUWARO ME NGAA TAKIWAA KUA PAANGIA

Our emission profile in Waikato is different to other parts of the world, and even New Zealand, due to our agricultural sector. In the Waikato Region, agriculture is the largest emissions source (69%).

We have established a rural economic forum, to better connect and engage with the farming community.

IN 2022 WAIKATO DISTRICT EMISSIONS WERE 2,332,246 tCO2e

#### Tonnes Co<sub>s</sub>e

Agriculture	1,721,291
Stationary energy	450,305
Transportation	297,225
Waste	47,438
Industry	23,914

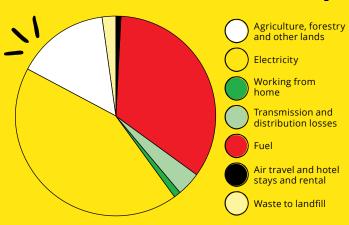


# **12.1 Council Operational Emissions**

Ngaa tukuwaro a ngaa mahi a te Kaunihera

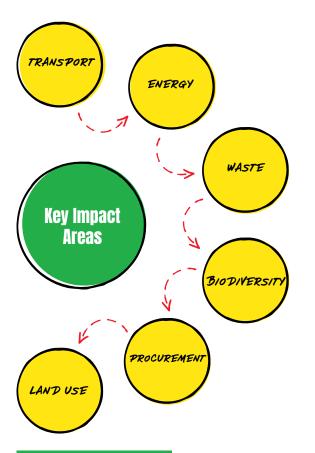
Council's operational emissions comprise of the following:

#### Waikato GHG Emissions by scope FY22: 1,065 TCO<sub>2</sub>e



Waikato District activities generate 19% of Waikato Region's emissions. Our district emissions have decreased by approximately 8.2% compared with 2018/19. The Key Impact Areas diagrams highlight our key impact areas for emission reduction. Addressing these over the next 7 years, combined with the Government's push for renewable energy, should hopefully reduce our emissions by 50% by 2030. We will continue to plan and investigate offsetting and other options for reduction beyond 2030.

### 13. KEY IMPACT AREAS NGAA TAKIWAA MATUA E PAANGIA ANA



Our Key Impact Action Areas: internal

- Transition our fleet to hybrid and electric where appropriate.
- Remove gas boilers, install LED lighting and scope energy efficiencies.
- Embed climate change/action in our planning, decision making and actions.
- Increase planting in our reserves/land where practical.
- Implement Green Office programme.
- Develop an Energy Plan.
- Sustainable Procurement Strategy.
- Verify Annual Emissions and report.
- Adopt Sustainable Development Goals.



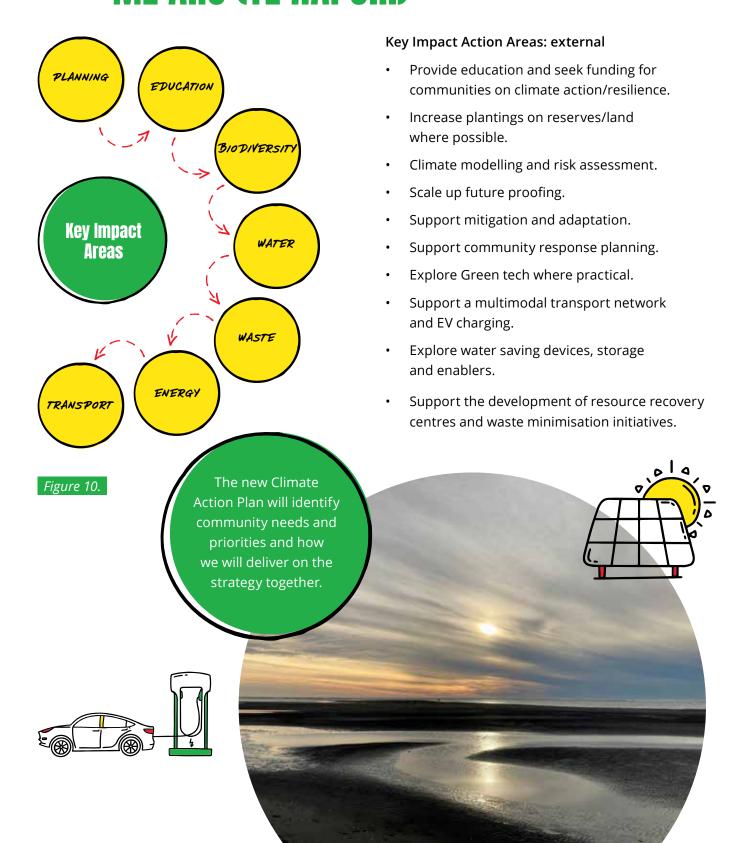
Figure 9. Areas to target.





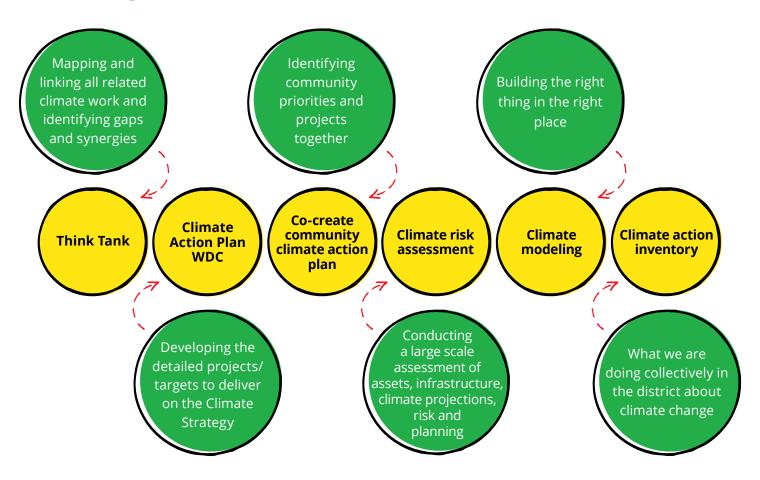


### 14. KEY IMPACT ACTION AREAS (COMMUNITY) NGAA TAKIWAA MATUA E PAANGIA ANA ME ARO (TE HAPORI)



## **Next steps**

### Me ahu peehea



# 15. GOVERNANCE TE MANA WHAKAHAERE

The Climate Action Strategy will be led and implemented by the Climate Action and Sustainability Team, the Climate Action & Advisory Group and the Council Sustainability & Wellbeing Committee.

The Strategy also requires the support and input of all staff and our communities to make it a reality. We will report annually on our progress to reduce emissions and prepare for the effects of climate change. More substantial reviews will be undertaken every three years to support the development of the Annual Plan and Long Term Plan. A new climate strategy will be developed for beyond 2030.

TAKING ACTION
TOGETHER
ON CLIMATE
CHANGE



### 15. GLOSSARY TE KUPUTAKA





**Adaptation** Making changes or adjustments to moderate and live with the impacts

of climate change.

**Anthropogenic** Caused or made from human activities. Greenhouse gases created by

human activity.

**Climate change** Changes in the large-scale, long-term shift in the planet's weather patterns

and average temperatures

Climate emergency Where urgent action is needed to reduce or halt climate change to avoid

damage on the environment, people, and communities.

**Carbon footprint** The amount of carbon dioxide released into the atmosphere because

of the activities of an individual, organisation, or community. 'Carbon' is used as a shorthand to also include other greenhouse gases (e.g.,

methane and nitrous oxide) which cause climate change.

**Carbon neutral** A process where there is no net release of carbon dioxide. The amount

of Co<sub>2</sub> taken out and the amount released are identical. A company or country

can also achieve carbon neutrality by means of carbon offsetting.

**Carbon dioxide equivalent is a unit for measuring carbon footprints.** 

"CO<sub>2</sub>e" allows "bundles" of greenhouse gases to be expressed as a single

number, comparing the various gases emissions based on their

global warming potential.

COP26 is the annual United Nations climate change conference. COP

stands for Conference of the Parties, and the summit is attended by the countries that signed the **United Nations Framework** 

**Convention on Climate Change (UNFCCC).** 

**Biodiversity** The variety of life on Earth in all its forms and interactions. Biodiversity on

earth is being lost at an alarming rate. One million animal and plant species

are currently threatened with extinction, more than ever before in

human history.

**LGNZ Statement** This is the Local Government NZ position statement on climate change.

Local government recognises a need for proactive collaboration between central and local government which recognises the different mandates and

roles for climate change responses.

**Local Government Act 2002** This Act provides for democratic and effective local government that

recognises the diversity of New Zealand communities.

<b>NZ Emissions</b>	•
<b>Reduction Pla</b>	an

New Zealand's first emissions reduction plan contains strategies, policies and actions for contributing to global efforts to limit global temperature rise to 1.5°C above pre-industrial levels.

#### NZ Zero Carbon Act (now called 'Climate Change Response (Zero Carbon) Amendment Act 2019)

**NZ Zero Carbon Act**This amendment Act provides a framework by which New Zealand can develop and implement clear and stable climate change policies.

#### **NZ National Adaption Plan**

The National Adaptation plan considers the impacts of climate change now and into the future and it sets out how NZ will adapt.

#### **NZ Climate Adaptation Act**

this Act is intended to address the issues associated with managed retreat such as funding, compensation, land acquisition, liability, and insurance (it is not released yet).

#### NZ Natural and Built Environment Bill

The Natural and Built Environment Bill, along with the Spatial Planning Bill, replaces the Resource Management Act 1991 (RMA).

#### **Paris agreement**

The Paris Agreement is an international treaty on climate change. Adopted in 2015, the agreement covers climate change mitigation, adaptation, and finance.

### WDC Climate Policy & Climate Plan

The Climate Response & Resilience Policy enables WDC to take a proactive approach to climate change and emissions reduction, via the delivery of the Climate Action Plan.

#### **Waikato River Authority**

The Authority's purpose is to set the primary direction through Te Ture Whaimana o Te Awa o Waikato (Vision & Strategy) to restore and protect the health and wellbeing of the Waikato River and Waipā River.

# CLIMATE RESPONSE & RESILIENCE STRATEGY

2023-2027

