



NGĀ TAUMATA O TE MOANA

Our strategy for tackling climate change

*Ko te pae tawhiti whāia kia tata,
ko te pae tata, whakamaua kia
tina, haumi e, hui e, tāiki e.*

*Seek out distant horizons,
and cherish those that we
attain as one.*





Vision

Te Taitokerau is resilient in a changing climate, and transitions proactively and equitably to a thriving net-zero emissions society before 2050.

NGĀ TAUMATA O TE MOANA

Provided by Pita Tipene (Ngāti Hine), co-chair of Te Taitokerau Māori and Council Working Party. The whakataukī 'Titiro atu ki ngā taumata o te moana', was first uttered by the Ariki of Ngāti Hine, Te Ruki Kawiti immediately after the battle of Ruapekapeka in Jan 1846. It literally means 'Look to the horizons of the ocean' and encourages us to think strategically and maintain a global outlook while appreciating the ground upon which we stand.

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Ngā pou herenga

Core values

Responding to an ever-changing world

The climate crisis is our generation's biggest challenge, and this decade is crucial – we must respond by transforming how our society and economy operate. With this strategy, we acknowledge the urgent need for change, and the vital role council plays in addressing climate change to protect current and future generations.

Our commitment

We will continue to work in partnership with tangata whenua, and collaboratively with communities and stakeholders, to support resilience and a transition that is tika (correct and fair).

We will think strategically, maximise new opportunities, and support the mahi through resourcing and funding.

We will establish and maintain council's climate-action integrity and mana through leadership, commitment and sustained, science-based action.

We will deliver on our promises by taking responsibility for significant projects, and empowering others to adapt to this new reality.

How we will work with others

Kotahitanga

- » Working together
- » Consistency with NRC's vision, mission and values
- » Cooperation and collaboration

Manaakitanga

- » Uplifting the mana of our connections
- » Balancing co-design with leadership

Whanaungatanga

- » Connectedness and relationships
- » Thinking of future generations
- » Showing respect

Ngā kōrero takenga

Background and context

The climate crisis is happening now

The scientific evidence of climate change is indisputable. Temperatures over our atmosphere, oceans and land have all risen over the past century, due to the ongoing release of greenhouse gas pollutants. We're already witnessing significant global changes, including:

- » an increased average temperature of more than 1.5°C over land, above pre-industrial levels
- » the heating of our rivers, lakes and oceans
- » melting glaciers and ice sheets, causing sea level rise
- » more acidic and less productive oceans
- » more severe storms and extreme weather events
- » changing rainfall patterns, causing drought and floods
- » an increased number of forest fires
- » indigenous biodiversity and ecosystems coming under stress.

Projected changes in the world's climate will create ongoing, widespread and far-reaching consequences for people and the natural environment.

How climate change will affect our people

In Northland, the effects of climate change will increasingly disrupt our water, land, ecosystems, people and economy. This will fundamentally influence the way council does business.

We have heard from Māori that climate change impacts have the potential to create an existential threat to their cultural taonga and values. Sea level rise and flood risk, combined with existing patterns of land ownership, mean in some places, traditional uses of the land will come under increased pressure. In other places, the close social ties and cultural networks of Māori communities will help them develop adaptation responses and improve resilience. Working with Māori as partners to understand, and act on, climate

change is essential, as is enabling flexible, Māori-led responses.

Northland communities are particularly exposed to climate change. Many of our settlements, town centres and roads sit on coastal floodplains, exposed to sea level rise and increased flooding. Some communities, already isolated, will face further pressure from frequent river and coastal flooding. Negative impacts on human health will also affect our communities.



Our economy relies on primary-industry exports that are susceptible to droughts, floods, pests and diseases. Water supply systems are vulnerable to prolonged droughts, which are predicted to become more common and more extreme with climate change.

Being at the northern tip of an island nation means a warmer climate is likely to drive many of our indigenous species and ecological

communities south to cooler regions, or result in localised extinctions. This will alter the makeup of habitats and leave voids that are likely to be filled by invasive exotic species.

This means we must be prepared to adapt, time and time again, to a changing climate.

We need to reduce our carbon footprint

It's vital that we reduce greenhouse gas emissions as soon as possible. Our society needs to transform from depending on fossil fuels to a point where we no longer produce net greenhouse gas emissions by 2050.

The scale of change required to limit dangerous global warming will require significant shifts in the energy sources used to power our economies and society, how and where we plan our communities and build future housing, and how we operate businesses. The economic, cultural and societal upheavals of such a shift will have consequences for Northlanders – particularly for Māori, rural landowners, farmers, manufacturers, and those with limited financial resources.

New Zealand signed the Paris Agreement, which sets a target of limiting global warming to well below 2°C above pre-industrial levels. This will require the world to reach net zero emissions by 2050.

New Zealand has committed to reducing emissions by 30% (compared to 2005 gross emissions) by the end of this decade. While New Zealand's overall emissions are small in the global picture, we have some of the highest emissions per capita in the world (which could result in future trade sanctions).

Northland's contribution to national emissions is also disproportionate: we emit more in terms of our regional productivity than elsewhere in the country, largely due to the presence of high-emitting industry such as Golden Bay Cement and the refinery.

Roughly 80% of Northland's regional emissions come mostly from agriculture and manufacturing; the remainder come from transport, services and households.

Northland's emissions

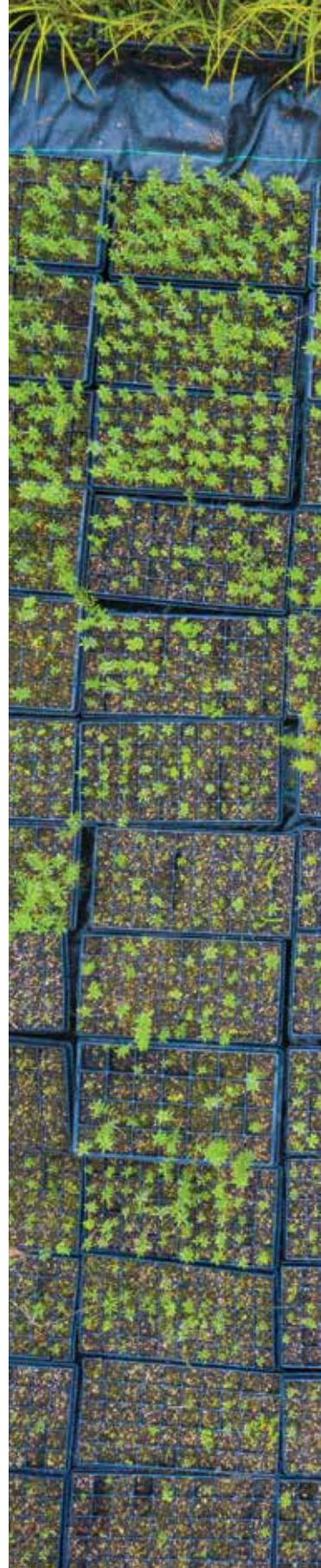
While council has only a limited role in directing how the primary and industrial sectors manage their emissions, we can support, encourage and facilitate a regional shift to a net-zero emissions economy. We can also help reduce the impact of the transition on communities and businesses, by enabling investment in zero-emissions infrastructure.

We need to manage how carbon is stored in our landscapes and seascapes, to ensure we maximise the potential for carbon removal and storage. Natural systems, such as forests, wetlands and mangroves, are important carbon sinks and will need restoration, protection and enhancement. There are also opportunities to capture, use and store carbon emissions from industrial processes and landfills.

Northland Regional Council produces approximately 1,100 tonnes of CO₂-equivalent greenhouse gases each year, largely from our bus fleet (42%), maritime fleet (28%), vehicle fleet (24%), electricity (3%) and air travel (3%). While our electricity consumption has fallen in recent years, our overall emissions have been rising, largely due to an increase in the services we deliver. Changing this will require a concerted effort.

Council is committed to a path where our own emissions are reduced to a state of 'net-zero emissions'. This is defined under the UN's Race to Zero definition as "... reducing (its) emissions following science-based pathways, with any remaining GHG emissions attributable ... being fully neutralized by like-for-like removals (e.g. permanent removals for fossil carbon emissions)".

Council's aspirational end state is 'climate positive', where the balance of the atmospheric carbon we are able to permanently sequester exceeds our residual greenhouse gas emissions.





Ka aha a te kaunihera?

What will council do?

We're framing our response to the climate crisis in terms of three pou: adaptation, reducing emissions, and removing carbon. Council commits to actions aligned with each pou, to help build climate resilience and enable Northland's equitable transition to a net-zero emissions society.

Many of council's existing activities, such as freshwater management, civil defence and flood protection, already address issues created by climate change. However, we recognise that we need a wider programme to target climate change initiatives, and to be more deliberate about embedding climate change responses across the organisation. We've provided a bit more detail here about the scope of the mahi we're able to carry out, and how that relates to each pou.

The graphics on pages 18–23 describe the goals for each pou, and the key activities we plan to undertake over the next three years. An implementation plan, containing a detailed list of climate change projects addressing these action points, accompanies this strategy and can be found on our website at www.nrc.govt.nz/climatechange.



Adapt



We will build the resilience of communities and natural systems so they can weather the current impacts, and the significant future effects, of climate change.

Enabling an equitable, long-term response to climate change for our communities is vital. Alongside our Māori partners, we plan to coordinate and deliver a comprehensive, science-based programme to manage the risks climate change poses to our region.

As well as supporting a sustainable economy through informed land-use planning, we will help build community-wide resilience by enabling collaborative and self-directed adaptation plans.

In implementing these programmes, we will show leadership in coordinating Taitokerau councils to work with iwi/hapū and communities, and align this work with other regional and central government initiatives.

Our role as environmental stewards means we have a specific focus on how a changing climate threatens Northland's biosecurity, natural habitats and biodiversity. By supporting locally relevant research and monitoring, we establish knowledge to ensure we are well prepared to respond to climate risks, and nurture the long-term health of our natural environment.

Reduce emissions



We will reduce carbon pollution by significantly reducing council's use of fossil fuels in our operations and infrastructure, investing in renewable energy and zero-emissions technology, and encouraging our region to transition to a net-zero emissions economy.

We plan to transition our organisation to net-zero emissions swiftly and rigorously, through a robust, science-based plan and appropriate investment. This is a moral obligation to future generations, as well as a national responsibility to help New Zealand meet Paris Agreement targets.

Council aims to take a leading role in helping reduce Te Taitokerau's emissions, by supporting communities and businesses to adopt net-zero emissions practices, and by delivering high-quality public transport and other services.

We also have the opportunity to regulate emissions through Resource Management Act consents, and putting national emission reduction plans into practice.

To successfully transition to an equitable, thriving zero-carbon society, we must collaborate with others. It's important that we use our existing relationships to develop strong partnerships with tangata whenua, drive multi-sector coordination to encourage bold emissions reductions, and maximise opportunities across all economic sectors in Te Taitokerau.

Remove carbon

We will help restore a healthy carbon balance to the atmosphere, by enhancing natural processes that capture and store carbon (such as growing trees and protecting wetlands) – and also benefit biodiversity and water quality.



Many of our existing work programmes contribute to removing and storing carbon through land-use planning, tree planting, soil conservation, wetland restoration and coastal habitat protection. We will improve these programmes to monitor and optimise biological carbon removal, and use this as a guide for future work programmes and investments. There is a huge opportunity to improve in this area, and we plan to bring an awareness of carbon storage to all our activities.

We aim to help accomplish carbon removal in Northland by improving our understanding of regional carbon stocks and flows, identifying potential carbon sinks, and supporting programmes of restoration and enhancement for carbon sink habitats.

To show leadership, council plans to set carbon removal goals, support innovative carbon removal programmes, and promote accurate carbon accounting methods.

We also intend to contribute to innovative industrial and biological carbon removal across the region.

Working with businesses, iwi/hapū, landowners and government, we will help enable the long-term investment and changes required to develop a thriving carbon removal economy in Te Taitokerau.

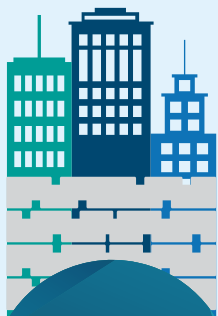


ADAPT

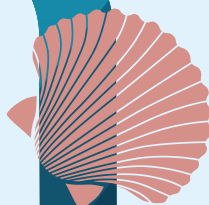
Building resilience to climate change impacts for communities and natural systems

Ngā uaratanga | Our goals

Our regional economy is sustainable, strong and flexible, taking advantage of new opportunities as they arise.



Our natural ecosystems thrive, adapting and maintaining ecosystem function and biological diversity in a changing climate.



Māori cultural connections are strengthened, and indigenous knowledge systems supported.



Our communities are resilient and thriving, and adapt to climate change impacts.

Ngā mahi | Our work

Support

- » research, climate risk assessment and mapping
- » equitable adaptation approaches and help develop funding plans for adaptation responses
- » research to better understand the potential impacts on our natural environment, including freshwater systems, indigenous biodiversity and biosecurity, and develop appropriate monitoring and response programmes.

Lead the delivery and implementation of the Te Taitokerau Climate Adaptation Strategy.

Develop

nature-based adaptation solutions for coastal management.

Focus

our regional economic development on advancing initiatives that contribute to a climate-resilient economy.

Build

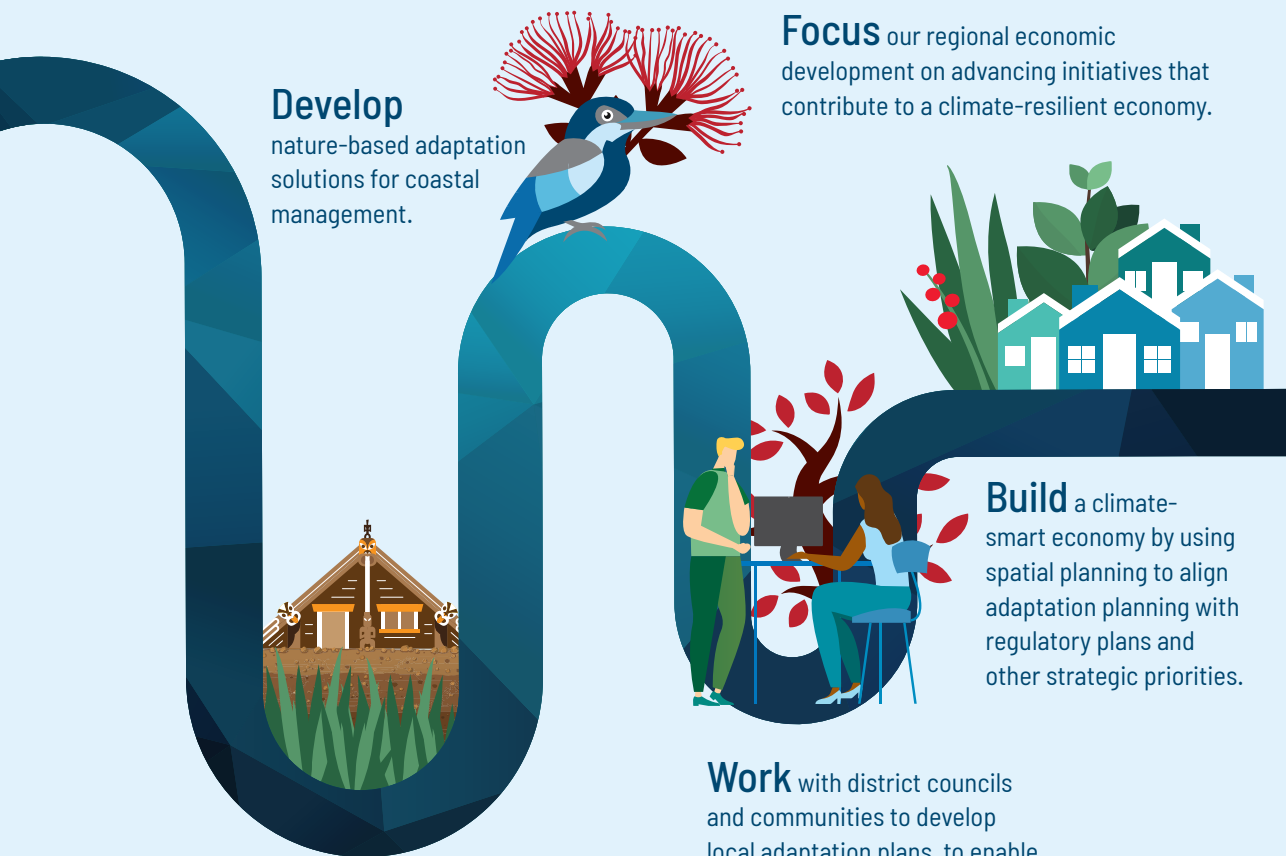
a climate-smart economy by using spatial planning to align adaptation planning with regulatory plans and other strategic priorities.

Work

with district councils and communities to develop local adaptation plans, to enable a transition to appropriate land use and infrastructure.

Engage

with Māori on issues, or co-design programmes with Māori, and enable iwi-/hapū-led programmes.



REDUCE EMISSIONS

Transitioning to a net zero-emissions organisation and regional economy

Ngā uaratanga | Our goals

Our greenhouse gas emissions are rapidly reduced in line with Paris Agreement targets, and our region transitions equitably to a prosperous net-zero emissions economy and society.

Energy, land use and transport in our communities are swiftly transformed to enable equitable outcomes alongside emissions reductions.

Appropriate land uses are widely adopted that enable net-zero emissions and thriving rural communities.

Our Māori communities are supported to ensure a tika (correct and fair) transition to a net-zero emissions future.

Local industry transforms to reach net-zero emissions, while supporting local employment and taking advantage of new opportunities for green jobs.



Ngā mahi | Our work

Help the region achieve best-practice emissions reductions by providing scientific knowledge, spatial planning and regulatory processes, and supporting land-use change.

Use rigorous, best-practice carbon accounting, monitoring and verification processes to define a robust emissions profile for council.

Develop a verified, accredited council emissions reductions plan, following approved criteria, which outlines clear steps to reach Paris-aligned targets, and includes a carbon offset and removals strategy.

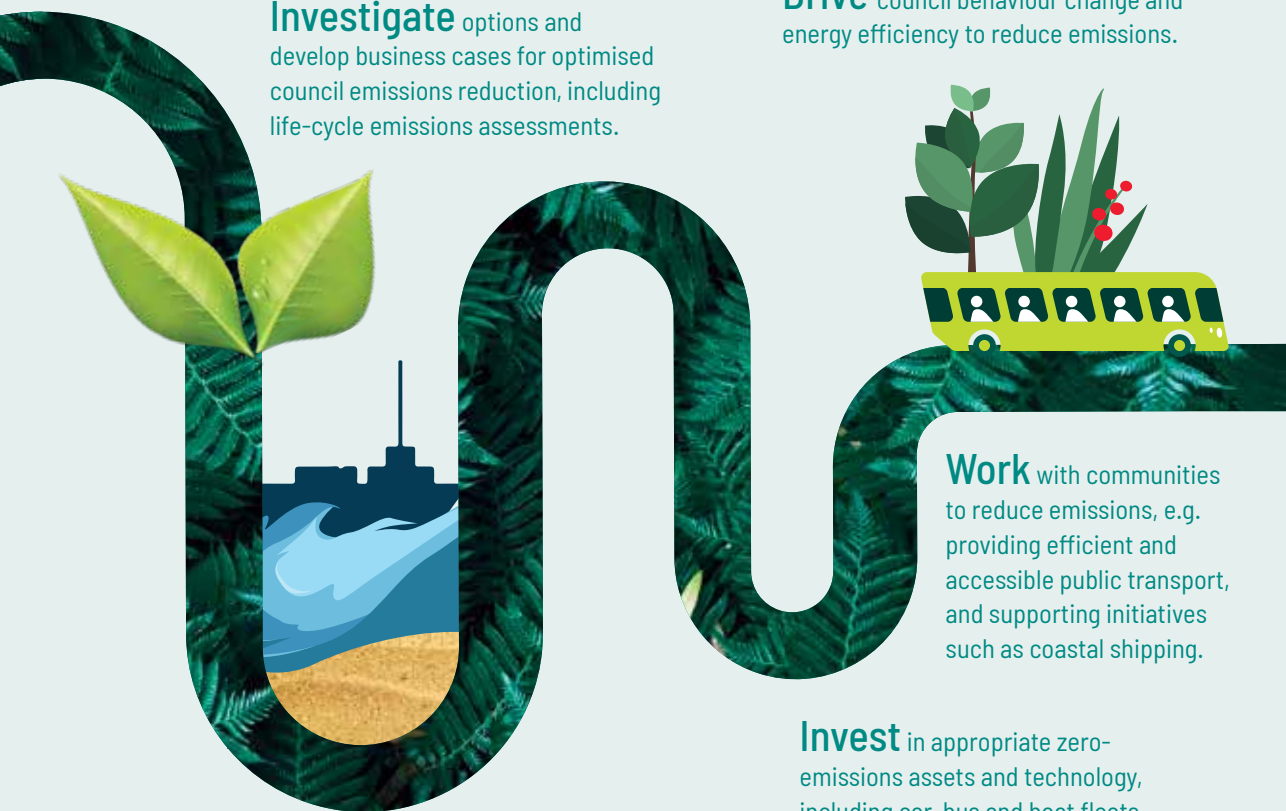
Investigate options and develop business cases for optimised council emissions reduction, including life-cycle emissions assessments.

Drive council behaviour change and energy efficiency to reduce emissions.

Work with communities to reduce emissions, e.g. providing efficient and accessible public transport, and supporting initiatives such as coastal shipping.

Support and enable regional emissions reduction initiatives, working with our economic development partners alongside industry and primary sectors, government agencies, communities and research centres.

Invest in appropriate zero-emissions assets and technology, including car, bus and boat fleets, buildings and other assets.



REMOVE CARBON

Helping reverse climate change by taking carbon pollution out of the atmosphere

Ngā uaratanga | Our goals

Native forest plantings remove carbon and bring co-benefits such as healthy waterways and biodiversity. Coastal blue carbon ecosystems are restored and protected as carbon sinks.

Our region is a leader in removing carbon through the protection, restoration and creation of natural carbon sinks such as wetlands, forests and coastal ecosystems.

Local manufacturing and heavy industry invest in technology to capture and store carbon, with any necessary carbon offsets invested locally to support carbon removal projects.

On-farm practices are adopted that store carbon through plantings, soil improvement and forest management to help the primary sector manage emissions.

Our region supports a thriving, innovative carbon removal economy on land and sea.

Māori connection to land and sea is enhanced through restorative practices that help remove carbon from the atmosphere.



Ngā mahi | Our work

Use spatial planning to plan and optimise carbon removal opportunities and land-use change.

Protect and restore high-value carbon-storing ecosystems in alignment with our freshwater management and adaptation planning programmes, recognising the valuable co-benefits they provide.

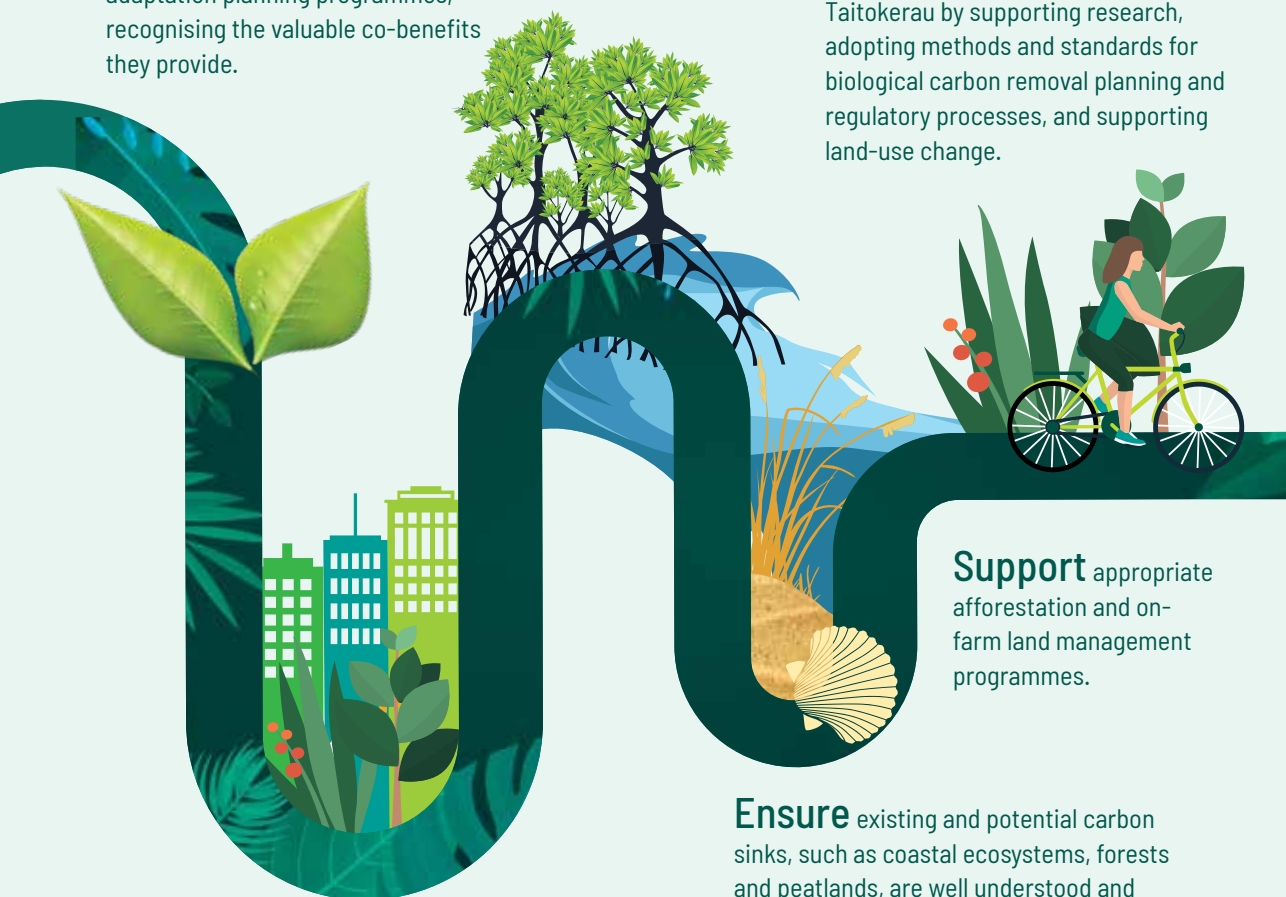
Adopt a carbon offset protocol for council that ensures high-quality carbon offset outcomes, including opportunities for investing in verified local projects for biological carbon removal.

Help improve understanding of biological carbon storage in Te Taitokerau by supporting research, adopting methods and standards for biological carbon removal planning and regulatory processes, and supporting land-use change.

Support appropriate afforestation and on-farm land management programmes.

Work with our regional economic development partners, industry and the primary sector to support carbon removal projects and attract investment in a high-performing, regional carbon removal economy.

Ensure existing and potential carbon sinks, such as coastal ecosystems, forests and peatlands, are well understood and have long-term management plans to enhance carbon storage.



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