



# Rotorua Sustainable Living Strategy - Refresh

Toitū te oranga o Rotorua

## A Community View

He hāpori rautaki  
He kōrero a te iwi

Tatau Tatau - We Together

## Rotorua 2030

August 2020

# Our district vision: Rotorua 2030

## Tatau Tatau - We Together

This is our home

We are its people

We're connected to each other through our culture and communities

We're innovative and we share what we learn

We're driving opportunity, enterprise and diversity

We're supporting a legacy of sustainability for our environment

Rotorua is a place for everyone

Tatau Tatau - We Together



# Kupu Arataki

## Introduction and Scope

Early in 2015, a steering group of community members with interests in a range of topics relating to sustainable living came together with Councillors and Council staff to begin the journey to develop a strategy for sustainable living contributing to achieving the Rotorua 2030 goals.

Council joined the United Nations Global Compact - Cities Programme and the team used the Programme's 'City Scan' tool to assess a range of attributes contributing to sustainability issues for our district. This information was discussed with a wide range of people in our community to understand what things were of most importance or concern. The resulting strategy focuses on six objectives.

- People are resilient to change, and able to adapt and thrive
- People in Rotorua will at all times have access to enough safe and nutritious food for a healthy and active lifestyle
- People live in affordable healthy homes
- Our land and water is sustainably managed and supports the natural environment
- We minimise our waste and recover its value
- Rotorua will be ready for the approaching post-carbon economy through greater energy efficiency and reduction in greenhouse gas emissions.

These objectives are as valid now as they were in 2015. In the wake of the COVID-19 pandemic, Rotorua faces difficult times ahead that will require challenging decisions, yet provide opportunities for our community to become stronger and more resilient.

The themes of action across the strategy are:

- Leadership
- Collaboration
- Innovation and change management

Council is just one part of the community and many of the objectives are complex and require support from across agencies, Te Arawa, the community and business sectors in order to achieve the outcomes. To this end, the strategy is framed from the perspective of council working with the community.

The strategy actions include areas where:

- Council has statutory obligations to develop policies and regulations that will support actions
- Council takes direct responsibility to lead actions
- Council partners with and works collaboratively with others providing leadership to achieve
- Council encourages, supports learning and provides information but is not directly responsible.

## The United Nations Global Compact – Cities Programme

Rotorua became a leading participant of the United Nations (UN) Global Compact - Cities Programme in May 2015. We were the first city in New Zealand, and the 100th in the world to join the Programme.

The UN Global Compact is the largest voluntary corporate responsibility initiative in the world. It is a strategic policy initiative for businesses, established by the UN Secretary General in 2000, where businesses commit to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. By doing so, business, as a primary driver of globalisation, can help ensure that markets, commerce, technology and finance advance in ways that benefit economies and societies everywhere.

As social, political and economic challenges (and opportunities) – whether occurring at home or in other regions – affect business more than ever before, many companies recognise the need to collaborate and partner with governments, civil society, labour and the UN.



# Me pēhea te rautaki nei ki te moemoea 2030 me ēra atu mōmō rautaki mōmō mahere hoki?

## How does this strategy relate to Rotorua 2030 goals, other Council strategies and plans?

The Sustainable Living Strategy is one of a suite of strategies based on Rotorua 2030 goals. Although the Sustainable Living Strategy relates most strongly to goals 1, 2 and 7, by the nature of sustainability, there is also interdependence and consistency with other goals and strategies.

Operational plans such as those for active transport, waste management and wastewater treatment are much more detailed and specific to topics included in the Sustainable Living Strategy.

## He aha tēnei te mea toitū oranga mō Rotorua?

### What does sustainable living mean for Rotorua?

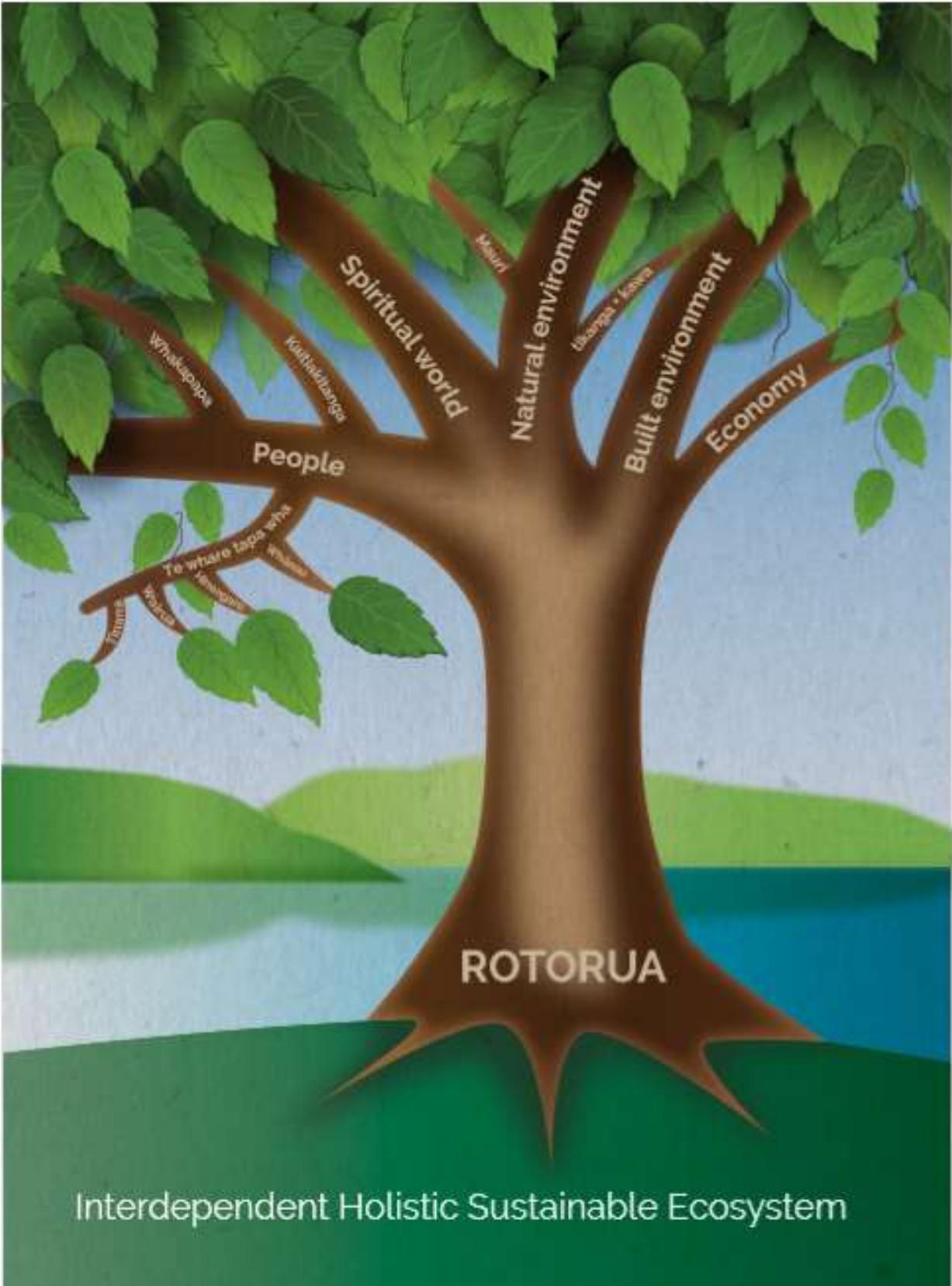
Sustainability is a concept; however different people and groups place different values on the contributing elements. None of the standard definitions, which typically include the three pillars environment, economy and society, adequately express how people in Rotorua have talked to us about what sustainable living means to them. The model overleaf has been developed to represent the interdependence and importance of concepts as they pertain to our local community, Rotorua.

## Rotorua 2030 Goals Tatau Tatau - we together

1. **A resilient community...** He hāpori pūmanawa...
2. **Homes that match needs...** Kāinga noho kāinga haumaruru...
3. **Outstanding places to play...** Papa whakatipu
4. **Vibrant city heart...** Wāhi pūmanawa...
5. **Business innovation and prosperity...** Whakawhanake pakihi...
6. **Employment choices...** He huarahi hou...
7. **Enhanced environment...** Tiakina to taiao...

# Te taura toitū oranga o Rotorua

Rotorua Model of Sustainable Living



# Ngā ara rangatiratanga, tūhonotanga/ kūpapa, anahatanga, panonitanga

The action themes - How we will achieve our sustainable living objectives - through leadership, collaboration, innovation and change management

## Rotorua's Sustainability Voyage

The entire crew is interdependent but also have a shared responsibility, to work together to move closer to the destination

### Steerer

Kaiurungi implements course changes as the main implementer  
~ **Council**

### Reciprocity

Rapa, the rear paddlers can assist the Tau Ihu for extra performance ~  
**Stakeholders**

### Sustainability group

Waenga paddle straight to provide the real power for the voyage ~  
**Community**

### Leadership/ Innovation

Kaihautū sets the course and alters the course to reach the destination

### Leadership

Tau Ihu front paddlers can paddle straight or assist the steerer for course adjustments ~  
**Change management/ Innovation**

### Rapa

Represents who we are and steadies us in stormy weather to stay on course  
~ **Best practice solutions**

**The waka is the vessel we are all in together, for this voyage**  
~ **Rotorua**

**The moana/water is the environment we are navigating**  
~ **Sustainable future**

### Leadership


The Tau Ihu represents an ancestor guiding us forward ~  
**Vision**


Note the environment includes waves, buoyancy, currents, all of which can help or hinder our voyage depending on how we react to them





# Ngā whāinga: Taumata angitu


## Our sustainable living objectives and how we will recognise success


Objective 1	Long term outcome	
<p>He hapori pūmanawa, He hapori ngāwari</p> <p>People are resilient to change, and able to adapt and thrive</p>	<p>Increased equity in social, educational and health indicators</p> <p>Reduction in children living in poverty</p>	

Objective 2	Long term outcome	
<p>Kia tau te iwi o Rotorua ki te nuinga ngā kai ora, ngā kai pai ki te tiaki te mauri tū, te mauri ora</p> <p>People in Rotorua will at all times have access to enough safe and nutritious food for a healthy and active lifestyle</p>	<p>Healthy population BMI</p> <p>Population activity measures</p>	

Objective 3	Long term outcome	
<p>Ka noho te iwi i ngā kāinga whakaruru, ngā kāinga haumarū</p> <p>People live in affordable healthy homes</p>	<p>All people housed to meet their needs</p>	

Objective 4	Long term outcome	
<p>Toitū te papa, Toitū te wai, he tuarā mo te taiao</p> <p>Our land and water is sustainably managed and supports the natural environment</p>	<p>Water quality is improved (dissolved oxygen, pH, temperature, salinity and nutrients)</p>	

Objective 5	Long term outcome	
<p>Mimiti atu ai ngā para, ka whai tikanga te wāriu</p> <p>We minimise our waste and recover its value</p>	<p>A district known for its waste minimisation and resource recovery</p>	

Objective 6	Long term outcome	
<p>Kei te takatū a Rotorua mo te ao hōu, mai te mahi tiaki, me te mahi whakakorengia ngā hau 'greenhouse'</p> <p>Rotorua will be ready for the approaching post-carbon economy through greater energy efficiency and reduction in greenhouse gas emissions</p>	<p>Council comprehensively accounts for and demonstrates reductions in energy use and greenhouse gas emissions</p>	



# Objective 1

## He hapori pūmanawa, He hapori ngāwari

### People are resilient to change, and able to adapt and thrive

#### The four wellbeing

The four wellbeing; social, economic, environmental and cultural, were reintroduced to the purpose of local government in April 2019. This is in line with the direction of central government, and will ensure that Councils and their communities contribute to the delivery of intergenerational wellbeing for all New Zealanders, along with regional growth objectives, the strengthening of local democracy, and instilling greater trust and confidence in local governance. The goal is the achievement of an improved quality of life and higher living standards for all New Zealanders in a way that takes local needs and conditions into account. Indicators of the four wellbeing include, but are not limited to, health, housing, education, transport, employment and income, safety, environmental quality, cultural identity, social connectedness and community participation.

#### Where are we now?

Te Arawa iwi are the tāngata whenua people of the Rotorua district, and Māori culture and heritage is a special characteristic and strength of this place. There are notable health, education, income and other socio-economic inequalities in Rotorua especially among Māori and Pacific ethnicities.

In order to live well, people need to be able to afford quality housing, food and health care. Education underpins people's future earning ability. Employment 'to thrive' is required to secure financial security.

#### Where are we going?

Māori culture will continue to be a strong and iconic feature of Rotorua, evidenced by kaitiakitanga of natural resources, equitable social, health and economic outcomes for Māori, and use of te reo and tikanga in formal and every-day settings.

The population of Rotorua is changing, with an increased proportion of older adults and increasing ethnic diversity. Rotorua will be a place where children, youth, the elderly, and those with disabilities are valued, their voices heard and included. We will celebrate ethnic and cultural diversity and incorporate it into our community on a bicultural foundation.

We will respond and adapt positively to continuing challenges of change including technology, climate, work roles, communication and mobility that affect how we play, learn, live and work. Our networked community will be resilient to civil defence risks.

Rotorua people will be well-educated with high levels of skilled employment, participation and have a sense of place and belonging in the community.



A number of communities have worked with Council on Neighbourhood Revivification projects including Ngāpuna, Western Heights and Fordlands. These projects involved all areas of Council working with a community to plan and implement what's needed. The photo above was taken during a hīkoi around the Ngāpuna neighbourhood during the initial planning. Improvements were made to street lighting, paving, roads

Strategies	Actions
Celebrate our Te Arawa heritage	<ul style="list-style-type: none"> <li>• Use te reo Māori in public signage, meetings and documents</li> <li>• Use contemporary indigenous knowledge through stories and signage to give context to sustainable living</li> <li>• Refer to Creative Arts Strategy</li> </ul>
Promote social and economic inclusion through collective impact approaches	<ul style="list-style-type: none"> <li>• Work towards becoming an age-inclusive community with a wide range of community partners</li> <li>• Support initiatives which increase public access to digital connectivity and participation</li> <li>• Provide a range of opportunities for all people and communities to be informed and participate in democratic processes and debate, including children, youth, people with disabilities, aged and vulnerable populations</li> <li>• Take a community-led development approach to support communities with their aspirations</li> <li>• Council to assign community grants and Partnership Agreements with a focus on equity</li> <li>• Deliver child equity programmes that aim to improve children's access to services and opportunities that will make a potentially life-changing difference into adulthood</li> <li>• Council to implement and model sustainable procurement to achieve social, economic, environmental and cultural benefits beyond the immediate aim of purchasing goods, services and capital works</li> </ul>
Improve urban design to foster stronger connections to our culture, our environment and between our people	<ul style="list-style-type: none"> <li>• Undertake 'Locality Planning' projects for Rotorua Eastside, Western, Ngongotahā and Central City/CBD to improve community health and wellbeing by strengthening the links between social, economic and environmental factors.</li> <li>• Smokefree outdoor areas policy reduces exposure to second-hand smoke especially for children and young people, and reduces the social acceptance of smoking for future generations</li> <li>• Improve design of public spaces to improve accessibility (physical and visual) for people of all ages and abilities</li> <li>• Planning processes support and encourage community connectivity</li> <li>• Refer to Sport and Recreation Strategy</li> </ul>

Strategies	Actions
<p>Enhance safety in our communities by working collaboratively with our people and agencies which bring people together</p>	<ul style="list-style-type: none"> <li>• Develop a Community Safety Plan to ensure that public places are safe and enjoyable</li> <li>• Reduce negative impacts of emergency housing on the inner city</li> <li>• Invest in community leadership development through training and mentorship</li> <li>• Support community-led initiatives that encourage and support communities to reduce the incidence of family harm</li> <li>• Council to continue its alcohol and drug regulatory activities and Safe City Guardian patrols of CBD</li> <li>• Grow Civil Defence Emergency Management capability and capacity</li> </ul>
<p>Provide information which enables people to connect to others and access services</p>	<ul style="list-style-type: none"> <li>• Support initiatives that increase public access to information about services and connecting to others</li> </ul>

## Sustainable Procurement

Sustainable (social) procurement describes how an organisation leverages its purchasing activities to achieve social, economic, environmental and cultural benefits beyond the immediate aim of purchasing goods, services and capital works. Council is working with other large local organisations to develop a framework that considers the potential impacts of purchasing on the local economy and community wellbeing and ensures their purchasing spend is directed into the local economy as much as possible.

The current focus for sustainable procurement in the Rotorua district is on how it can support economic recovery, improve local employment and encourage environmental sustainability. The framework will aid economic recovery by keeping spend as local as possible, thus building and retaining community wealth. Having good employment can be transformational for families, and an important route to intergenerational wellbeing. Lastly, procurement activities can encourage businesses to operate with more regard to the environment. For example, potential suppliers could be asked to document their approach to reducing carbon emissions, minimizing waste, promoting water and air quality and other responsible business practices as part of tendering for work..

Rotorua Lakes Council's Child Equity Programme pilot, run in partnership with Sunset Primary School, aims to ensure tamariki living in deprivation have access to activities, services and experiences that enhance health and wellbeing and can have life-changing implications into adulthood.

The incentive to develop this approach grew from the need to interrupt the poverty cycle and reduce inequities to limit associated long-term impacts.

The programme has focussed on instilling hope and aspiration and realising potential by providing experiences, mentors and improved access to services and activities. It explores the potential of accessing multiple opportunities by changing how community and stakeholders can work together collaboratively.

Since the pilot, the programme has grown into a group of schools and organisations taking collective action to improve outcomes for tamariki, with a particular focus on reducing the impacts of child poverty.



January 2018 saw the rollout of phase two of Council's Smokefree Outdoor Spaces Policy, to include outdoor paved eating places, Eat Street, inner city markets and the entrances/exits of public buildings and facilities.

The aim of the Policy is to reduce exposure to second-hand smoke, including vape smoke, especially for children and young people, and to reduce the social acceptance of smoking for future generations.

Annual smoking counts have been undertaken by Toi Te Ora Public Health at Rotorua bus stops, Eat Street and the i-SITE. Their data shows that the overall prevalence of smoking has reduced from 3.34% in 2017 to 0.94% in 2019.



# Objective 2

## Kia tau te iwi o Rotorua ki te nuinga ngā kai ora, ngā kai pai ki te tiaki te mauri tū, te mauri ora

People in Rotorua will at all times have access to enough safe and nutritious food for a healthy and active lifestyle

### Where are we now?

Our environment is contributing to the risk of unhealthy food choices and an increase in the number of overweight and obese in our community. Increasingly food is highly-processed with limited nutritious value. More people are accessing food grants or food banks. There is continued interest in community gardens that can supply affordable fresh produce to our district. Having the option to select and purchase healthy food is affected by social, cultural and physical environments.

### Where are we going?

Rotorua: a city of enterprising, active and healthy people. A city where our people can readily and capably grow or find and prepare affordable, fresh and local produce in ways that meet diverse cultural needs; where there is a thriving and sustainable local food economy and where opportunities for physical activity are everywhere.



Mataarae Marae at Reporoa developed a thriving maara kai that they celebrated with a Harvest Festival inviting the wider community. Council's Neighbourhood Matching Fund has been used to support the development of a number of community gardens across Rotorua district, providing supplies of fresh healthy vegetable and fruit produce and bringing members of the community together over the gardening.

Strategies	Actions
Collaborate through a network approach to address local food security	<ul style="list-style-type: none"> <li>• Support development of a network including businesses, iwi, community organisations, individuals and agencies to strengthen our local food systems</li> <li>• Support Para Kore marae waste minimisation programme</li> </ul>
Increase sustainable production of local food	<ul style="list-style-type: none"> <li>• Support Rotorua Economic Development work on identifying and developing local food economy opportunities, including sustainable food production systems and resilient agricultural practices</li> <li>• Identify and make available Council-controlled land suitable for public use for community gardens, maara kai, orchards and other edible planting</li> <li>• Refer to the Climate Change Strategy with regard to the role of sustainable food production in climate change adaptation</li> </ul>
Advocate for healthy food environments	<ul style="list-style-type: none"> <li>• Develop and implement a healthy food, and sugar-sweetened-beverage-free policy for Council venues, events and activities</li> <li>• Promote our clean healthy spring water as a first choice for drinking</li> <li>• Refer to the Sport and Recreation Strategy</li> </ul>

## Strategy in action

The World Food Summit of 1996 defined food security as existing "when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life".



# Objective 3

## Ka noho te iwi i ngā kāinga whakaruru, ngā kāinga haumarū

People live in affordable healthy homes

### Where are we now?

Housing plays an important role in the social, cultural, environmental and economic wellbeing of our Rotorua community. A growing population has put pressure on our housing market, with not enough homes being built to meet our needs. We are faced with a shortage of housing at all levels of the market for both renters and owner-occupiers, increasing housing costs, reducing affordability and increasing homelessness.

Poor quality of housing is also a concern - lack of maintenance, poor construction, age and the impact of building to minimum building standards. Most Rotorua homes were built to pre-2000 standards and new homes are generally built to the Building Act minimum standards, resulting in thermal performance well below best practice. Energy inefficient homes increase vulnerability to illness and overcrowding, as residents often cannot afford to heat them adequately.

### Where are we going?

Our He Papakāinga, He Hāpori Taurikura – Housing and Thriving Communities Strategic Framework takes into account the need for a range of size, location and tenure options to improve affordability and quality of homes. We are establishing a sustainable, collaborative 'homes in communities' model to deliver safe and secure housing that will underpin a connected, sustainable and thriving community.



Strategies	Actions
Implement Rotorua's Implement Rotorua's Homes and Thriving Communities Strategic Framework- He Papakāinga, He Hāpori Taurikura Te Poupou Rautaki to meet Rotorua's future quality housing needs	<ul style="list-style-type: none"> <li>• Work collaboratively with iwi partners and stakeholders including property, land and other businesses, agencies, and community organisations to deliver the housing strategy-</li> </ul>

Rotorua Lakes Council continue to work with Sustainability Options (SO) to provide in-home assessments for Rotorua residents and support informed actions towards healthier and more efficient homes. In 2018/19 SO visited 157 local homes to do assessments and provide home performance advice and a further 190 homes as part of the Hot Swap Programme. Healthy homes can improve health, reducing the cost of prescriptions and doctors' visits and can positively impact on increased school attendance and workplace productivity





# Objective 4

## Toitū te papa, Toitū te wai, he tuarā mo te taiao

### Our land and water is sustainably managed and supports the natural environment

#### Where are we now?

Rotorua is renowned as a tourism destination, noted for its beautiful lakes, spectacular geothermal attractions and stunning scenery. The district is centered around a thriving urban area on the southern shore of Lake Rotorua, and extends to include a substantial rural area and lakeside communities. The local environment encompasses 18 lakes, active geothermal areas and considerable public open space.

The environmental quality of Rotorua's lakes is a key issue. Many of the Rotorua Te Arawa Lakes have undergone significant change over the long-term and continue to be vulnerable to invasive plants and animals, and water quality deterioration. Measures to protect future lake quality include nitrogen rules, land use change proposals and incentives. Our wastewater treatment system is one of the pre-eminent nutrient plants in the world and work is underway to further improve the end product and to move the discharge location out of the Whakarewarewa Forest.

#### Where are we going?

The contribution and collaboration of many stakeholders is required to positively impact our land and water ecosystems. The mauri of our water, land and nature will be strong. Our natural environment will continue to provide a strong habitat for native plants and animals; it will be iconic and accessible. Māori kaitiakitanga and relationship to this environment will be a key strength. A variety of sustainable uses of rural land will include pastoral, horticulture, forestry and fuel. We will adapt to the challenges of climate change and sustain a thriving environment.



Strategies	Actions
Treat our wastewater to a high standard and discharge safely	<ul style="list-style-type: none"> <li>Recognise the importance of Te Arawa perspectives on wastewater treatment and water use</li> <li>Identify options to reduce water volume and contaminants to the wastewater treatment plant</li> <li>Implement the Wastewater Treatment Plant Plan to upgrade with an alternative discharge location</li> </ul>
Work collaboratively with agencies, iwi and stakeholders to manage water catchment areas	<ul style="list-style-type: none"> <li>Facilitate the development of management plans for stream catchment areas in collaboration with Bay of Plenty Regional Council, Waikato Regional Council, Department of Conservation, iwi, landowners, community and business stakeholders</li> </ul>
Work with stakeholders to protect and promote biodiversity	<ul style="list-style-type: none"> <li>Review reserve management plans to strengthen nature conservation principles and encourage community action</li> <li>Complete the ecological restoration of Sanatorium Reserve</li> <li>Review Council tree policy, including public space planting to optimise native plant corridors</li> <li>Review Council policy for horticultural chemical use to cost-effectively minimise risk to biodiversity, human health and stream ecology</li> </ul>
Encourage diversification of land use to reduce environmental impacts	<ul style="list-style-type: none"> <li>Ensure spatial planning facilitates environmentally and economically sustainable use of land</li> <li>Support provision of information to the public on climate change impacts on horticulture and agriculture that identifies viable alternative land uses</li> </ul>
Review and implement a water conservation plan	<ul style="list-style-type: none"> <li>Review Council operations' water uses and identify opportunities to reduce, set goals and lead community by example</li> <li>Consider opportunities to reuse water within infrastructure networks</li> </ul>
Review methods to improve storm water management	<ul style="list-style-type: none"> <li>Consider new ways of managing rainfall to mitigate drought and flooding impacts, reduce soil erosion and nutrient leaching in the urban environment</li> </ul>
Protect the geothermal ecosystem and features	<ul style="list-style-type: none"> <li>Work in collaboration with Bay of Plenty Regional Council, iwi and other agencies to regulate the use of geothermal resources in a sustainable manner based on scientific and cultural knowledge</li> <li>Support traditional Māori uses of geothermal resources</li> </ul>



Tiaki Early Learning Centre is a small privately owned early learning centre, nestled on the shores of Lake Rotorua, just a stone's throw from Ōwhata Marae. The Tiaki house is an old family home which is set within a large, well-established garden. There is a paddock at the back of the section with vegetable gardens, an orchard, and plenty of space to run, climb, and play. The outside environment is intentionally designed to encourage children to connect with nature.

One of the overarching philosophies is to 'walk softly on the earth', a kaupapa that is reflected in many aspects of the learning programme. The Centre is committed to ensuring all children have opportunities to spend time in and grow a connection with the local community. The tuakana children of Tiaki spend one day a week out in the community, tending the wetland they have established down at the lake edge.

Rotorua's sewage is treated daily at a central Wastewater Treatment Plant on Te Ngae Rd. The sludge produced (biosolids) is currently transported to Kawerau, mixed with waste pulp mill fibre, vermi-composted, and applied to land.

Upgrades underway for the Plant include additional phosphorus removal, additional membrane filtration and UV disinfection as an additional barrier to pathogens. A new discharge location and the potential to re-use the treated water are also proposed. The Plant is located in the 77ha Sanatorium Reserve, an ecological icon beside Lake Rotorua.





Rotorua Canopy Tours leads the tourism industry with their conservation initiatives. Money raised through their zipline tours venture has enabled them to put a comprehensive trapping programme into 220ha of native forest. Since they started their predator control in 2013, they have managed to reduce the number of rats to 16% and possums to 3%. The birdlife and reptiles in the forest are now flourishing and the long-term plan is to restore the whole 500ha of forest, including reintroducing rare native birds.

The iconic Papakura Geyser was formerly a constantly spouting hot spring and a jewel in the crown of the Whakarewarewa Thermal Valley. It went to sleep in 1979, after 90 years of continuous eruption, highlighting the damage to geysers caused by private and commercial boring in the area. In what may be a world-first, the resulting bore closure programme of the 1980s has seen Papakura Geyser showing signs of life again. Today you can view the geyser's miraculous recovery for yourself, as it bubbles and even erupts to nearly half the size of its earlier years.



# Objective 5

## Mimiti atu ai ngā para, ka whai tikanga te wāriu

### We minimise our waste and recover its value

#### Where are we now?

In the year to March 2020, 18,155 tonnes of waste was sent out of the district to the Tirohia landfill. Of this, 60% or around 11,000 tonnes was municipal waste from weekly kerbside collection.

A red (refuse) bin audit carried out in the Rotorua District in 2017 found that:

- 50% of waste was divertible or putrescible (i.e., biodegradable or compostable organic matter, such as food waste)
- 21% of waste was recyclable (could have been placed in the yellow recycling bin instead of the red rubbish bin)
- 29% of waste was refuse (or rubbish)

Weekly kerbside recycling collections have been taking place since 2016. During the year to March 2020, 3,925 tonnes of recyclable materials were collected via kerbside collection. An additional 3,944 tonnes of green waste were collected at the green waste collection facility at Atiamuri landfill and transported to Kawerau for composting. Similarly, 9,680 tonnes of biosolids from the Rotorua Wastewater Treatment Plant were also composted in Kawerau.

#### Where are we going?

'Waste' is precisely that, waste. Wasted resources, wasted energy. Our communities will understand and practice the principles of waste minimisation resulting in further reduction in waste to landfill; separate organic waste management to minimise greenhouse gas production; maximised recycling and resource recovery; and development of opportunities to turn waste into energy.



Strategies	Actions
Avoid and minimise waste	<ul style="list-style-type: none"> <li>• Investigate Zero Waste (circular economy) initiatives</li> <li>• Lead by example and demonstrate through Council events and operations</li> <li>• Promote tap water and install public drinking fountains to discourage single-use of plastic bottles</li> <li>• Refer to the Waste Strategy</li> </ul>
Encourage product stewardship/ extended producer responsibility	<ul style="list-style-type: none"> <li>• Encourage local businesses to join national Product Stewardship Schemes</li> </ul>
Promote recycling	<ul style="list-style-type: none"> <li>• Public education to increase knowledge and practice of recycling</li> <li>• Refer to the Waste Strategy</li> </ul>
Resource recovery	<ul style="list-style-type: none"> <li>• Wastewater biosolid recovery system continues to divert biosolids from the landfill and maximises beneficial uses</li> <li>• Investigate food and organic waste collection and processing options to reduce landfill emissions</li> <li>• Support development of a resource recovery park</li> </ul>





Iconic drinking water fountains with bottle filler options have been installed at key community locations around Rotorua to encourage reuse of plastic bottles. The aim is to ultimately reduce the amount of plastic waste the city generates. Fountains are located at youth spaces including the Rotorua skate park in Sheaf Park (pictured). Artwork by award-winning Rotorua artist Kereama Taepa features on the fountains, making them an artistic feature of parks around the city, as well as providing fresh drinking water.

# Objective 6

## Kei te takatū a Rotorua mo te ao hōu, mai te mahi tiaki, me te mahi whakakorengia ngā hau 'greenhouse'

**Rotorua will be ready for the approaching post-carbon economy through greater energy efficiency and reduction in greenhouse gas emissions**

### Where are we now?

It is accepted internationally that the climate is changing as a result of greenhouse gases (GHGs) already emitted into the atmosphere from human activity. The future extent of this change will depend on how the planet responds to increased GHGs and to the amount of GHGs that continue to be emitted globally. A changing climate change will present a range of challenges and opportunities, creating a need for diverse and innovative solutions. Identifying these solutions will be important for ensuring that in the long-term Rotorua's wealth of natural assets and strong tourism reputation are protected and our community needs are adequately met.

The Paris Agreement of 2015 (COP21) set the goal of limiting global warming to less than 2°C compared to pre-industrial levels. New Zealand was one of a number of countries that ratified the Agreement in 2016 and committed to 'pursue efforts to' limit the global temperature increase to 1.5°C. This ambitious target will require zero emissions to be reached sometime between 2030 and 2050.

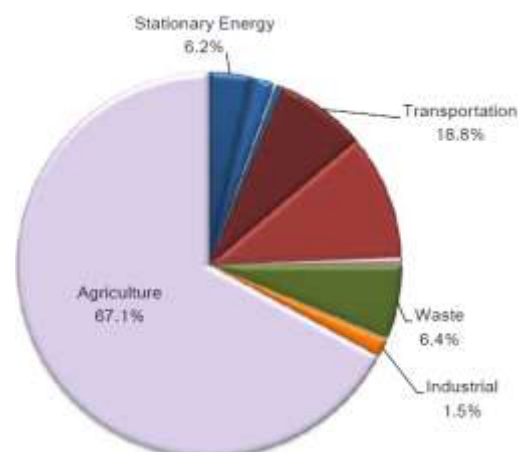
The Climate Change Response (Zero Carbon) Amendment Act 2019 provides a framework by which New Zealand can develop and implement clear and stable climate change policies. This includes a domestic target of zero greenhouse gas (GHG) emissions by 2050, except biogenic methane, for which the target is 24-47% below 2017 levels by 2050.

Council is a member of the Global Covenant of Mayors for Climate & Energy, one of over 10,000 cities around the world that has made a commitment to work towards a resilient and low-emission society. To monitor our progress, we have developed a community carbon footprint for the Rotorua Lakes District using 2015/16 as the benchmark year. In this year, the district had gross emissions of 1,483,356 tCO<sub>2</sub>e, or 21.0 tCO<sub>2</sub>e/person. The national average is 17.8 tCO<sub>2</sub>e/person and the regional average is 13.9 tCO<sub>2</sub>e/person. Emissions from agriculture and forestry activities within the district are responsible for most of the difference. Council has also developed a carbon footprint for its own operations.

Councils are required to set emissions reduction targets that as a minimum match the government's target of net zero emissions by 2050. This will ensure we will manage the transition to a low carbon future and capitalise on future opportunities to make our community more sustainable and resilient.

### Where are we going?

Council is developing a Climate Action Plan that will set targets for the reduction of the district's GHG emissions and propose actions that will help us prepare for and adapt to a changing climate. No single action or organisation can comprehensively address our climate adaptation needs, thus we are developing a variety of complementary actions across short and medium timeframes, with a focus on collaboration and partnership with stakeholders and the wider community.





Strategies	Actions
Update Council and Rotorua District carbon footprints	<ul style="list-style-type: none"> <li>• Update energy use and emission inventory for all Council operations</li> <li>• Update Rotorua Lakes District community carbon footprint</li> <li>• Council continues to participate in and meet the reporting requirements of the Global Covenant of Mayors for Climate &amp; Energy</li> </ul>
Council develops, consults on and implements a community Climate Action Plan with partners and stakeholders	<ul style="list-style-type: none"> <li>• Set emissions reduction targets and action plan to cut emissions</li> <li>• Plan and prepare for climate adaptation</li> <li>• Implement Climate Action Plan</li> </ul>





Kearoa Marae generates its own power. A micro-hydro unit on Pokaitu Stream in Horohoro generates enough power for a marae, church and a farm. Eugene Berryman-Kamp says, "In increasing demand, it's important to be able to look after your own. So with having our own power source here we generate more power than the marae and our iwi-owned farm use." The micro-hydro unit at the rear of the marae produces 2.7 kilowatts per hour, saving the marae \$4,000 a year in power bills.

It is widely considered that timber is the most sustainable building material given its origin in plantation forestry, its role in offsetting carbon emissions and in improving water quality. This Toi Ohomai Waipa Campus building comprises a workshop, along with teaching and administration areas. The structure is LVL post and beam and LVL portals with a quick-connect system. The component nature of the engineered timber meant that the substructure could be erected very quickly and easily by a team of builders that were otherwise unfamiliar with this construction process. Battens were sourced from local company Verda and were all custom-designed and milled on site. Cladding was milled by the students in the training facility.



# Appendices

## Appendix 1: List of actions and estimated timeframe

Actions	Timeline		
	Underway	Next 1-3 years	Beyond 3 years
Use te reo Māori in public signage, meetings and documents			
Use contemporary indigenous knowledge through stories and signage to give context to sustainable living			
Work towards becoming an age-inclusive community with a wide range of community partners			
Support initiatives which increase public access to digital connectivity and participation			
Provide a range of opportunities for all people and communities to be informed and participate in democratic processes and debate, including children, youth, people with disabilities, aged and vulnerable populations			
Take a community-led approach to support communities with their aspirations			
Council to assign community grants and Partnership Agreements with a focus on equity			
Deliver child equity programmes that aim to improve children's access to services and opportunities that will make a potentially life-changing difference into adulthood			
Council to implement and model sustainable procurement to achieve social, economic, environmental and cultural benefits beyond the immediate aim of purchasing goods, services and capital works			
Undertake 'Locality Planning' projects for Rotorua Eastside, Western, Ngongotahā and Central City/CBD to improve community health and wellbeing by strengthening the links between social, economic and environmental factors			
Smokefree outdoor areas policy reduces exposure to second-hand smoke especially for children and young people and reduces the social acceptance of smoking for future generations			
Improve design of public spaces to improve accessibility (physical and visual) for people of all ages and abilities			
Planning processes support and encourage community connectivity			
Invest in community leadership development through training and mentorship			
Develop a Community Safety Plan to ensure that public places are safe and enjoyable			
Reduce negative impacts of emergency housing on the inner city			
Support community-led initiatives that support and encourage communities to reduce the incidence of family harm			
Council to continue its alcohol and drug regulatory activities and Safe City Guardian patrols of CBD			
Grow Civil Defence Emergency Management capability and capacity			
Support initiatives that increase public access to information about services and connecting to others			
Support development of a network including businesses, iwi, community organisations, individuals and agencies to strengthen our local food systems			

Actions	Timeline		
	Underway	Next 1-3 years	Beyond 3 years
Support Rotorua Economic Development work on identifying and developing local food economy opportunities, including sustainable food production systems and resilient agricultural practices			
Identify and make available council-controlled land suitable for community gardens, maara kai, orchards and other edible planting			
Develop and implement a healthy food, and sugar-sweetened-beverage-free policy for Council venues, events and activities			
Promote our clean, healthy spring water as a first choice for drinking			
Work collaboratively with iwi partners, landowners and businesses, agencies, and community organisations to deliver the housing strategy			
Continue the Eco-design Advisor service to provide independent advice to households for existing and new homes, to increase community awareness of design for affordability, energy and resource efficiency			
Implement a programme to address poor performing homes through critical repairs, health homes literacy and DIY upskilling			
Introduce a voluntary housing warrant of fitness programme			
Remove barriers to and encourage development of smaller homes, shared public spaces and greater density of living to increase affordability and resource efficiency and reduce infrastructure costs through district plan zoning			
Facilitate education of industry stakeholders to encourage optimal design of homes for natural light, heating, ventilation, cooling, water use and resource efficiency			
Develop a collaborative pathway for managing critically substandard housing			
Recognise the importance of Te Arawa perspectives on wastewater treatment and water use			
Identify options to reduce water volume and contaminants to the wastewater treatment plant			
Implement the Wastewater Treatment Plant Plan to upgrade with an alternative discharge location			
Facilitate the development of management plans for stream catchment areas in collaboration with Bay of Plenty Regional Council, Waikato Regional Council, Department of Conservation, iwi, landowners, community and business stakeholders			
Review reserve management plans to strengthen nature conservation principles and encourage community action			
Review Council tree policy, including public space planting to optimise native plant corridors			
Review Council policy for horticultural chemical use to cost-effectively minimise risk to biodiversity, human health and stream ecology			
Ensure spatial planning facilitates environmentally and economically sustainable use of land			
Support provision of information to the public on climate change impacts on horticulture and agriculture that identifies viable alternative land uses			

Actions	Timeline		
	Underway	Next 1-3 years	Beyond 3 years
Consider new ways of managing rainfall to mitigate drought and flooding impacts, reduce soil erosion and nitrogen leaching in the urban environment			
Review Council operations' water uses and identify opportunities to reduce, set goals and lead community by example			
Consider opportunities to reuse water within infrastructure networks			
Consider new ways of managing rainfall to mitigate drought and flooding impacts, reduce soil erosion and nutrient leaching in the urban environment			
Work in collaboration with Bay of Plenty Regional Council, iwi and other agencies to regulate the use of geothermal resources in a sustainable manner based on scientific and cultural knowledge			
Support traditional Māori uses of geothermal resources			
Investigate Zero Waste (circular economy) initiatives			
Lead by example and demonstrate through Council events and operations			
Promote tap water and install public drinking fountains to discourage single-use plastic bottle use			
Encourage local businesses to join national Product Stewardship Schemes			
Public education to increase knowledge and practice of recycling			
Wastewater biosolid recovery system continues to divert biosolids from the landfill and maximises beneficial uses			
Investigate food and organic waste collection and processing options to reduce landfill emissions			
Support development of a resource recovery park			
Update energy use and emission inventory for all Council operations			
Update Rotorua Lakes District community carbon footprint			
Council continues to participate in and meet the reporting requirements of the Global Covenant of Mayors for Climate & Energy			
Set emissions reduction targets and action plan to cut emissions			
Plan and prepare for climate adaptation			
Implement Climate Action Plan			

# Appendices

## Appendix 2: Long-term outcomes and proposed progress measures

Objective	Long term outcome	Possible progress measures (* indicates strong Council influence)
People are resilient to change, and able to adapt and thrive	Increased equity in social, educational and health indicators Reduction in children living in poverty	Number of 'Locality Planning' projects * Number of people participating in public debate and engagement opportunities and community events * Population access to digital connectivity Number of people fluent in te reo Māori Increase in bilingual signage Community Association membership Increase in businesses implementing sustainable procurement Number of initiatives that increase public access to information about services and connect to others Increase in skilled employment Reduction in Police reports of family harm Improved 'perceptions of safety' in public places
People in Rotorua will at all times have access to enough safe and nutritious food for a healthy and active lifestyle	Healthy BMI population Population activity measures	Number of active Food Network projects * Number of active community gardens and orchards * Growth in healthy food businesses Affordability of fresh produce Number of local fresh produce growers Supply of fresh produce to support initiatives (e.g. food banks, free food) Measure amount of food re-distributed
People live in affordable healthy homes	All people housed to meet their needs	Number accessing Eco Design Advisor service * Number of changes made following Eco Design Advisor recommendations Number of homes meeting warrant of fitness standards Established social housing providers Increase in resource efficient building Supply meets demand for housing of all price groups and owner/rental tenure Regional housing/affordability index Reduced power disconnections Decreased overcrowding Decreased homelessness
Our land and water is sustainably managed and supports the natural environment	Quality water	Decrease in council water use, savings in litres * Trend improving lake water quality measures * Swimmable lakes and rivers See the footprints of koura (or other cultural measures) Increase in biodiversity measures for native flora and fauna Strong geothermal features Number of collaborative catchment plans Environmentally certified hectares Number of community environmental projects
We minimise our waste and recover its value	A district known for its waste minimisation and resource recovery	Increase in % recycling of waste * Decrease in landfill volumes * Decrease in food and organic waste to landfill * Measure resource recovery * Number of local businesses in NZ Product Stewardship Schemes Number of waste to energy projects
Rotorua will be ready for the approaching post-carbon economy through greater energy efficiency and reduction in greenhouse gas emissions	Council comprehensively accounts for and demonstrates reductions in energy use and greenhouse gas emissions	Increased use of digital communication technology for meetings Increased public transport use Increased active transport journeys to school and work Decreased fossil fuel use Increased % of electric vehicles Increased use of wood for buildings and infrastructure Increased forestation including lifestyle forest blocks % or area land use change Meeting emissions targets