

Six Monthly Climate Change Report 2023

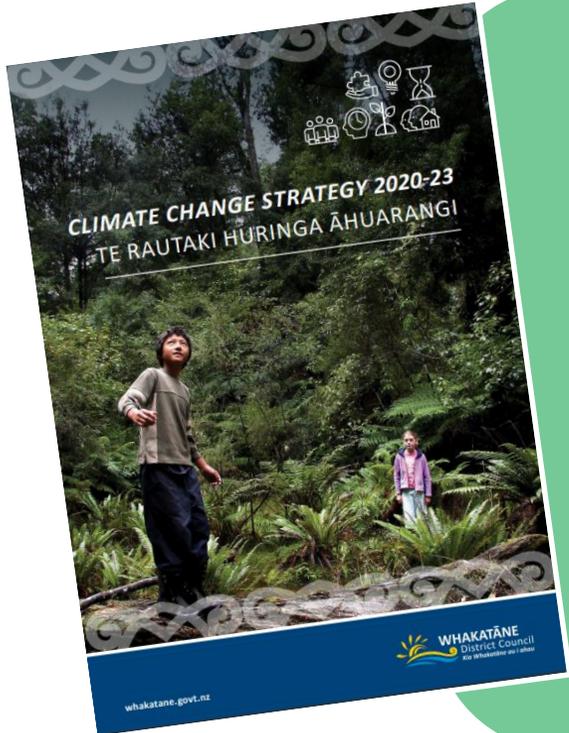
About this report:

Whakatāne District Council adopted its Climate Change Strategy and six Action Plans in September 2020. These documents are available on Council’s climate change page on: <https://www.whakatane.govt.nz/climate-change>

This Six Monthly Climate Change Report covers the time period 1 January – 30 June 2023, and summarises the progress made towards actions specified in the Council’s six Climate Change Action Plans. This report also provides an update on Council’s ongoing energy management programme.

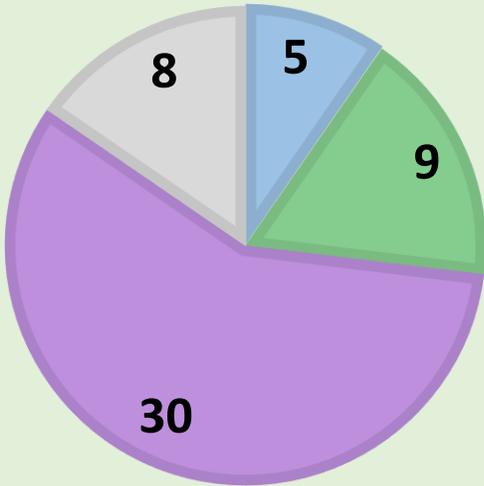
Progress made towards the wider Climate Change Strategy targets (both mitigation and adaptation) will be covered in the next six-monthly climate change report.

This report is the fifth report on the targets, goals and actions collectively agreed upon. Previous reports are available on Council’s climate change page under climate change reporting: <https://www.whakatane.govt.nz/about-council/council-projects/climate-change/climate-change-reporting>

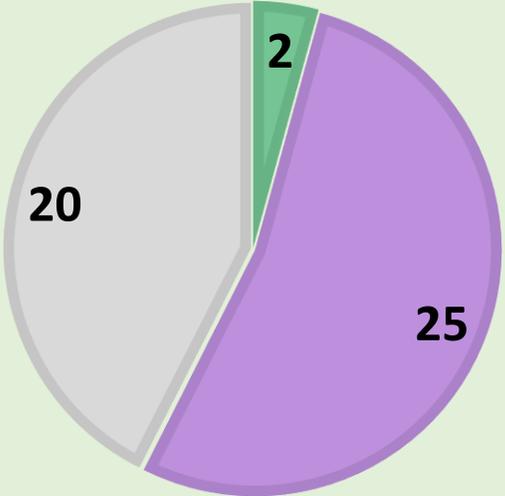


Action Plan Progression

JULY – DECEMBER 2022



JANUARY – JUNE 2023



In November 2022, teams worked to prioritise actions. Actions were narrowed down to better fit with resourcing. We ended up with 52 actions across the six action plans. This month we are reporting on 47 actions as we completed 5 in the last six-monthly report.

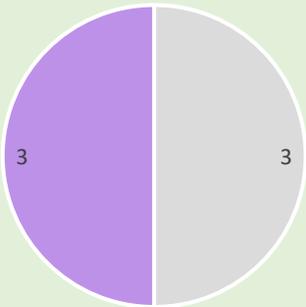
Key	
● action progressing	● action complete
● action not started	● action ongoing



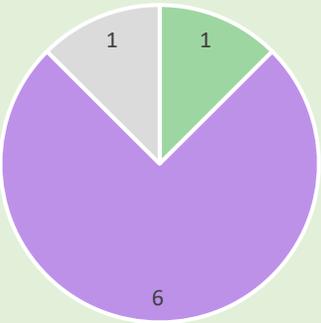
LEADERSHIP AND COLLABORATION



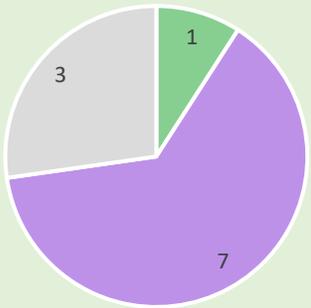
Waste and Circular Economies



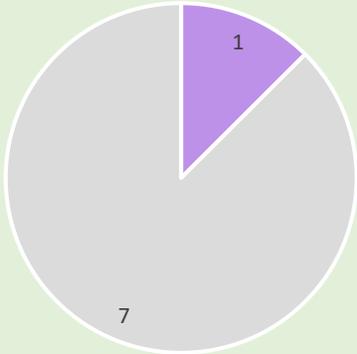
TRANSPORT



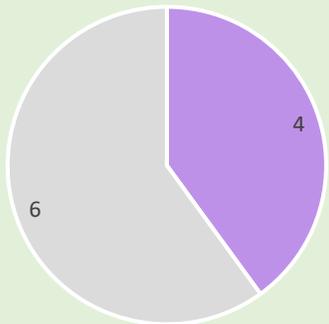
Landuse and Build Environment



ENERGY



Water Services



Key	
● action progressing	● action complete
● action not started	● action ongoing



The Climate Change Principles state we will act now and we will be part of the solution. Showing leadership and working with others are two crucial roles to ensure we can effectively respond to this challenge. Climate change will impact us all in different ways, so we must work together and consider a range of viewpoints. Access the full Leadership and Collaboration Action Plan [here](#).

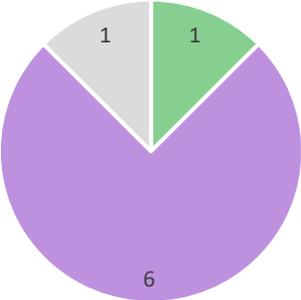


Key	
● action progressing	● action complete
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GOALS	PROGRESS ON EACH ACTION	SNAPSHOTS
<p>Goal 2: Build the Council’s organisational knowledge about climate change, mitigation and adaptation</p>	<ul style="list-style-type: none"> ● Develop knowledge and understanding of risk to the Whakatāne District and communities. ● Monitor information related to climate change and incorporate a range of sources in decision-making, including science, local knowledge, and mātauranga Māori. 	<p>a. The team has joined a Local Government emissions modelling group to ensure consistent, best practice (Goal 3).</p> <p>b. The team have been attending bi-monthly meetings led by the Regional Council and supported by the other TA’s to share current work, key learnings, collaborate and share resources (Goal 3).</p>
<p>Goal 3: Collaborate with stakeholders, partners, and the community, for a unified approach to the climate crisis</p>	<ul style="list-style-type: none"> ● Work with, and advocate to regional and central government on climate change related processes. 	<p>c. The team has been undertaking community engagement through the climate change strategy review (Goal 4).</p> <p>d. The team submitted to the Climate Change Commission on their advice to inform the second emissions reduction plan (Goal 3).</p>
<p>Goal 4: Build community awareness about matters relating to climate change, including the Council’s response</p>	<ul style="list-style-type: none"> ● Celebrate success and achievements related to climate change. 	<p>e. The team submitted to the Ministry for the Environment in support of proposed Biodiversity Credit System (Goal 3).</p>



Transport (of people and products) is directly responsible for a large portion of emissions (20% for New Zealand, 16% for the district and 14% for the Council). Significantly reducing transport emissions will help achieve our mitigation targets. Transport infrastructure is at risk from a changing climate and increasing resilience of our roads and key routes will make communities less vulnerable. Access the full Transport Action Plan [here](#).



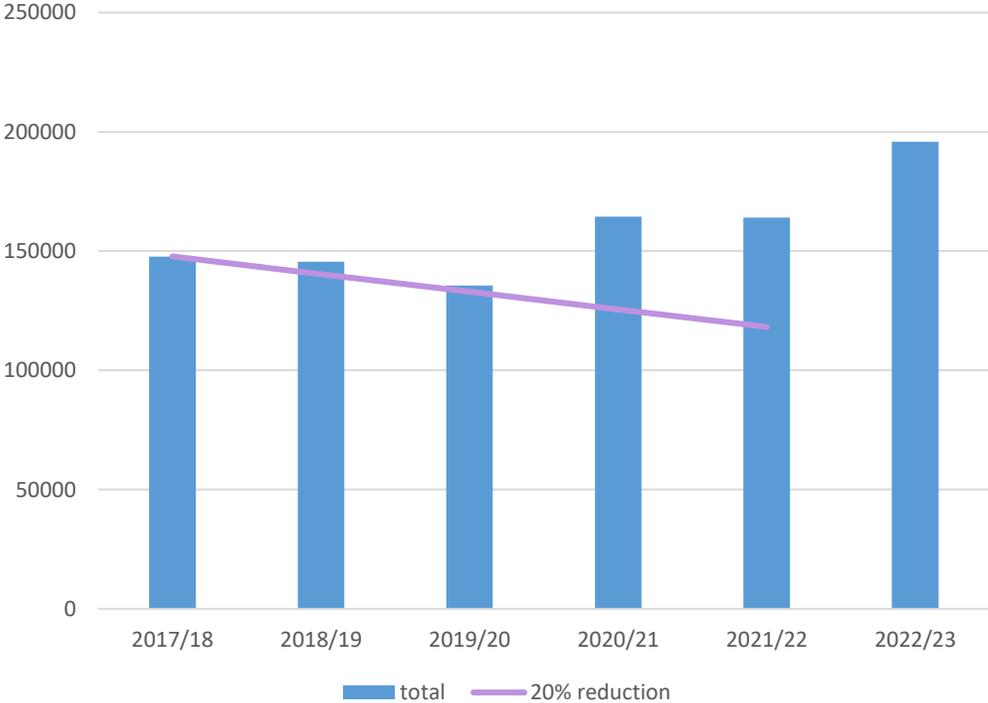
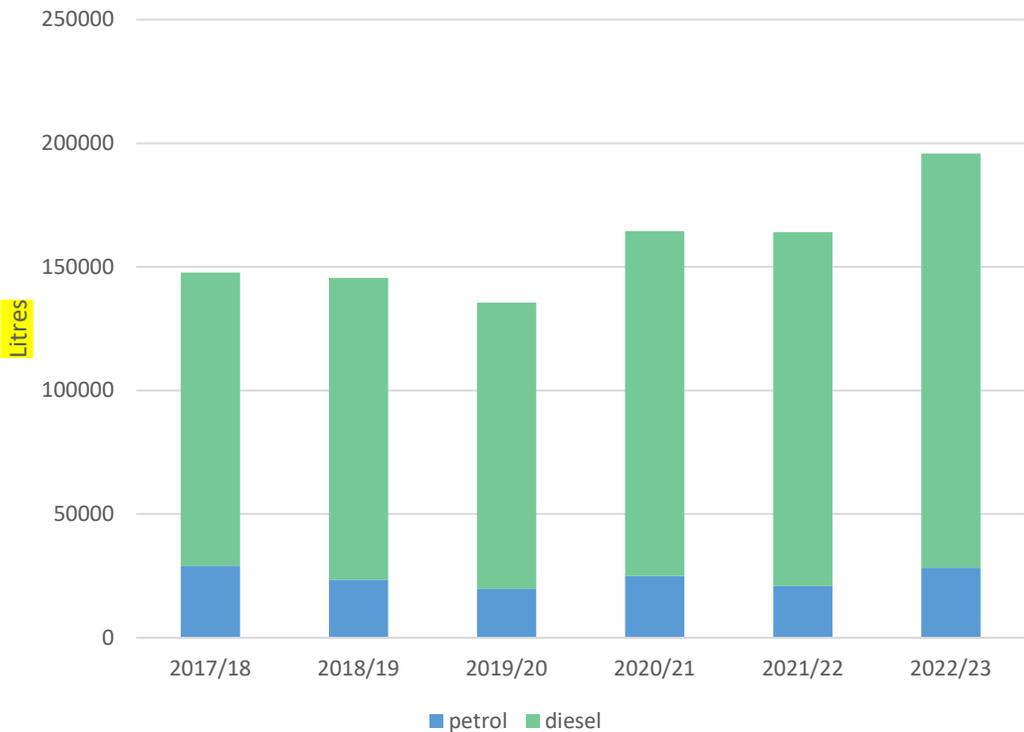
Key	
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GOALS	PROGRESS ON EACH ACTION	SNAPSHOT
Goal 1: Promote travel efficiency	<ul style="list-style-type: none"> ● Advocate for reduced and more efficient community travel 	a. Working from home has significantly reduced travel to the office. Staff will be asked to complete a survey to estimate the impact on travel and identify opportunities for continued working from home where appropriate. (Goal1).
Goal 2: Enable and encourage active transport	<ul style="list-style-type: none"> ● Provide facilities and infrastructure to encourage Council staff and the community to utilise active forms of travel. 	b. Staff are continuing the role out of Active Whakatāne Implementation Plan including monitoring programme to track update of active mode transport. (Goal 2). c. Bike rack installs completed around town. Lockable E-bike charging facilities.(Goal 2 and 3).
Goal 3: Increase low carbon transport options	<ul style="list-style-type: none"> ● Reduce corporate transport-related emissions. ● Advocate for increased low-carbon transport options and infrastructure. 	d. Roll out of E-Bike Library through Waka Kotahi’s CERF funded Transport Choices Programme has been successful and additional funding grant received from Trust Horizon to extend the E-Bike Library. (Goal 2 and 3).
Goal 4: Manage climate change risks to existing transport infrastructure	<ul style="list-style-type: none"> ● Identify transport infrastructure that is at risk or vulnerable to climate change. ● Manage climate change risks when planning for ongoing operations and renewal of transport infrastructure. 	e. Staff have developed a Public EV charging policy to encourage installation of EV charging facilities across the district. (Goal 3) f. End of journey facilities have been included in the re-development of the Civic Centre Goal 2 and 3).
Goal 5: Build future transport infrastructure for a changing climate	<ul style="list-style-type: none"> ● Apply climate change assumptions to new transport projects. ● Collaborate with other transport providers, within the Bay of Plenty region, to build climate change resilience. 	g. Climate change risks are now considered as BAU for infrastructure development within the transport department. h. Vulnerable infrastructure is being identified through development of the 2024-34 Transport Activity Management Plan



Council specific transport target

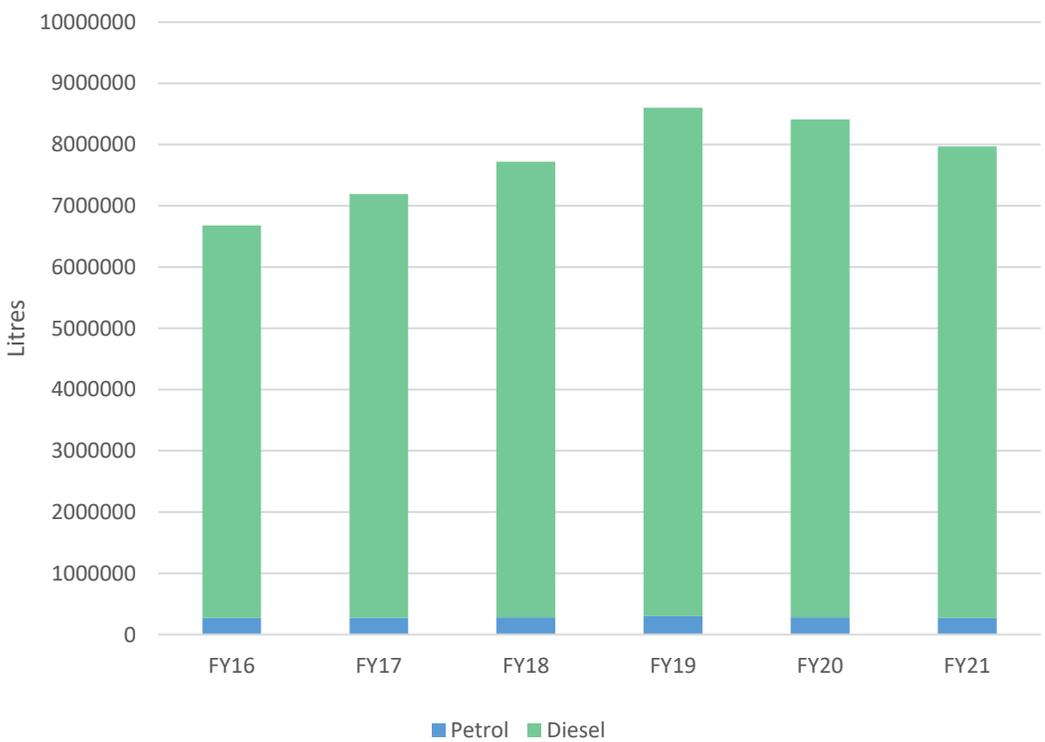
20% reduction in the Council’s total purchased petrol and diesel by 2021 (compared to 2017/18).



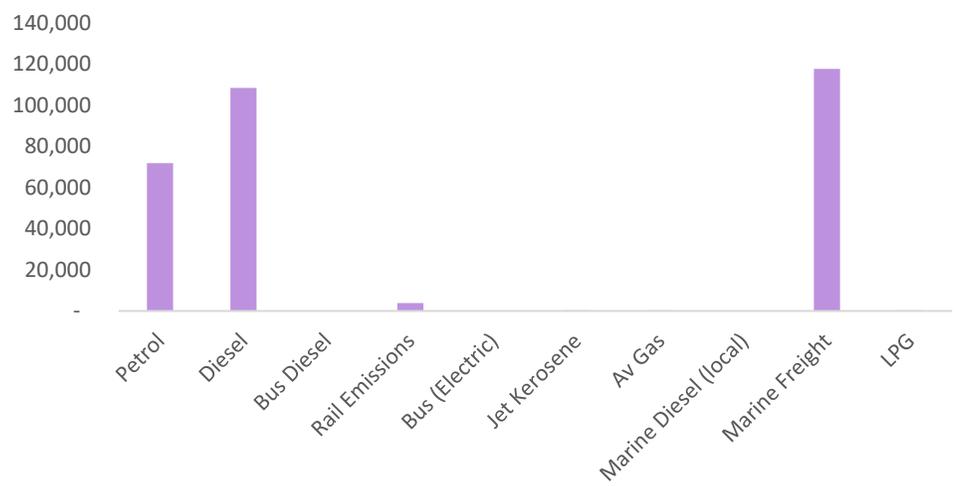
Our diesel use is made up from cars, generators and tractors/diggers. The 20% reduction goal has not been met. We acknowledge that this is a significant area of improvement for our Council, and work will be undertaken as part of the next strategy to reduce petrol and diesel use.



Community Fuel Use



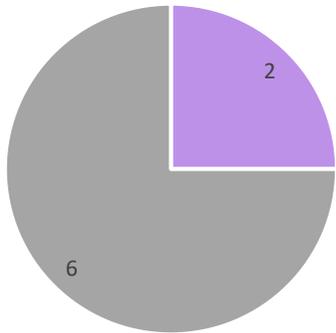
Transport Emissions (tCO2e)



Information is sourced from Community Carbon Footprint. Data includes diesel use from transport and any other sources such as aviation, marine freight, farm equipment etc. Diesel and petrol use in the Whakatāne District is slowly trending downwards. This is an area of opportunity for our District. Actions to reduce fuel use in our community and transition to renewable sources is a priority for our next climate change response. Through the survey the community told us that transport is an area they want to do more in.



Nationally, New Zealand generates a large amount of renewable energy, but energy still accounts for 41% of our emissions. Energy represents the second largest emissions sector for the district (17%), primarily from natural gas use. Energy also makes up 38% of the Council’s overall emissions, primarily electricity. Localised energy generation may also help improve community resilience. Access the full Energy Action Plan [here](#).



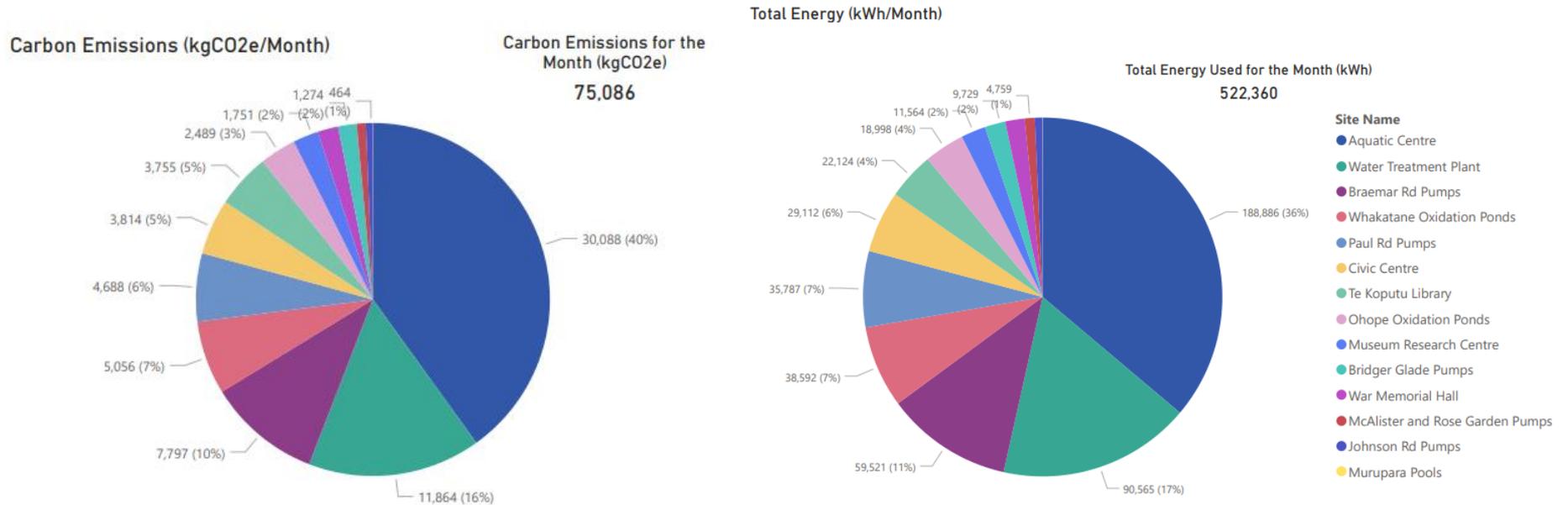
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GOALS	PROGRESS ON ACTIONS	SNAPSHOT
Goal 1: Enhance energy efficiency	<ul style="list-style-type: none"> ● Reduce energy use within existing facilities through energy efficiency initiatives. ● Energy consumption considered for all major new projects. ● Consider energy related greenhouse gas emissions associated with services as a factor in awarding contracts 	<ol style="list-style-type: none"> Council’s energy management programme continues. The achieved emission, energy and cost reductions are explored further in the following slides (Goal 1). Significant reductions in natural gas use have been achieved at the Whakatāne Collections and Research Centre (Taketake), and at the aquatic centre as a result of Council’s on-going energy management programme. (Goal 1). The audit actions are regularly extended.
Goal 2: Encourage low carbon energy options	<ul style="list-style-type: none"> ● Plan to transition from use of natural gas at Council facilities ● Advocate for low emissions energy generation. 	<ol style="list-style-type: none"> A natural gas elimination study and a solar feasibility study are being incorporated in the Climate Change Strategy review (Goal 2 and 3).
Goal 3: Encourage the development of resilient low carbon energy options	<ul style="list-style-type: none"> ● Reduce organisational reliance on the national grid ● Enable community resilience through localised power generation ● Encourage local collaboration to ensure energy resilient communities 	<ol style="list-style-type: none"> It is challenging finding local providers with available climate change products & services that help reduce Councils carbon footprint (Goal 1).

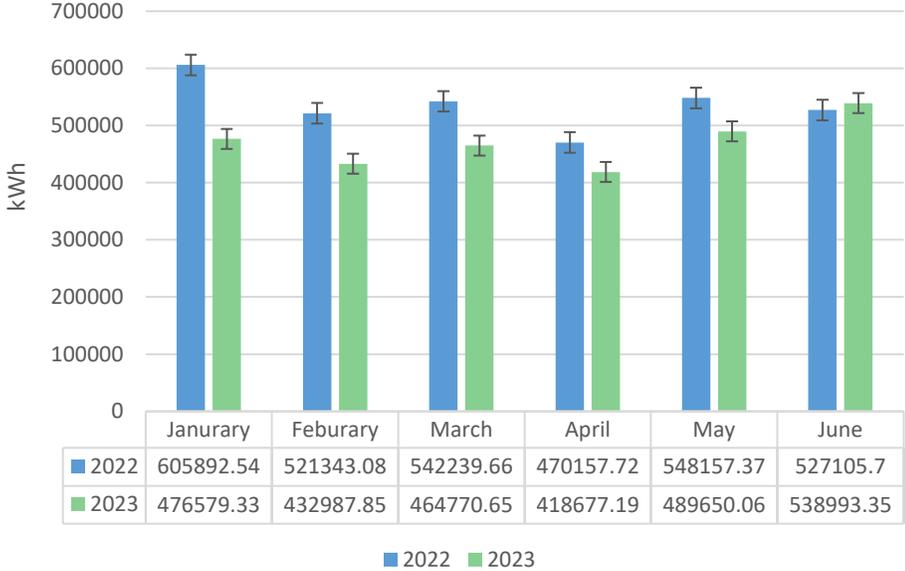


The Energy Management program tracks energy usage at our 13 biggest energy usage sites which are displayed on the right of the graph.

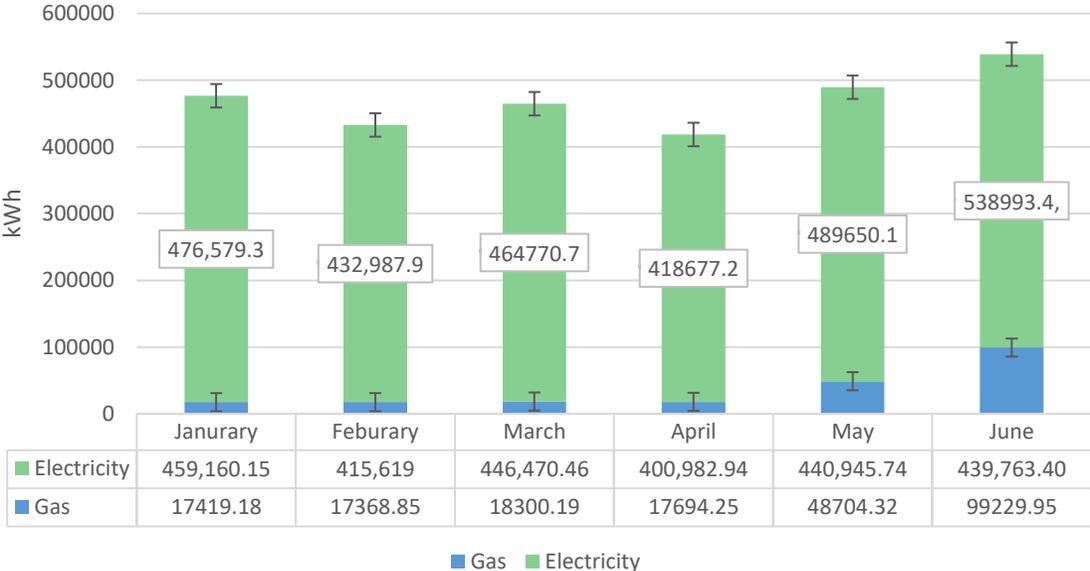
This snapshot shows the general pattern of energy usage. Most of our energy usage occurs at the Aquatic Centre and the Water Treatment Plant. These are similarly the highest Greenhouse gas emitting sites from energy usage. The aquatic center makes up a higher proportion of carbon emissions due to the higher global warming potential of natural gas compared to electricity.



ENERGY USE COMPARED TO THE PREVIOUS YEAR



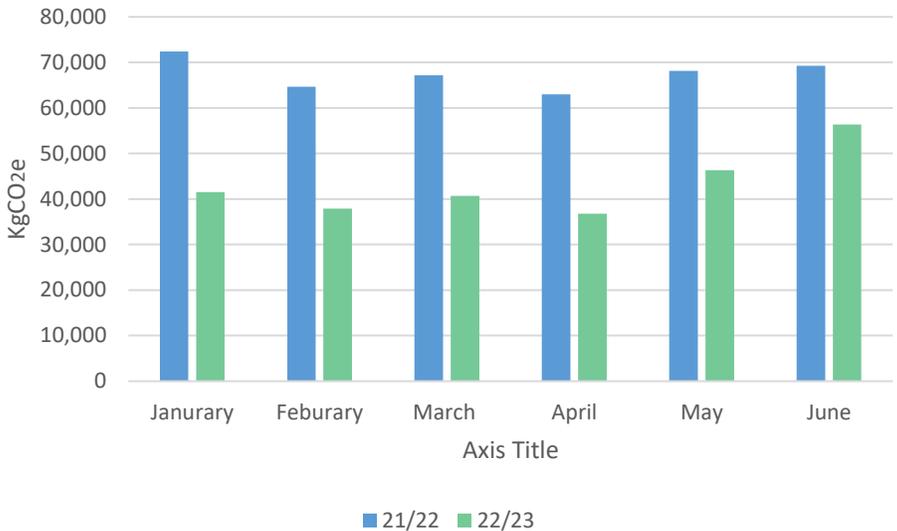
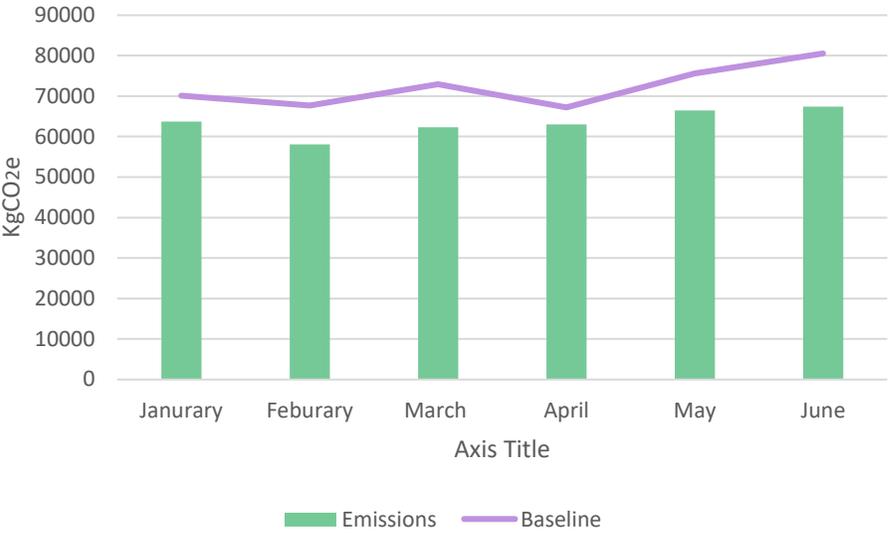
ENERGY USE



Over the past six months, we have reduced energy use through the energy management program (compared to the same six months of the previous financial year). June saw a large increase of natural gas. This was due to the shower failure at the aquatic centre.



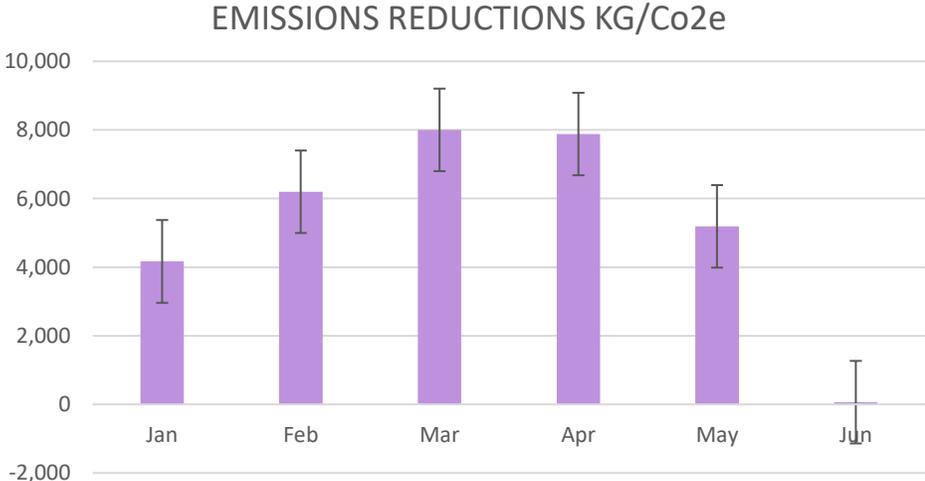
Total Energy Emissions



We have continued to reduce our carbon emissions; no month has exceeded the baseline. The emissions factor for electricity was reduced by 37% from 2022, this new baseline means we cannot compare to 20/21 data. The last six months we have emitted less carbon from energy compared to the same six months the year before, showing the good work undertaken in our energy management program.



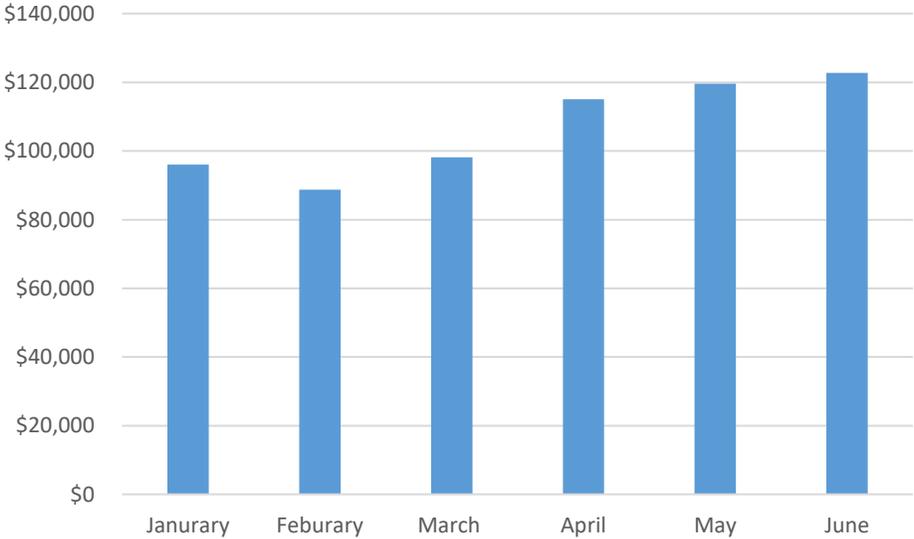
Emission Reductions



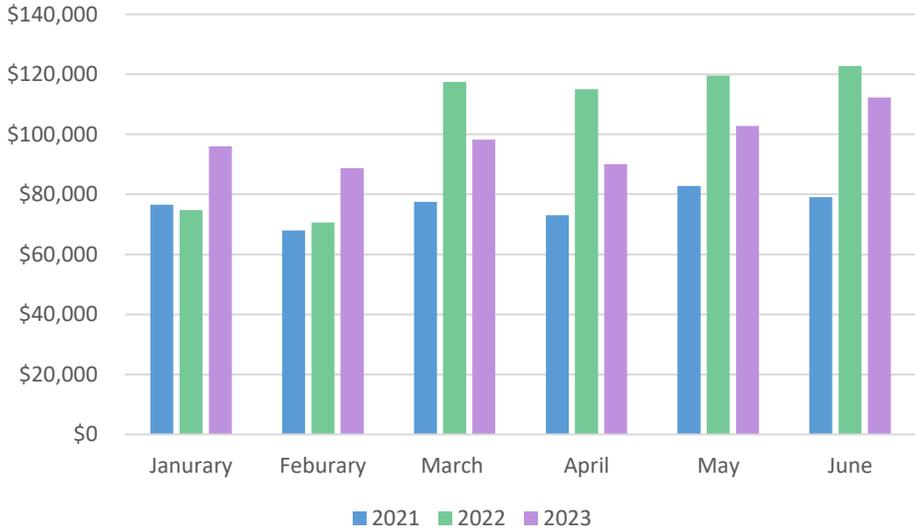
We have seen emissions reductions every month. **Over the past six months we have saved 20,421 kg/Co2e compared to the baseline.** The result for June is due to the Boiler being on at the Aquatic Centre.



Energy Cost January – June 2023



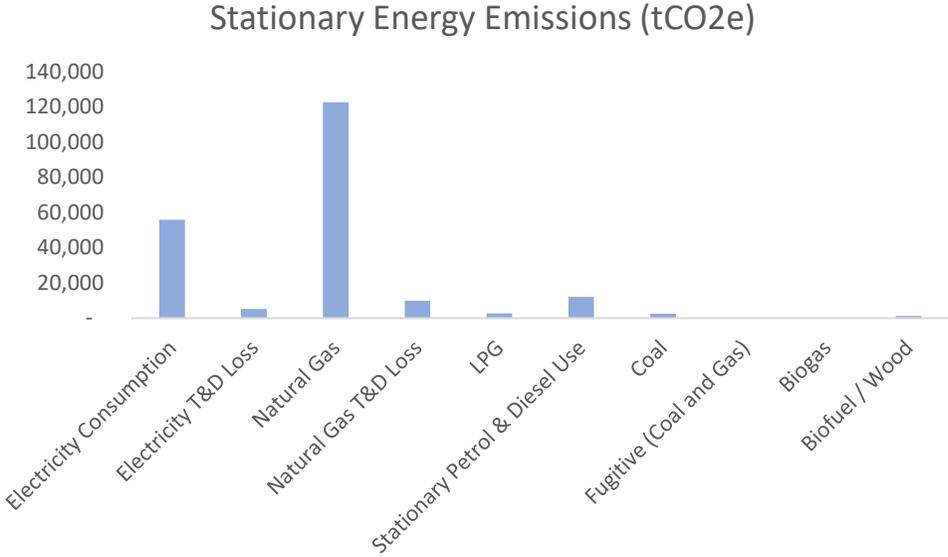
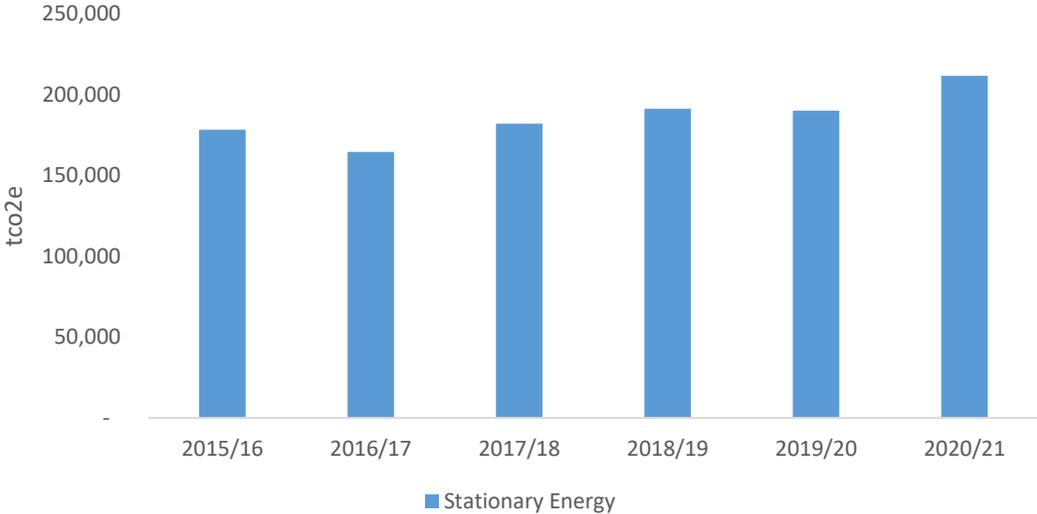
Energy Cost – Compared to the last two years.



The past six months saw an increase in monthly energy costs. The last two years have seen a steady increase in energy costs.



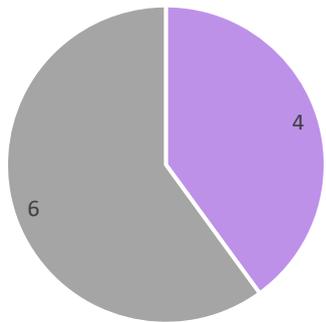
Community stationary energy



Stationary energy emissions in our district have steadily increased. This is due to the significant use of natural gas to heat homes. Actions to reduce natural gas use and stationary energy emissions in our community and local industries will be part of our next climate response.



Water supply and wastewater (also known as sewage) have both mitigation and adaptation implications. Wastewater contributes significantly to emissions, with 63% of Council’s emissions coming from the district wastewater treatment plants. A changing climate will have many implications for water, including droughts, flooding and sea-level rise. Access the full Water Services Action Plan [here](#).

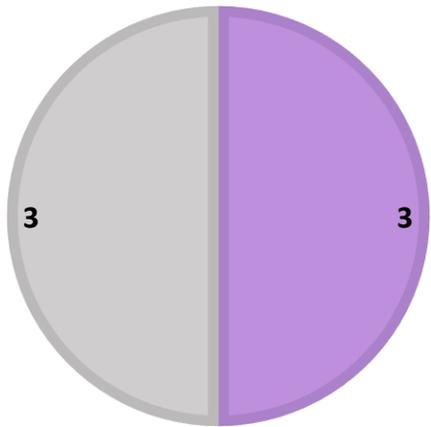


Key	
● action progressing	● action complete
● action not started	● action is on-going

GOALS	PROGRESS ON ACTIONS	SNAPSHOT
Goal 1: Manage water responsibly and sustainably	<ul style="list-style-type: none"> ● Increase Council and community understanding of water use. ● Increase understanding of water supply assets. ● Develop demand management strategy. 	<p>a. There has been significant pressure across local government three waters departments as a result of central government’s three waters reform – programme. This has resulted in uncertainty and limitations for some of the actions.</p> <p>b. New high lift pumps and meters have been installed to progress (Goal 1 and 2).</p> <p>c. Some of the actions progressed through the development of a localised climate change risk assessment as part of the Land Use and the Built Environment Action Plan. We are reliant on Regional Council risk assessment to progress District work (Goal 3 and 4).</p> <p>d. Community understanding of three waters infrastructure has occurred over the past six months. The team plans to attend the Farm like Grandad event to continue these conversations (Goal 1).</p>
Goal 2: Reduce and manage greenhouse gas emissions from water supply and wastewater services	<ul style="list-style-type: none"> ● Consider and optimise greenhouse gas reduction measures in any new projects. ● Embrace new technologies. ● Investigate high energy use infrastructure for potential emissions savings. 	
Goal 3: Manage climate change risks to existing water supply and wastewater services	<ul style="list-style-type: none"> ● Identify at risk and vulnerable water supply and wastewater infrastructure susceptible to various climate change models. ● Develop adaptive design and planning pathways for ongoing operation and renewal of water supply and wastewater infrastructure. 	
Goal 4: Incorporate climate change considerations into future water supply and wastewater services	<ul style="list-style-type: none"> ● Apply climate change assumptions to new projects. ● Collaborate with other water service providers, in particular within the Bay of Plenty Region, to build on climate change resilience. 	



New Zealanders still have a ‘throw away’ mind-set. More than 4% of New Zealand’s emissions are from waste, mostly due to domestic waste sent to landfill. To change the environmental effects of our waste, we need to change our behaviour. Responsibility for waste management lies with the whole community. Access the full Waste and Circular Economies Action Plan [here](#)



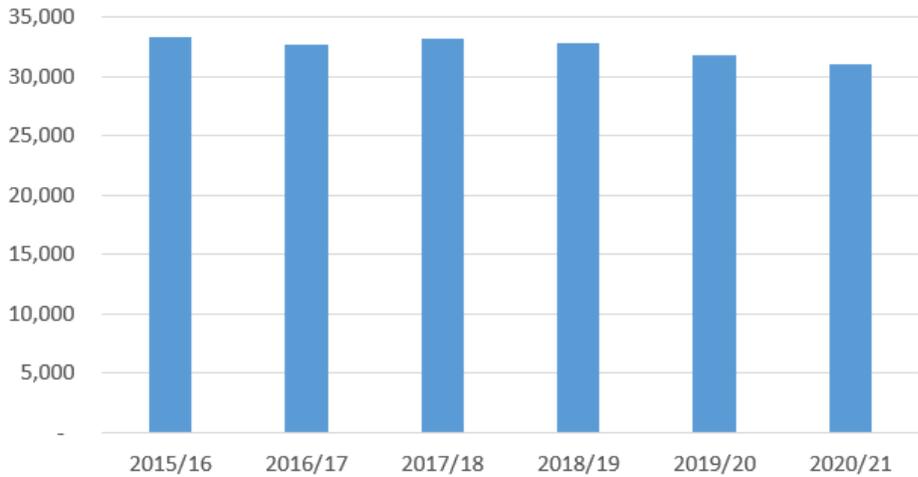
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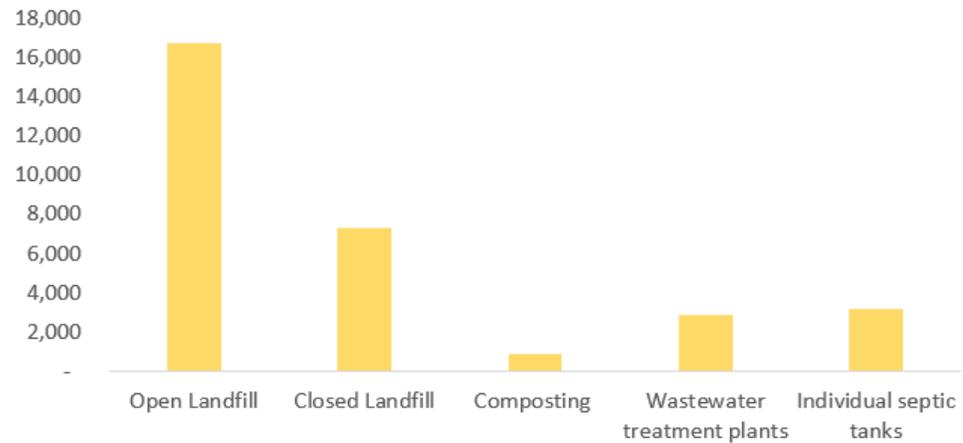
GOALS	PROGRESS ON ACTIONS	SNAPSHOT
Goal 1: Reduce the amount of waste generated by the Council	<ul style="list-style-type: none"> ● Raise internal organisation awareness. ● Work with suppliers to reduce waste coming into the organisation. 	<ul style="list-style-type: none"> a. Staff are putting regular waste tips on Whoogle (staff website). Such as encouraging staff to use their own cups when visiting local cafes and promoting staff awareness of the Eco store return scheme (Goal 1). b. Staff battery recycling program continuing (Goal 1).
Goal 2: Move community waste patterns up the waste hierarchy	<ul style="list-style-type: none"> ● Review and implement Council’s Waste Management and Minimisation Plan (WMMP). ● Implement central government policy changes that support circular economies within the District. 	<ul style="list-style-type: none"> c. A range of submissions have been made on waste related central government policies such as the Waste Management Legislation, NZ Waste Strategy, Climate Change Action Plan, Emission Reduction Plan, and the proposed mandatory reporting requirements for territorial authorities (Goal 2).
Goal 4: Manage climate change risks to existing and future waste services	<ul style="list-style-type: none"> ● Identify at risk and vulnerable waste infrastructure susceptible to various climate change projections (including closed landfills). ● Apply climate change assumptions to new waste-related projects. 	<ul style="list-style-type: none"> d. Several projects are in planning to reduce transportation of waste (Goal 2). e. Some of the actions for goal 4 will be progressed through the development of a localised climate change risk assessment as part of the Land Use and the Built Environment Action Plan. Development of a Council dynamic adaptive planning pathways (DAPP) –approach will also inform future action.



Total co2e



Waste Emissions (tCO2e)



*Open Land Fill is Waste from the whole District, transported out of the District

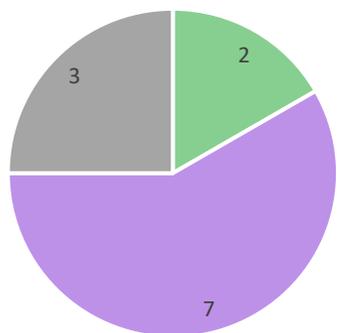
*Emissions are allocated to territorial authorities based on where the waste was produced, even if the waste is disposed in landfill outside the territorial authority.

- Data is from the Community Emissions work commissioned by Regional Council and [Aecom](#).
- Council's footprint includes the footprint for all of the waste in the District, as we collect and dispose of it, rather than just what we as an organisation produce.
- Landfill waste volume and end location information has been provided by the respective Council departments.
- Where information is not available, waste volumes have been estimated based on historical national data on a per capita basis.

- Solid waste produced the bulk of waste emissions making up 78% total of Waste Emissions.
- Solid waste emissions include emissions from open landfills and closed landfills
- Both open and closed landfills emit methane from the breakdown of organic materials disposed of in the landfill for many years after waste enters the landfill.
- It has been assumed that landfill waste in Whakatāne has been transported to either [Tirohia](#) or Hampton Downs since 2001.
- Annual emissions from closed landfill sites will decrease over time as no new waste enter these sites.



The District is already vulnerable to natural hazards including landslide, flooding, coastal erosion and coastal inundation. The consequences and impact of these hazards are likely to get worse as the climate changes, adding to the existing pressures on the natural environment like habitat loss, pollution and intense resource use. Access the full Land Use and the Built Environment Action Plan [here](#).

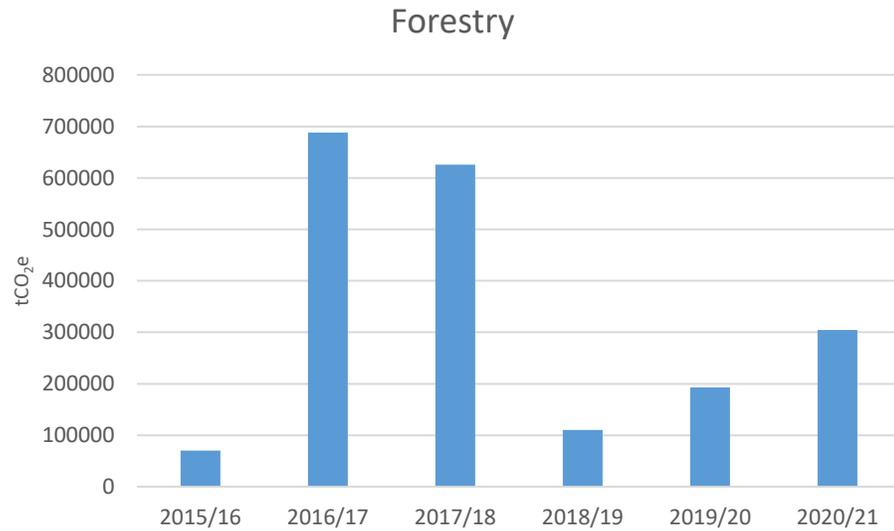


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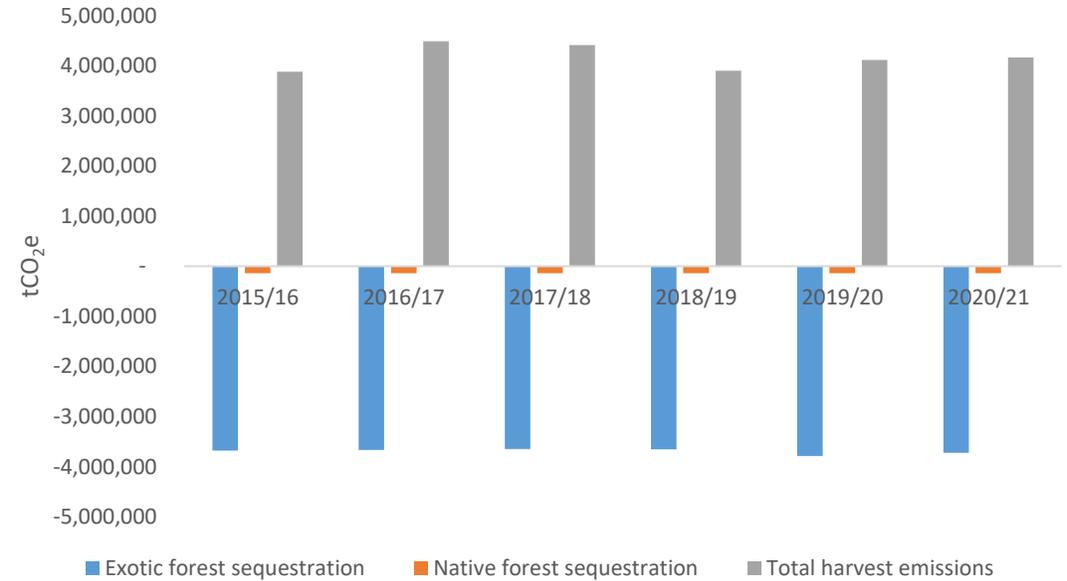
- action progressing
- action not started
- action complete
- action is on-going

GOALS	PROGRESS ON ACTIONS	SNAPSHOT
Goal 1: Identify, understand and reduce climate change risk to existing building and infrastructure, including storm water services, the airport and wharves, community buildings such as halls, public toilets, the Civic Centre, museum & library	<ul style="list-style-type: none"> ● Identify communities at risk from climate related natural hazards. ● Develop strategy to manage associated risks to those communities. ● Identify and manage at risk infrastructure. 	a. Work continues to advance a climate change risk and adaptation specific project. As part of this project, a local climate change risk assessment will be undertaken. This assessment will inform several work streams across the six action plans (Goal 1).
Goal 2: Enhance resilience through land use decisions	<ul style="list-style-type: none"> ● Identify how areas within the District will be affected by climate change. 	b. Quantitative landslide risk assessments being reviewed, incorporating climate adjusted rainfall intensities (Goal 1, 2 and 3).
Goal 3: Recognise cultural heritage and values in land use decisions	<ul style="list-style-type: none"> ● Future development avoids areas most at risk. ● Take account of cultural values when considering the impact of climate change. ● Ensure that land use decisions create no further disconnect for local Iwi to their traditional sites and practices and consider ki uta ki tai in all land use decisions and pathways planning. 	c. Minimum Building Platform Level Change in development (Goal 2 and 4).
Goal 4: Promote a built environment which is resilient to climate change impacts	<ul style="list-style-type: none"> ● Comply with and promote exceedance of minimum building regulations. 	
Goal 5: Care for biodiversity and ecosystems, and protect them from the impacts of climate change	<ul style="list-style-type: none"> ● Promote public awareness of the District’s natural environment, and support local community groups who care for it. ● Reduce the impact of human activity on local biodiversity. 	
Goal 6: Promote low emissions and sustainable land use, building practises and day-to-day operations	<ul style="list-style-type: none"> ● Encourage the use of sustainable products and practises. ● Take travel, motor vehicle emissions and access to public transport into account when making land use decisions, working with Bay of Plenty Regional Council. 	





Harvesting emissions are high in Whakatāne. We did not have any forestry harvest this year.



Native forest sequestration is low, showing a huge opportunity for us.

