

Mid-Year Climate Change Report 2021/22 [Report #3]

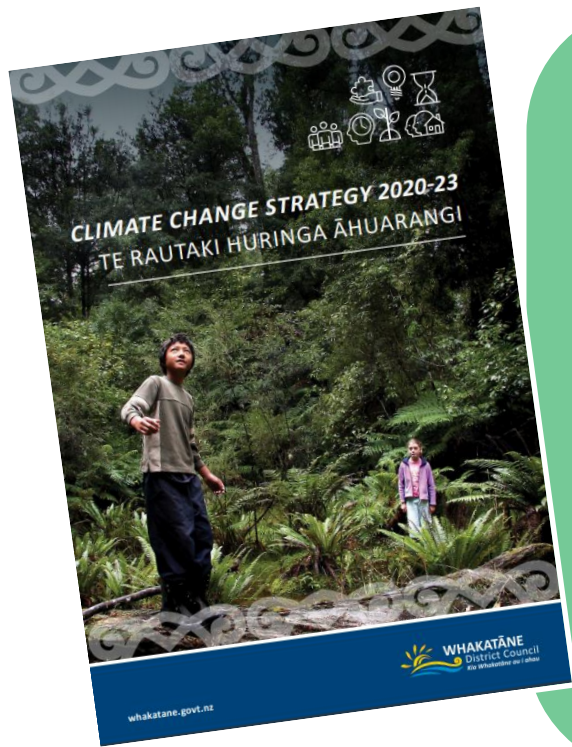
About this report:

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 ‘Mid-Year’ 2021/22 Climate Change Report’ covers the time period 1 July 2021 – 31 December 2021, and summarises the progress made towards the short-term actions (2020/22) specified in the Council’s six Climate Change Action Plans. This report also provides an update on Council’s ongoing energy management programme.

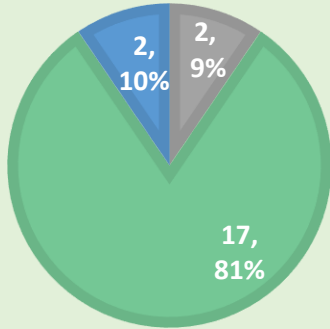
Progress made towards the wider Climate Change Strategy targets (both mitigation and adaptation) will be covered in the next six-monthly climate change report.

This report is the third 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>



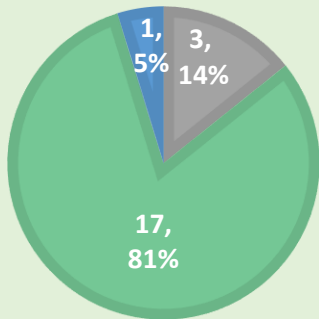
LEADERSHIP AND COLLABORATION ACTION PLAN

Mid – year reporting:
1 July – 31 December
2021



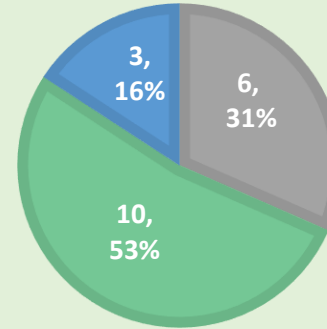
■ Not started
■ Progressing - on track
■ Completed
■ Requires review

Comparison to
previous reporting
period: 1 January –
30 June 2021



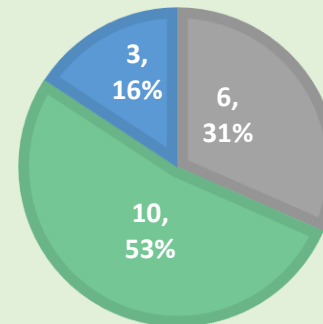
TRANSPORT ACTION PLAN

Mid – year reporting:
1 July – 31 December
2021



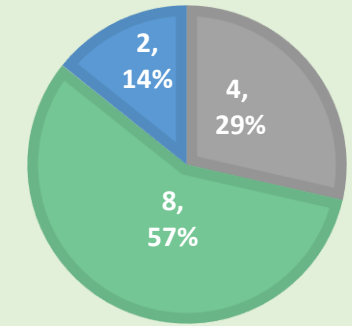
■ Not started
■ Progressing - on track
■ Completed
■ Requires review

Comparison to
previous reporting
period: 1 January –
30 June 2021



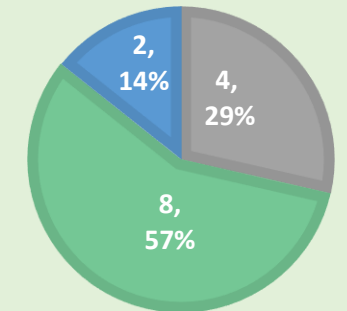
ENERGY ACTION PLAN

Mid – year reporting:
1 July – 31 December
2021



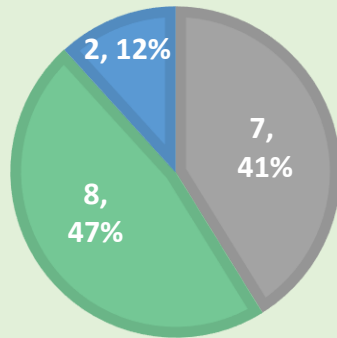
■ Not started
■ Progressing - on track
■ Completed
■ Requires review

Comparison to
previous reporting
period: 1 January –
30 June 2021



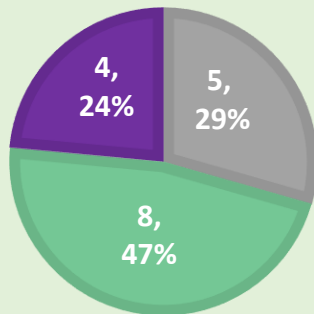
WATER SERVICES ACTION PLAN

Mid – year reporting:
1 July – 31 December
2021



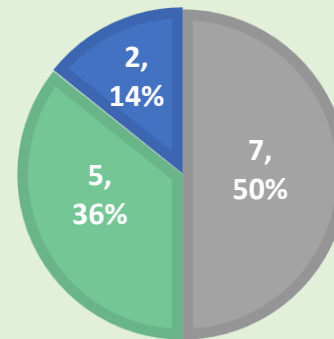
- Not started
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- Requires review

Comparison to
previous reporting
period: 1 January –
30 June 2021



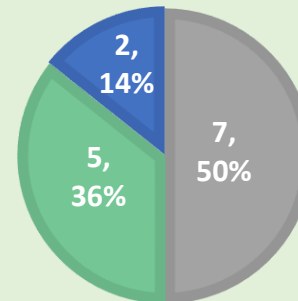
WASTE AND CIRCULAR ECONOMIES

Mid – year reporting:
1 July – 31 December
2021



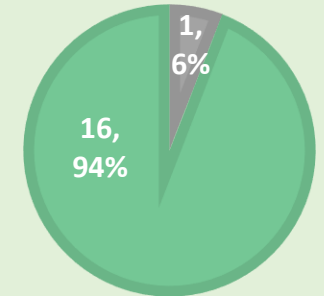
- Not started
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- Completed
- Requires review

Comparison to
previous reporting
period: 1 January –
30 June 2021



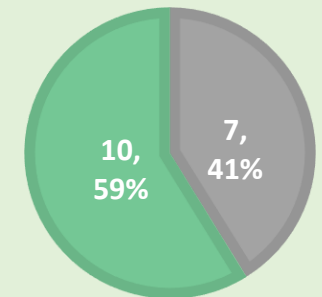
LAND USE AND THE BUILT ENVIRONMENT

Mid – year reporting:
1 July – 31 December
2021



- Not started
- Progressing - on track
- Completed
- Requires review

Comparison to
previous reporting
period: 1 January –
30 June 2021





This is to certify that
Whakatāne District Council

meets the requirements of Toitū carbonreduce certification having measured its greenhouse gas emissions in accordance with ISO 14064-1:2006 and committed to managing and reducing its emissions in respect of the operational activities of its organisation, excluding council controlled organisations.

Osana Robertson – Certifier

Date issued: 1 November 2021 | Valid until: 1 November 2024
 Certificate Number: 2021169J | Certification Status: Certified organisation
 Company Address: Civic Centre, 14 Commerce Street, Whakatāne, 3120, New Zealand
 Certification Year Level of Assurance: Reasonable

Please refer to the disclosure page on www.toitu.co.nz for further details.
 Toitū carbonreduce is an annual certification programme and this certificate only remains valid with an annual surveillance audit.



WWW.JAS-ANZ.ORG/REGISTER
 Certified by Enviro-Mark Solutions Limited
 (Trading as Toitū Envirocare)

Council has been recertified with Toitū Carbonreduce for the 2020/21 year

The Toitu Carbonreduce- programme helps organisations measure their greenhouse gas emissions, and put in place strategies to manage and reduce impacts.

The programme is in accordance with ISO 14064-1, an international standard for environmental management*.

*International Standard Organisation (ISO)
<https://www.iso.org/standard/66453.html>





Whakatāne District Council’s emissions for the year 2020/21 (01 July 2020 to 30 June 2021) were **3,357.46** tCO₂e.

This 8% lower than the base year 2017/18, with no change between the 2019/20 and 2020/21 years.

The graph to the right illustrates emissions by source.

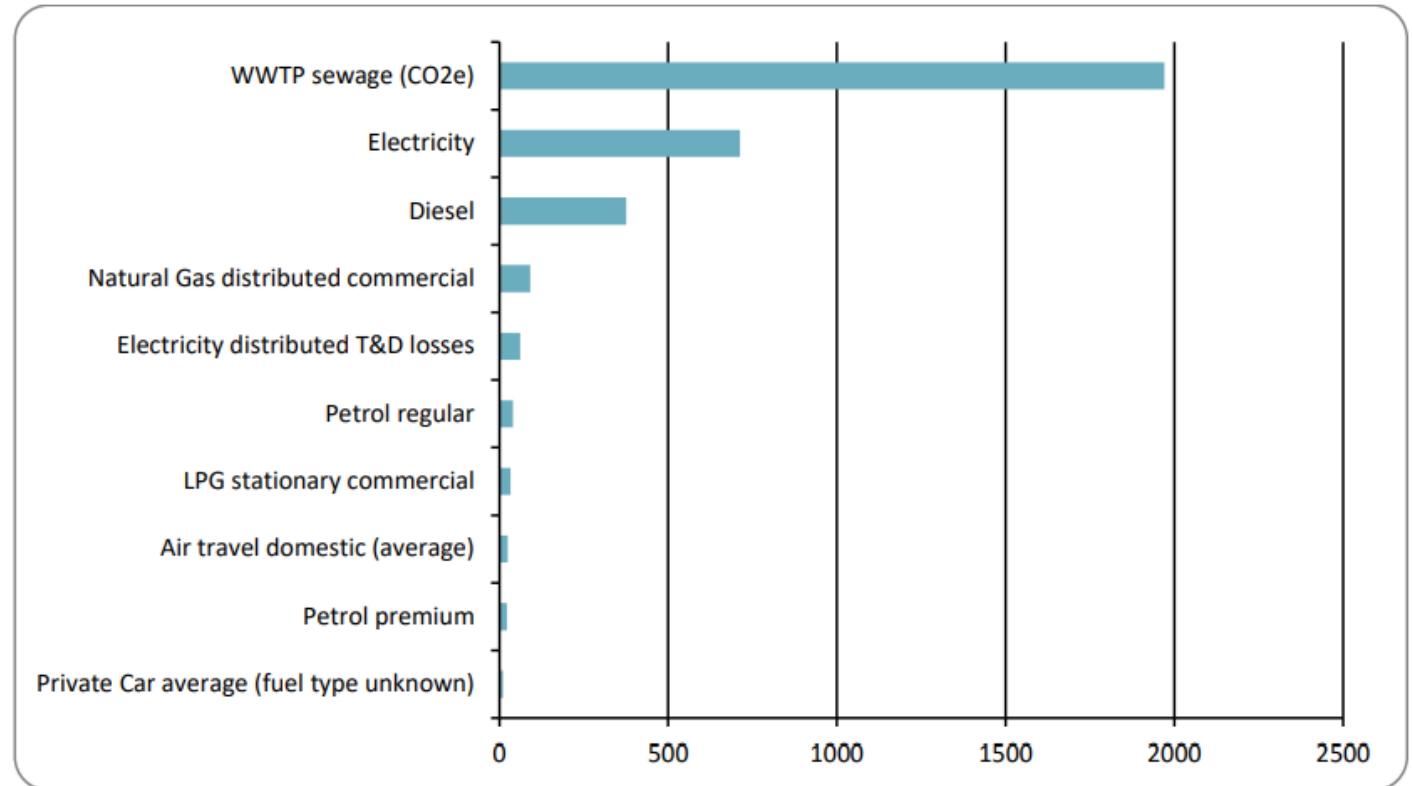
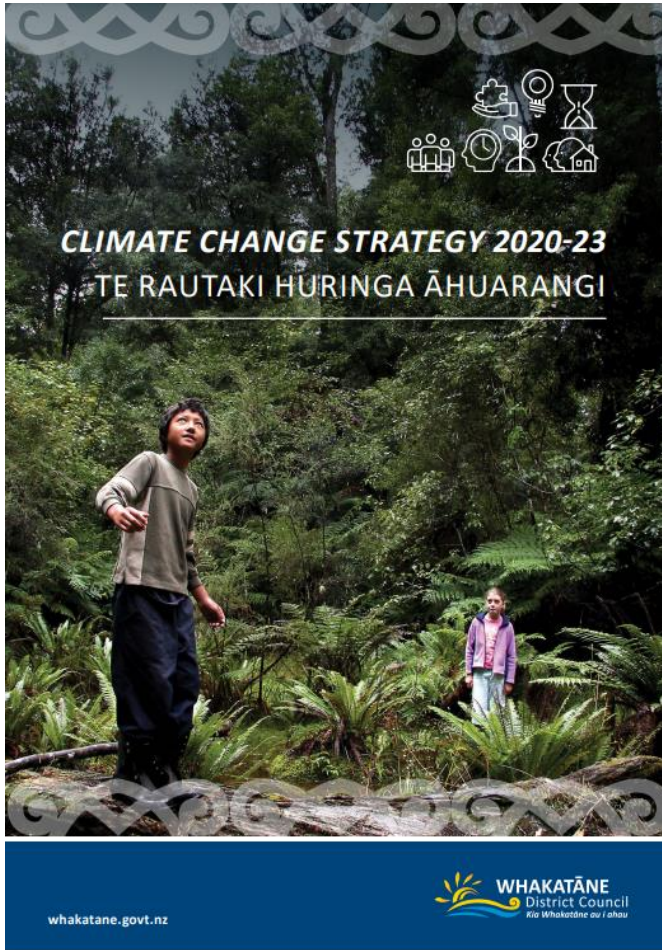


Figure 1: GHG emissions by emissions source





Strategy targets

Targets		Adaptation	Mitigation
Short/medium term (2020-24)	Organisation	Will make sound planning decisions in consideration of the likely effects of climate change.	Will reduce its carbon footprint by 15% by 2022, excluding biogenic methane ¹³ and nitrous oxide. ¹⁴
	District	Will develop a matrix to identify the communities most at risk from climate-related natural hazards by 2022.	* Progress towards long-term district target
Long term (2025-50)	Organisation	Will ensure infrastructure is resilient to the effects of climate change.	Will be a net carbon zero organisation by 2030, excluding biogenic methane and nitrous oxide. Organisational biogenic methane emissions reduction of 24% to 47% by 2050
		Will realise our climate change vision by delivering on our climate change principles.	
	District	Will develop community-led adaptation plans for the communities most at risk from climate change by 2025.	Net carbon zero district by 2030, excluding biogenic methane and nitrous oxide. District biogenic methane emissions reduction of; (i) 10% by 2030; and (ii) 24% to 47% by 2050.
		Will actively prepare for a changing climate.	



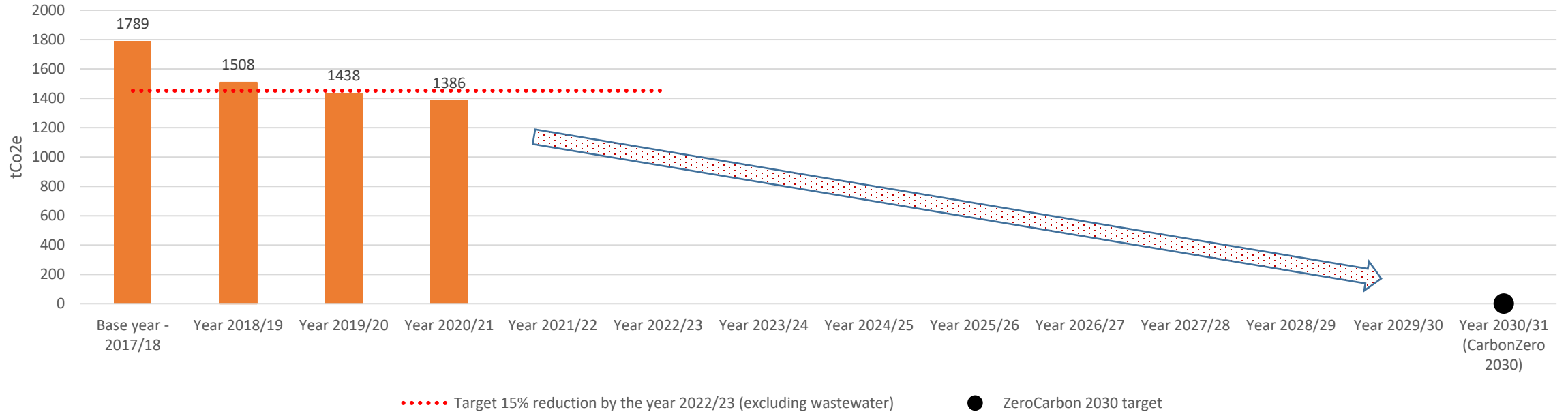
Short-term organisational mitigation target:
Will reduce its carbon footprint by 15% by 2022, excluding biogenic methane and nitrous oxide

Long-term organisational mitigation target:
Will be a net carbon zero organisation by 2030, excluding biogenic methane and nitrous oxide



The majority of Council’s biogenic methane emissions are produced by wastewater processing.

Progress towards our 2030 target (excluding wastewater)



As of 2021, the Council has reduced its carbon footprint by 23% (when excluding wastewater emissions). The 2022 15% reduction target has hence been achieved and the Council is making great progress towards its 2030 target.

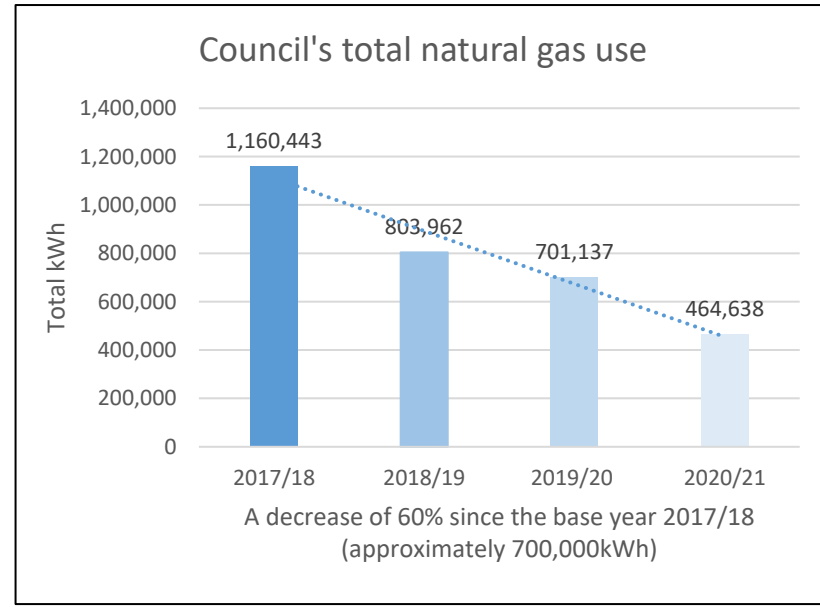
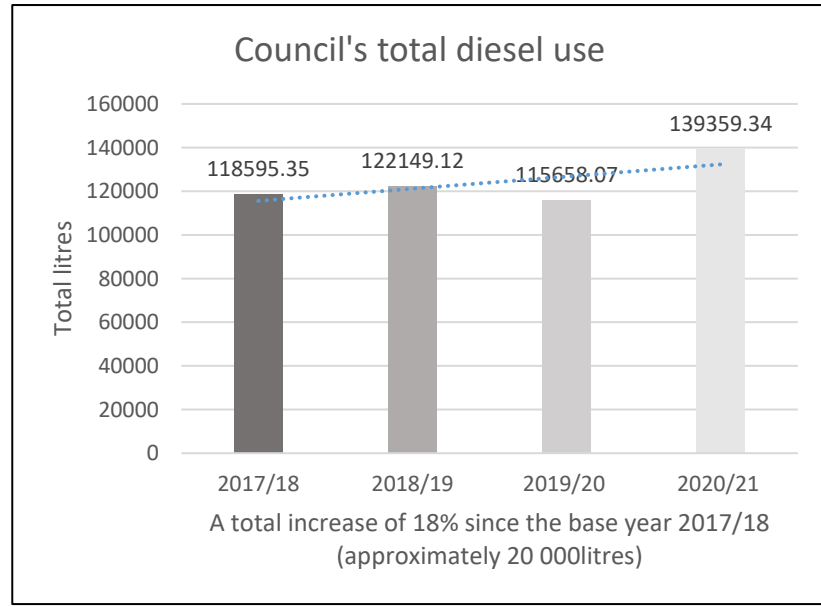
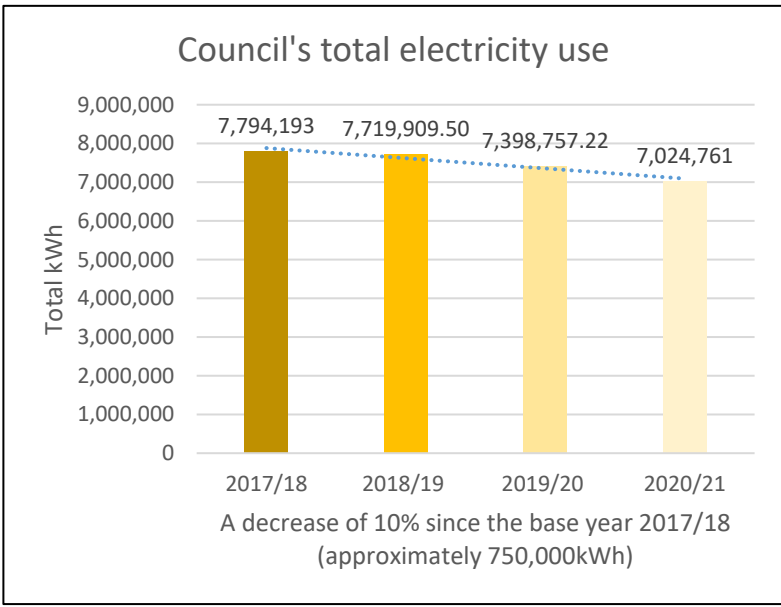




Excluding wastewater, the Council’s top 3 emission sources are: electricity, diesel, and natural gas. The charts below show the total energy, diesel and natural gas use over the past four years.

The observed reductions in Council’s electricity and natural gas use is a testimony to the success of Council’s energy management programme, especially the carbon emissions saved through the reduction in Council’s natural gas use due to the high emission factors associated with natural gas use.

The increase in Council’s diesel use is a reflection of the increased demand of service delivery and the availability of external funding opportunities like the Provincial Growth Fund (PGF), Kia Kaha Whakatāne, Three Waters stimulus funding etc.

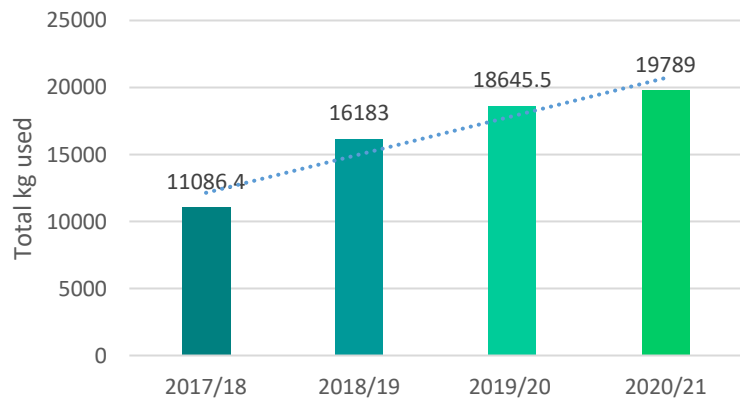




Some other interesting trends include:

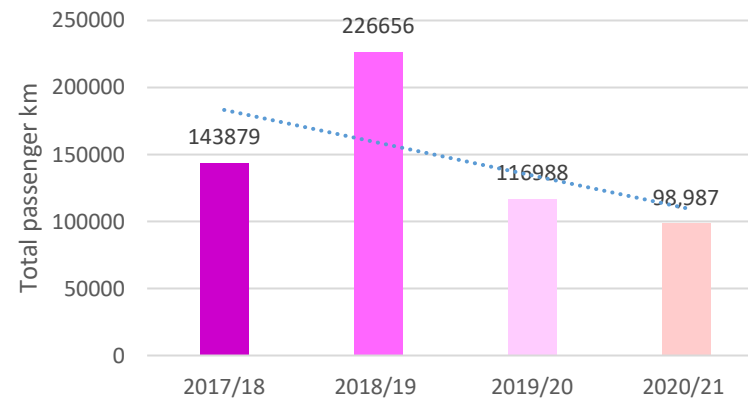
- A 80% increase in Council's LPG gas use
- A 31% decrease in air travel
- A 28% decrease in visitor nights

Total LPG use



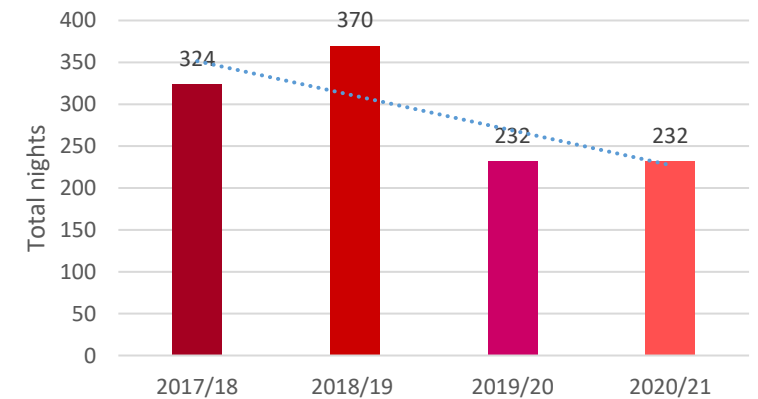
A 80% increase since the base year 2017/18 (approximately 8700kWh)

Council's total passenger km (air travel)



A 31% decrease since the base year 2017/18 (approximately 45,000km)

Council's total visitor nights



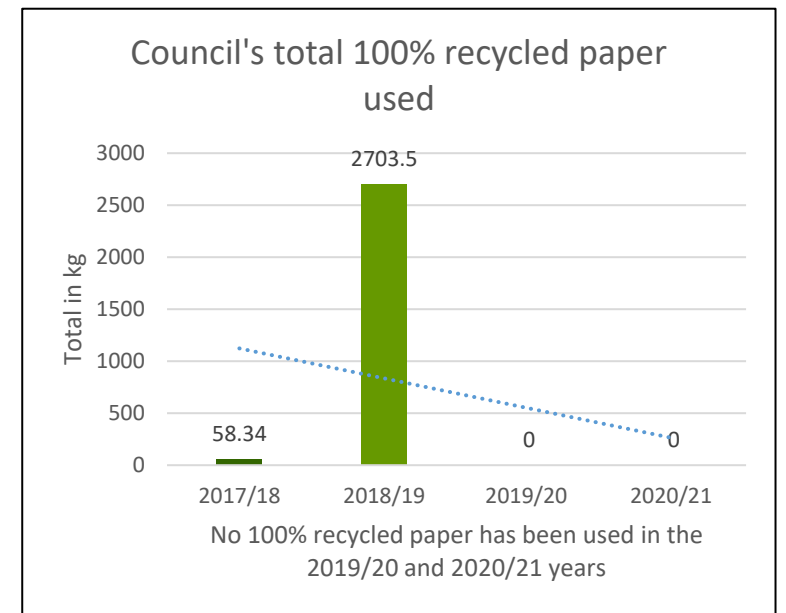
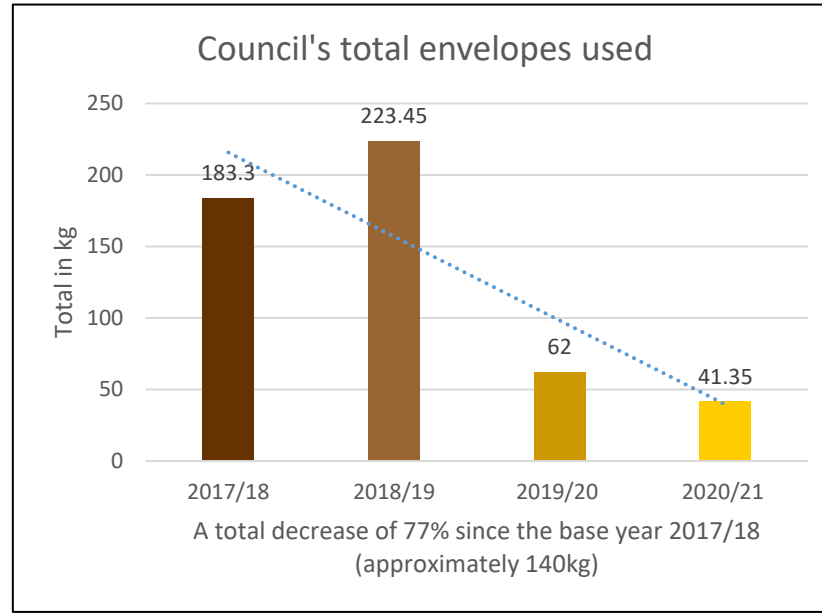
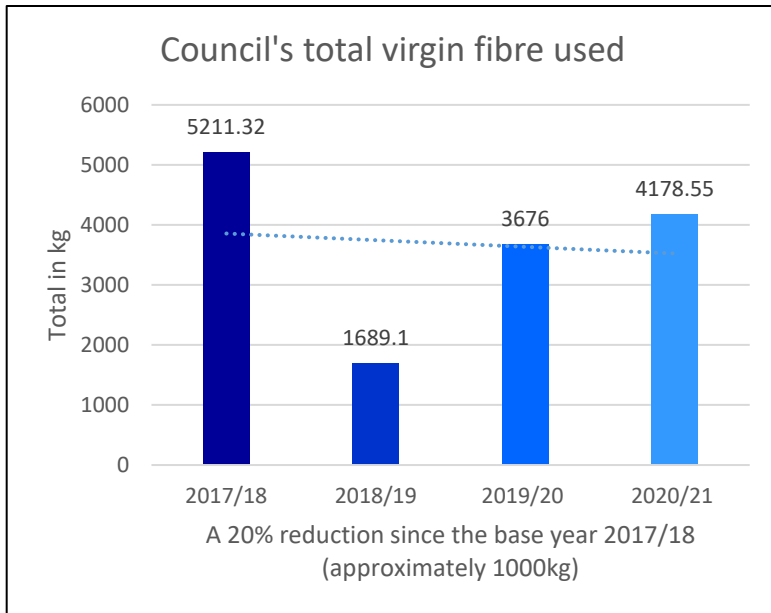
A 28% decrease since the base year 2017/18 (92 nights less)





Some other interesting trends include:

- A 20% reduction in Council’s virgin fibre use (printing paper etc)
- A 77% reduction in Council’s total envelopes used
- No 100% recycled paper was bought in the last two financial years.

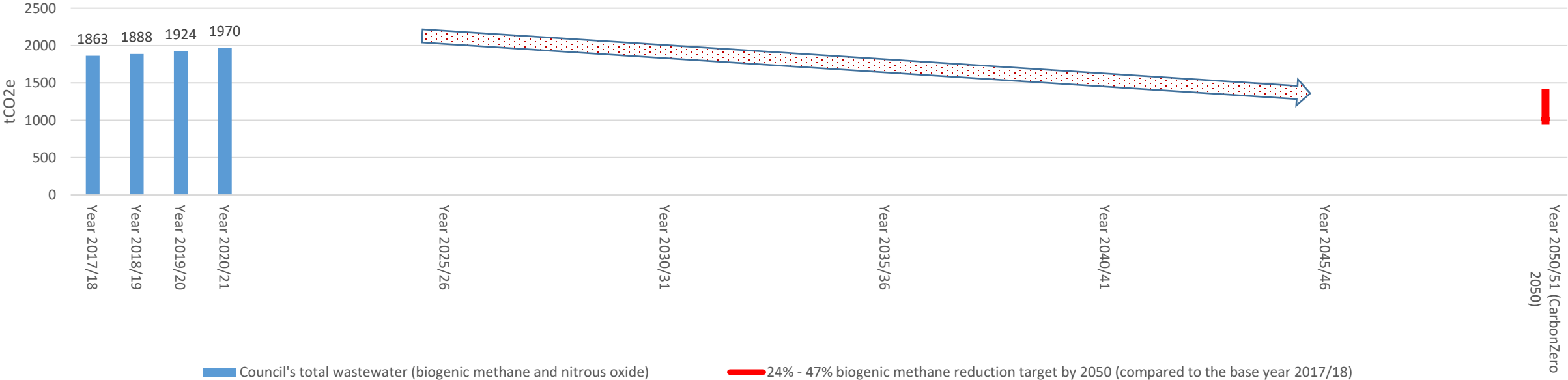


Long-term organisational mitigation target:
Organisational biogenic methane emission reduction of 24% to 47% by 2050



The majority of Council’s biogenic methane emissions are produced by wastewater processing.

Progress towards our 2050 biogenic methane and nitrous oxide target





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](#).

This action plan includes four goals setting out 21 short-term actions for 2020-22

GOALS	PROGRESS ON EACH ACTION	SNAPSHOTS
Goal 1: Align the Council’s culture, key documents and decisions with our climate change principles		<ul style="list-style-type: none"> a. The Annual Report 2020/21 includes a climate change section. The new vision and goals adopted through the LTP encompasses climate change considerations (contributes to goal 1).
Goal 2: Build the Council’s organisational knowledge about climate change, mitigation and adaptation		<ul style="list-style-type: none"> b. A new senior Policy Analyst has joined the Strategy Team and will work to develop the Council’s next iteration of its Climate Change Strategy.
Goal 3: Collaborate with stakeholders, partners, and the community, for a unified approach to the climate crisis		<ul style="list-style-type: none"> c. The strategy team manager is also working towards recruiting a new coordinator for the climate change work programme.
Goal 4: Build community awareness about matters relating to climate change, including the Council’s response		

Key	
action progressing	action complete
action not started	action requires review





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](#).

This action plan includes five goals setting out 19 short-term actions for 2020-22

GOALS	PROGRESS ON EACH ACTION	SNAPSHOT
Goal 1: Promote travel efficiency	● ● ● ●	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 post Covid-19. (Contributing to goal 1).
Goal 2: Enable and encourage active transport	● ● ● ●	b. Staff encouraged to participate in the Aotearoa Bike Challenge month in February to encourage more active transport uptake (contributing to goal 2). c. Staff are developing a Travel Demand Management Plan with Bay of Plenty Regional Council to identify further actions to encourage more efficient community travel including car-less vacations. Report currently being drafted. (Contributing to goal 2).
Goal 3: Increase low carbon transport options	● ● ● ● ●	d. Staff are continuing the role out of Active Whakatāne Implementation Plan including monitoring programme to track update of active mode transport. (Contributing to goal 2). e. Bike rack installs underway around town. Lockable E-bike charging facilities scheduled for install in September 2022. (Contributing to goal 2 and 3).
Goal 4: Manage climate change risks to existing transport infrastructure	● ● ● ●	f. Staff have developed a Public EV charging plan as part of Council Annual Plan funding .
Goal 5: Build future transport infrastructure for a changing climate	● ●	

Key	
● action progressing	● action complete
● action not started	● action requires review

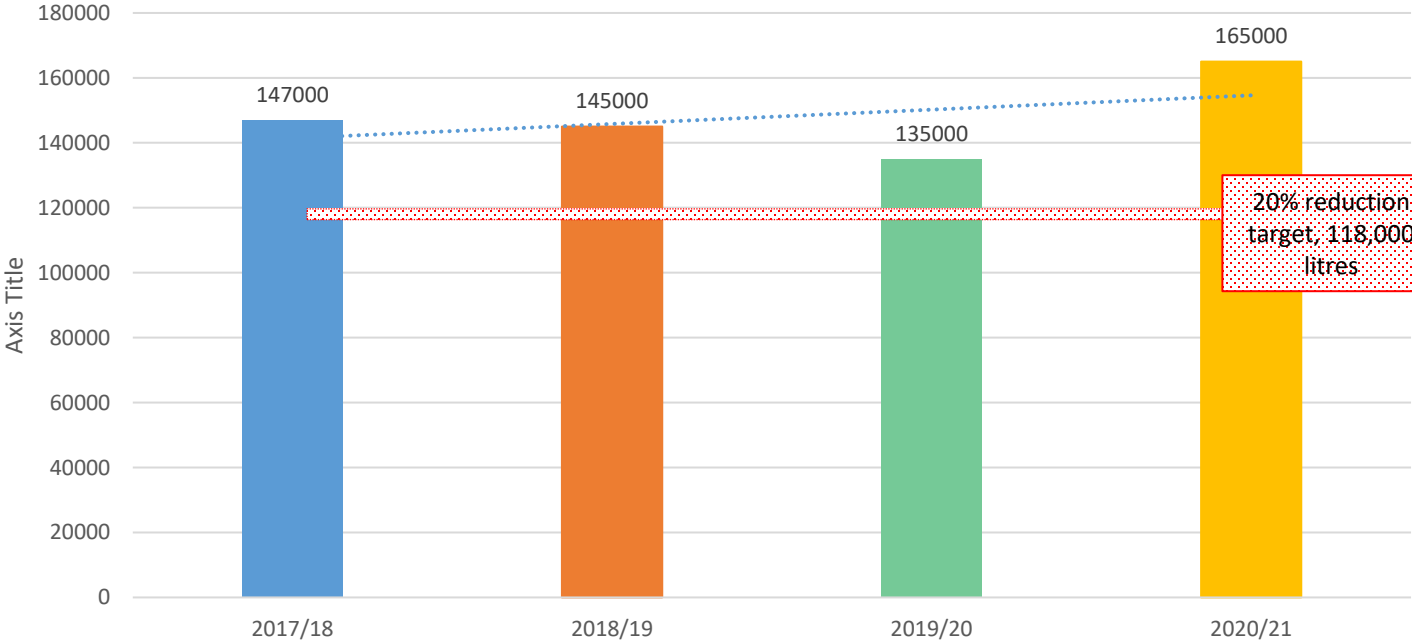


Council specific transport target

20% reduction in the Council’s total purchased petrol and diesel by 2021 (compared to 2017/18).
The data provided is based on Council’s annual carbon footprint audit through Toitu Carbonreduce.

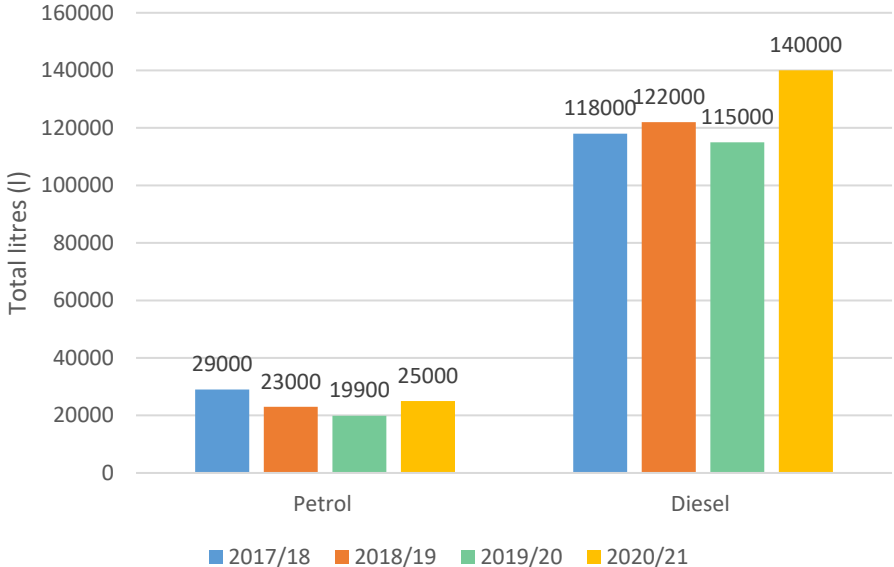


Total purchased fuel (petrol and diesel combined)



An increase of 11% since the base year 2017/18 (approximately 16,500litres)

Petrol vs diesel amounts



Target not achieved – highlighting further work is needed in the fleet and fuel use space.





This action plan includes three goals setting out 14 short-term actions for 2020-22

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](#).

GOALS	PROGRESS ON ACTIONS	SNAPSHOT
Goal 1: Enhance energy efficiency	● ● ● ● ● ● ● ●	<ul style="list-style-type: none"> a. Council’s energy management programme continues. The achieved emission, energy and cost reductions are explored further in the following three slides (contributing to goal 1). b. 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. (contributing to goal 1). c. Work is currently underway in Te Koputu to change over gas HVAC to heat pumps. (contributing to goal 1). d. Civic centre upgrade includes installation of hot water heat pumps, LED lighting, lighting controls, submetering and energy monitoring (contributing to goals 1, 2 and 3). e. Generator outlets at community halls installed for our rural communities. Three of ten have been installed to date.
Goal 2: Encourage low carbon energy options	● ●	
Goal 3: Encourage the development of resilient low carbon energy options	● ● ● ● ● ●	

Key	
● action progressing	● action complete
● action not started	● action requires review

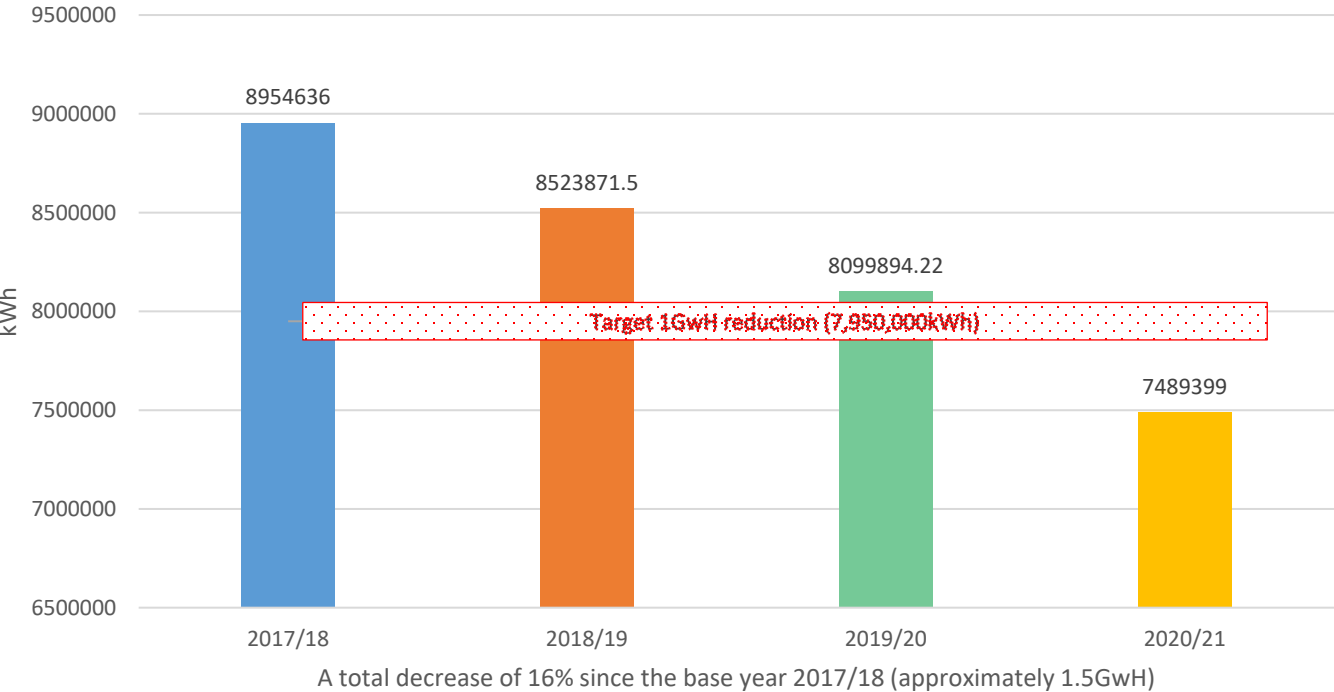


Council specific energy target

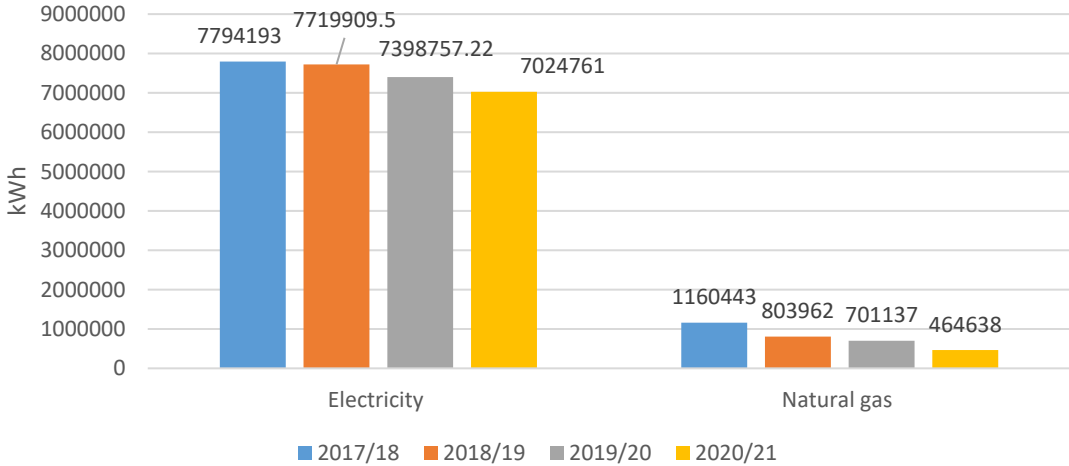
Ensure the Council delivers the benefit of 1GWh p.a. energy savings by June 2022 (based on the June 2017 to May 2018 baseline). The data provided is based on Council’s annual carbon footprint audit through Toitu Carbonreduce.



Council's total electricity and natural gas use (in kWh)



Electricity vs. natural gas



Target achieved

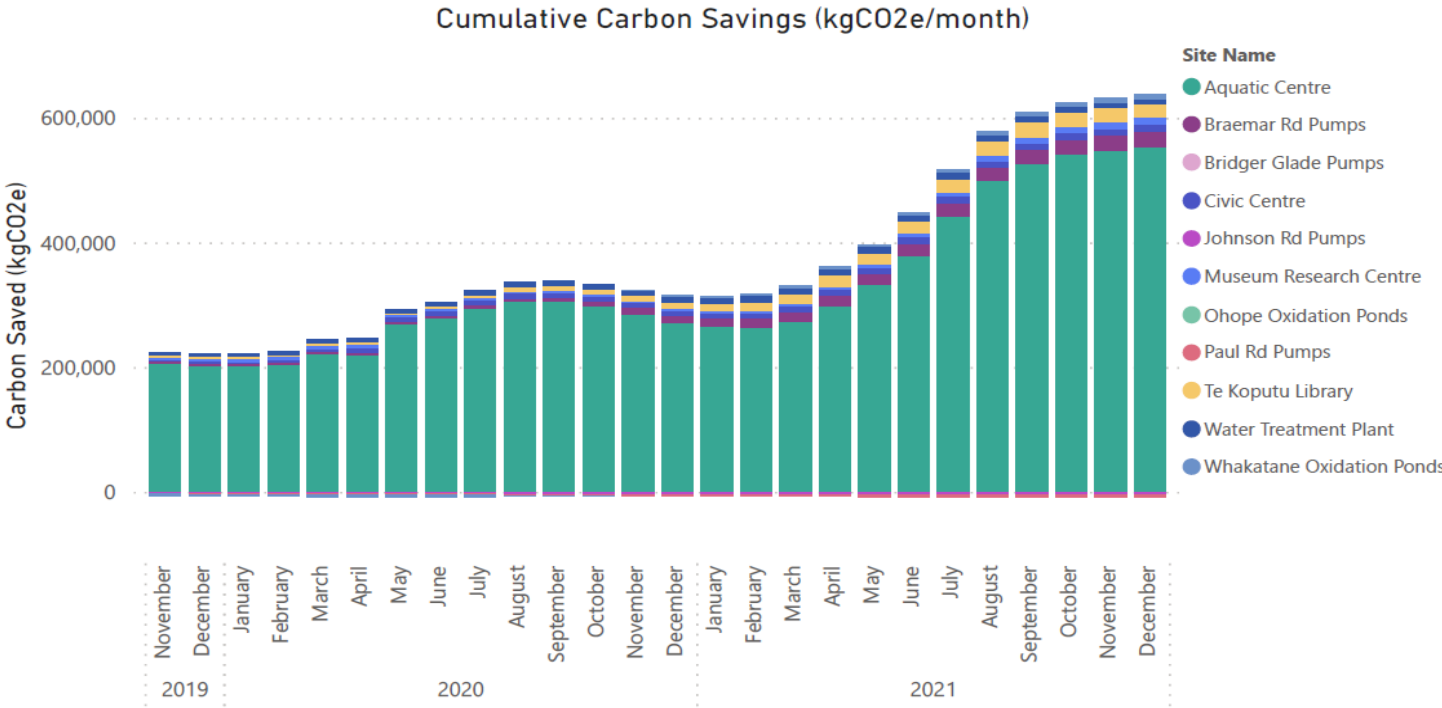


Council’s energy management programme

The Council undertook an energy audit in 2018 in collaboration with the [Energy Efficiency and Conservation Authority \(EECA\)](#) and with the support of Council's [energy management contractor EMSOL](#). Since September 2019, an energy management programme has been underway to identify opportunities for energy savings and emission reductions.

Council’s energy management programme with Emsol continues, with monthly meetings being held to monitor energy use at eleven specific sites/facilities which contribute the majority of the Council’s energy use.

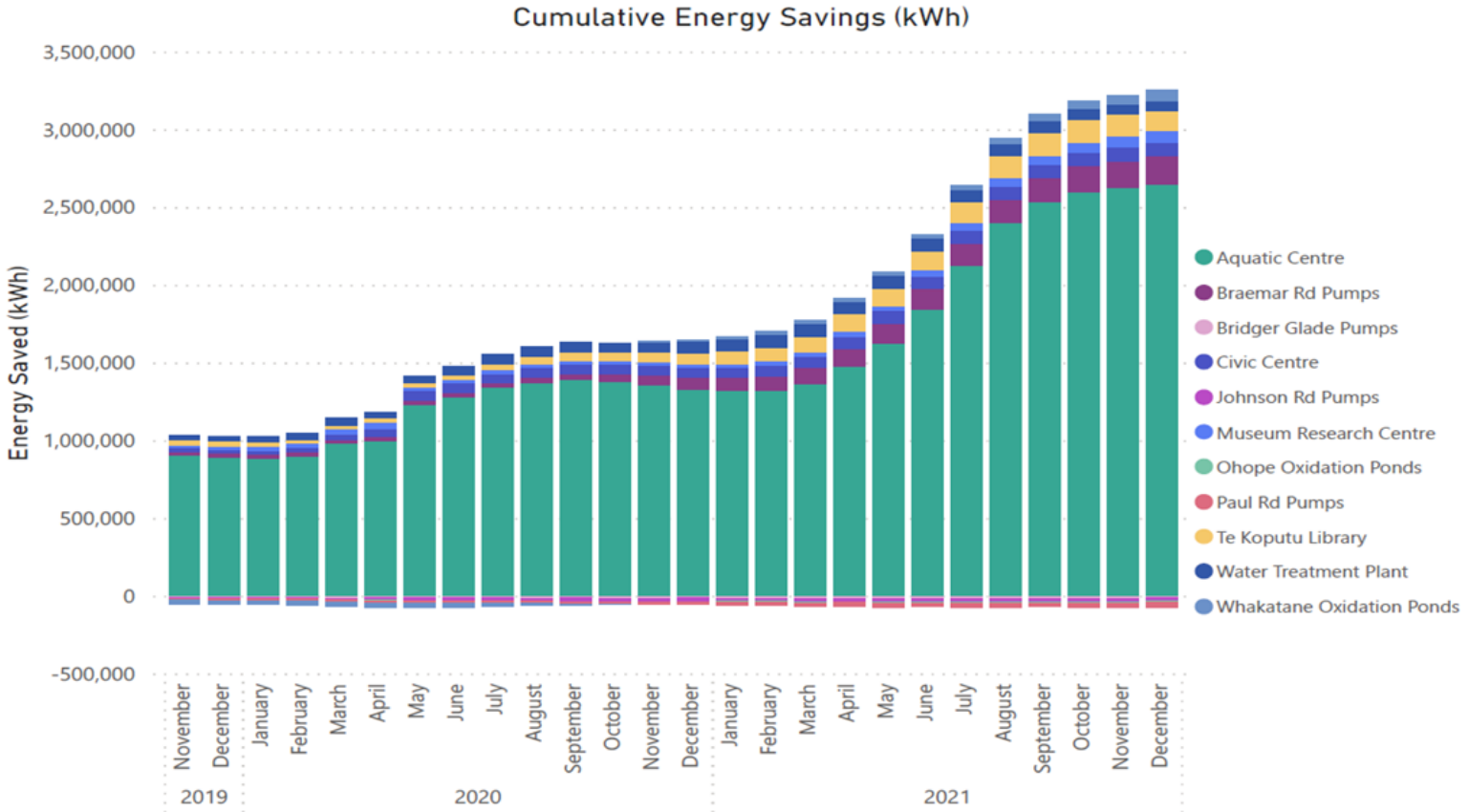
Approximately 600,000 CO2e has not been emitted since the start of Council’s energy management programme, as illustrated in the graph below.



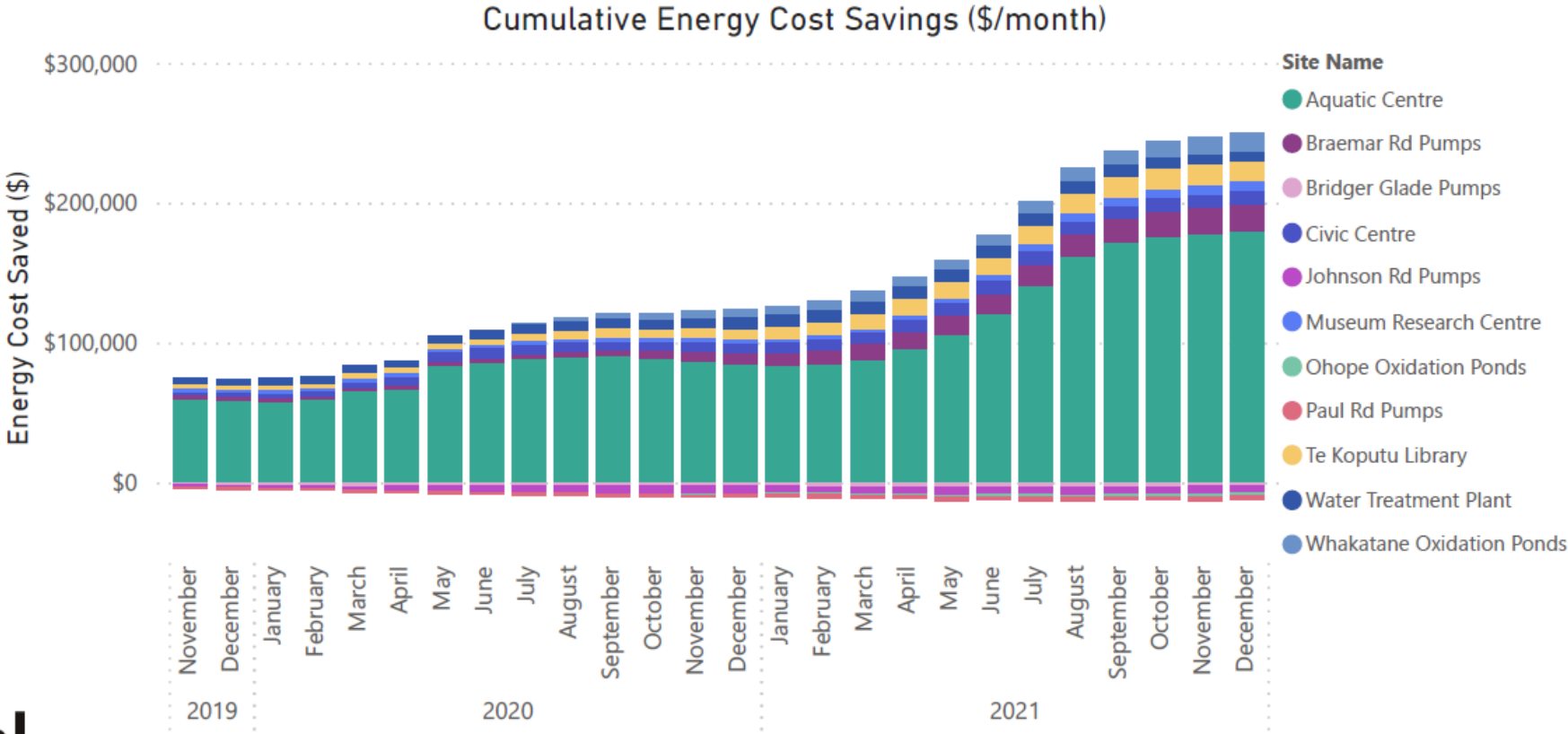
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time



Approximately 3,250,000 kWh of energy has been saved since the start of Council’s energy management programme, as illustrated in the graph below.



Approximately \$250,000 has been saved since the start of Council’s energy management programme, as illustrated in the graph below.





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](#).

This action plan includes 4 goals, setting out 17 short-term actions for 2020-22

GOALS	PROGRESS ON ACTIONS	SNAPSHOT
Goal 1: Manage water responsibly and sustainably	● ● ● ● ● ● ●	<ul style="list-style-type: none"> a. Start up group was established and a draft base Dynamic Adaptive Planning Pathways framework developed (contributing to goal 3). b. 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. c. Some of the actions for goal 3 and 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 a Council dynamic adaptive planning pathways (DAPP) –approach will also inform future action.
Goal 2: Reduce and manage greenhouse gas emissions from water supply and wastewater services	● ● ● ●	
Goal 3: Manage climate change risks to existing water supply and wastewater services	● ● ● ● ●	
Goal 4: Incorporate climate change considerations into future water supply and wastewater services	● ●	

Key

● action progressing	● action complete
● action not started	● action requires review





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](#)

This action plan includes four goals, setting out 14 short-term actions for 2020-22

GOALS	PROGRESS ON ACTIONS	SNAPSHOT
Goal 1: Reduce the amount of waste generated by the Council	● ● ●	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. (Contributes to goal 1). b. Staff battery recycling program put in place (Contributing to goal 1).
Goal 2: Move community waste patterns up the waste hierarchy	● ● ●	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. (contributing towards 2). d. Several projects are in planning to reduce transportation of waste. (contributing to goal 2).
Goal 3: Reduce waste transportation emissions	● ● ●	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.
Goal 4: Manage climate change risks to existing and future waste services	● ● ● ● ●	

Key

● action progressing	● action complete
● action not started	● action requires review





The District is already vulnerable to natural hazards including slips, flooding, coastal erosion and 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.

This action plan includes six goals, setting out 17 short-term actions for 2020-22

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 and library	● ● ● ● ●	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 (contributes to goal 1). b. Quantitative landslide risk assessments being reviewed, incorporating climate adjusted rainfall intensities. (contributes to goal 1, 2 and 3).
Goal 2: Enhance resilience through land use decisions	● ● ● ●	c. Built Floor Level Plan change in development (contributes to goal 2 and 4).
Goal 3: Recognise cultural heritage and values in land use decisions	● ● ●	d. Long term planning underway as part of Spatial Plan (contributes to goal 6).
Goal 4: Promote a built environment which is resilient to climate change impacts	●	
Goal 5: Care for biodiversity and ecosystems, and protect them from the impacts of climate change	● ●	
Goal 6: Promote low emissions and sustainable land use, building practises and day-to-day operations	● ●	

Key	
● action progressing	● action complete
● action not started	● action requires review

