

Mid-Year Climate Change Reporting 2020/21

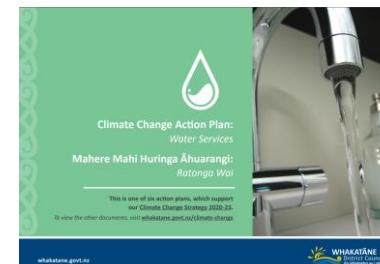
Whakatāne District Council adopted its climate change strategy and six action plans in September 2020.

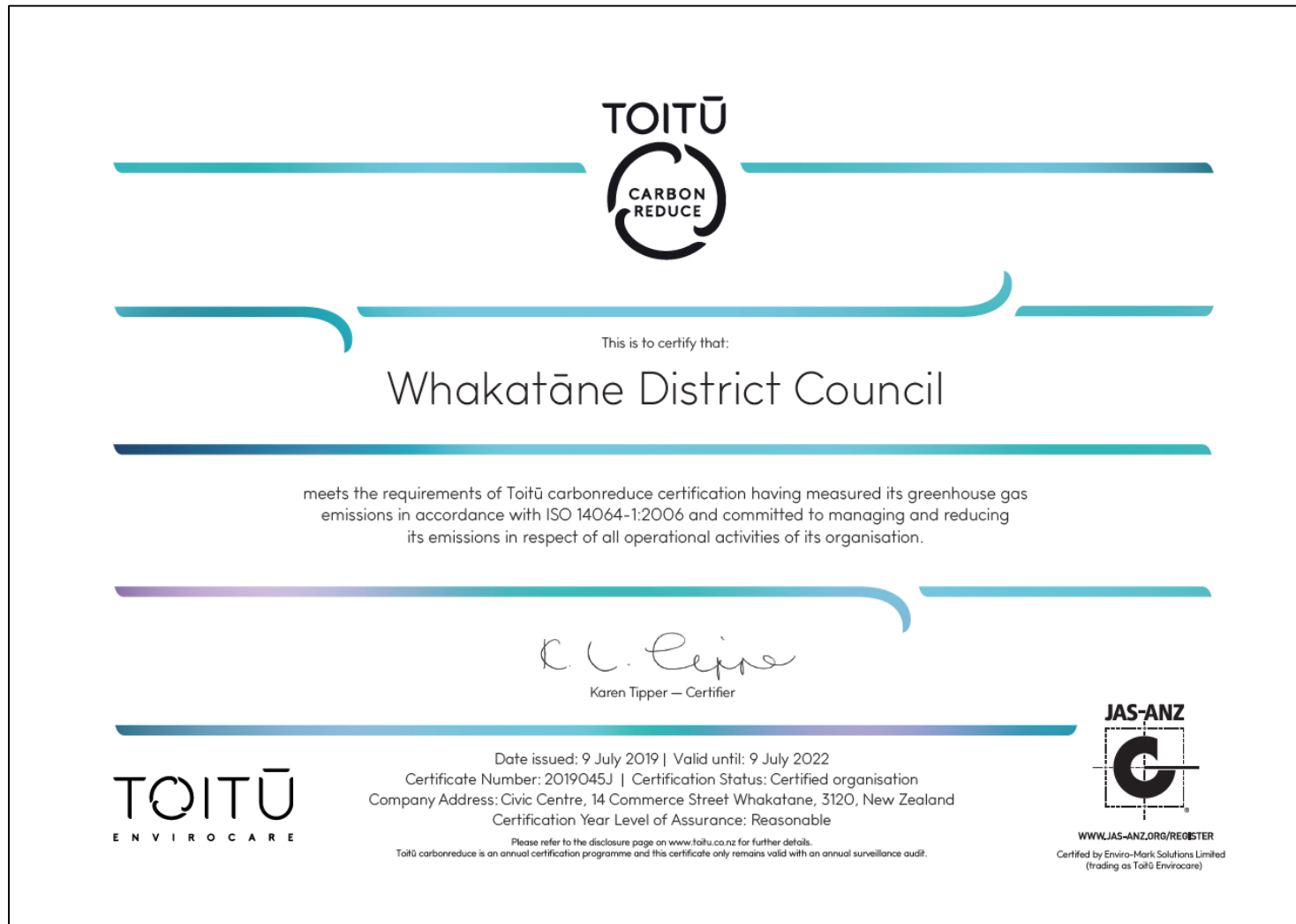
These documents are available on Council’s climate change page on <https://www.whakatane.govt.nz/climate-change>

This report is our first attempt at reporting back on the targets, goals and actions collectively agreed upon. Feedback on this reporting approach can be directed to the Council’s Strategy team for consideration.

About this report:

This report summarises the progress made towards the targets, goals and actions outlined in the Council’s climate change strategy and six action plans. Progress towards the strategy targets are outlined first, followed by the short-term actions (2020/22) specified in the Council’s six climate change action plans between the time period 30 September 2020 – 31 December 2020.





Council has been recertified with Toitū Carbonreduce for the 2019/20 year

The Toitu Carbonreduce-programme helps organisations accurately 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>

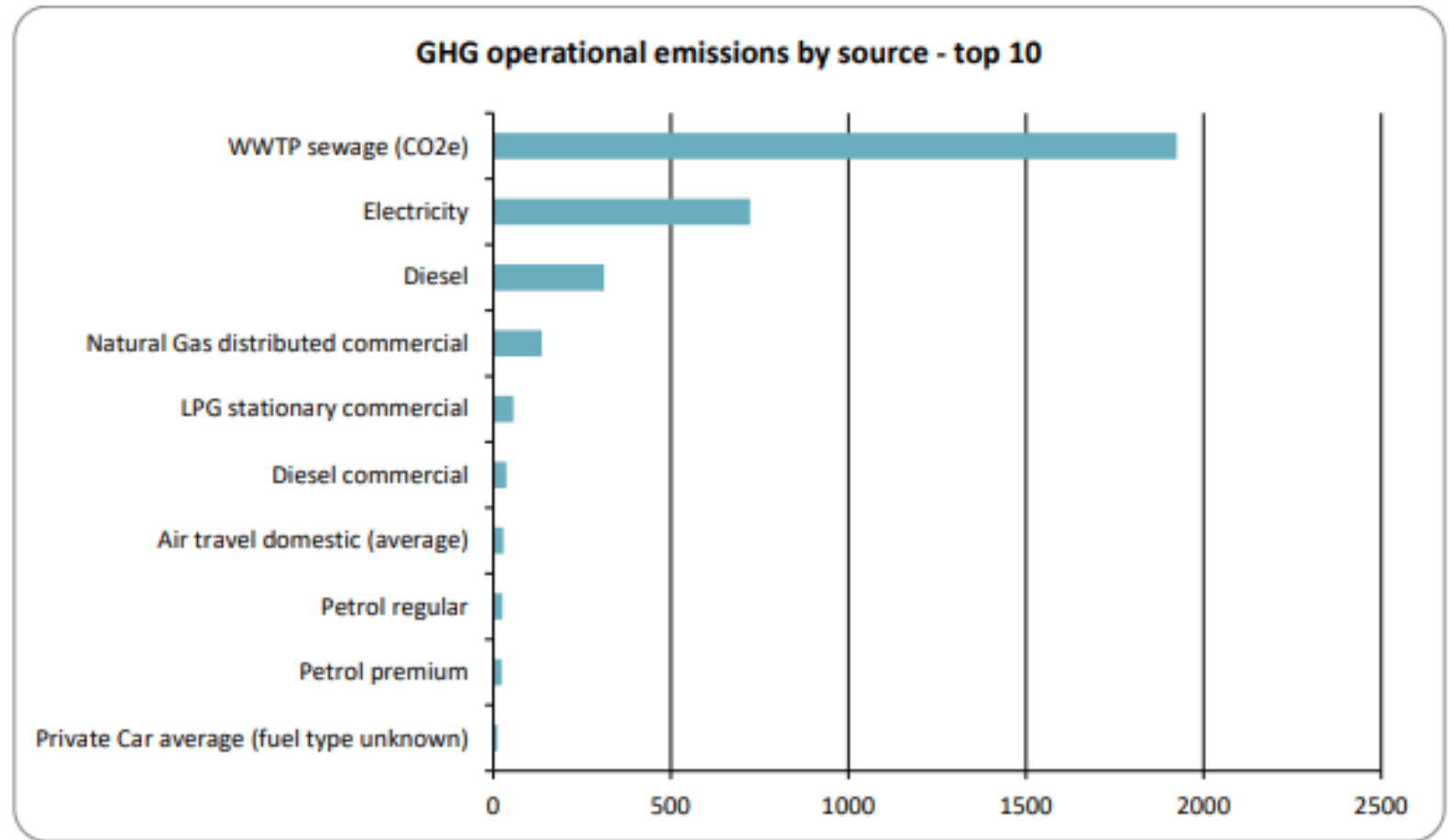




Whakatāne District Council’s emissions for the year 2019/20 (01 July 2019 to 30 June 2020) were **3,290.92 tCO₂e**.

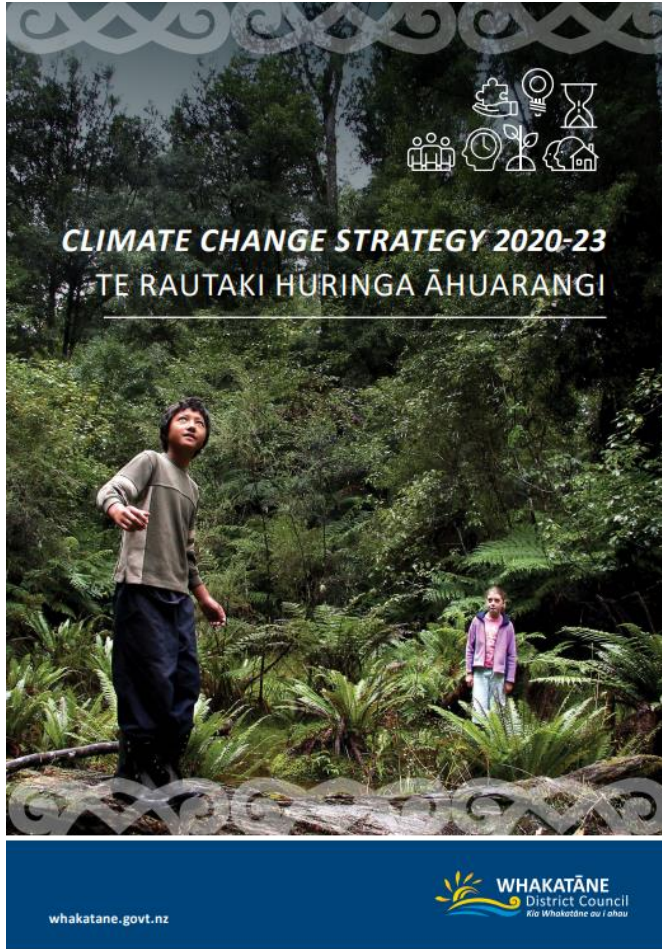
This is 1% lower than last year’s (2018/19) total of 3,324.84tCO₂e and 8% lower than the base year (2017/18) total of 3,570.66tCO₂e.

The graph to the right illustrates emissions by source.



<https://www.toitu.co.nz/our-members/members/whakatane-district-council>





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. Will actively prepare for a changing climate. | 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. |

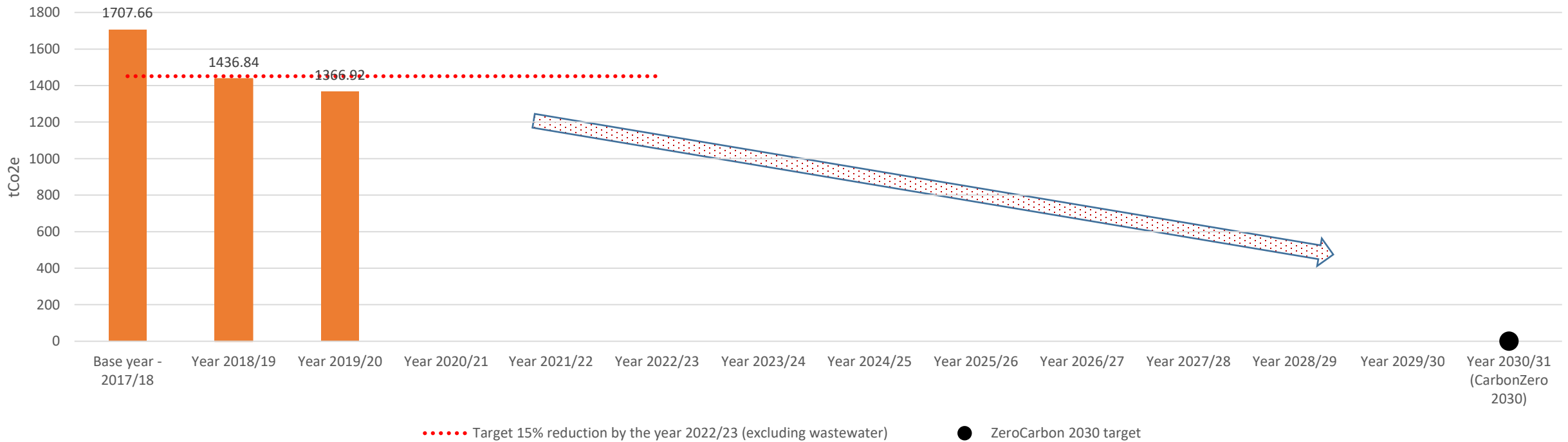
Short-term organisational mitigation target:
Will reduce its carbon footprint by 15% by 2022, excluding biogenic methane and nitrous oxide

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



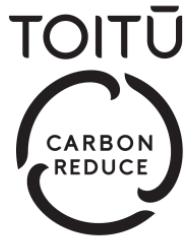
The majority of Council’s biogenic methane emissions are produced by wastewater processing.

Council's total carbon footprint excluding wastewater



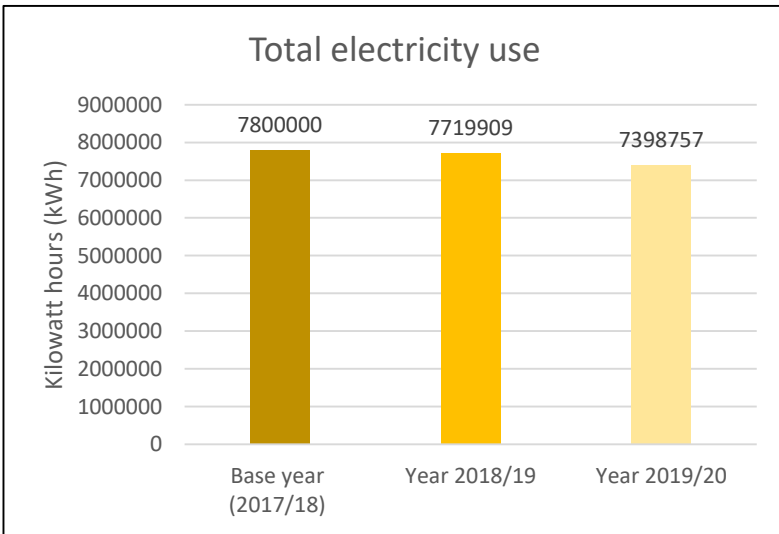
Excluding wastewater, the Council’s top 3 emission sources are: Electricity, Diesel, and Natural gas.



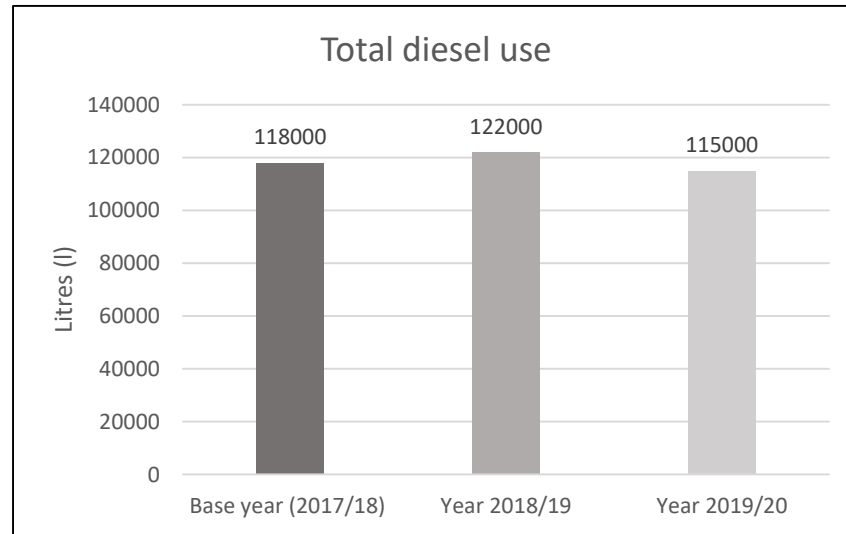


Excluding wastewater, the Council’s top 3 emission sources are: Electricity, Diesel, and Natural gas. The charts below show the total energy, diesel and natural gas use over the past three years.

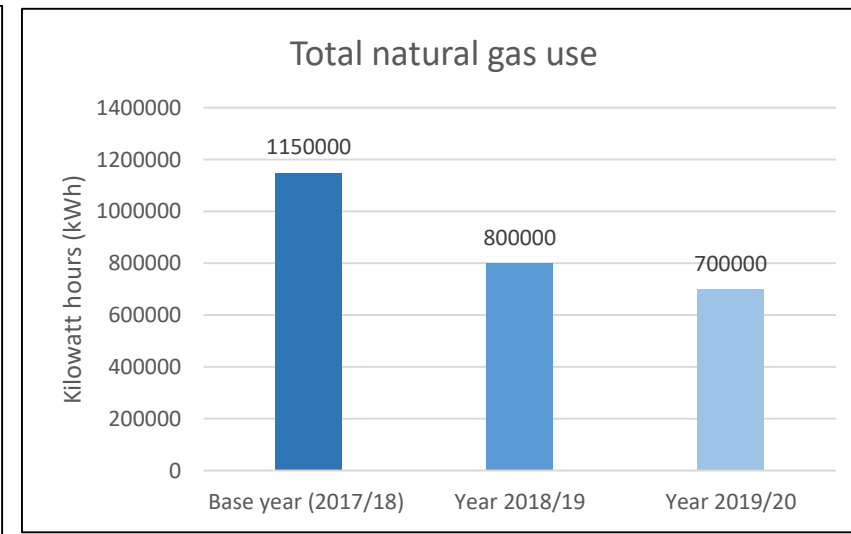
Varying levels of emission reductions have been achieved across these sources when compared to the base year (2017/18). Reductions have mainly been achieved as a result of Council’s energy audit, ongoing energy management programme and fleet audit.



A decrease of 5%* (approximately 400,000 kWh)



A decrease of 2%* (approximately 3000l)



A decrease of 40%* (approximately 450kWh)

* When compared to the base year 2017/18

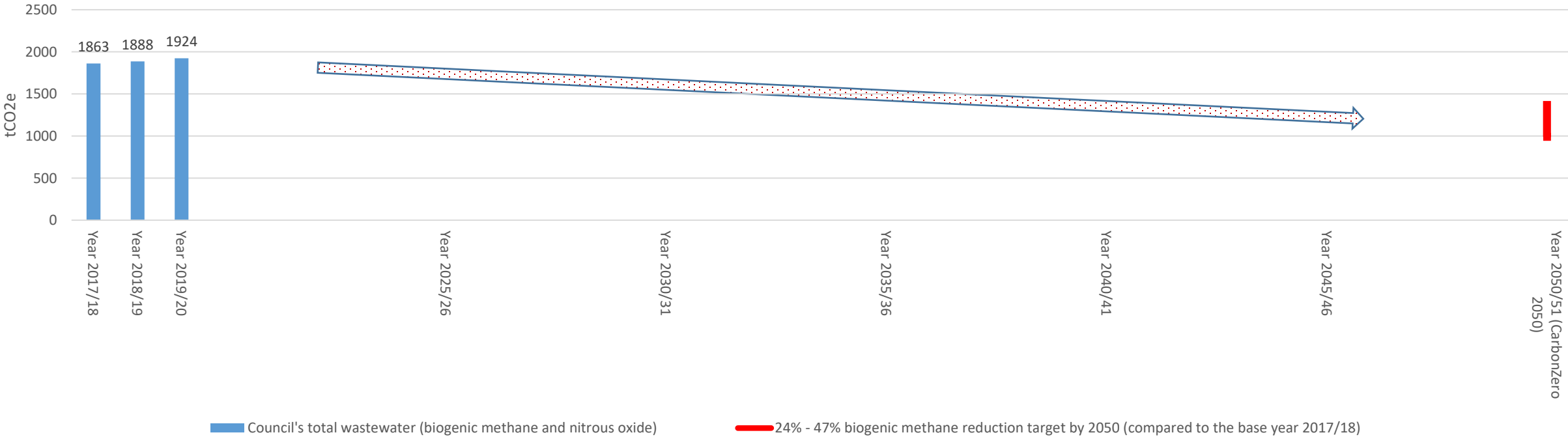


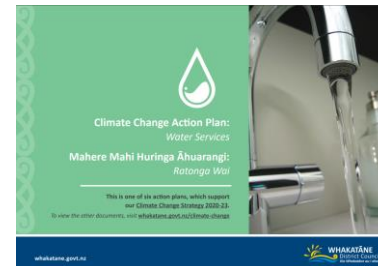
Long-term organisational mitigation target:
Organisational biogenic methane emission reduction of 24% to 47% by 2050



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

Council's total emissions from wastewater





Action Plan reporting

A traffic light approach has been applied to the action plan reporting - each action is symbolised with a coloured circle: blue for completed, green for progressing, grey for not started and red for at risk. Some snapshots discussing our progress are included for each action plan as well.

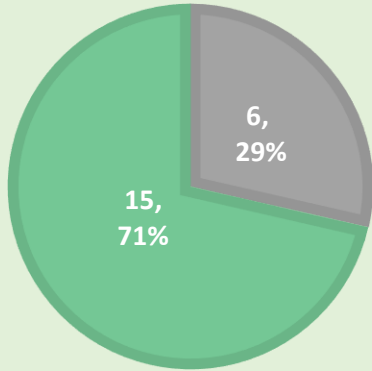
In addition to these actions, two specific targets have also been set for the Transport and Energy Action Plans (page 12 and 14).

Traffic light system

| | |
|--------------------|-----------------|
| action progressing | action complete |
| action not started | action at risk |

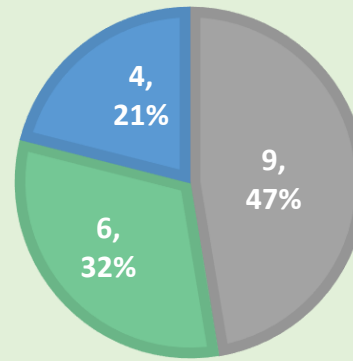


LEADERSHIP AND COLLABORATION ACTION PLAN



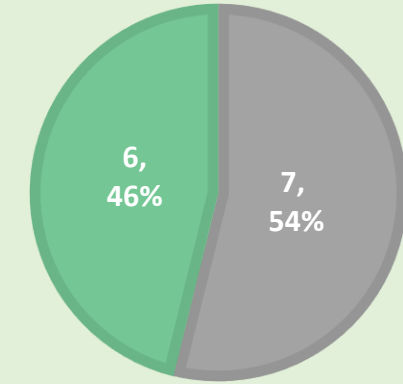
■ Not started ■ Progressing - on track ■ Completed ■ At risk

TRANSPORT ACTION PLAN



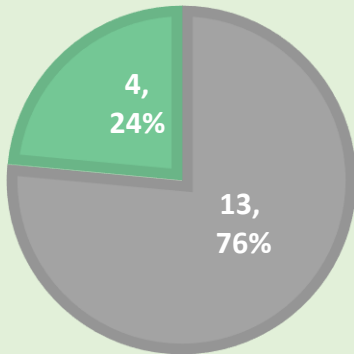
■ Not started ■ Progressing - on track ■ Completed ■ At risk

ENERGY ACTION PLAN



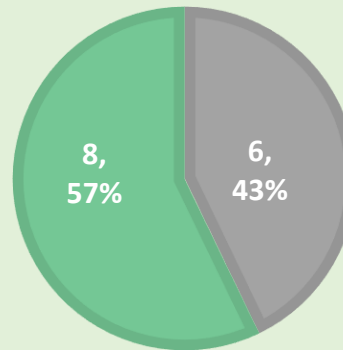
■ Not started ■ Progressing - on track ■ Completed ■ At risk

WATER SERVICES ACTION PLAN



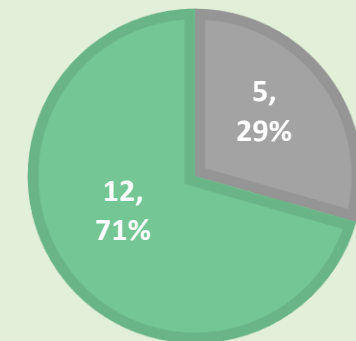
■ Not started ■ Progressing - on track ■ Completed ■ At risk

WASTE AND CIRCULAR ECONOMIES



■ Not started ■ Progressing - on track ■ Completed ■ At risk

LAND USE AND THE BUILT ENVIRONMENT



■ Not started ■ Progressing - on track ■ Completed ■ At risk





Our 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 | ● ● ● | a. Council’s Climate Change Strategy and Action Plans were adopted in September 2020 (contributes to goal 1) b. A climate change e-learning hub has been rolled out to all staff as well as made publicly available on Council’s public climate change web portal (contributes to goal 1 and 2) |
| Goal 2: Build the Council’s organisational knowledge about climate change, mitigation and adaptation | ● ● ● ● ● ● | c. Work continues to ensure climate change is embedded in the LTP, including the infrastructure strategy, asset management plans, and key assumptions (contributes to goal 1) d. Key stakeholders and partners were invited to attend the streaming of a two day national ‘Climate change + Business’- conference (contributes to goal 3 & 4) |
| Goal 3: Collaborate with stakeholders, partners, and the community, for a unified approach to the climate crisis | ● ● ● ● ● ● ● | e. The Council’s climate change project was featured in a SOLGM/BECA webinar showcasing ‘climate change best practise’ (contributes to goal 3 & 4). |
| 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 at risk |





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 | ● ● ● ● | <ul style="list-style-type: none"> a. Training and technology has been implemented to support staff for remote working and conferencing (contributing to goal 1). b. The Aotearoa Bike Challenge has been promoted to staff (contributing to goal 1). c. The Active Whakatāne Strategy has been adopted and the Implementation Plan approved (contributing to goal 2). d. Action completed to install two EV-charging stations at the Whakatāne Civic Centre (contributing to goal 3). e. Action completed to adopt an EV- first policy has been adopted to increase the number of EVs and low emission vehicles (contributing to goal 3). f. Action completed to purchase multiple EV’s and hybrids as fleet vehicles come up for replacement (contributing to goal 3). g. Some of the actions for goal 4 and 5 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 (contributing to goal 4 & 5). |
| Goal 2: Enable and encourage active transport | ● ● ● ● | |
| Goal 3: Increase low carbon transport options | ● ● ● ● ● | |
| Goal 4: Manage climate change risks to existing transport infrastructure | ● ● ● ● | |
| Goal 5: Build future transport infrastructure for a changing climate | ● ● | |

| Key | |
|----------------------|-------------------|
| ● action progressing | ● action complete |
| ● action not started | ● action at risk |

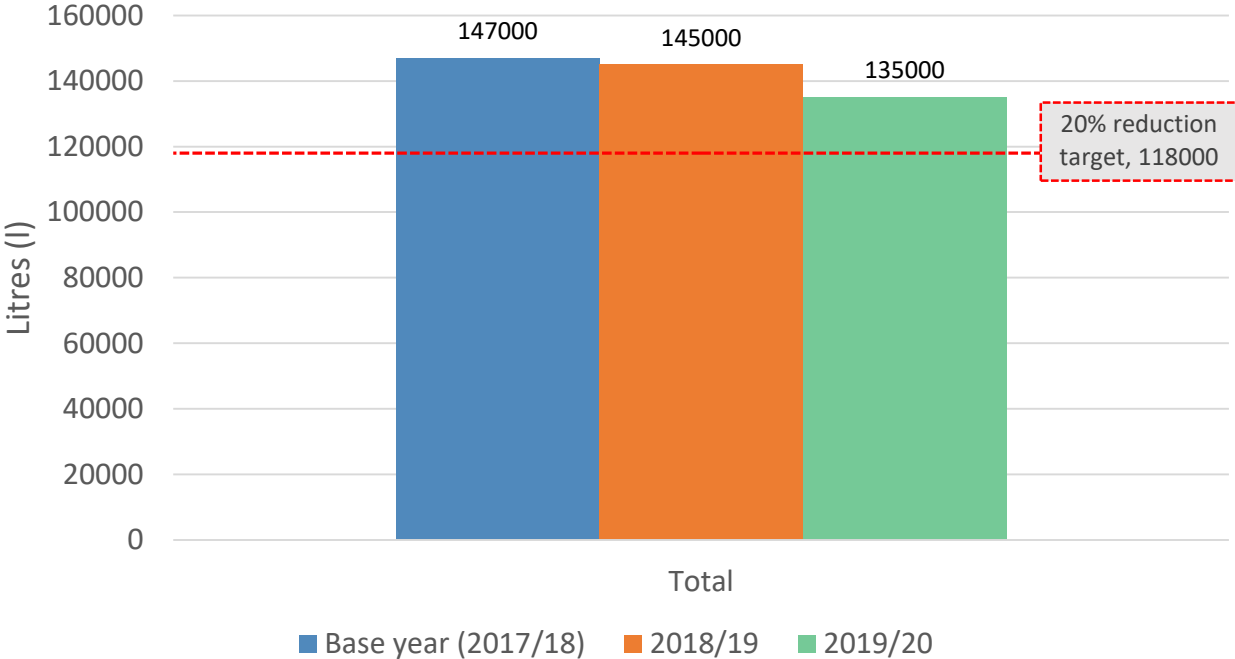


Council specific transport target

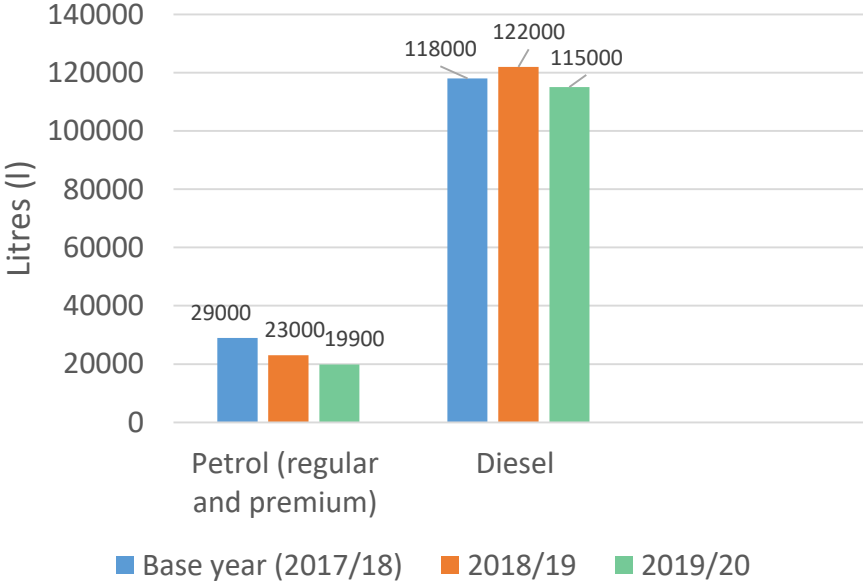
20% reduction in the Council’s total purchased petrol and diesel by 2021 (compared to 2017/18).
The data provided is based on Council’s annual carbon footprint audit through Toitu Carbonreduce.



Total purchased petrol and diesel amount



Petrol vs. diesel amounts



A reduction of 13,000 litres of petrol and diesel has been achieved to date. A further 17,000l reduction is necessary to achieve our 2021 target.





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](#).

| Key | |
|----------------------|-------------------|
| ● action progressing | ● action complete |
| ● action not started | ● action at risk |

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

| 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 slide 8 and 9 (contributing to goal 1). b. Significant reductions in natural gas use have been achieved at the Whakatāne Aquatic Centre and the Whakatāne Library and Exhibition Centre as a result of Council’s ongoing energy management programme (contributing to goal 1). |
| Goal 2: Encourage low carbon energy options | ● ● | <ul style="list-style-type: none"> c. Further case studies celebrating the achievements of Council’s energy management programme are underway (contributing to goal 1). |
| Goal 3: Encourage the development of resilient low carbon energy options | ● ● ● ● ● | <ul style="list-style-type: none"> d. Action completed for continued free solar hot water – consents (contributing to 3). e. Further focus is required for actions under goal 3 going forward. |

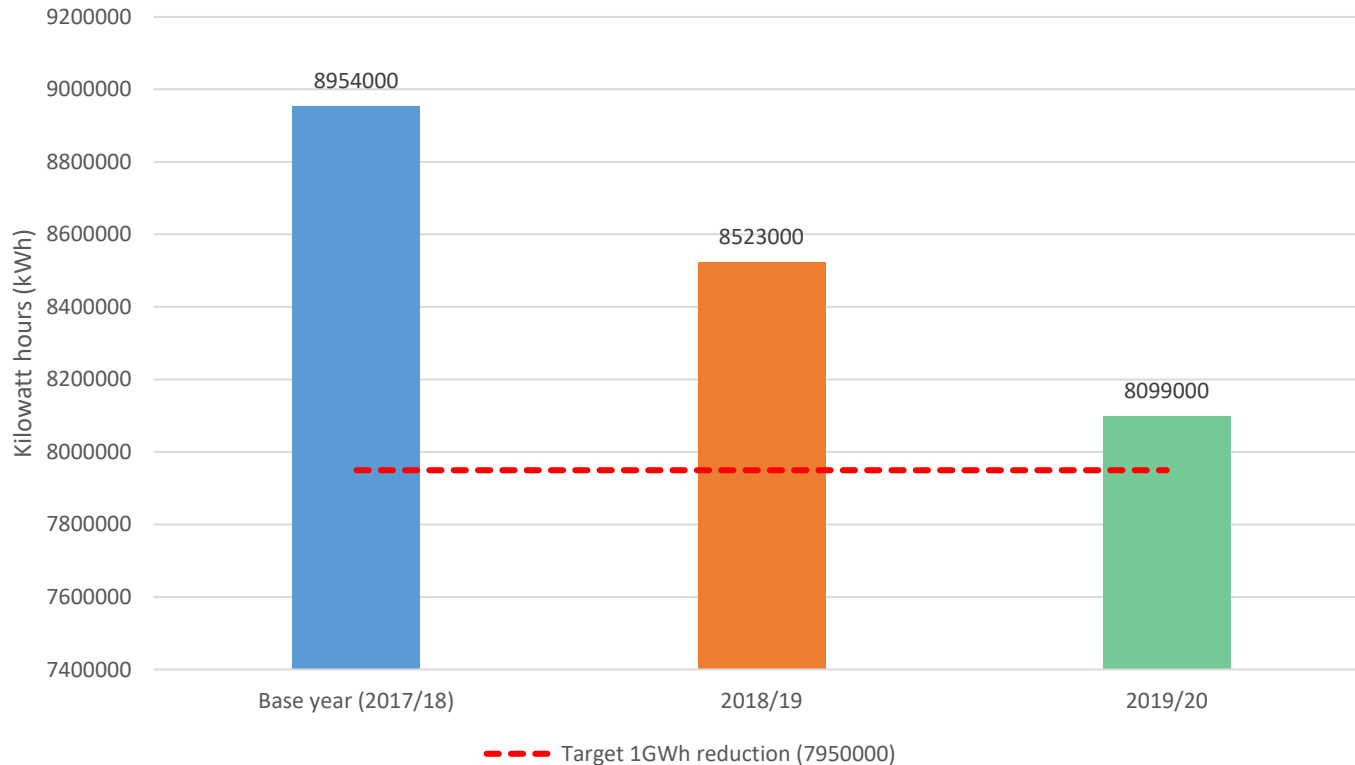


Council specific energy target

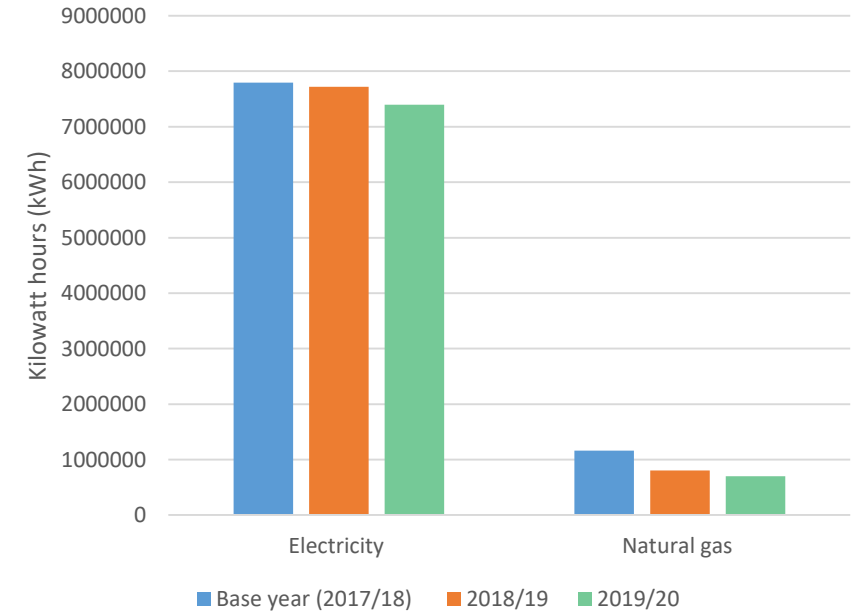
Ensure the Council delivers the benefit of 1GWh p.a. energy savings by June 2022 (based on the June 2017 to May 2018 baseline). The data provided is based on Council’s annual carbon footprint audit through Toitu Carbonreduce.



Total energy use (electricity and natural gas)



Electricity vs. natural gas



A reduction of 850,000kWh of energy (electricity and natural gas) has been achieved to date. A further 150,000 kWh reduction is necessary to achieve our 2022 target.



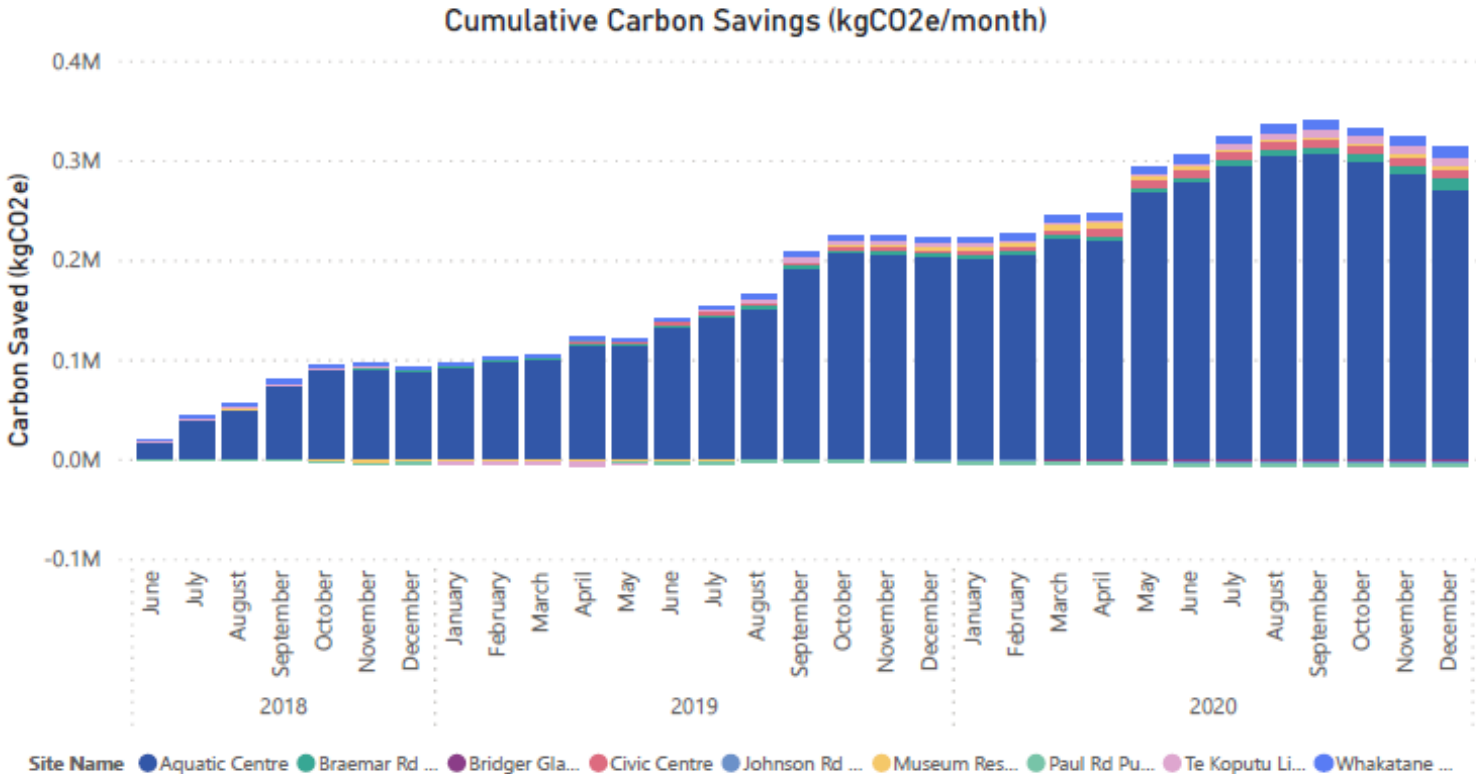
Council’s energy management programme

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.

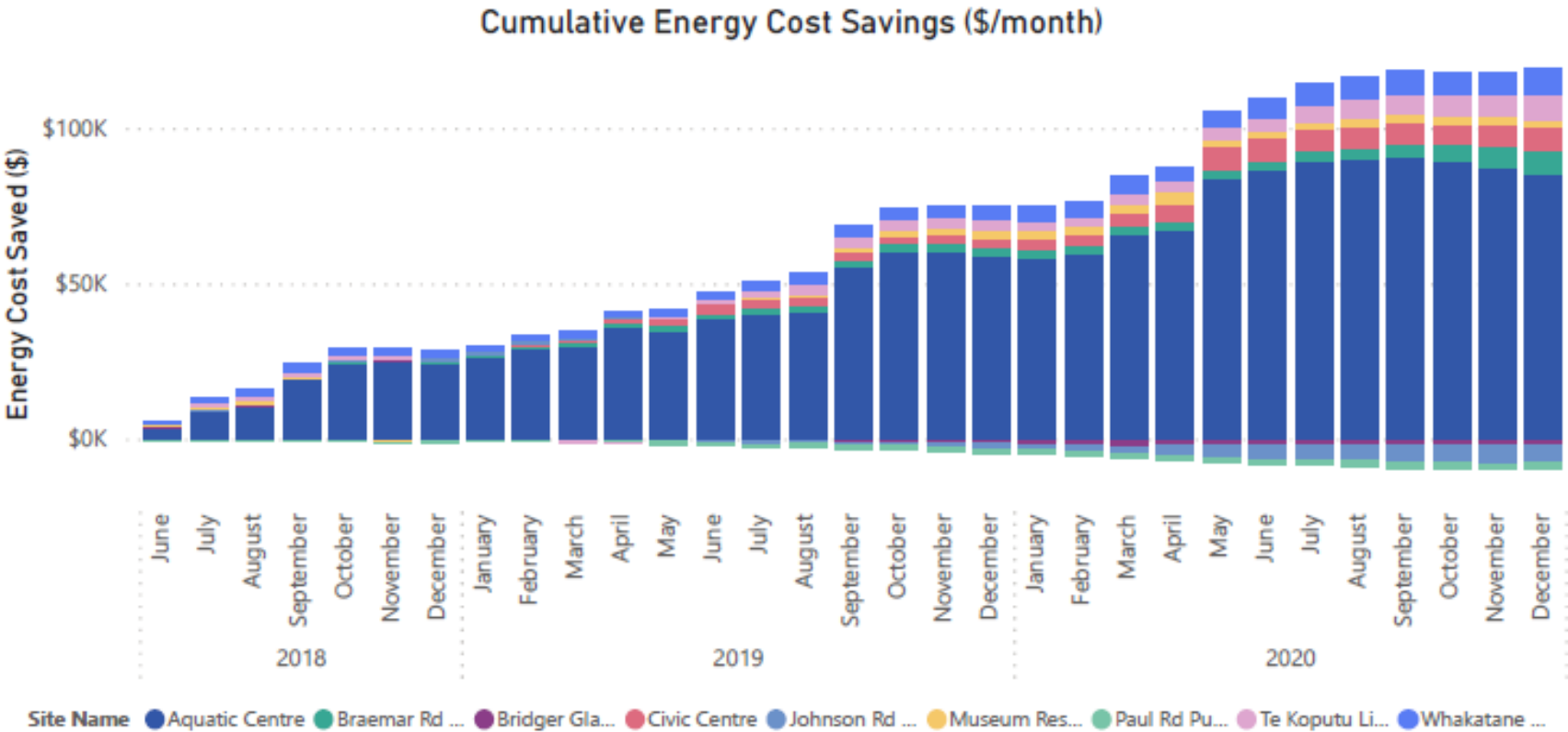
Council’s energy management programme with Emsol continues, with monthly meetings being held to monitor energy use at nine specific sites/facilities which contribute the majority of the Council’s energy use.



The graph on the right shows the cumulative carbon emission savings (kgCO2e/month) across the nine monitored sites since the energy audit in 2018.



The graphs below show the cumulative energy cost savings across the monitored nine sites since the energy audit in 2018.





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 | ● ● ● ● ● ● | a. Work investigating high energy use infrastructure for potential emissions savings is progressing well part of Council’s ongoing energy management programme (contributes to goal 2) |
| Goal 2: Reduce and manage greenhouse gas emissions from water supply and wastewater services | ● ● ● ● | 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 delays and limitations for some of the actions (contributes to goal 1 and 3) |
| Goal 3: Manage climate change risks to existing water supply and wastewater services | ● ● ● ● ● | 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 4: Incorporate climate change considerations into future water supply and wastewater services | ● ● | |

| Key | |
|---|---|
| ● action progressing | ● action complete |
| ● action not started | ● action at risk |





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. The 2021-27 Waste Management and Minimisation Plan (WMMP) is currently under review. The draft plan will go out for public consultation in March/April 2021. Pre-consultation with key stakeholders is underway (contributes to goal 2). b. The draft WMMP will include actions to investigate options for food waste collections and processing and support central government policies around circular economies (contributes to goal 2). c. Initial discussions about adding electric trucks have been initiated with Council’s main solid waste contractor(contributes to goal 3). d. Initial work has identified Matatā closed landfill as the Council solid waste asset most vulnerable to climate change. Further work is required to understand the implications of this(contributes to goal 4). 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 2: Move community waste patterns up the waste hierarchy | ● ● ● | |
| Goal 3: Reduce waste transportation emissions | ● ● ● | |
| Goal 4: Manage climate change risks to existing and future waste services | ● ● ● ● ● | |

| Key | |
|----------------------|-------------------|
| ● action progressing | ● action complete |
| ● action not started | ● action at risk |





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. Early work has begun to develop a climate change adaptation project proposal. The project proposal will be provided to the appropriate Council Committee in due time for approval and then be made publicly available as well, in line with the communications and engagement plan (contributes to goal 1). |
| Goal 2: Enhance resilience through land use decisions | ● ● ● ● | b. As part of the adaptation project –proposal, 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). |
| Goal 3: Recognise cultural heritage and values in land use decisions | ● ● ● | c. Work on the Asset Management Plans continue to identify and manage infrastructure at risk (contributes to goal 1). |
| Goal 4: Promote a built environment which is resilient to climate change impacts | ● | d. Work on the Future Development Strategy continues, to enhance resilience through land use decisions (contributes to goal 2). |
| 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 at risk |

