

Whakatane District Council

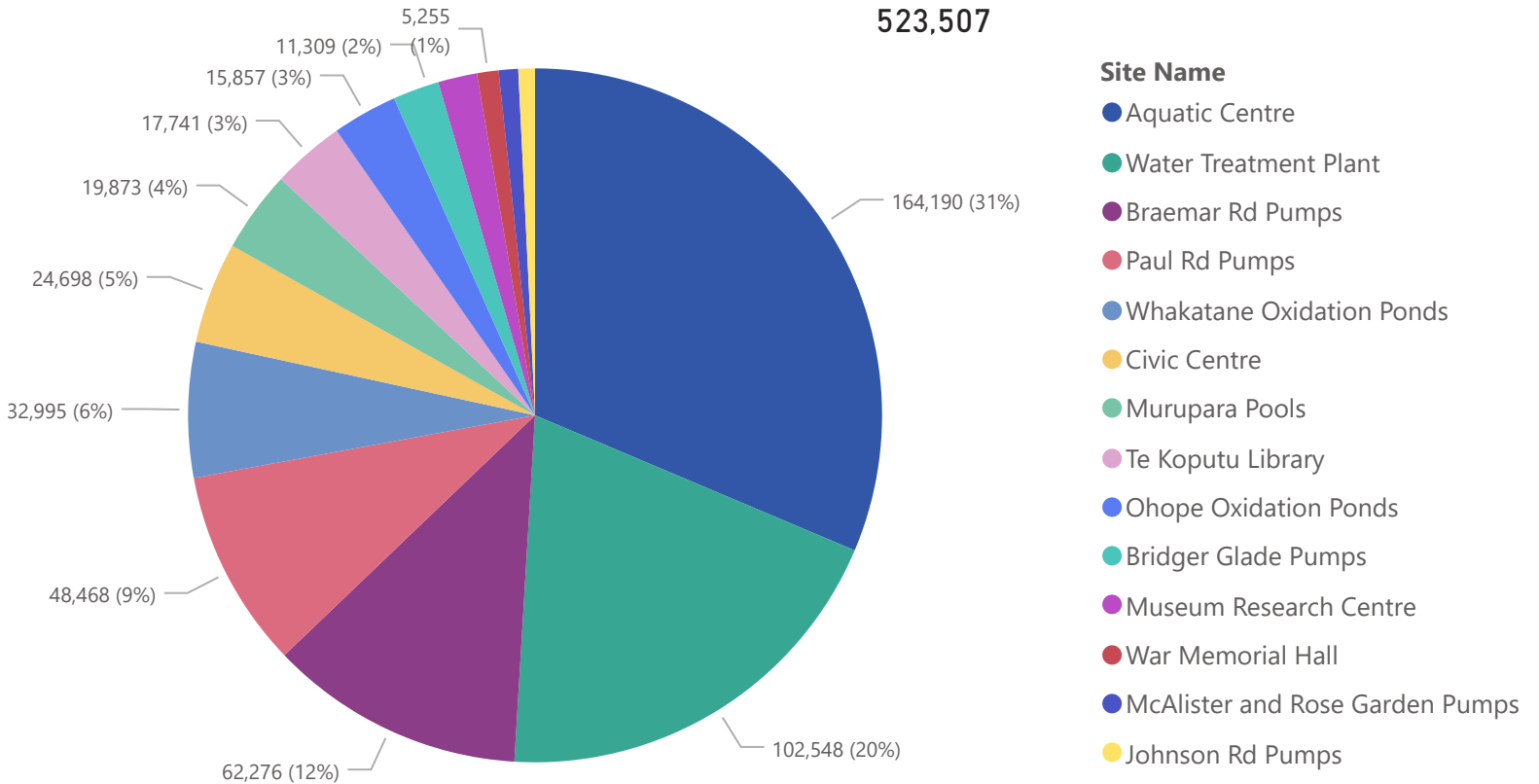
Summary

<p>\$8,397</p> <p>Monthly Energy Cost Savings</p>	<p>63,848</p> <p>Elec. Savings (kWh/mo)</p>	<p>12%</p> <p>Elec. Savings (%)</p>	<p>653,128</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>-851</p> <p>CO2e Savings (kg/mo)</p>
<p>\$95,308</p> <p>R12M Energy Cost Savings</p>	<p>-30,513</p> <p>Gas. Savings (kWh/mo)</p>	<p>-78%</p> <p>Gas. Savings (%)</p>	<p>-265,983</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>582</p> <p>R12M CO2e Savings (kg/yr)</p>

Total Energy (kWh/Month)

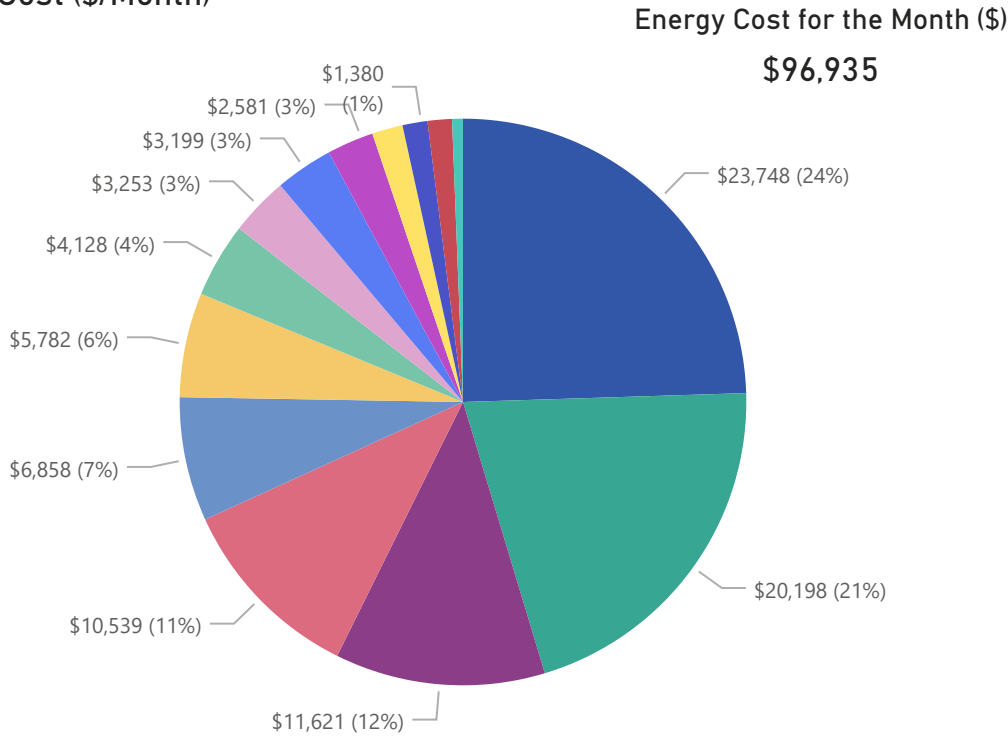
Total Energy Used for the Month (kWh)

523,507



Whakatane District Council Summary

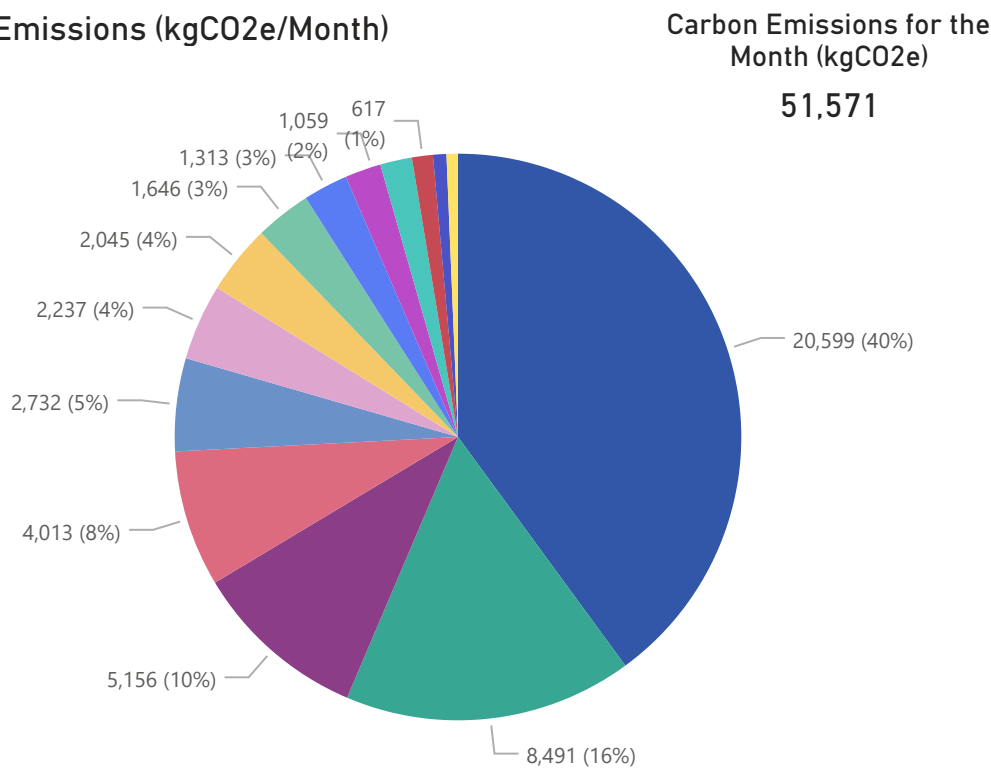
Energy Cost (\$/Month)



Site Name

- Aquatic Centre
- Water Treatment Plant
- Braemar Rd Pumps
- Paul Rd Pumps
- Whakatane Oxidation Ponds
- Civic Centre
- Murupara Pools
- Te Koputu Library
- Ohope Oxidation Ponds
- Museum Research Centre
- Johnson Rd Pumps
- McAlister and Rose Garden Pumps
- War Memorial Hall
- Bridger Glade Pumps

Carbon Emissions (kgCO2e/Month)



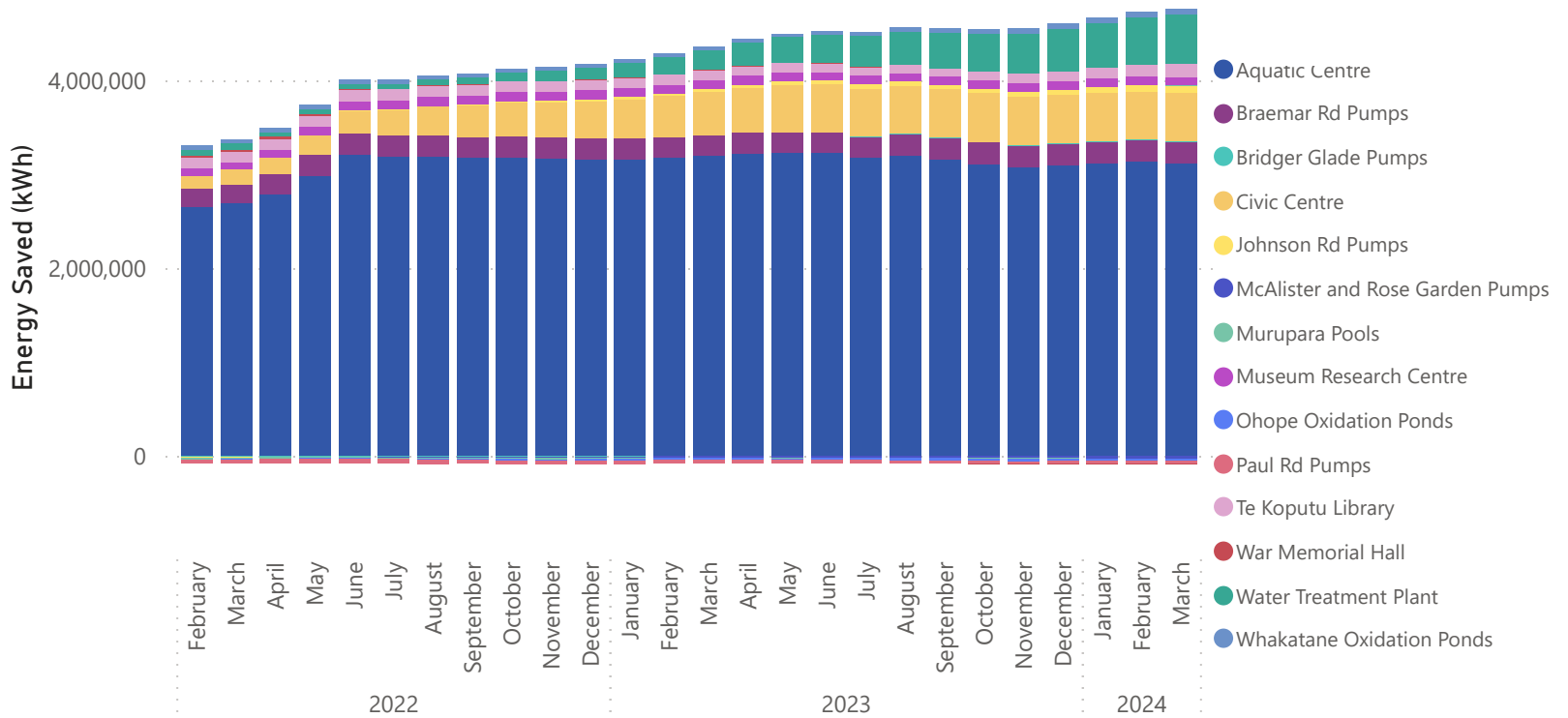
Site Name

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Whakatane District Council

Summary

Cumulative Energy Savings (kWh)



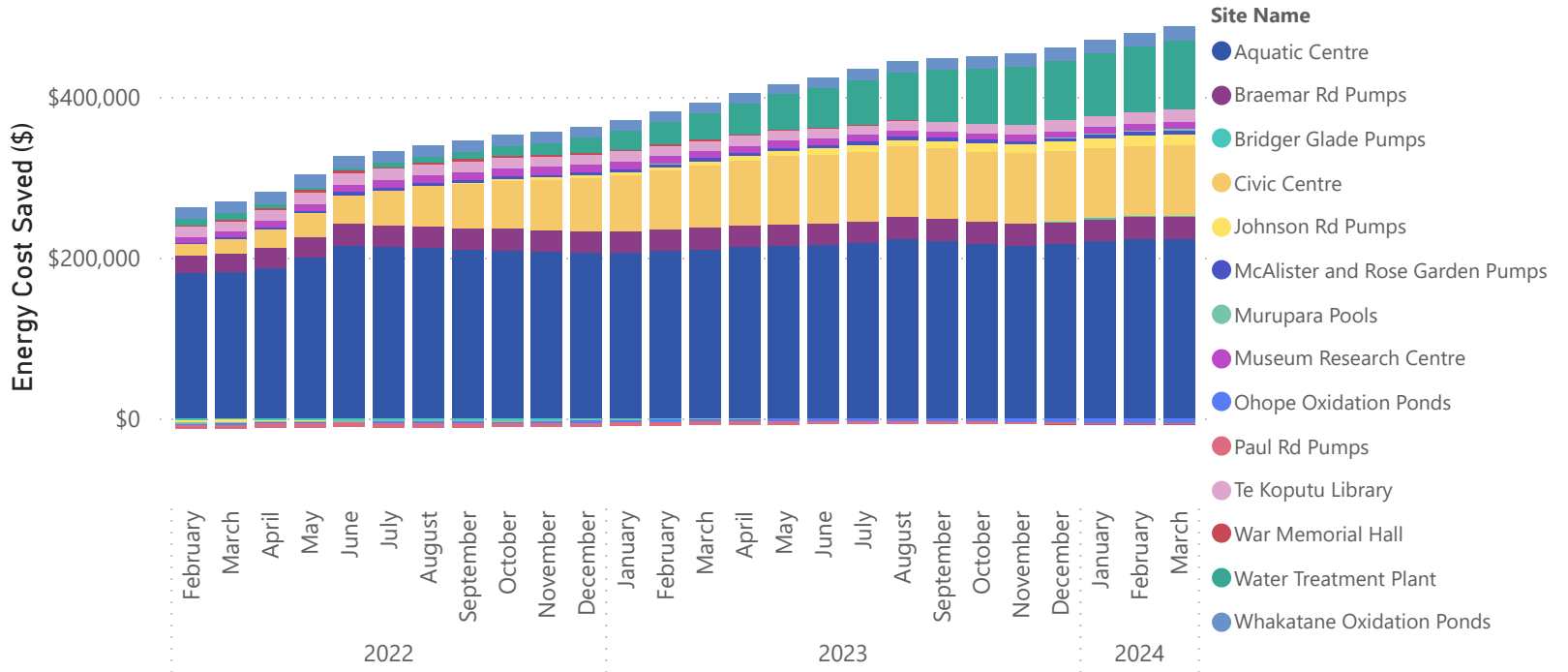
Note, cumulative savings are calculated starting July 2018

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 **Baselines were updated for all sites from July 2022.**

Whakatane District Council

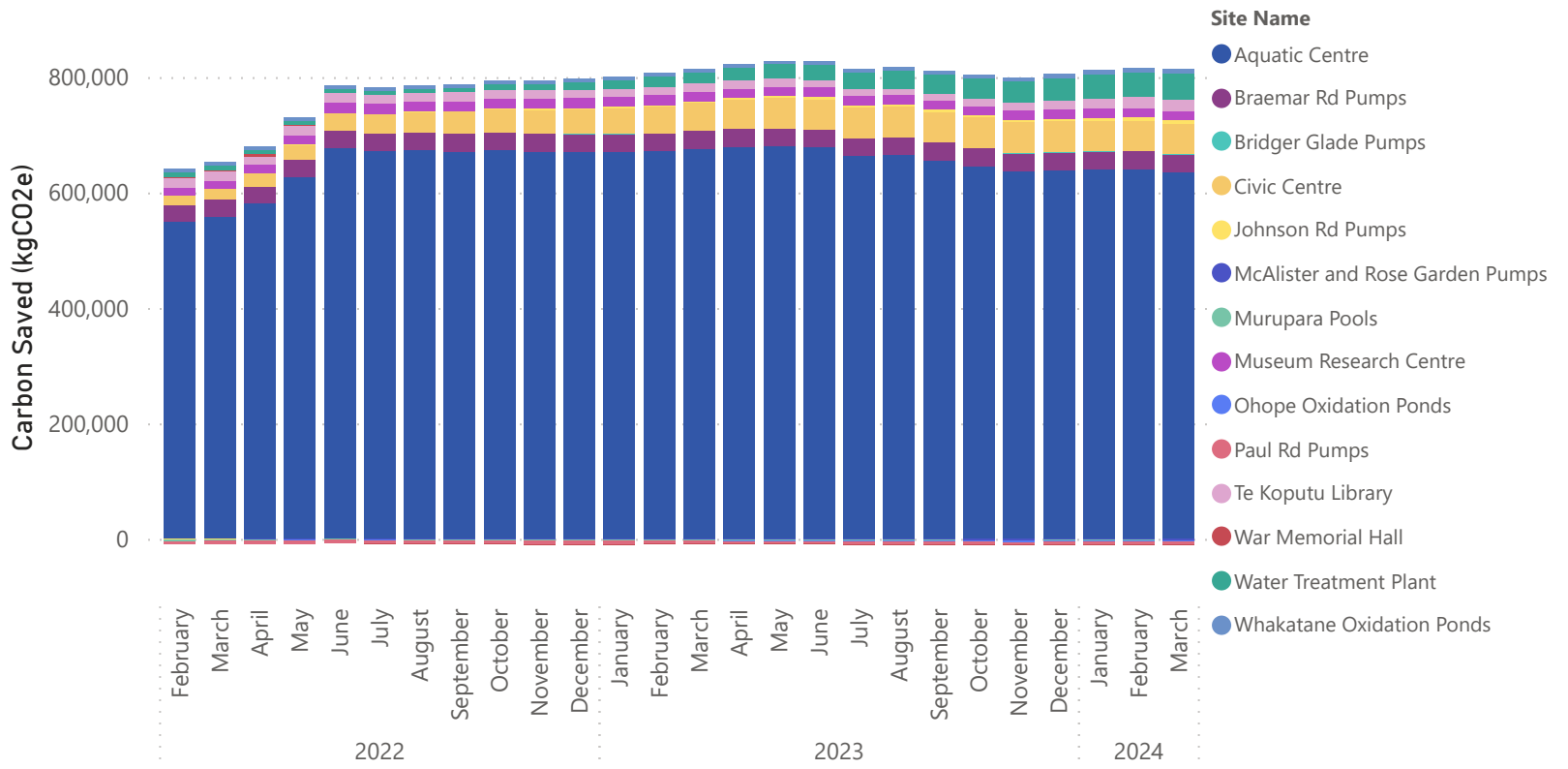
Summary

Cumulative Energy Cost Savings (\$)



Note, cumulative savings are calculated starting July 2018

Cumulative Carbon Savings (kgCO2e)



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Civic Centre

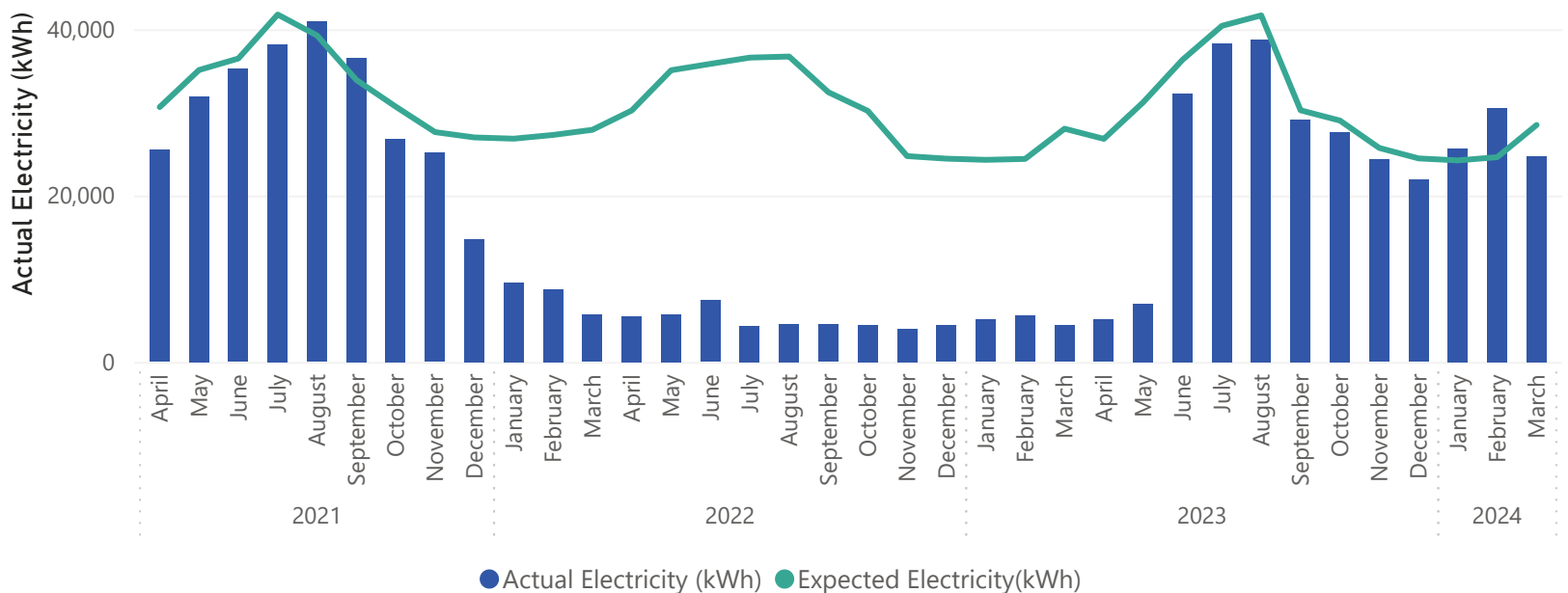
<p>\$617 Monthly Energy Cost Savings</p>	<p>3,786 Elec. Savings (kWh/mo)</p>	<p>13% Elec. Savings (%)</p>	<p>57,968 R12M Electricity Savings (kWh/yr)</p>	<p>313 CO2e Savings (kg/mo)</p>
<p>\$10,521 R12M Energy Cost Savings</p>				<p>4,800 R12M CO2e Savings (kg/yr)</p>

Comments:

Electricity use reduced in March compared to January and February, and was 13% below baseline for the month. This was mostly due to a reduction in afterhours and weekend electricity use as a result of improving schedules for HVAC systems.

Electric vehicle charging stations have been in use from March 2021, non-routine adjustments are on-going to account for the increased electricity use.

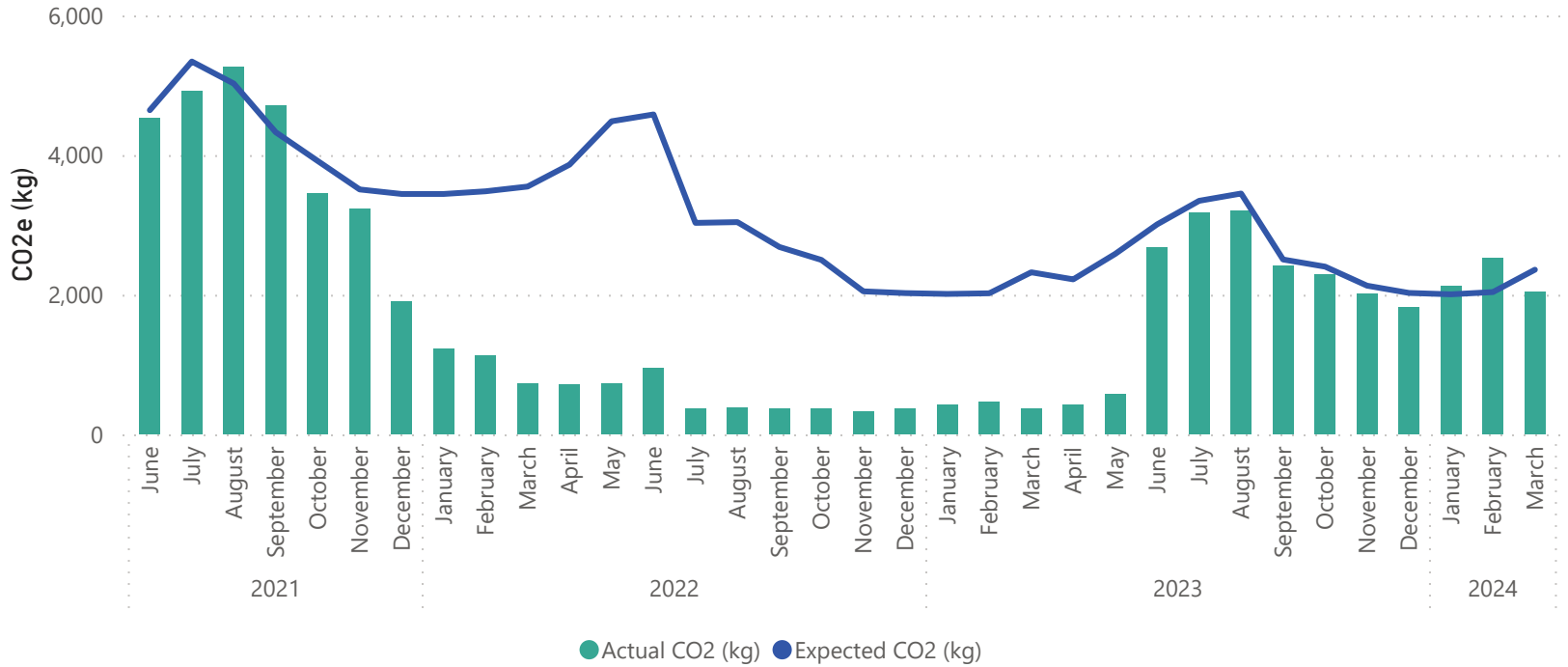
Civic Centre Electricity Use Compared to Baseline (kWh)



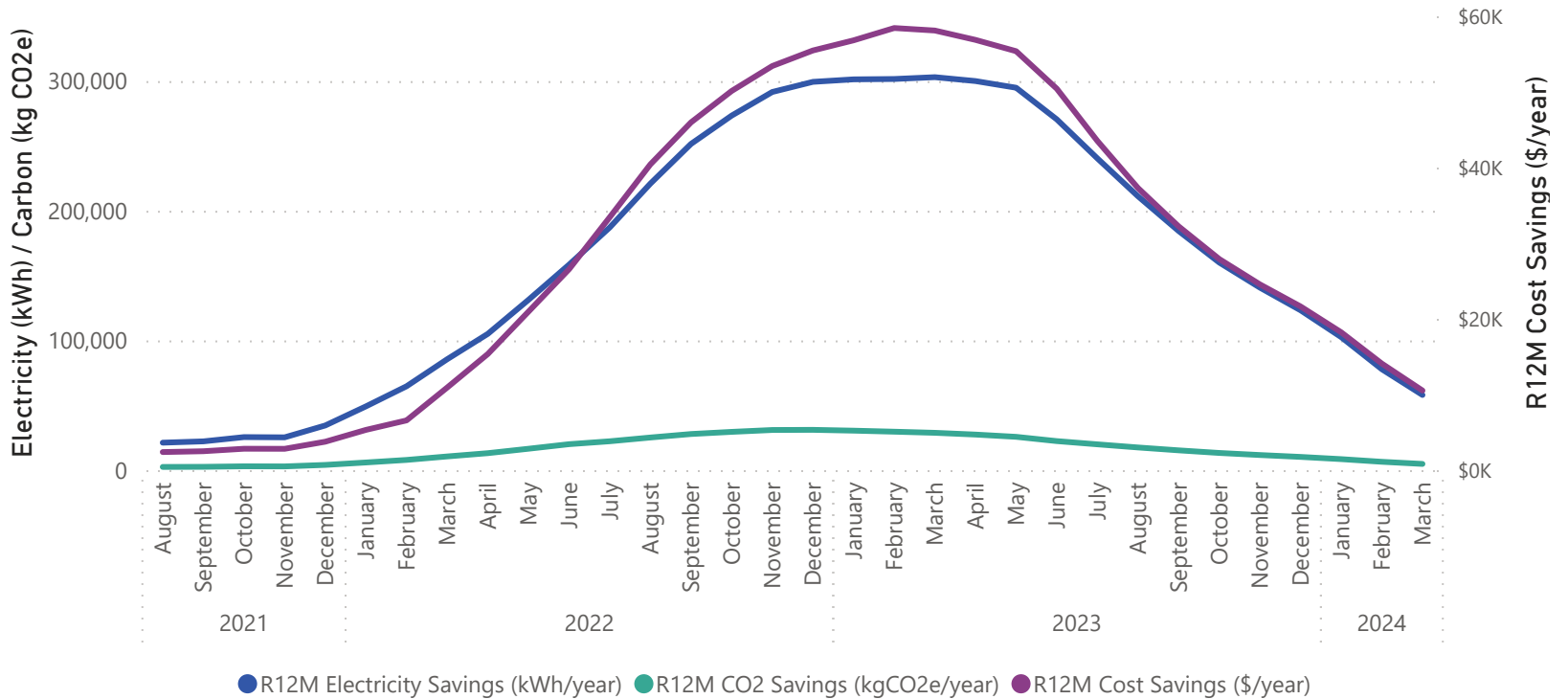
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Civic Centre

Civic Centre Carbon Emissions Compared to Baseline (kg CO2e)



Civic Centre Rolling 12 Month Savings

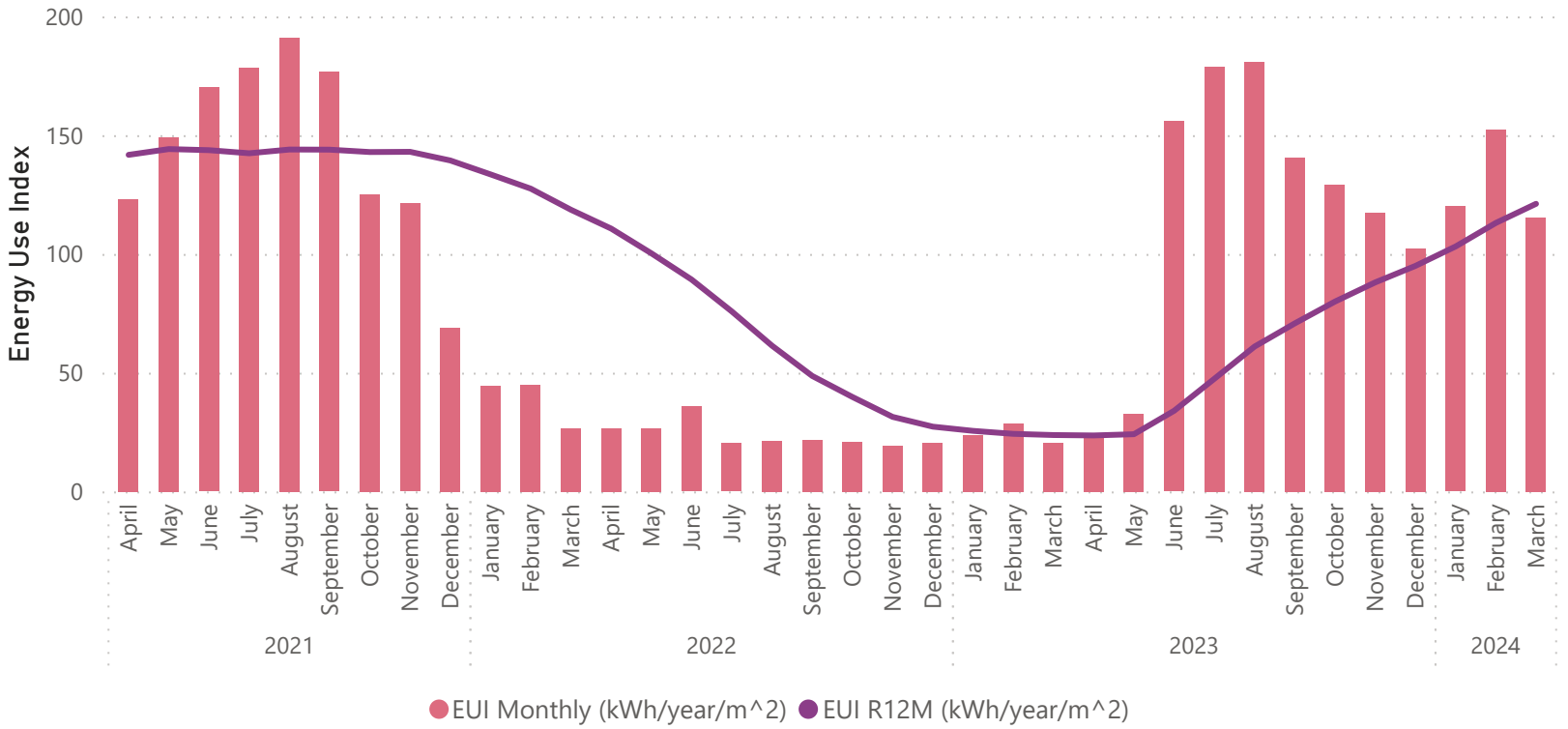


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Whakatane District Council

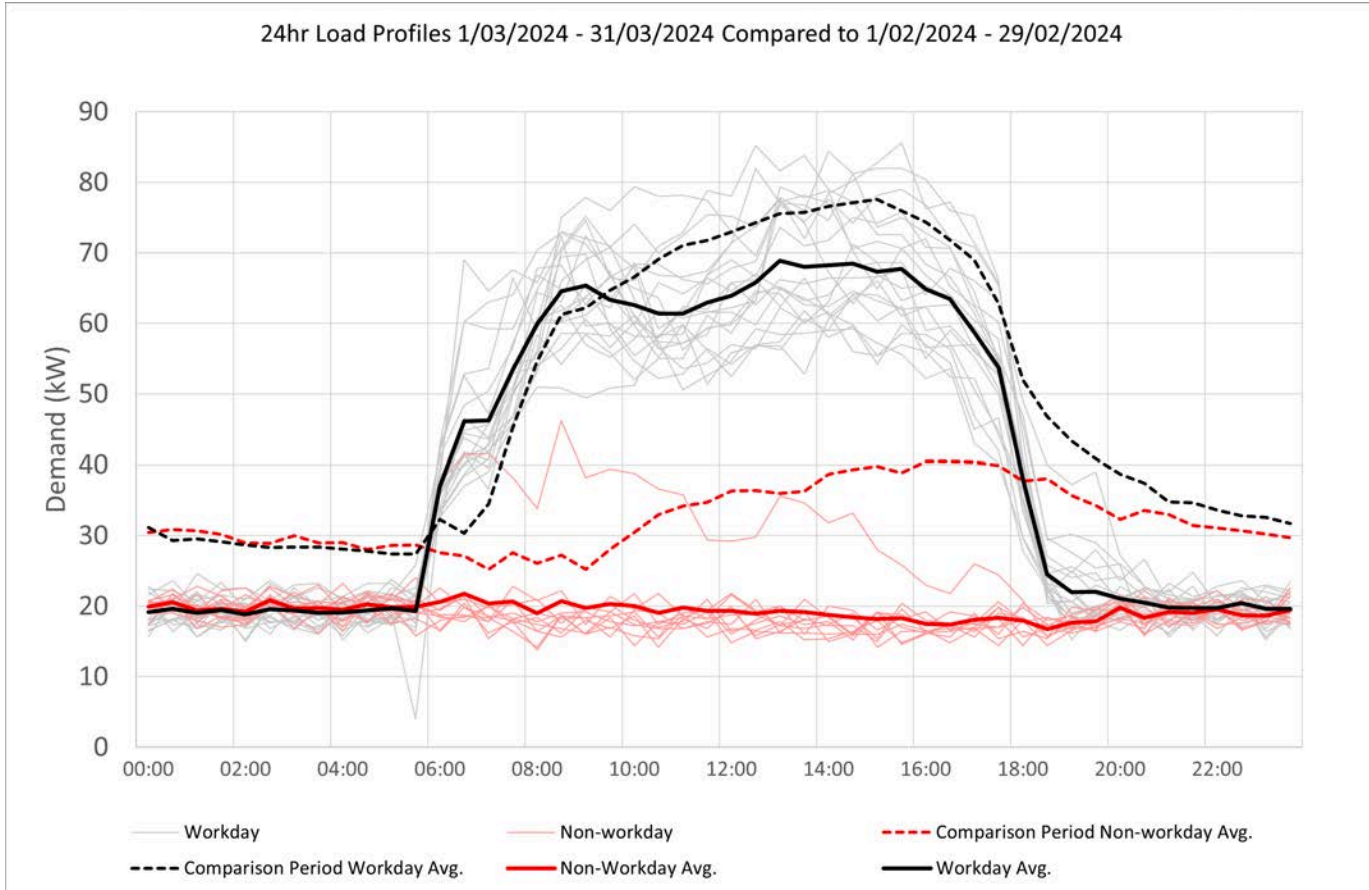
Civic Centre

Civic Centre Energy Use Index by Month Compared to Rolling 12-Month Values



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
Baselines were updated for all sites from July 2022.

Whakatane District Council Civic Centre



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Whakatane District Council

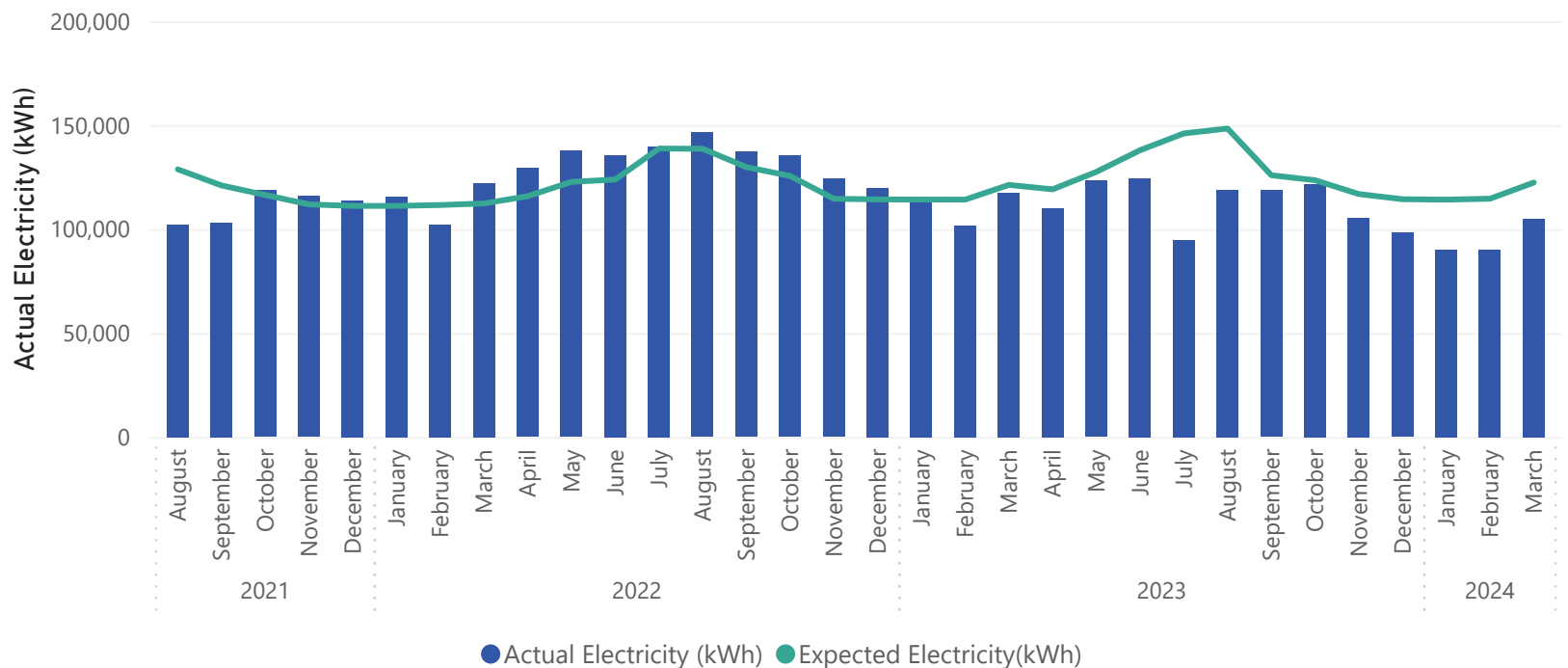
Aquatic Centre

<p>-\$465</p> <p>Monthly Energy Cost Savings</p>	<p>17,379</p> <p>Elec. Savings (kWh/mo)</p>	<p>14%</p> <p>Elec. Savings (%)</p>	<p>210,010</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>-5,983</p> <p>CO2e Savings (kg/mo)</p>
<p>\$12,425</p> <p>R12M Energy Cost Savings</p>	<p>-36,901</p> <p>Gas. Savings (kWh/mo)</p>	<p>-166%</p> <p>Gas. Savings (%)</p>	<p>-289,450</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>-40,828</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

Electricity use was less than baseline in March, however this is in part due to gas being used for water heating while the outdoor pool heat pump is repaired. Gas use was higher than baseline as a result. In March 2023, the Aquatic Centre did not use any gas; when all heating equipment is operating as expected, gas is only really needed over winter months.

Aquatic Centre Electricity Use Compared to Baseline (kWh)

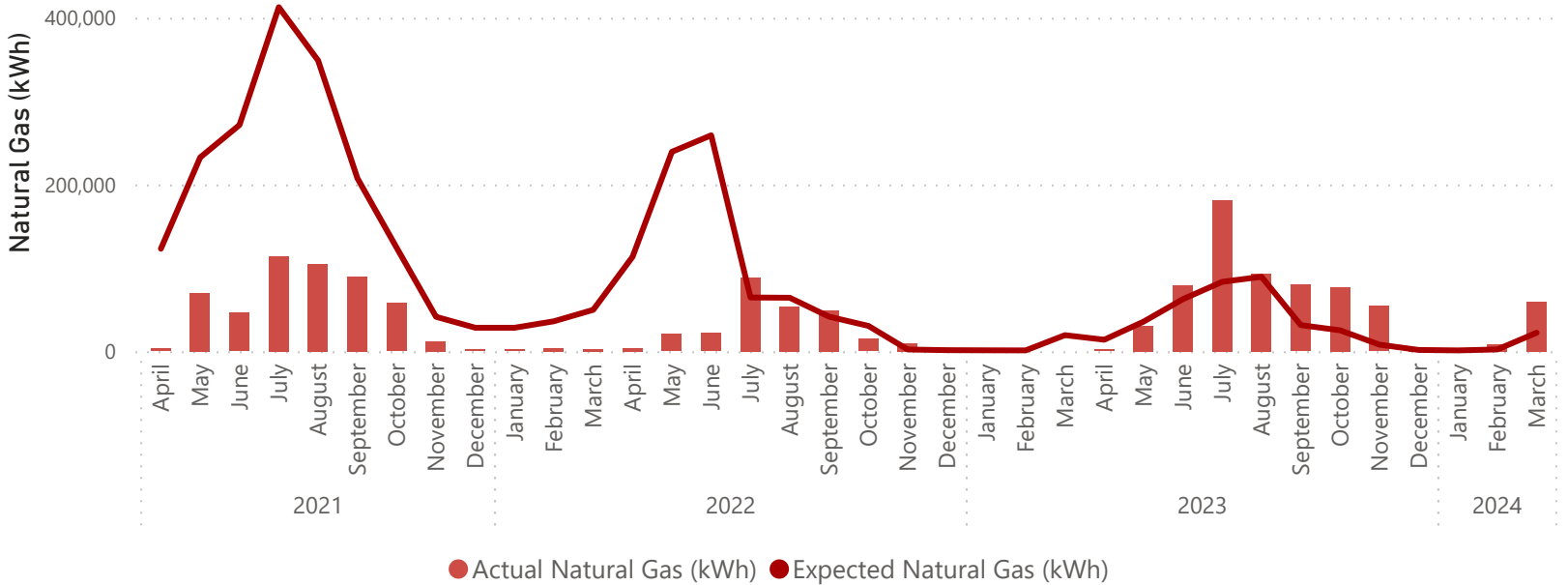


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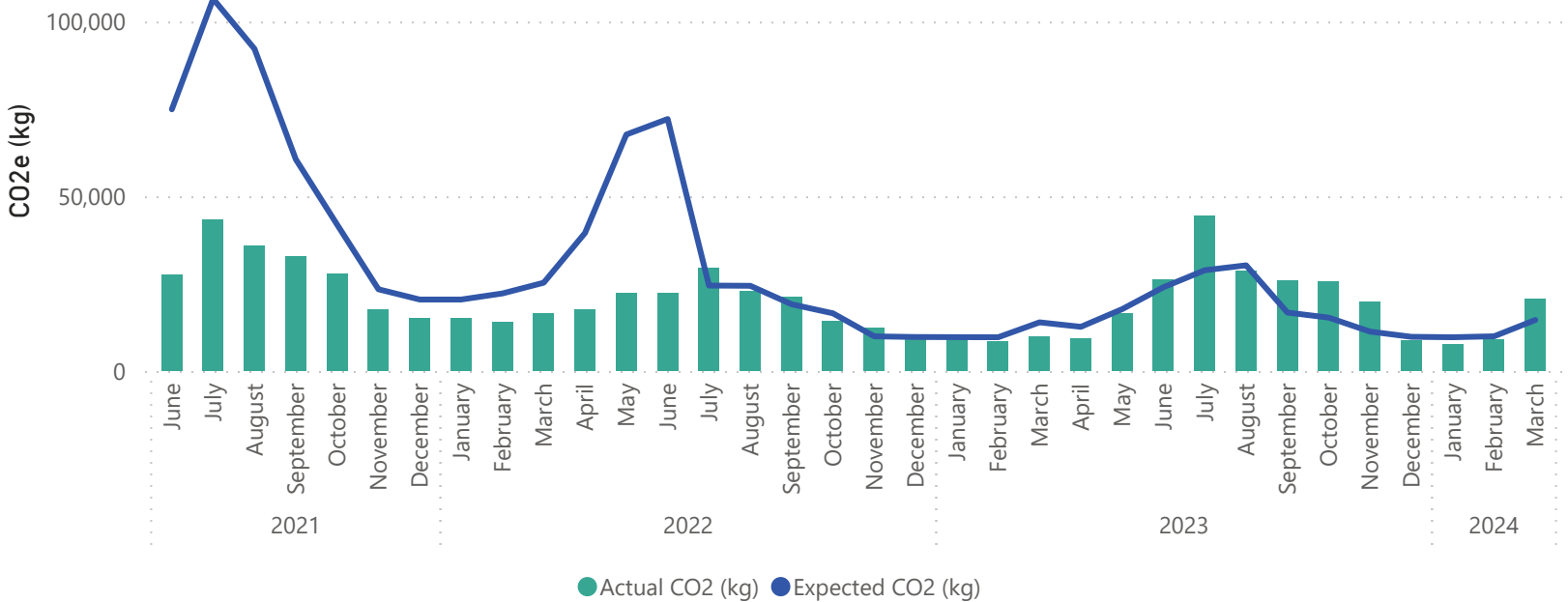
Whakatane District Council

Aquatic Centre

Aquatic Centre Natural Gas Compared to Baseline (kWh)



Aquatic Centre Carbon Emissions Compared to Baseline (kg CO2e)

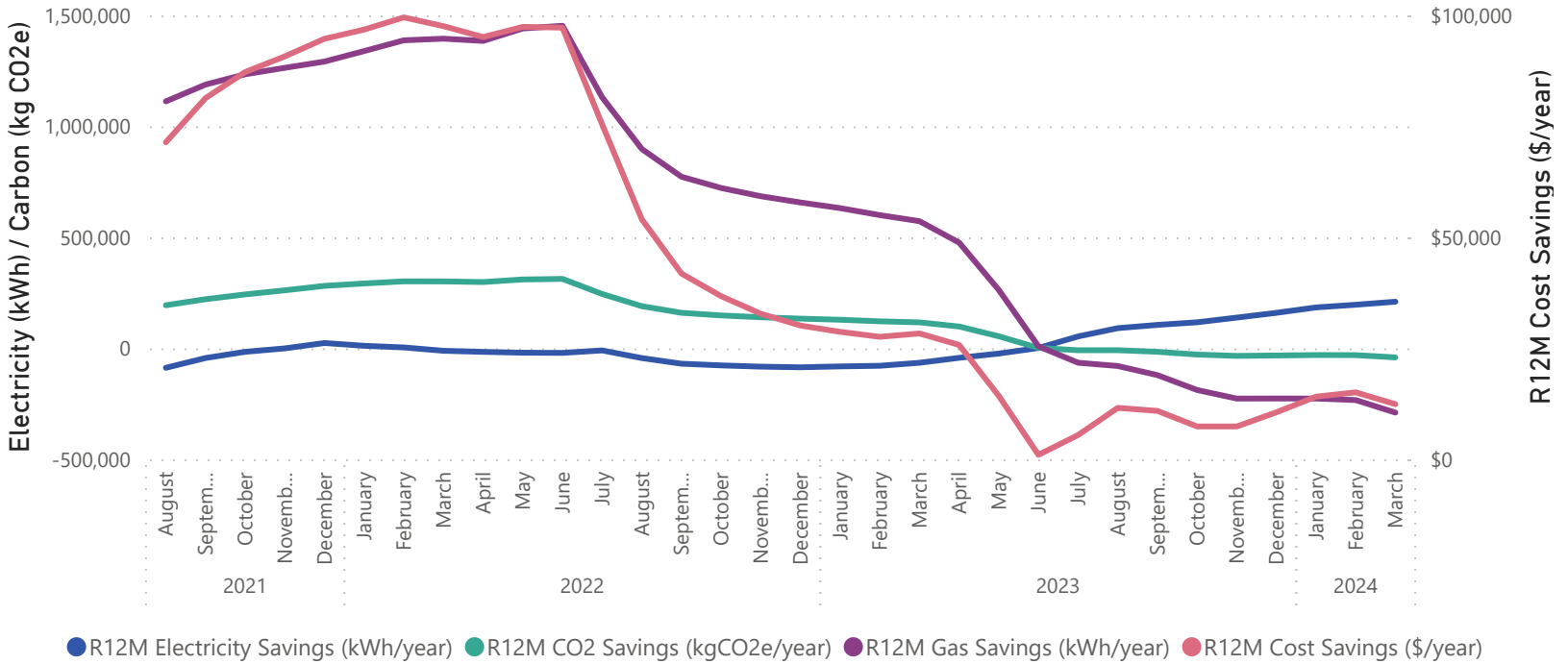


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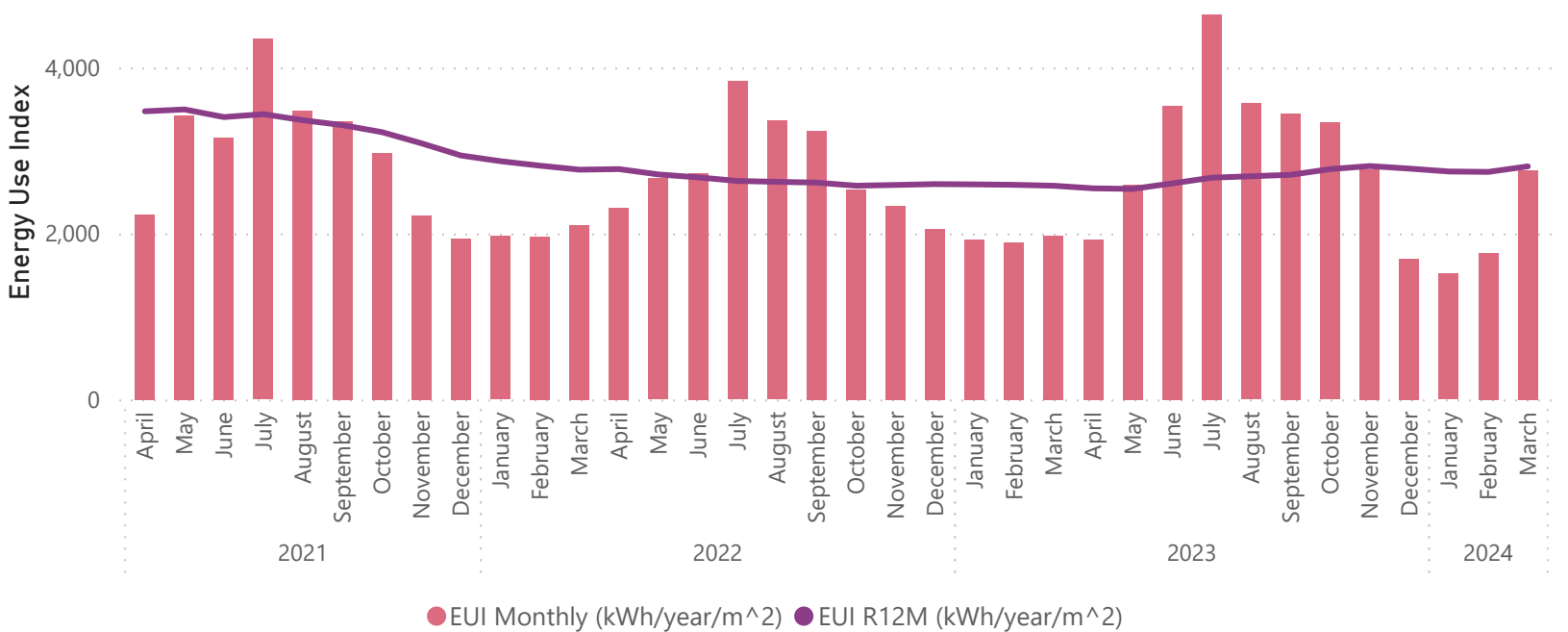
Whakatane District Council

Aquatic Centre

Aquatic Centre Rolling 12 Month Savings



Aquatic Centre Energy Use Index by Month Compared to Rolling 12-Month Values



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 **Baselines were updated for all sites from July 2022.**

Whakatane District Council

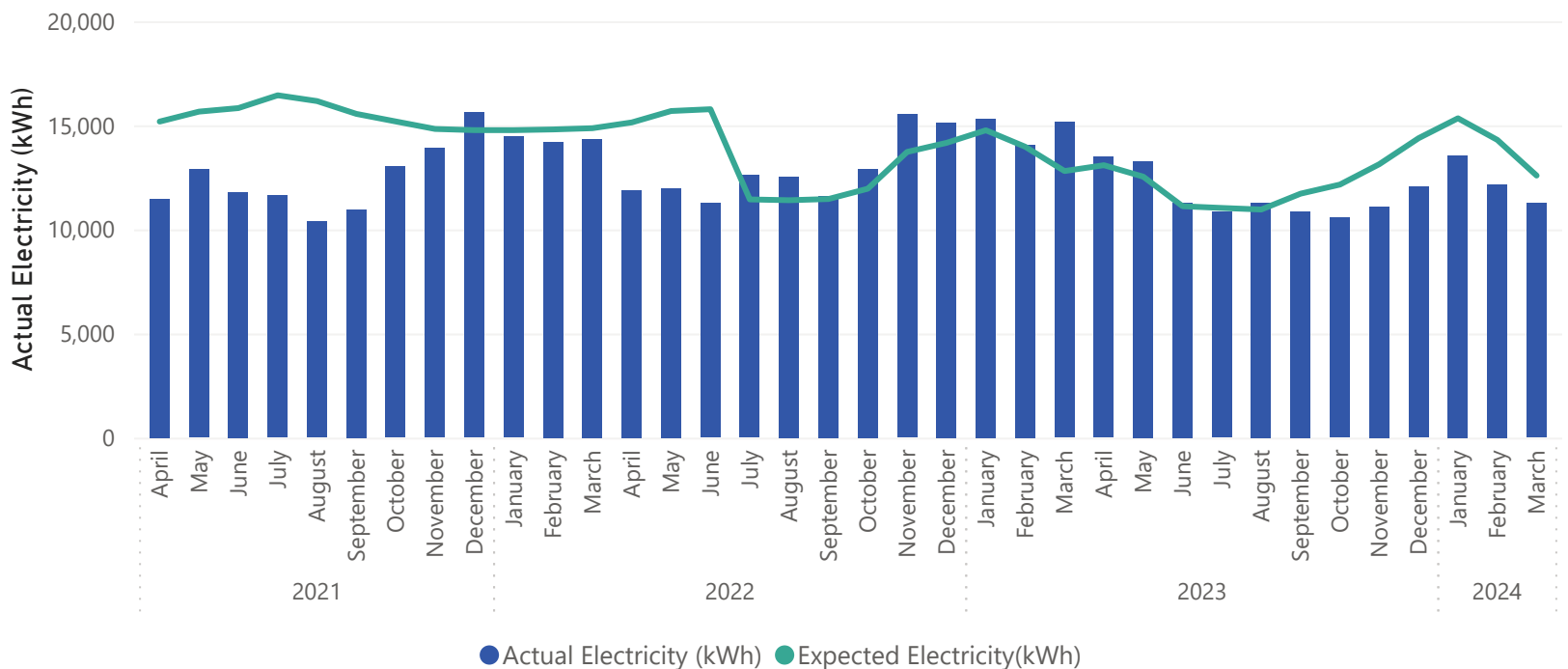
Te Koputu Library

<p>\$631</p> <p>Monthly Energy Cost Savings</p>	<p>1,332</p> <p>Elec. Savings (kWh/mo)</p>	<p>11%</p> <p>Elec. Savings (%)</p>	<p>10,616</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>1,092</p> <p>CO2e Savings (kg/mo)</p>
<p>\$3,860</p> <p>R12M Energy Cost Savings</p>	<p>4,880</p> <p>Gas. Savings (kWh/mo)</p>	<p>43%</p> <p>Gas. Savings (%)</p>	<p>25,587</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>6,025</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

Gas use was 43% below baseline in March and continues a trend of lower gas use which began in October 2023 and is the result of reducing afterhours fresh air and optimising set points. There has been a focus on improving the efficiency of dehumidification which has led to electricity and gas savings. This is currently limited by the inability of the chiller to maintain an appropriate chilled water temperature due to no buffer tank and poor chiller capacity control.

Te Koputu Library Electricity Use Compared to Baseline (kWh)

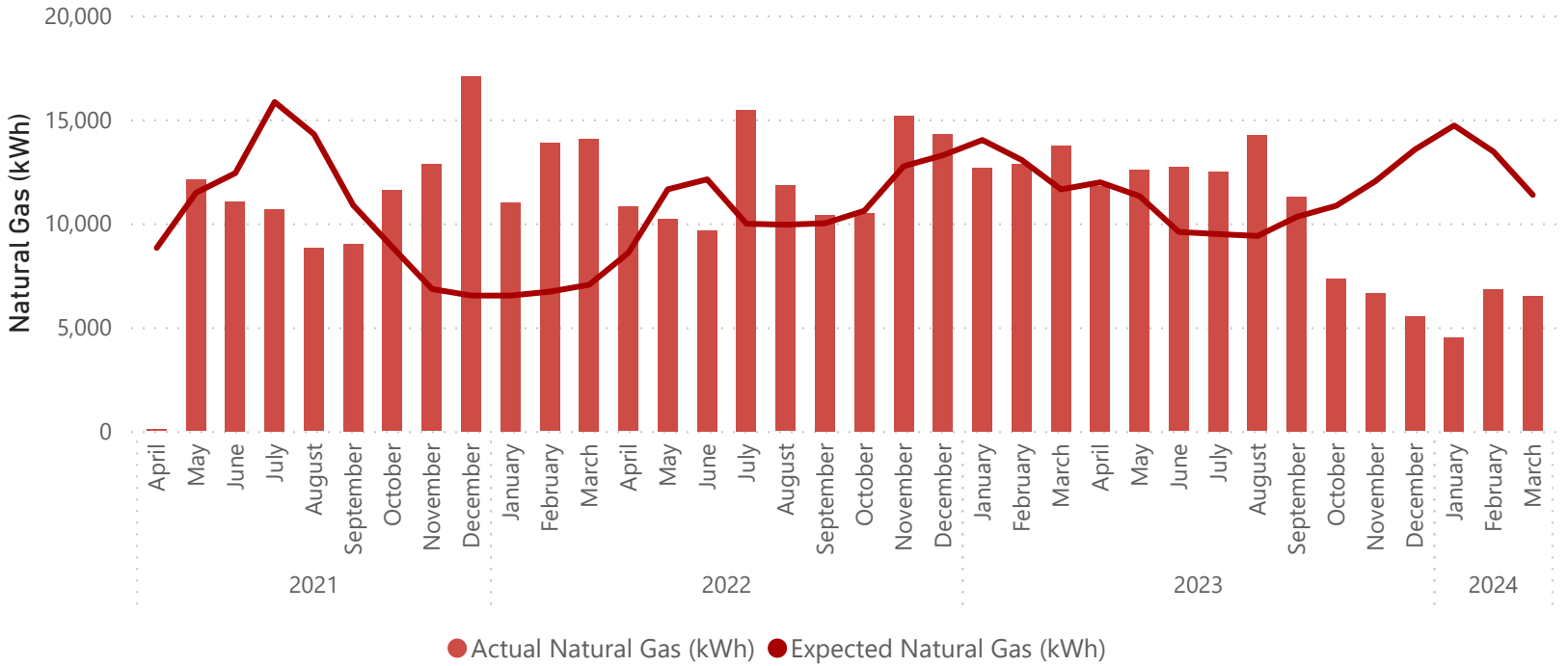


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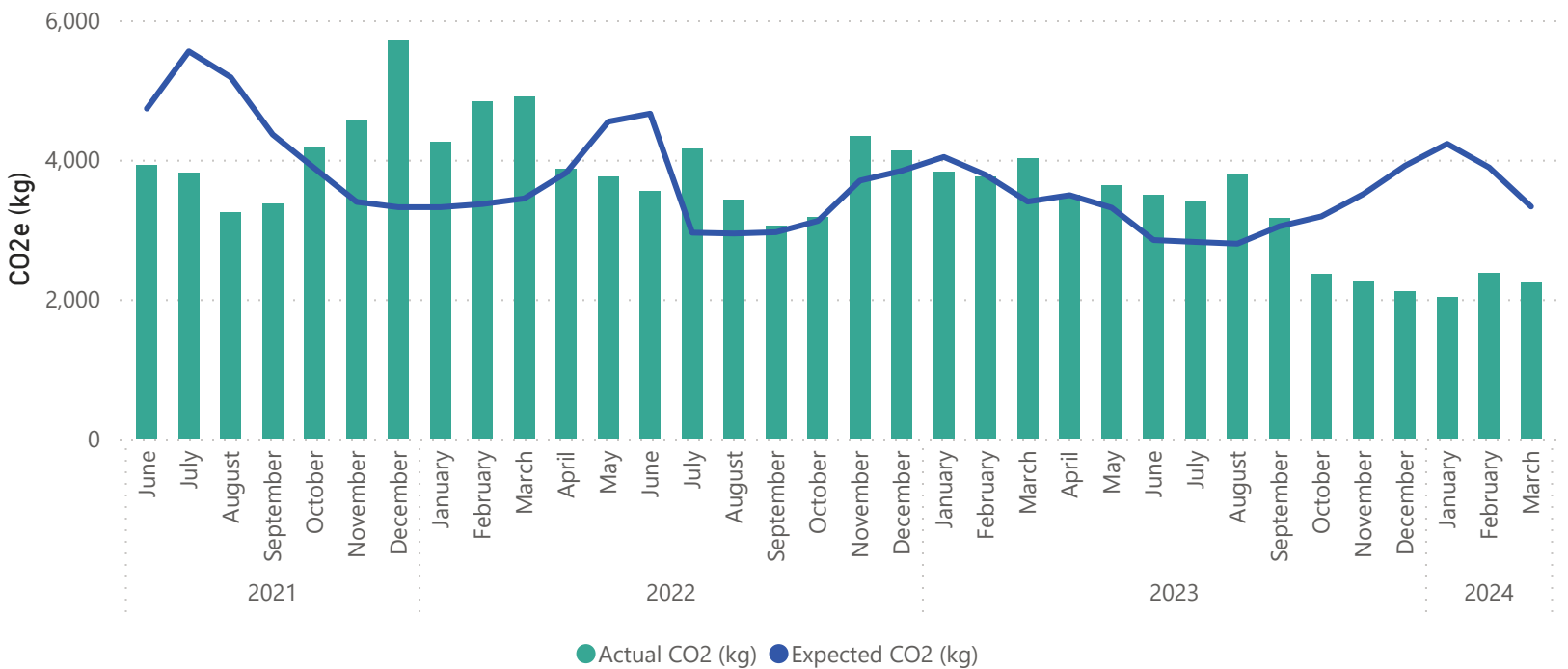
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Te Koputu Library

Te Koputu Library Natural Gas Compared to Baseline (kWh)



Te Koputu Library Carbon Emissions Compared to Baseline (kg CO2e)

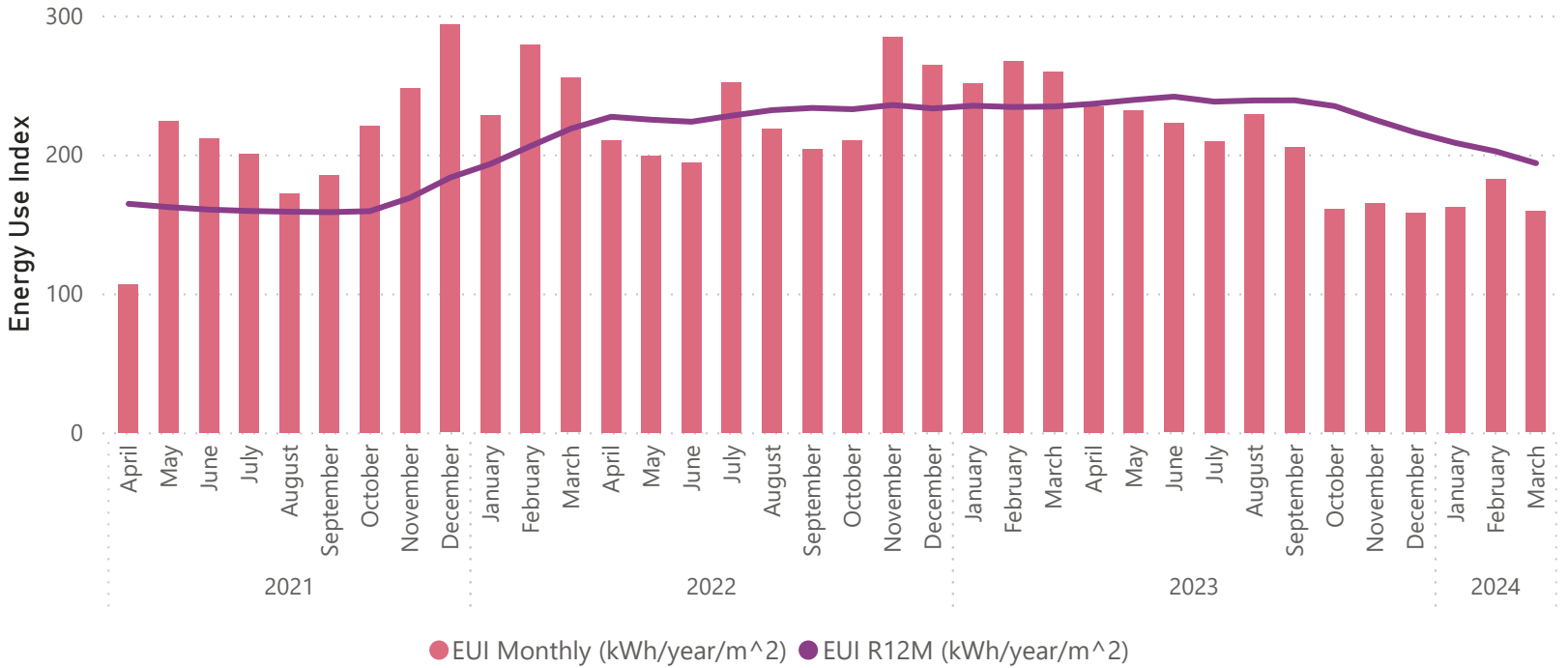


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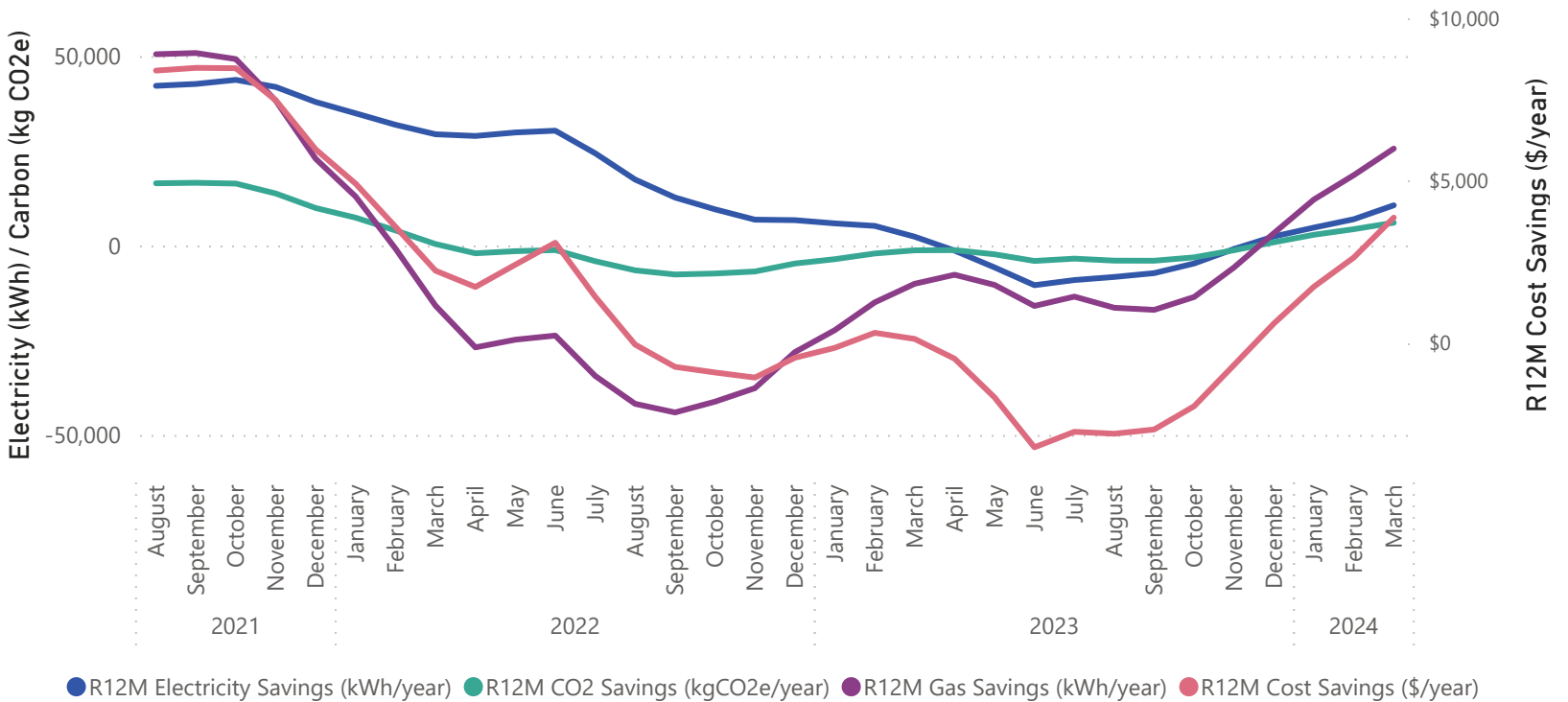
Whakatane District Council

Te Koputu Library

Te Koputu Library Energy Use Index by Month Compared to Rolling 12-Month Values



Te Koputu Library Rolling 12 Month Savings



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Whakatane District Council

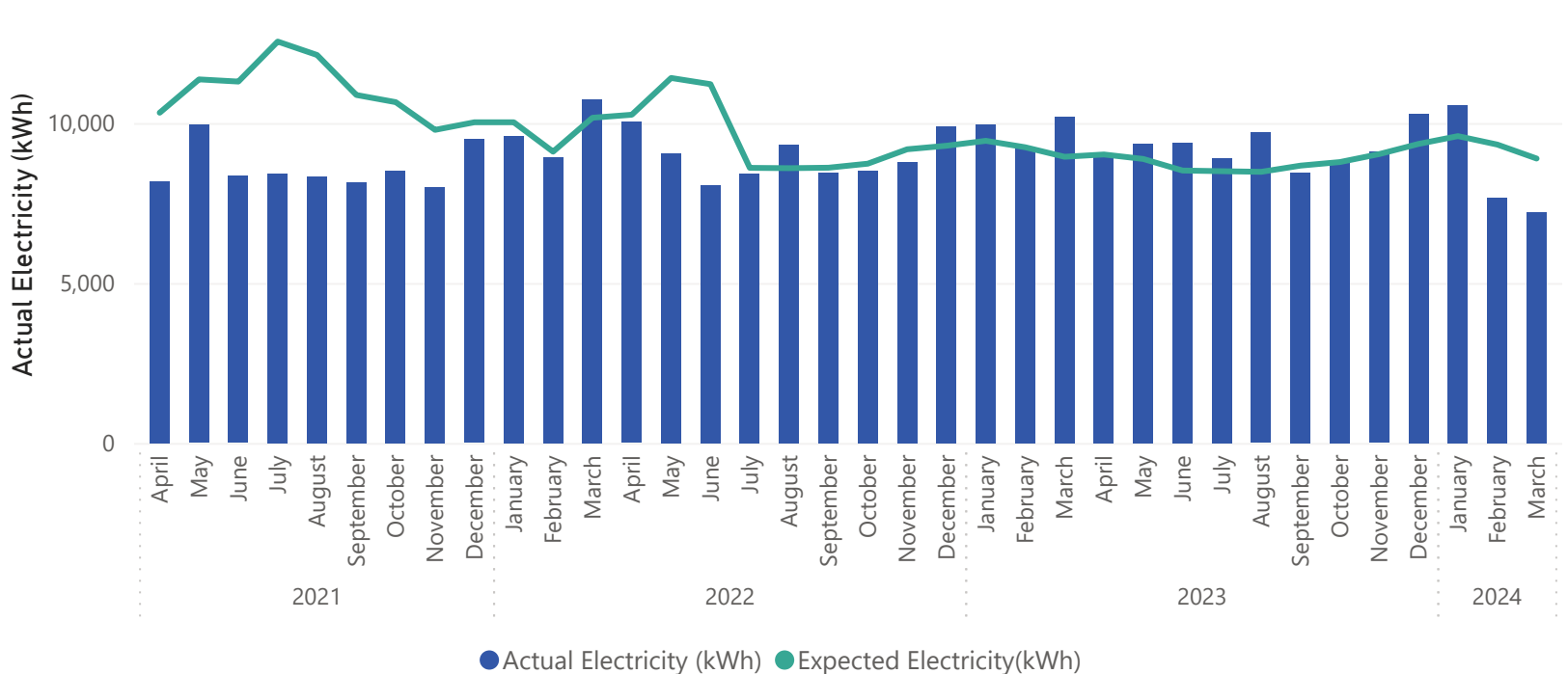
Museum and Research Centre

<p>\$318</p> <p>Monthly Energy Cost Savings</p>	<p>1,681</p> <p>Elec. Savings (kWh/mo)</p>	<p>19%</p> <p>Elec. Savings (%)</p>	<p>-1,392</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>255</p> <p>CO2e Savings (kg/mo)</p>
<p>-\$642</p> <p>R12M Energy Cost Savings</p>	<p>576</p> <p>Gas. Savings (kWh/mo)</p>	<p>20%</p> <p>Gas. Savings (%)</p>	<p>-4,028</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>-925</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

Natural gas and electricity were 20% and 19% below baseline respectively, which is an excellent result. Electricity and gas have each reduced in the last two months which has largely been the result of optimising control of the HVAC system. The HVAC system at the Museum and Research Centre has advantages compared to the Library and Exhibition Centre because it has a chilled water buffer tank and better chiller capacity control. The energy use intensity (EUI) is consistently lower at the Museum compared to the Library.

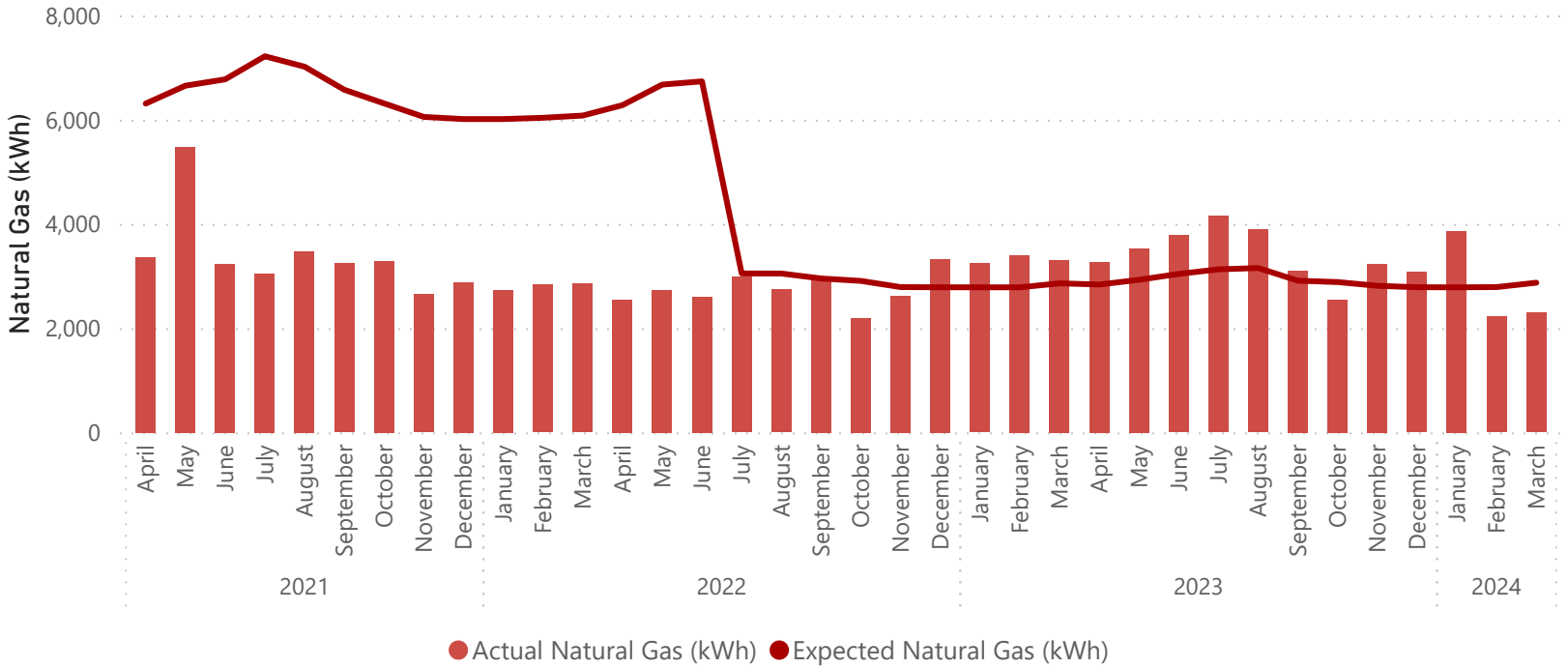
Museum Research Centre Electricity Use Compared to Baseline (kWh)



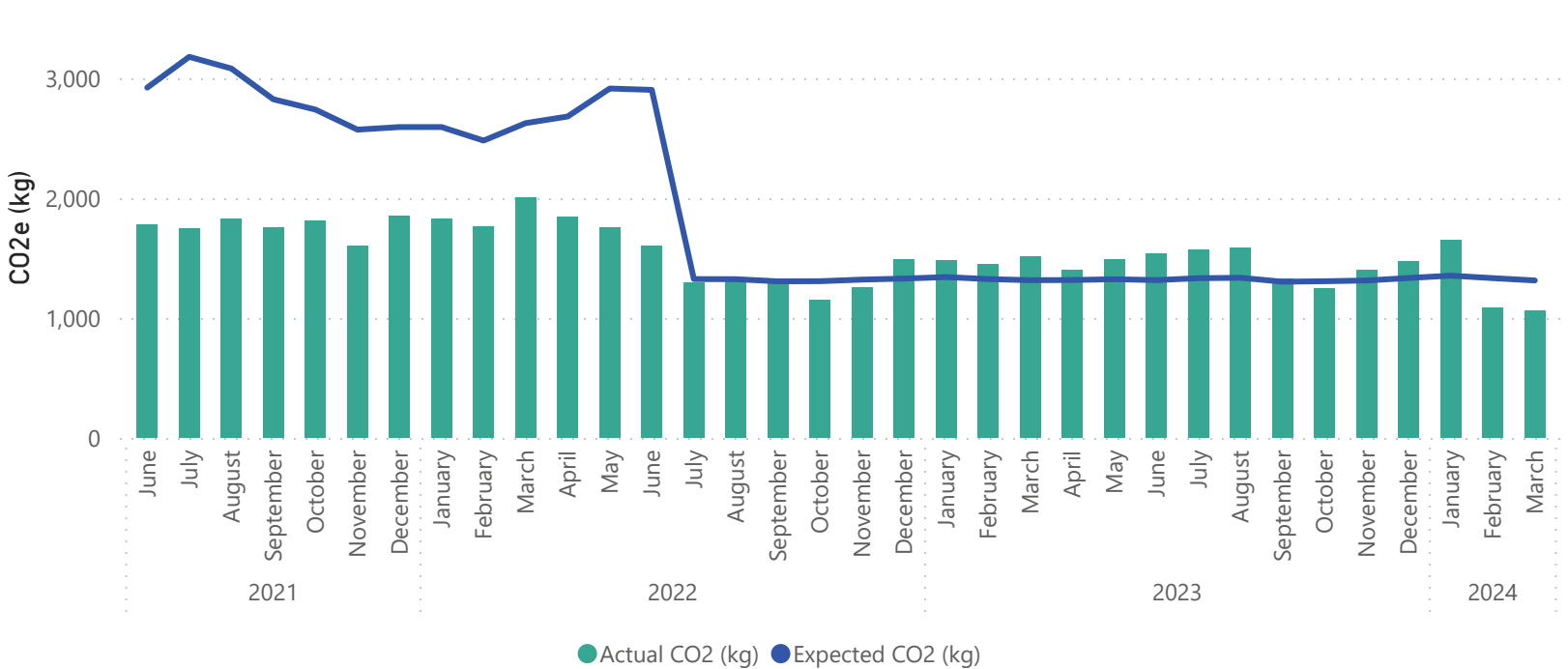
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Museum and Research Centre

Museum Research Centre Natural Gas Compared to Baseline (kWh)



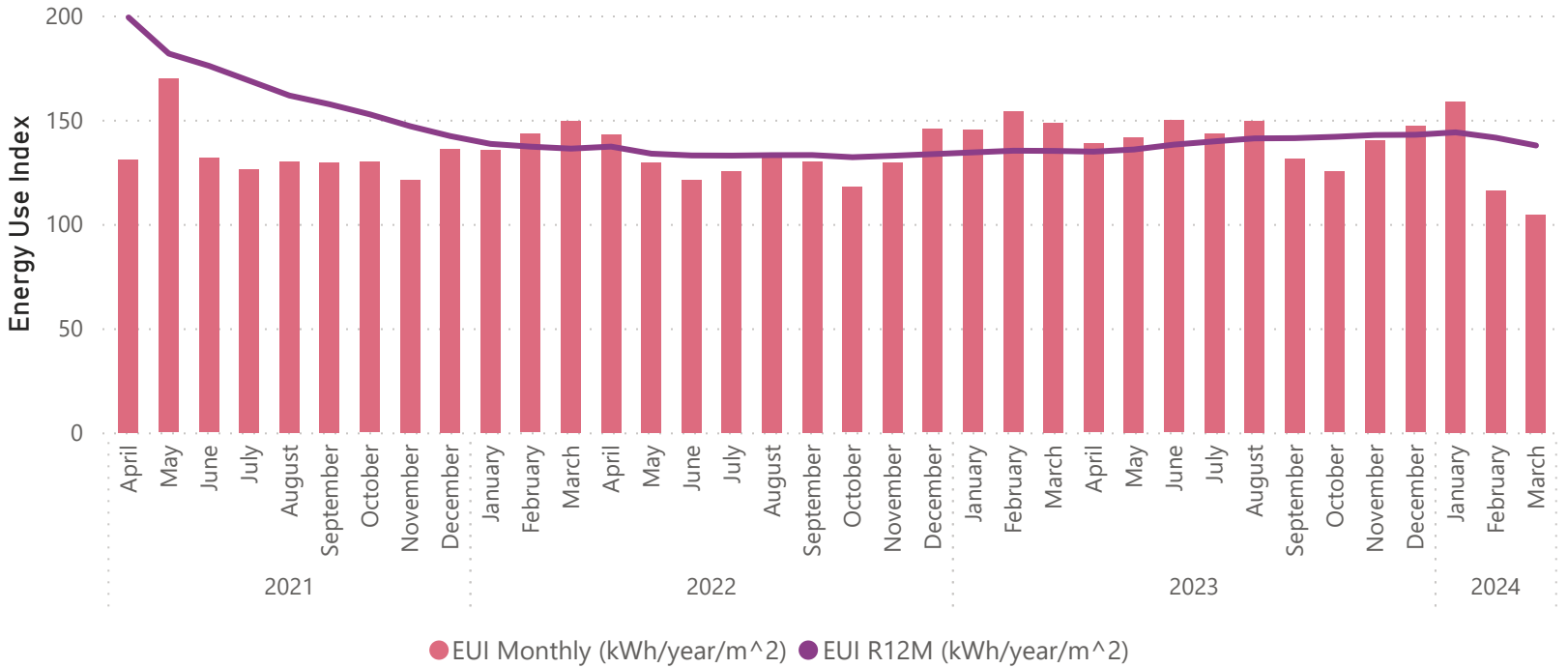
Museum Research Centre Carbon Emissions Compared to Baseline (kg CO2e)



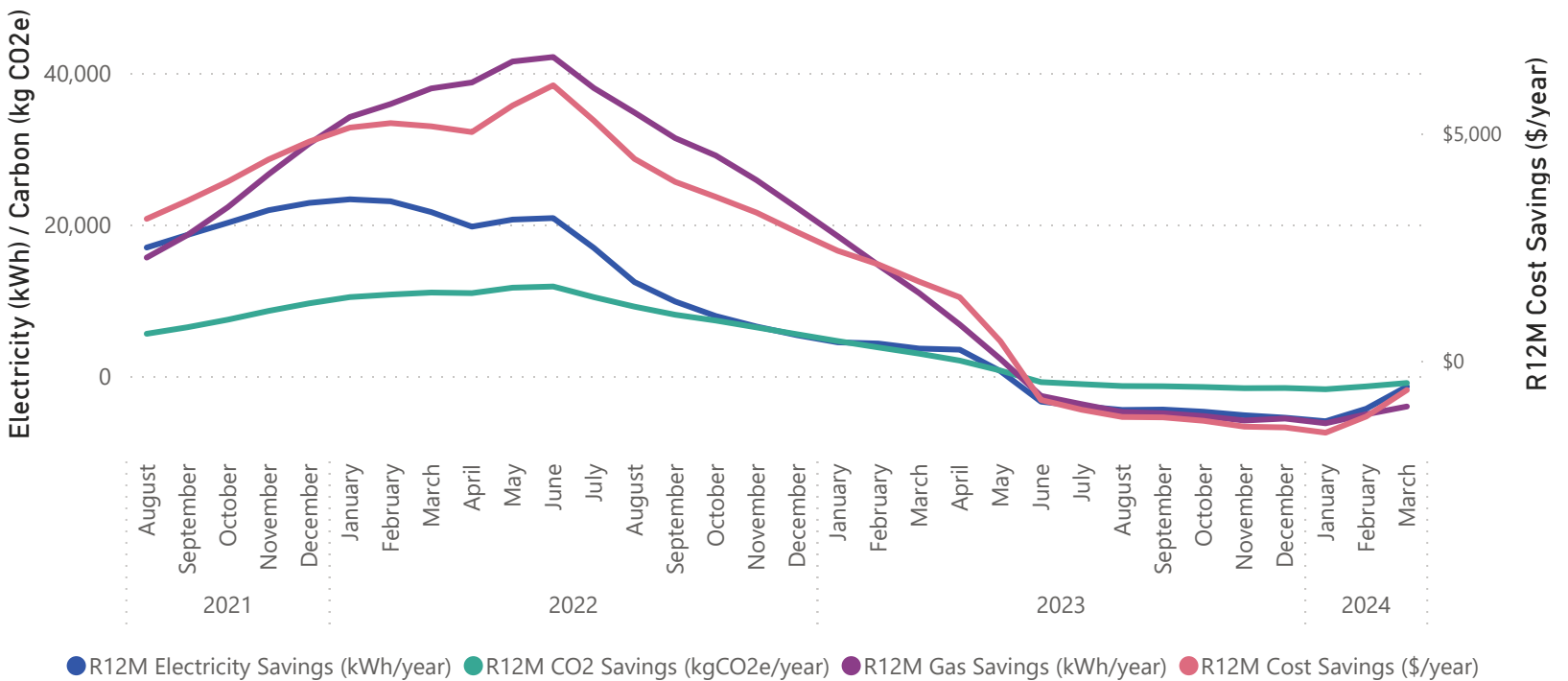
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Museum and Research Centre

Museum Research Centre Energy Use Index by Month Compared to Rolling 12-Month Values



Museum Research Centre Rolling 12 Month Savings



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Whakatane District Council

War Memorial Hall

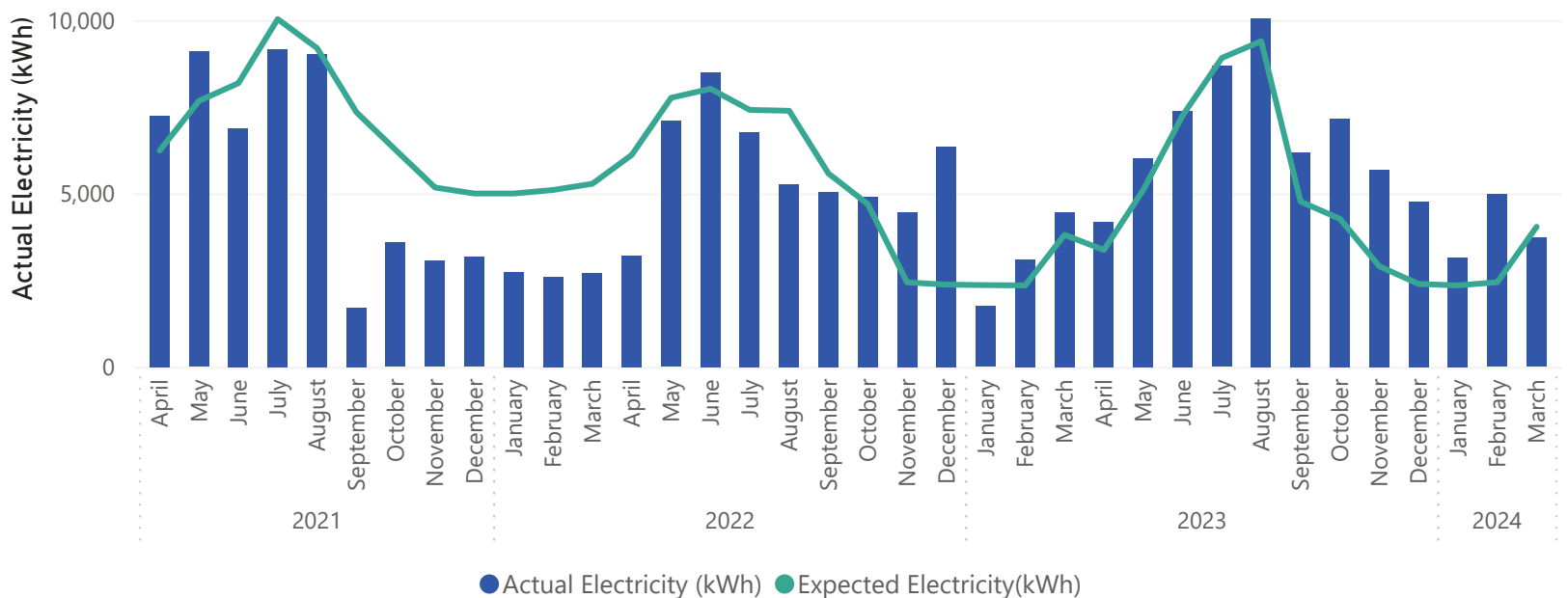
<p>\$131 Monthly Energy Cost Savings</p>	<p>319 Elec. Savings (kWh/mo)</p>	<p>8% Elec. Savings (%)</p>	<p>-14,787 R12M Electricity Savings (kWh/yr)</p>	<p>214 CO2e Savings (kg/mo)</p>
<p>-\$2,185 R12M Energy Cost Savings</p>	<p>932 Gas. Savings (kWh/mo)</p>	<p>38% Gas. Savings (%)</p>	<p>1,907 R12M Gas Savings (kWh/yr)</p>	<p>-841 R12M CO2e Savings (kg/yr)</p>

Comments:

The War Memorial Hall used less electricity than baseline in March, and reduced sharply compared to February. This breaks a 7 month trend of electricity use higher than baseline.

Natural gas use was less than expected for the 6 consecutive month.

War Memorial Hall Electricity Use Compared to Baseline (kWh)

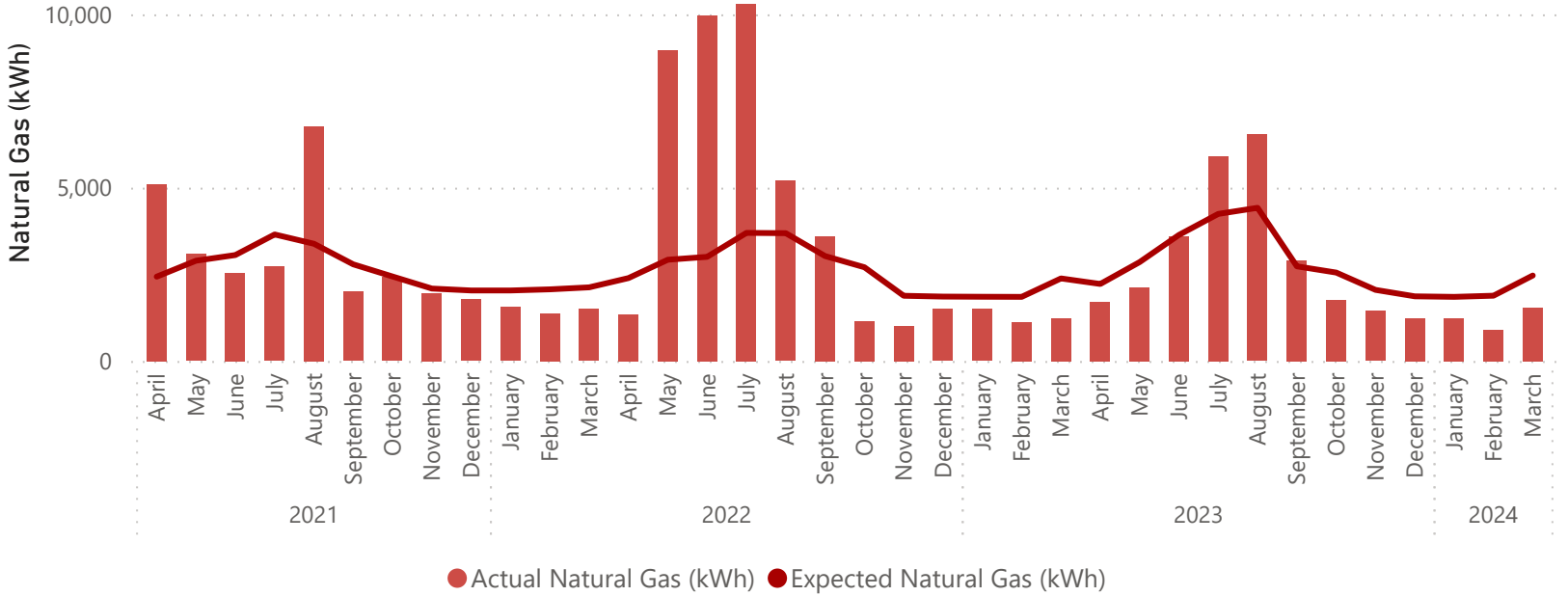


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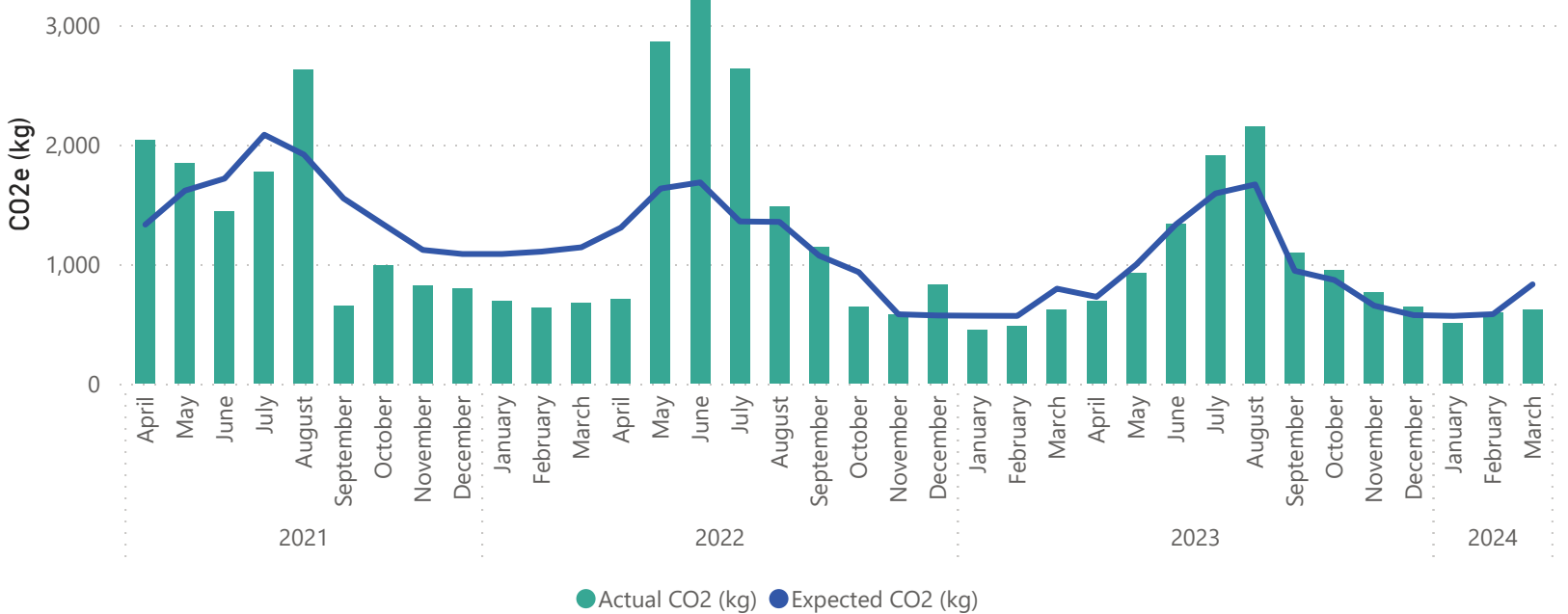
Whakatane District Council

War Memorial Hall

War Memorial Hall Natural Gas Compared to Baseline (kWh)



War Memorial Hall Carbon Emissions Compared to Baseline (kg CO2e)

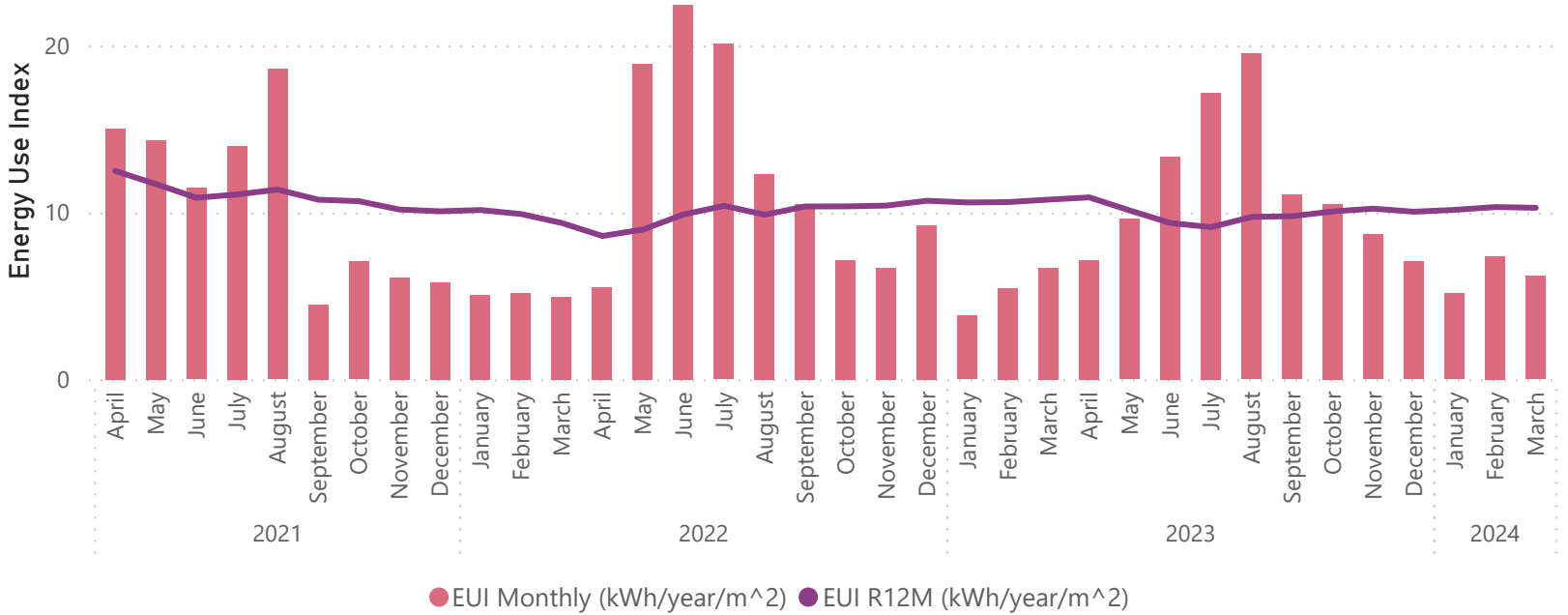


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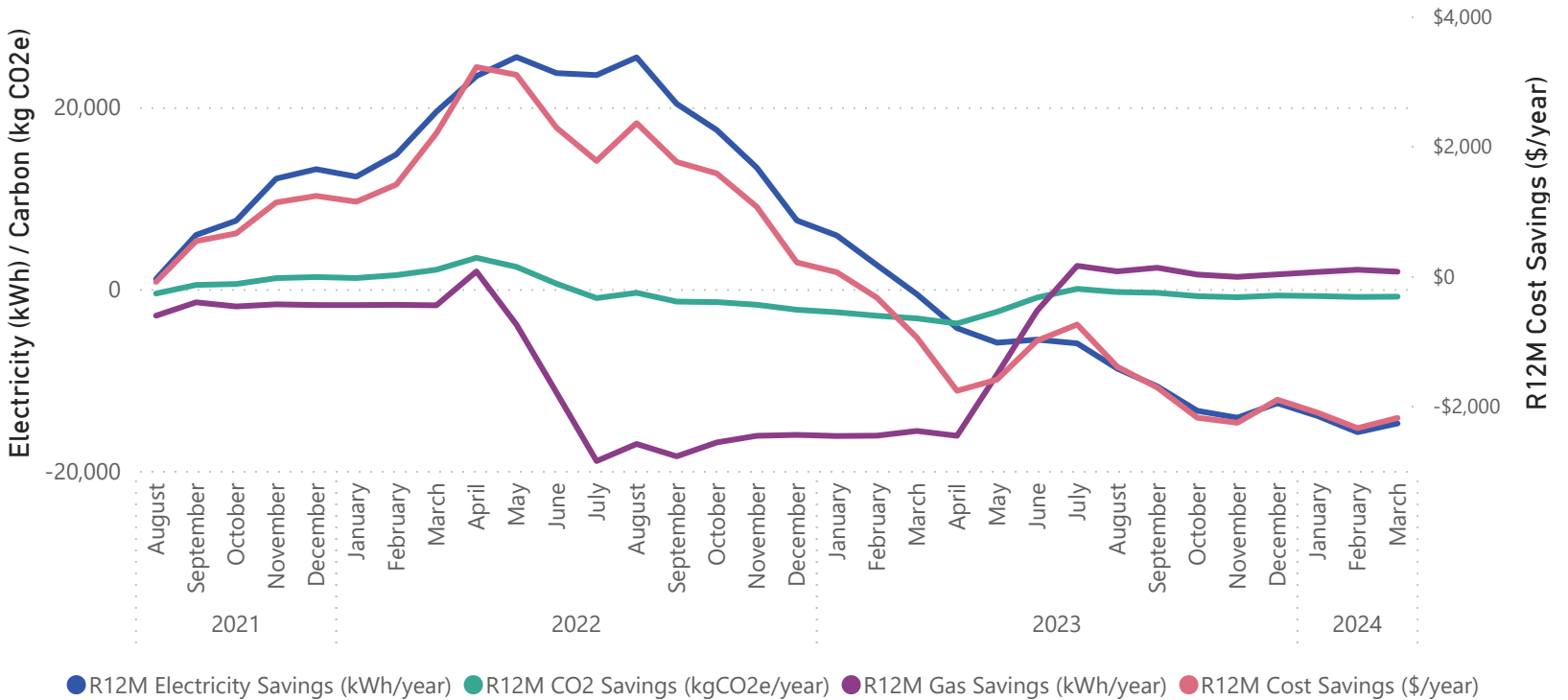
Whakatane District Council

War Memorial Hall

War Memorial Hall Energy Use Index by Month Compared to Rolling 12-Month Values



War Memorial Hall Rolling 12 Month Savings



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Whakatane District Council

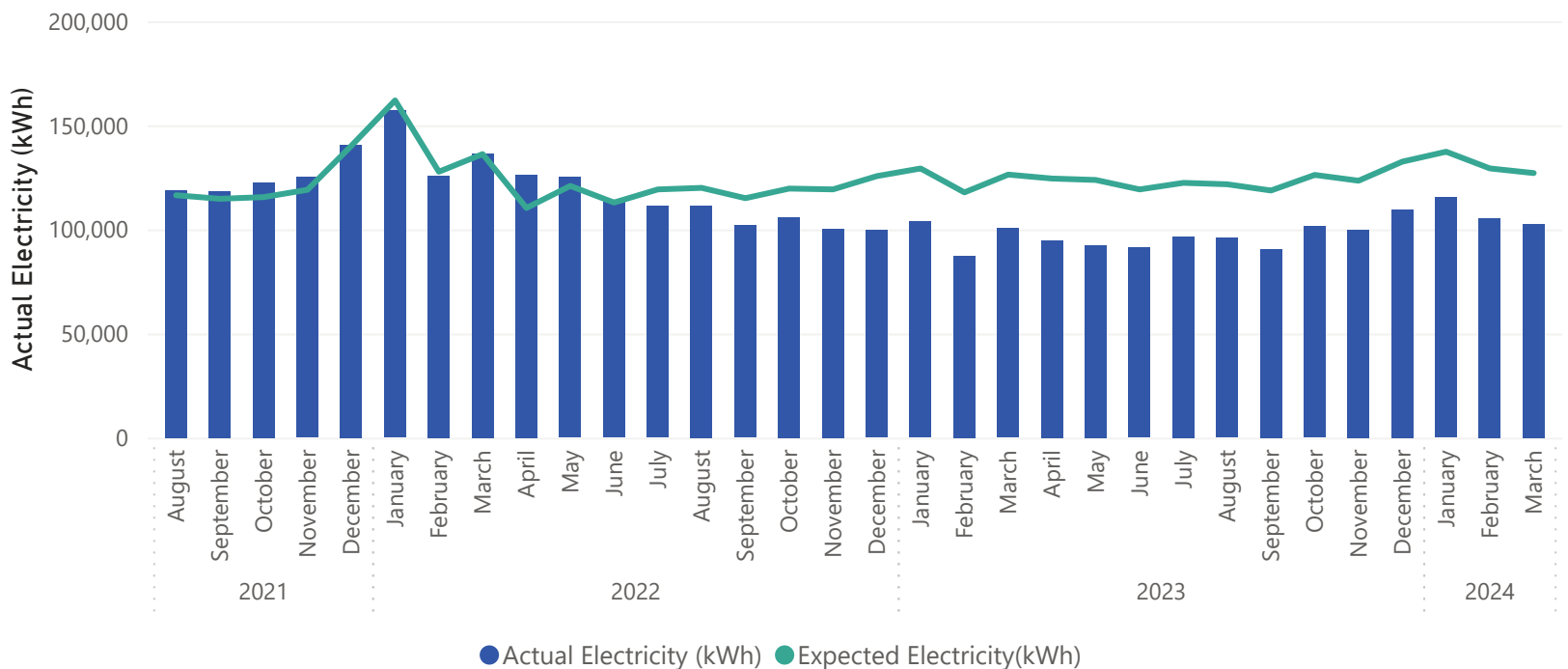
Water Treatment Plant

<p>\$3,761</p> <p>Monthly Energy Cost Savings</p>	<p>24,525</p> <p>Elec. Savings (kWh/mo)</p>	<p>19%</p> <p>Elec. Savings (%)</p>	<p>310,379</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>2,031</p> <p>CO2e Savings (kg/mo)</p>
<p>\$52,017</p> <p>R12M Energy Cost Savings</p>				<p>25,699</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

The water treatment plan continues to achieve savings in the order of 20% each month. This is the result of upgrading high lift pumps in 2022.

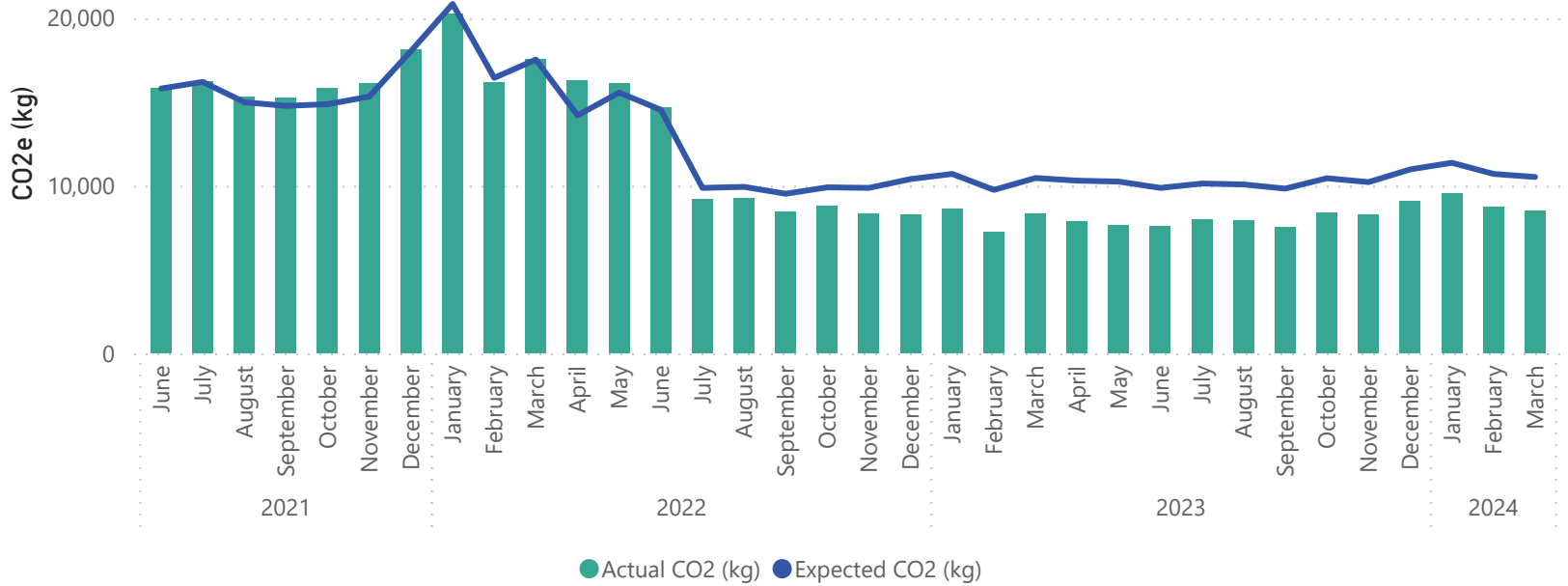
Water Treatment Plant Electricity Use Compared to Baseline (kWh)



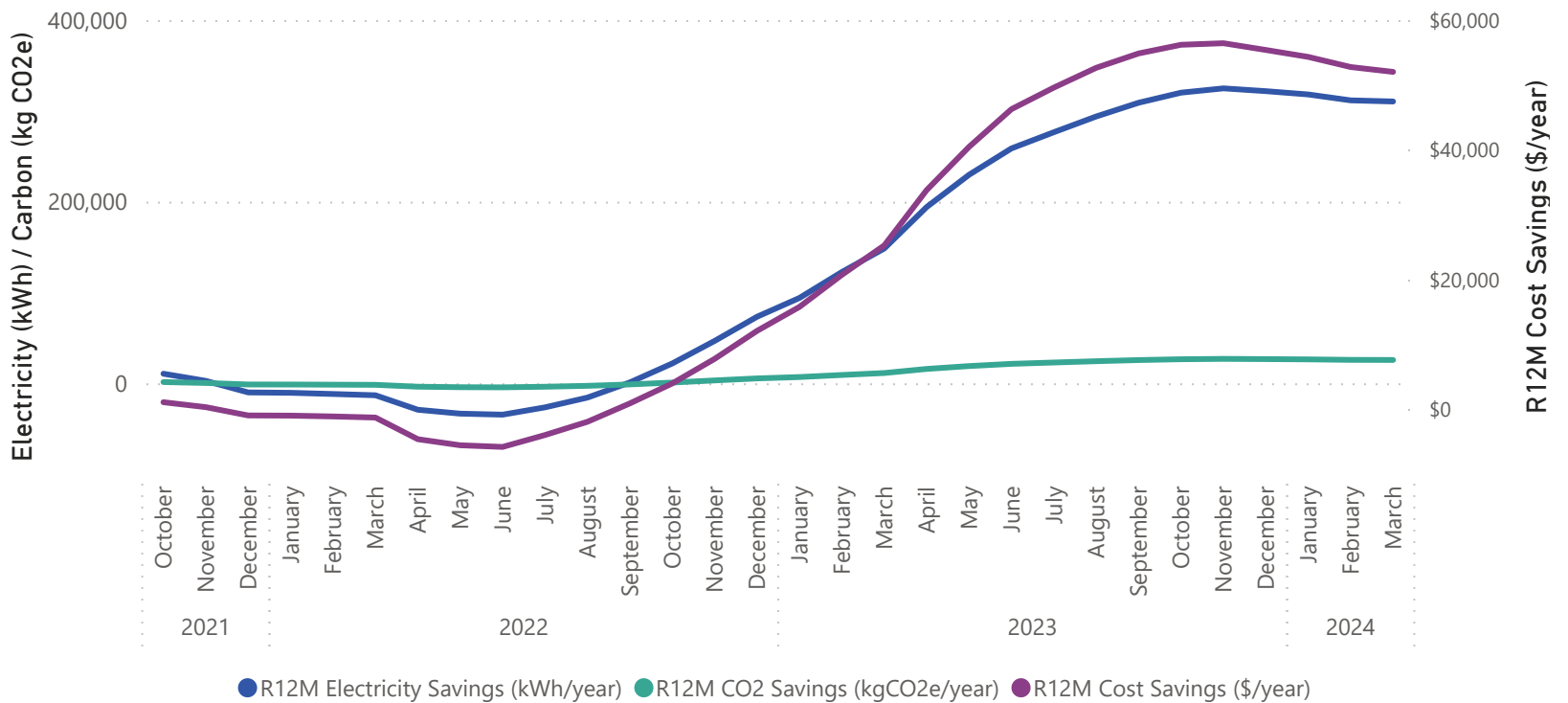
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Water Treatment Plant

Water Treatment Plant Carbon Emissions Compared to Baseline (kg CO2e)



Water Treatment Plant Rolling 12 Month Savings

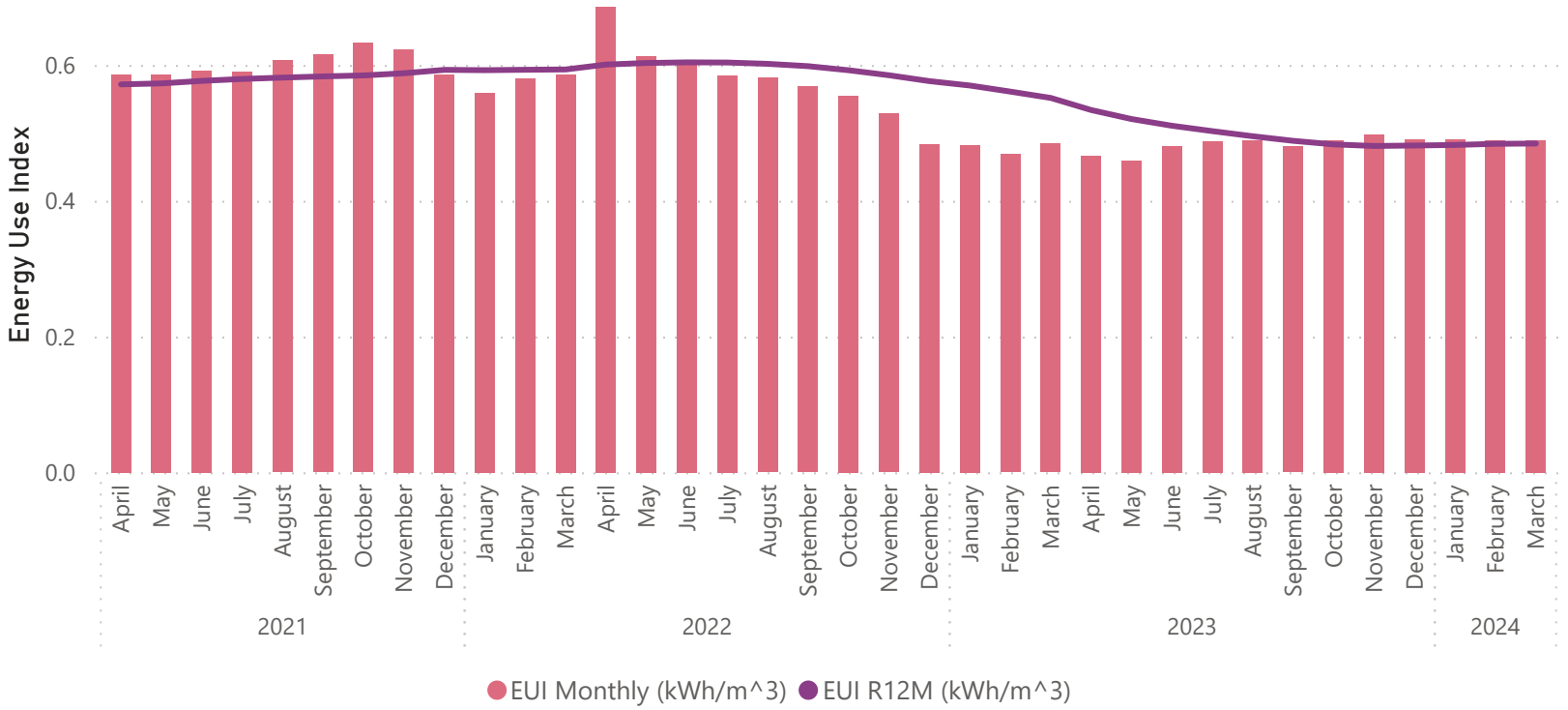


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Whakatane District Council

Water Treatment Plant

Water Treatment Plant Energy Use Index by Month Compared to Rolling 12-Month Values



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Whakatane District Council

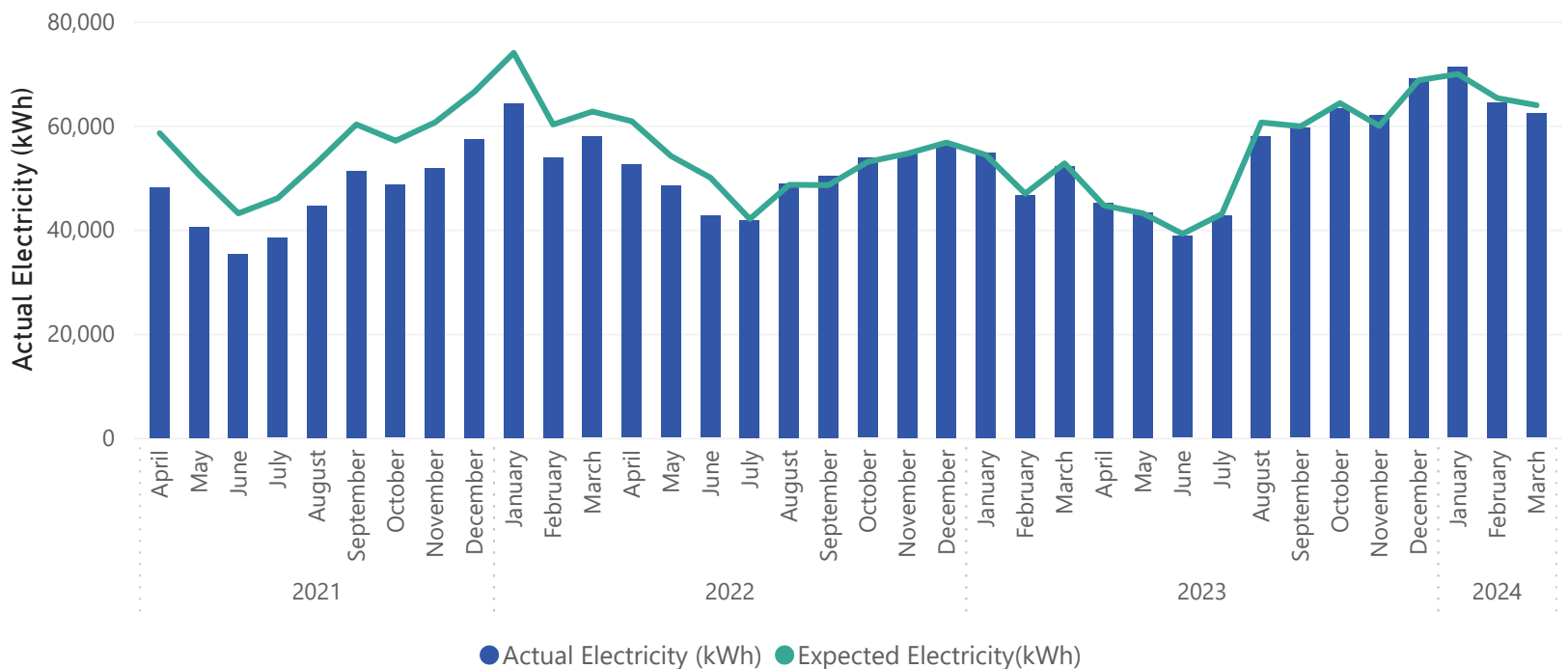
Braemar Road Pump Station

<p>\$247</p> <p>Monthly Energy Cost Savings</p>	<p>1,588</p> <p>Elec. Savings (kWh/mo)</p>	<p>2%</p> <p>Elec. Savings (%)</p>	<p>2,297</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>132</p> <p>CO2e Savings (kg/mo)</p>
<p>\$501</p> <p>R12M Energy Cost Savings</p>				<p>190</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

Braemar Rd pump station has been re-baselined in January 2024, the baseline period is Jul 2023 to Jan 2024 and has an R2 value of 0.99. The new baseline is required to account for arsenic screening and additional pumps. Usage in March was 2% below this new baseline

Braemar Rd Pumps Electricity Use Compared to Baseline (kWh)

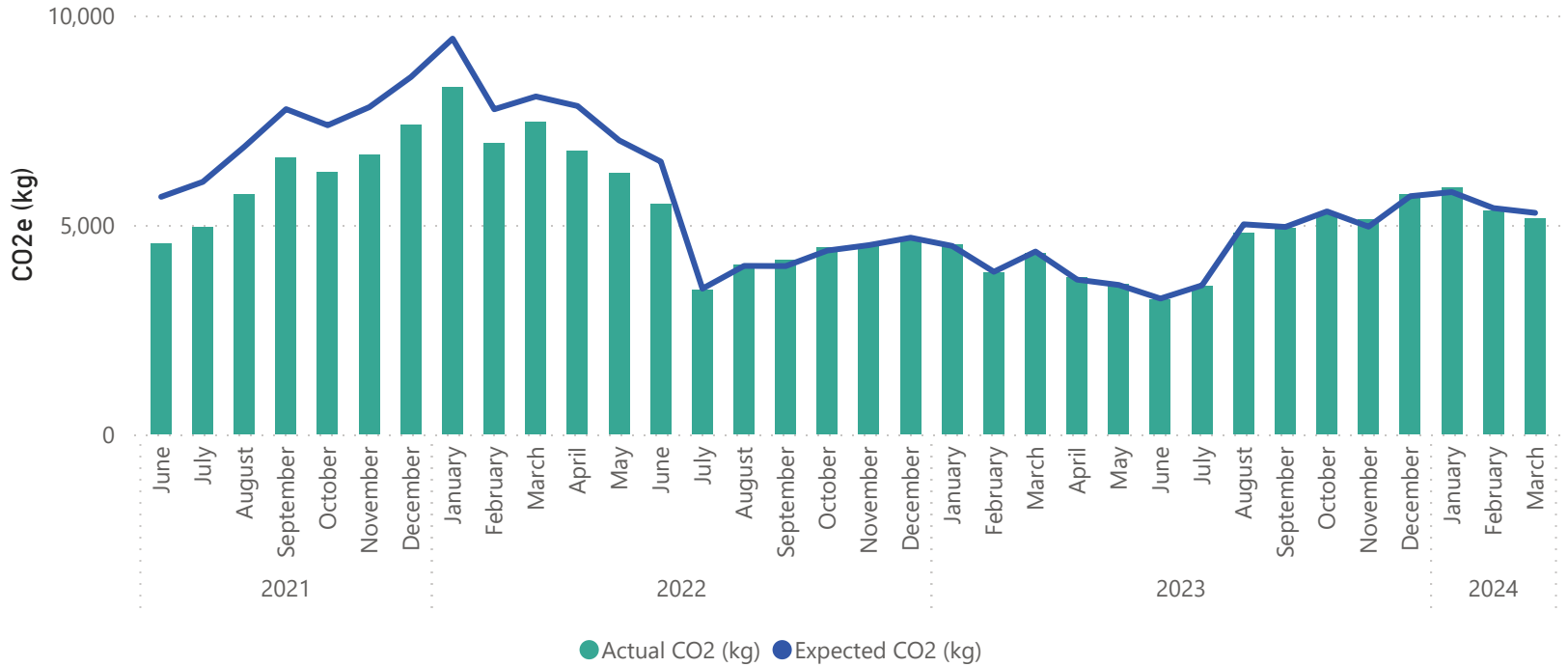


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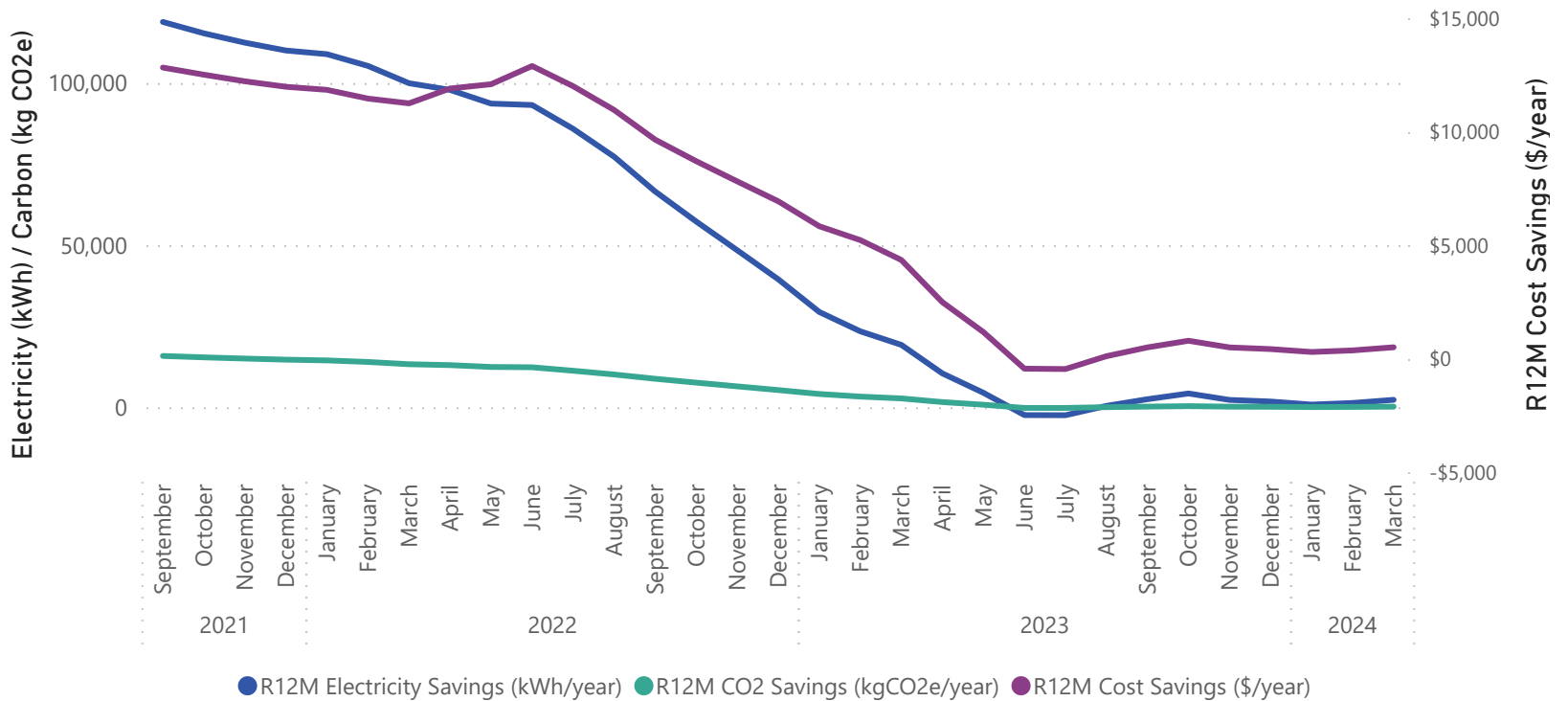
Whakatane District Council

Braemar Road Pump Station

Braemar Rd Pumps Carbon Emissions Compared to Baseline (kg CO2e)



Braemar Rd Pumps Rolling 12 Month Savings

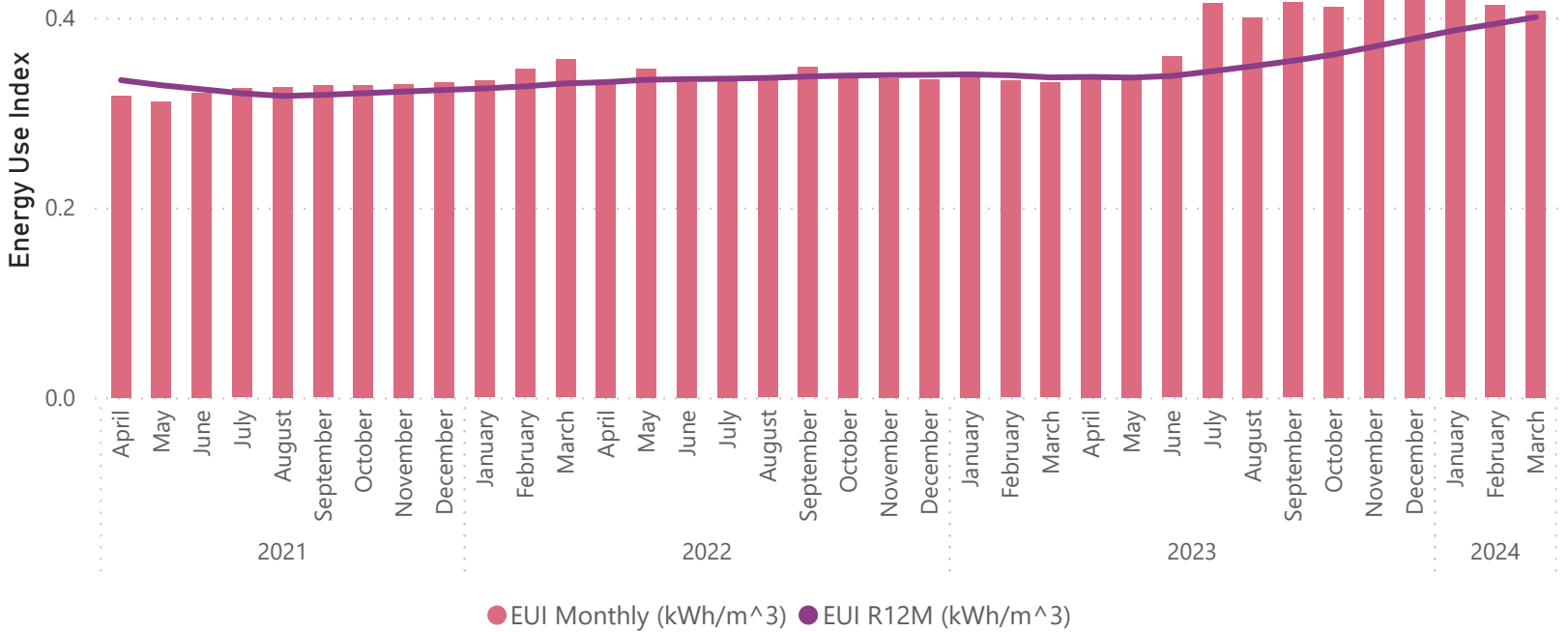


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Whakatane District Council

Braemar Road Pump Station

Braemar Rd Pumps Energy Use Index by Month Compared to Rolling 12-Month Values



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Whakatane District Council

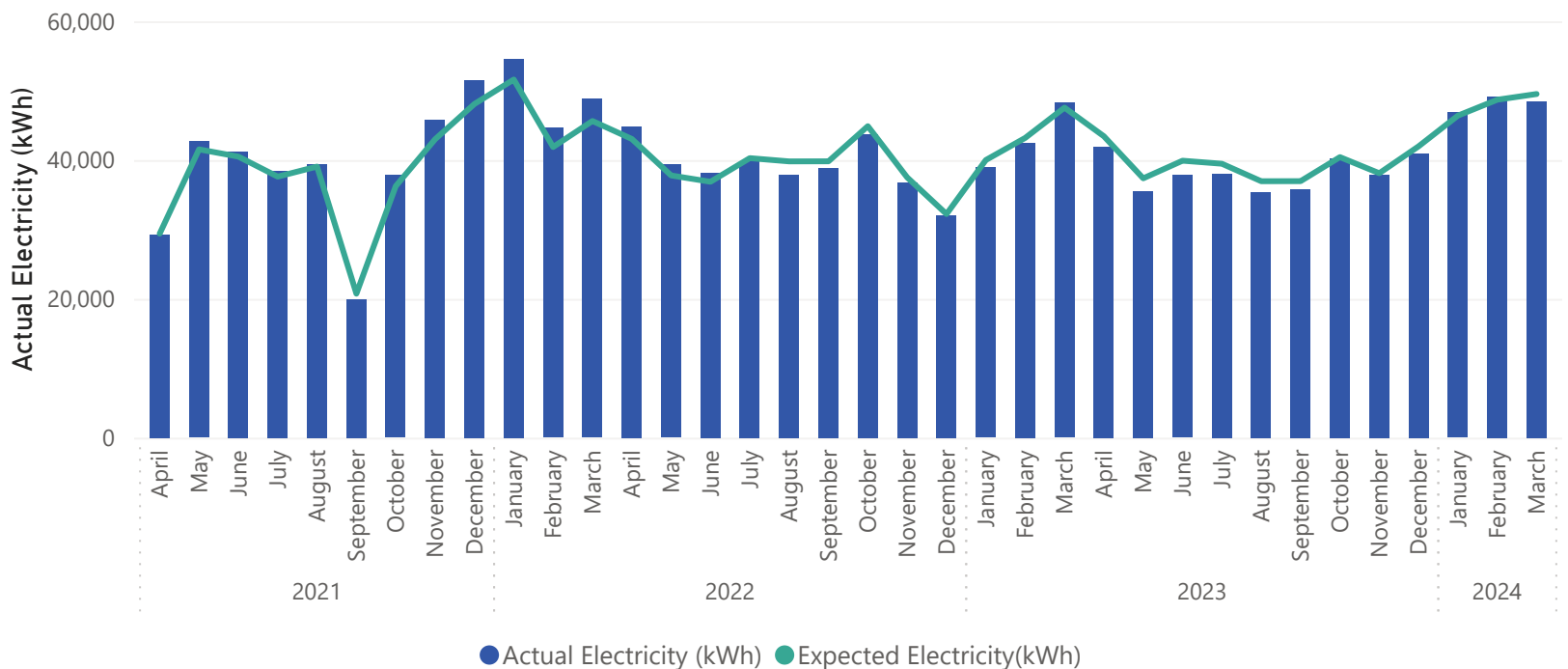
Paul Road Pump Station

<p>\$162 Monthly Energy Cost Savings</p>	<p>1,047 Elec. Savings (kWh/mo)</p>	<p>2% Elec. Savings (%)</p>	<p>11,310 R12M Electricity Savings (kWh/yr)</p>	<p>87 CO2e Savings (kg/mo)</p>
<p>\$2,072 R12M Energy Cost Savings</p>				<p>936 R12M CO2e Savings (kg/yr)</p>

Comments:

Paul Rd pumps have not had any significant changes for the past few years and have operated with consistent efficiency. Electricity was 2% below baseline in March.

Paul Rd Pumps Electricity Use Compared to Baseline (kWh)

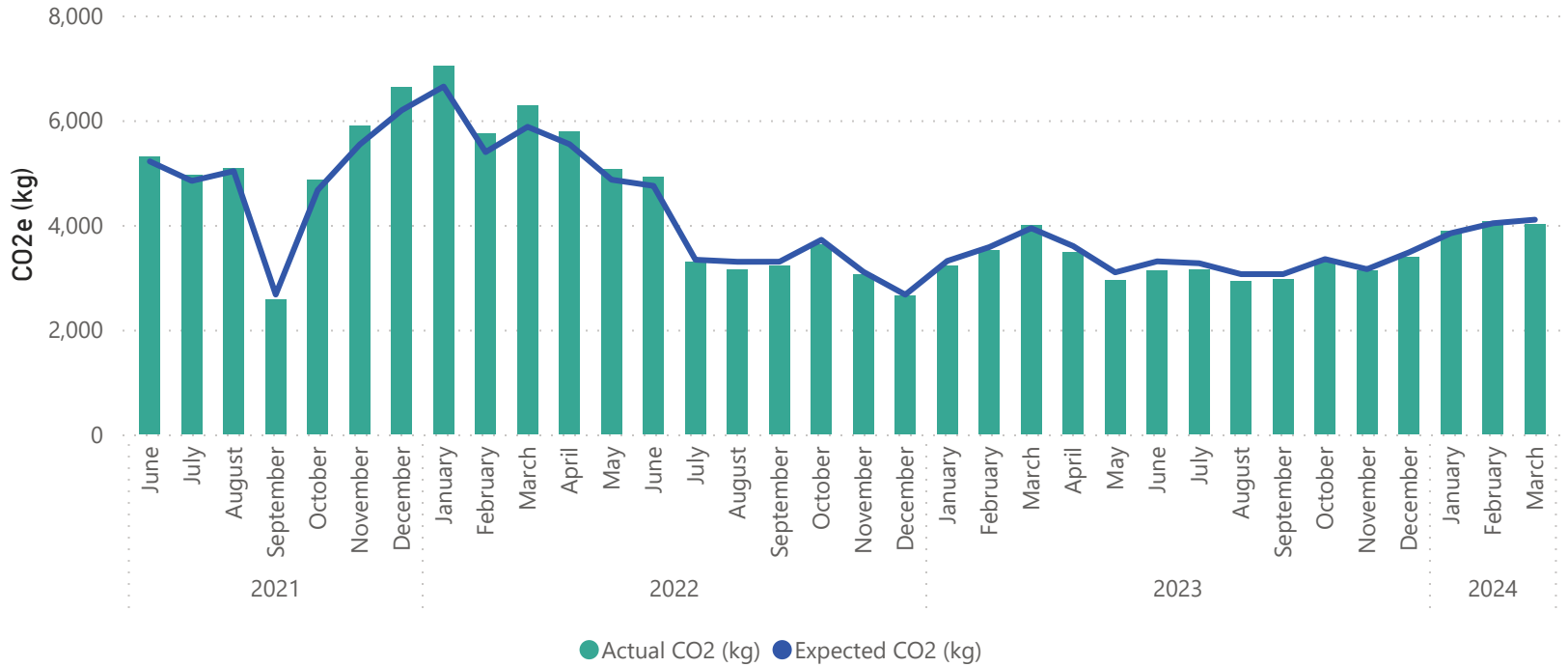


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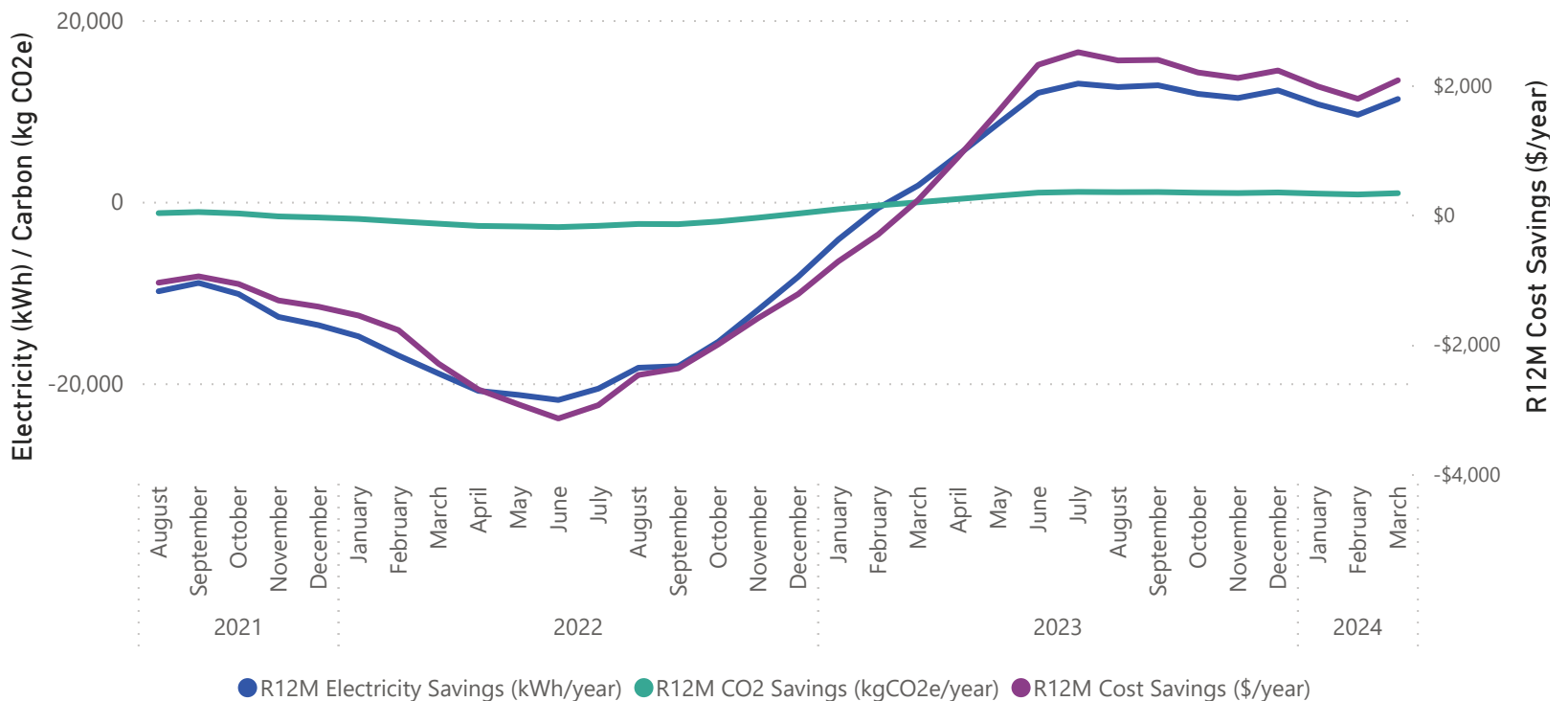
Whakatane District Council

Paul Road Pump Station

Paul Rd Pumps Carbon Emissions Compared to Baseline (kg CO2e)



Paul Rd Pumps Rolling 12 Month Savings

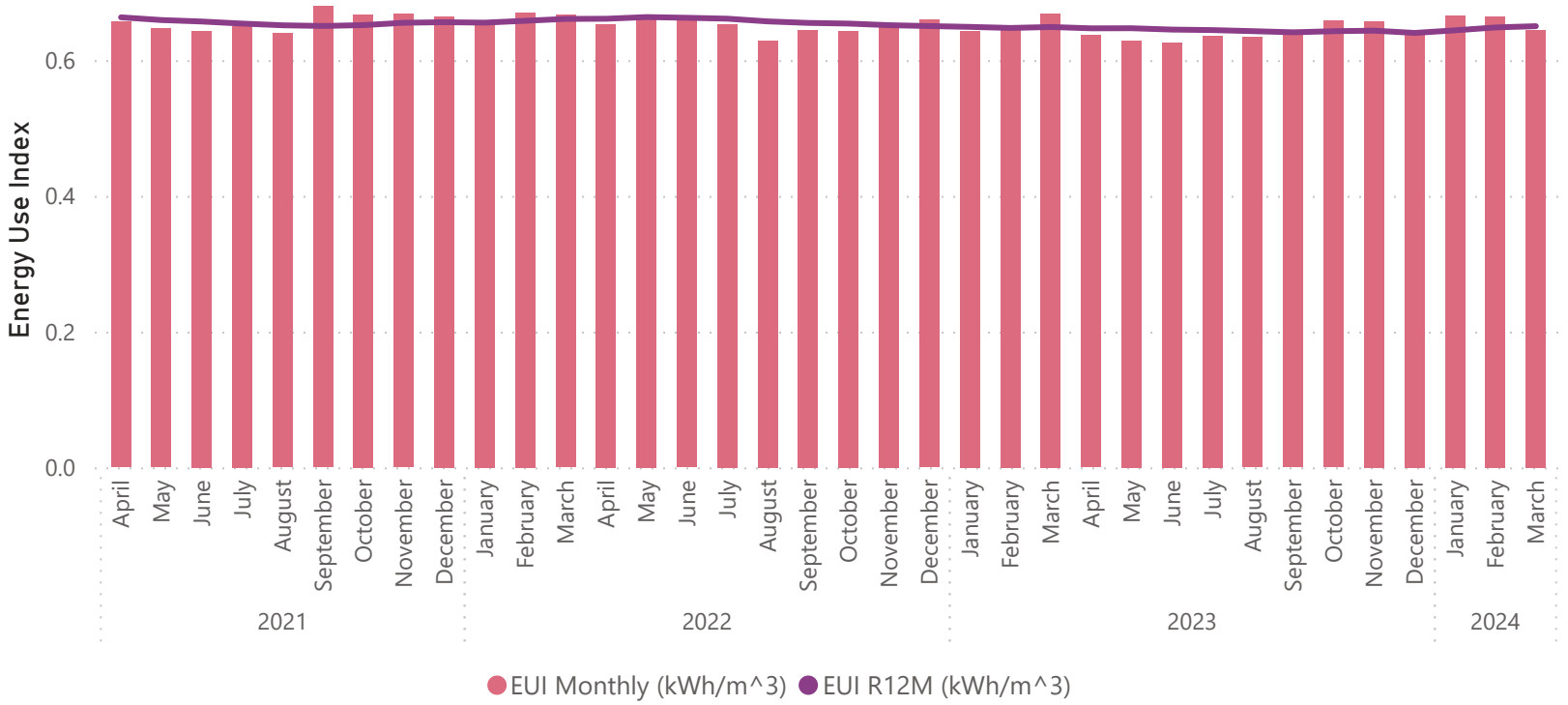


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Paul Road Pump Station

Paul Rd Pumps Energy Use Index by Month Compared to Rolling 12-Month Values



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
Baselines were updated for all sites from July 2022.

Whakatane District Council

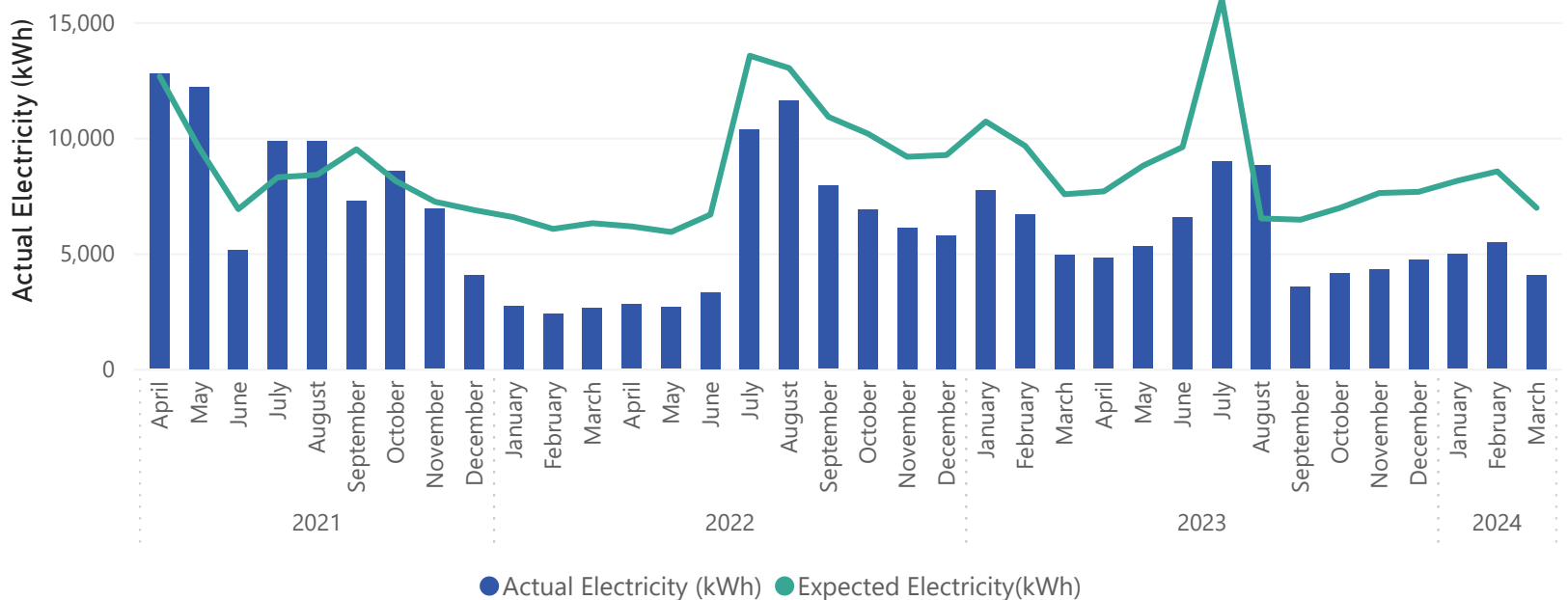
Johnson Road Pump Station

<p>\$647 Monthly Energy Cost Savings</p>	<p>2,911 Elec. Savings (kWh/mo)</p>	<p>42% Elec. Savings (%)</p>	<p>35,245 R12M Electricity Savings (kWh/yr)</p>	<p>241 CO2e Savings (kg/mo)</p>
<p>\$7,735 R12M Energy Cost Savings</p>				<p>2,918 R12M CO2e Savings (kg/yr)</p>

Comments:

Johnson Rd pump operates as part of a system that includes Braemar Rd. Because the Braemar Rd pumps are more efficient than Johnson Rd, an effort has been made to minimise the use of Johnson Rd.

Johnson Rd Pumps Electricity Use Compared to Baseline (kWh)

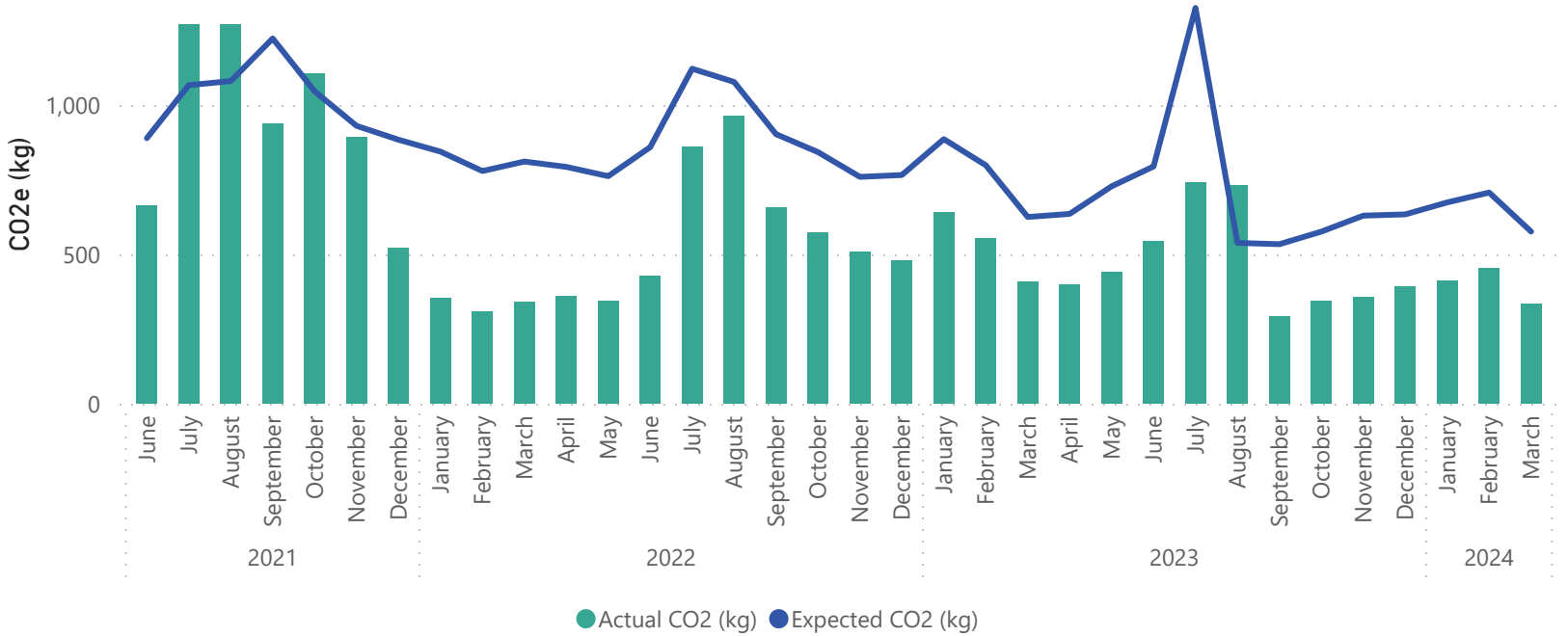


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

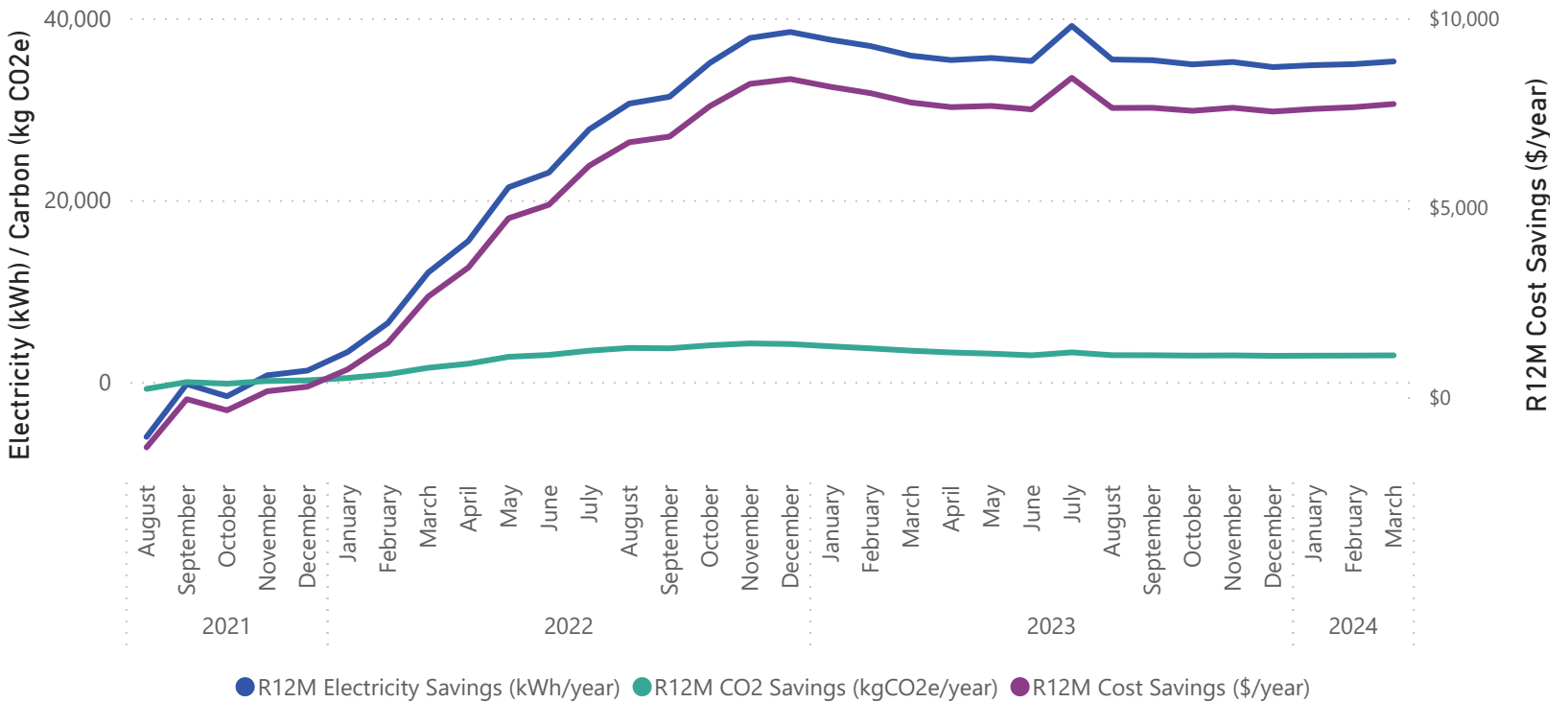
Whakatane District Council

Johnson Road Pump Station

Johnson Rd Pumps Carbon Emissions Compared to Baseline (kg CO2e)



Johnson Rd Pumps Rolling 12 Month Savings

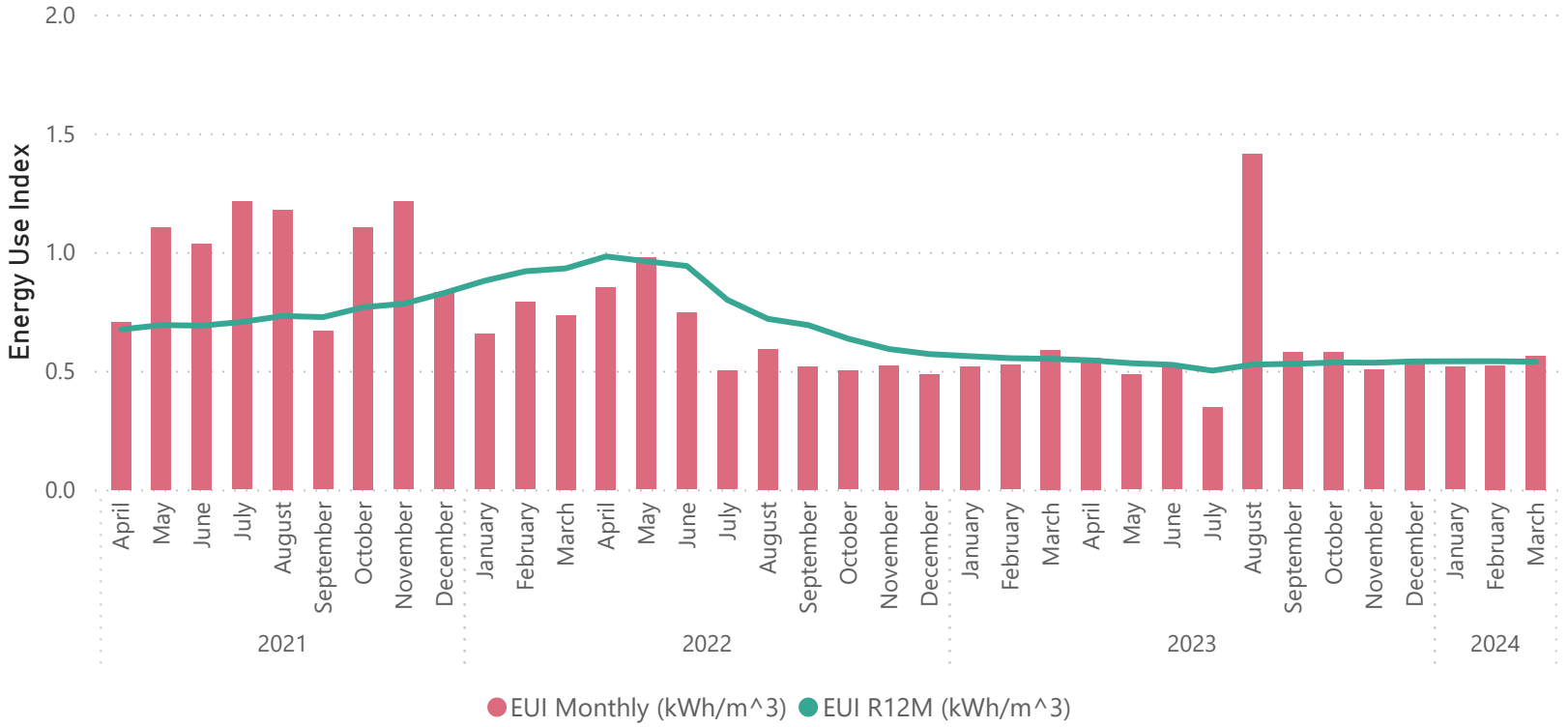


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Johnson Road Pump Station

Johnson Rd Pumps Energy Use Index by Month Compared to Rolling 12-Month Values



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Whakatane District Council

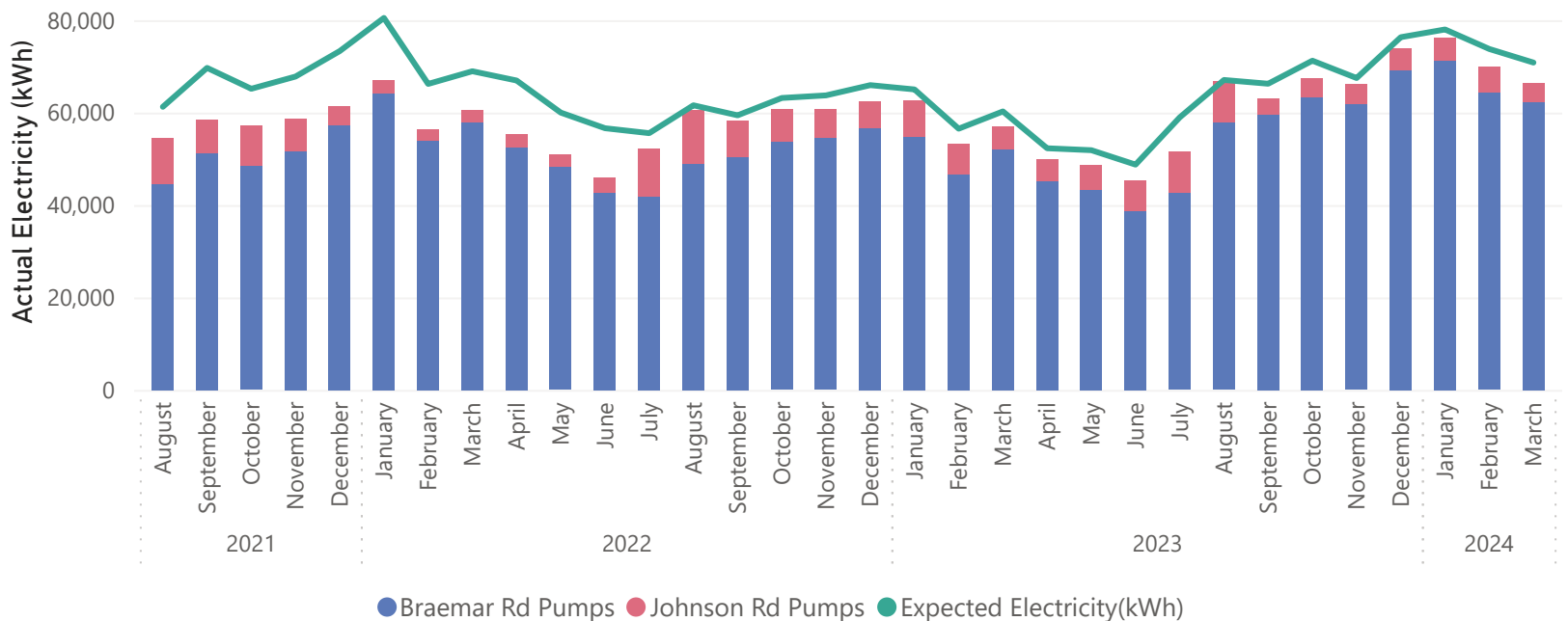
Johnson and Braemar Rd Pump Stations

<p>\$894</p> <p>Monthly Energy Cost Savings</p>	<p>4,500</p> <p>Elec. Savings (kWh/mo)</p>	<p>6%</p> <p>Elec. Savings (%)</p>	<p>37,542</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>373</p> <p>CO2e Savings (kg/mo)</p>
<p>\$8,236</p> <p>R12M Energy Cost Savings</p>				<p>3,108</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

Braemar Rd pump station has been re-baselined due to new pumping requirements from additional screens added, which has increased electricity use by approximately 24%.

Johnson and Braemar Rd Pump Stations Electricity Use Compared to Baseline (kWh)

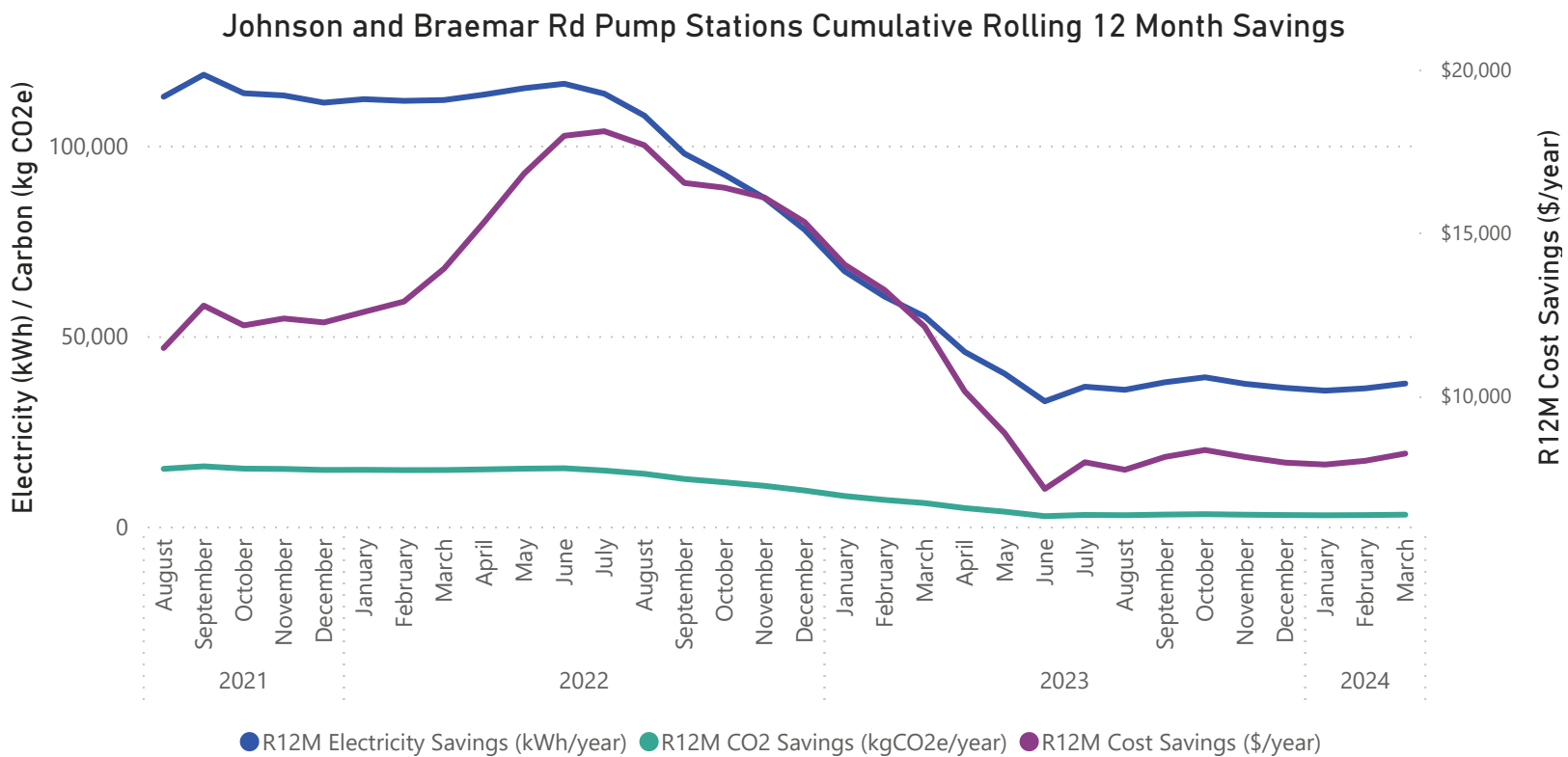
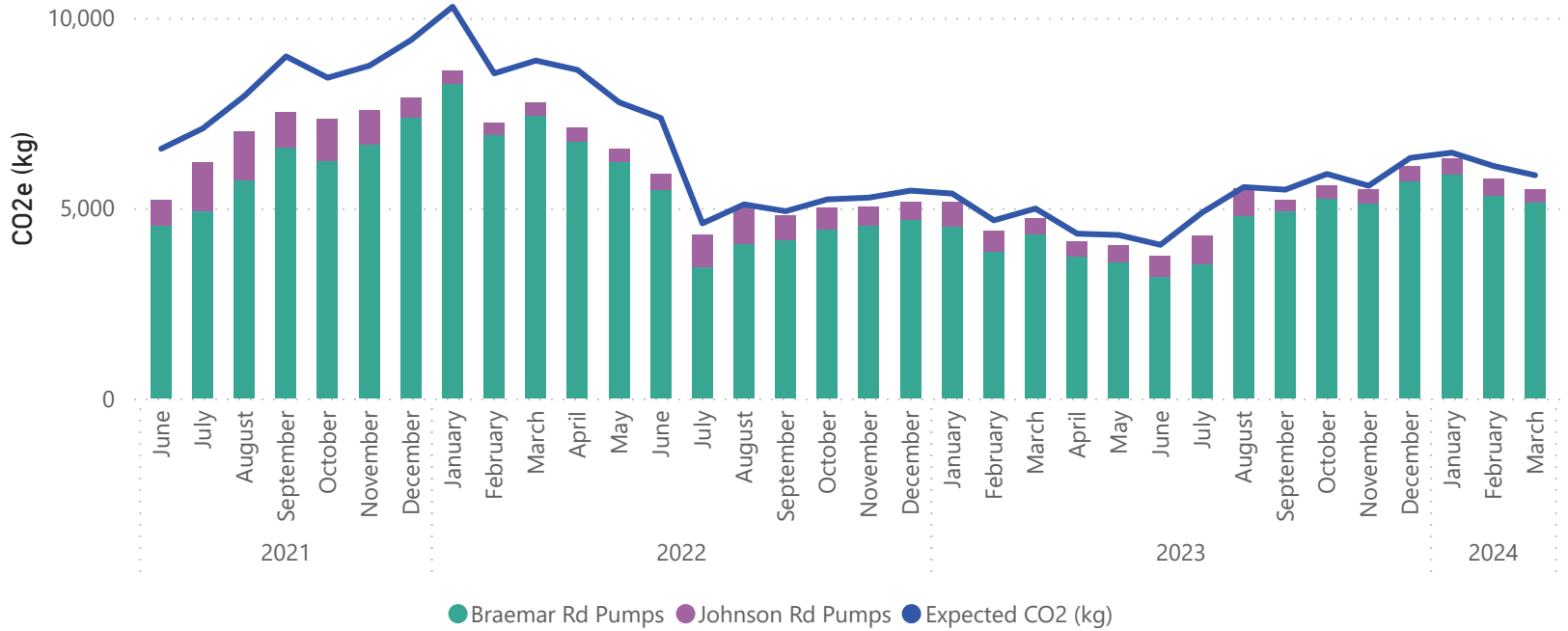


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Johnson and Braemar Rd Pump Stations

Johnson and Braemar Rd Pump Stations Carbon Emissions Compared to Baseline (kWh)

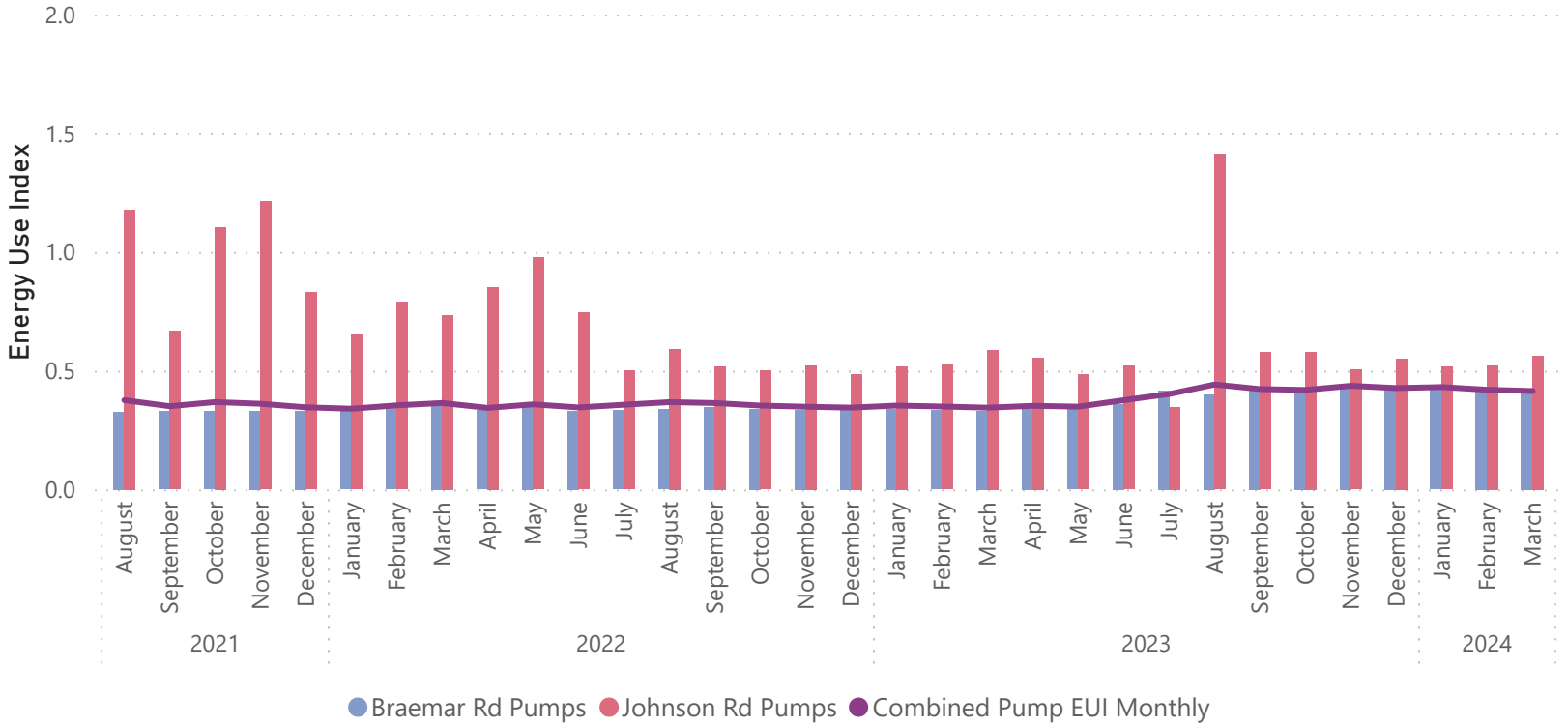


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Johnson and Braemar Rd Pump Stations

Johnson and Braemar Rd Pump Stations Energy Use Index by Month



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
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Whakatane District Council

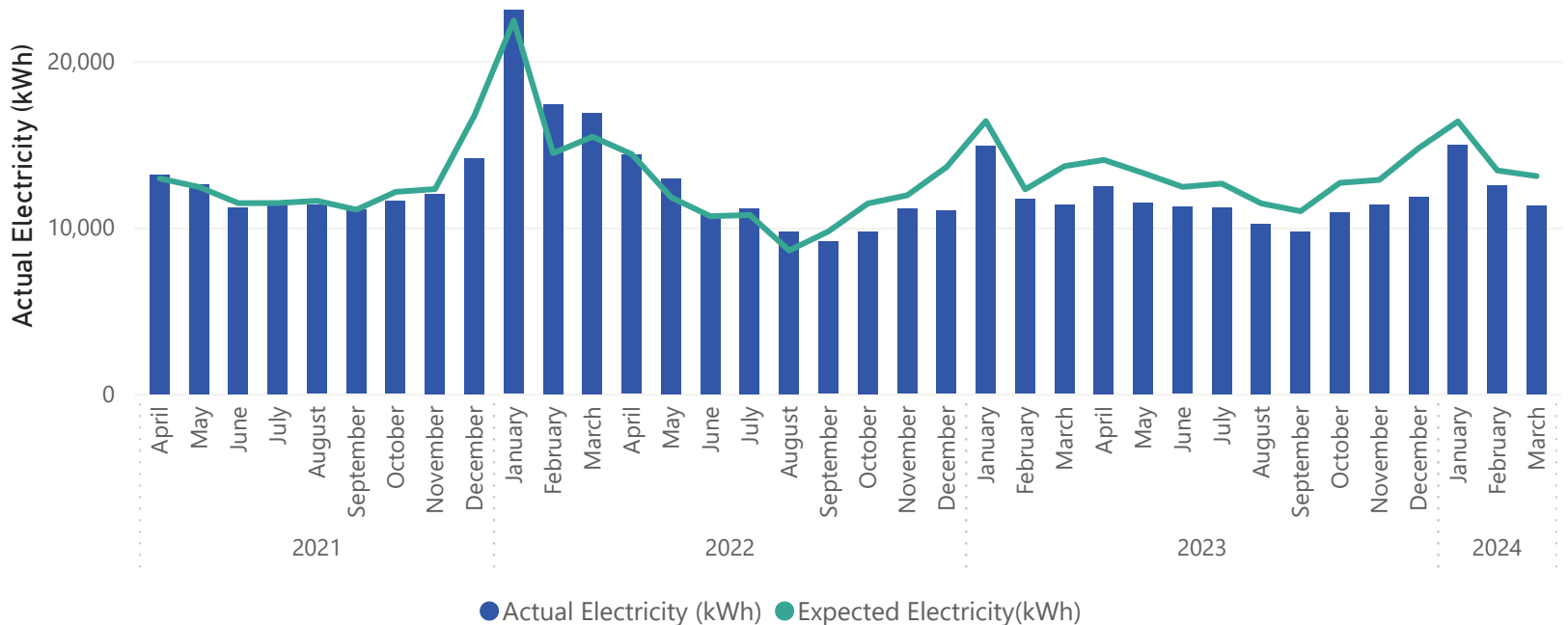
Bridger Glade Pump Station

<p>\$314 Monthly Energy Cost Savings</p>	<p>1,773 Elec. Savings (kWh/mo)</p>	<p>14% Elec. Savings (%)</p>	<p>18,751 R12M Electricity Savings (kWh/yr)</p>	<p>147 CO2e Savings (kg/mo)</p>
<p>\$3,316 R12M Energy Cost Savings</p>				<p>1,553 R12M CO2e Savings (kg/yr)</p>

Comments:

Bridger Glade Pump Station has shown savings of approximately 15% each month since new pumps were installed late in 2022. The overall efficiency of the pumps is poorer than would be expected. Further work is needed to determine if the pumps are operating near their Best Efficiency Point (BEP).

Bridger Glade Pumps Electricity Use Compared to Baseline (kWh)

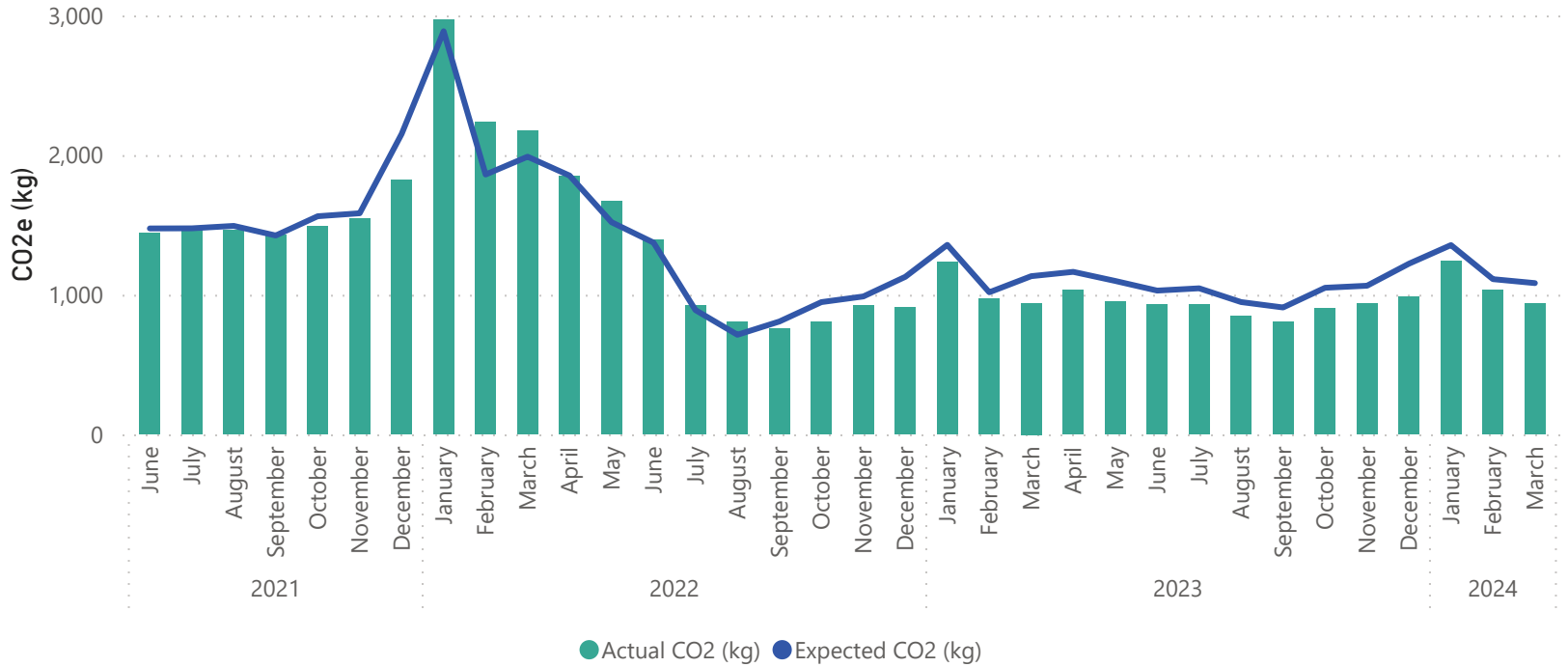


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

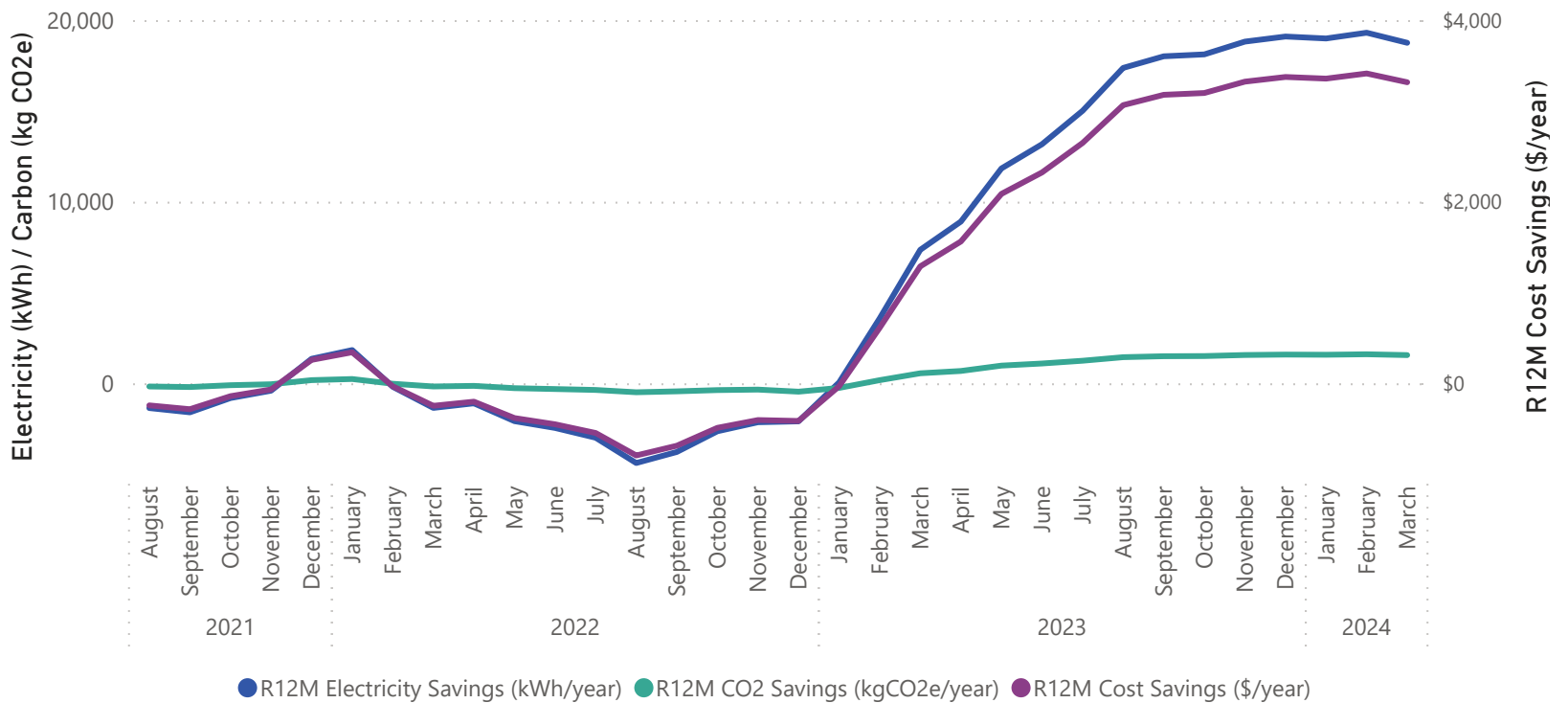
Whakatane District Council

Bridger Glade Pump Station

Bridger Glade Pumps Carbon Emissions Compared to Baseline (kg CO2e)



Bridger Glade Pumps Rolling 12 Month Savings

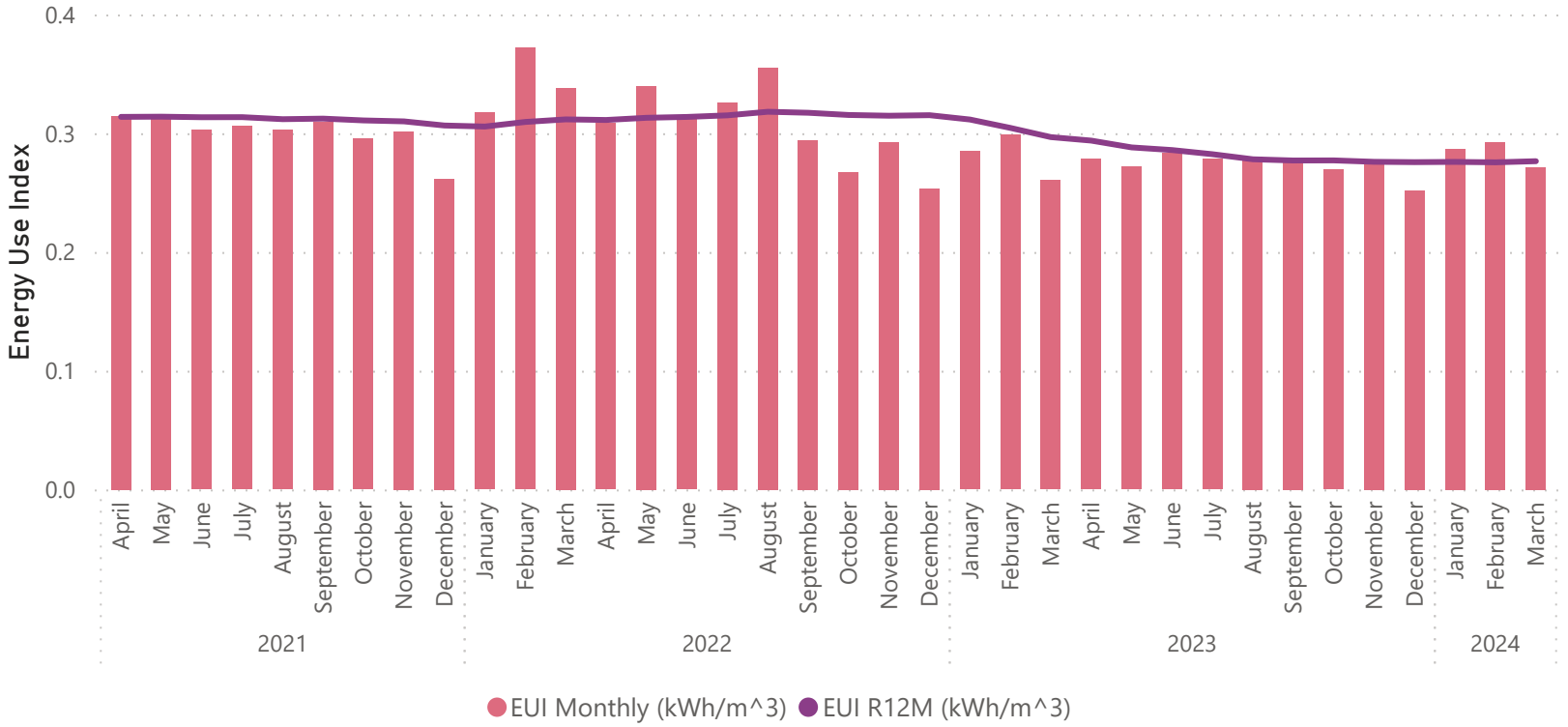


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Bridger Glade Pump Station

Bridger Glade Pumps Energy Use Index by Month Compared to Rolling 12-Month Values



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
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Whakatane District Council

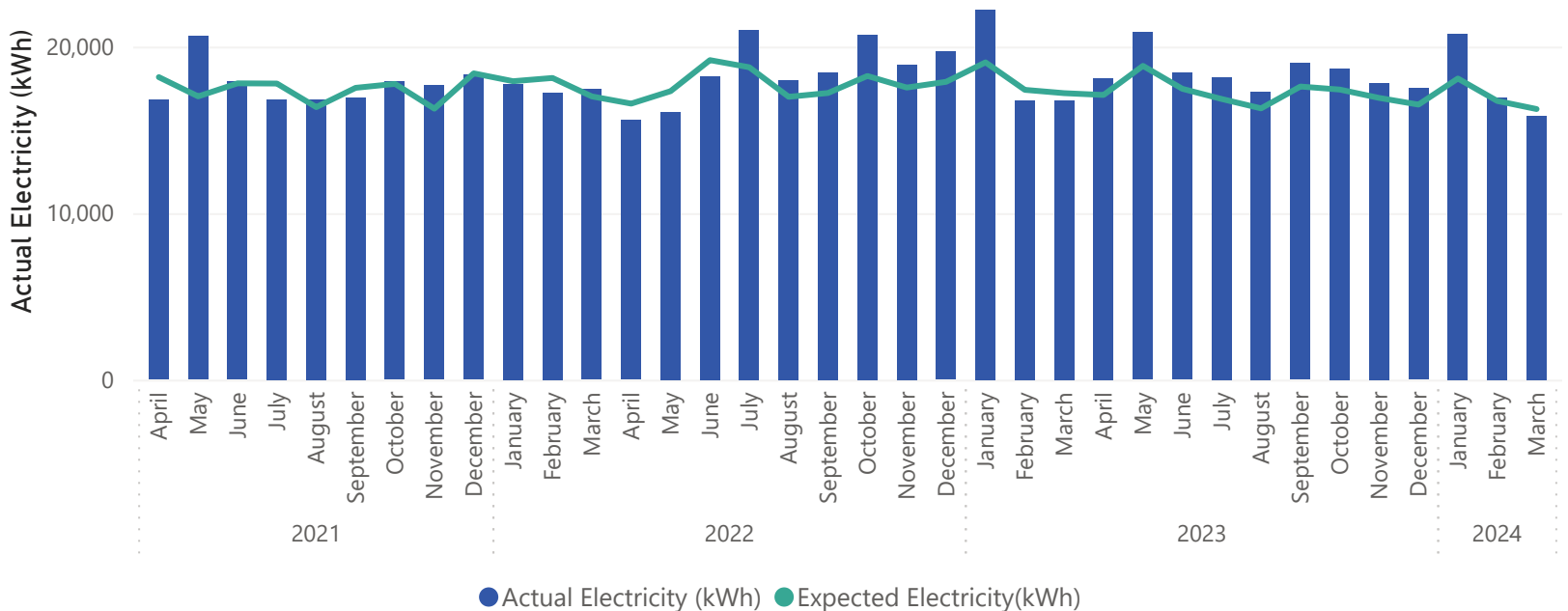
Ohope Oxidation Ponds

<p>\$71 Monthly Energy Cost Savings</p>	<p>392 Elec. Savings (kWh/mo)</p>	<p>2% Elec. Savings (%)</p>	<p>-13,267 R12M Electricity Savings (kWh/yr)</p>	<p>32 CO2e Savings (kg/mo)</p>
<p>-\$2,370 R12M Energy Cost Savings</p>				<p>-1,098 R12M CO2e Savings (kg/yr)</p>

Comments:

Electricity used by the Ohope oxidation ponds in March was the lowest for any month since April 2022. This coincided with lower effluent volume, however was the first time in 12 months that electricity use was below baseline.

Ohope Oxidation Ponds Electricity Use Compared to Baseline (kWh)

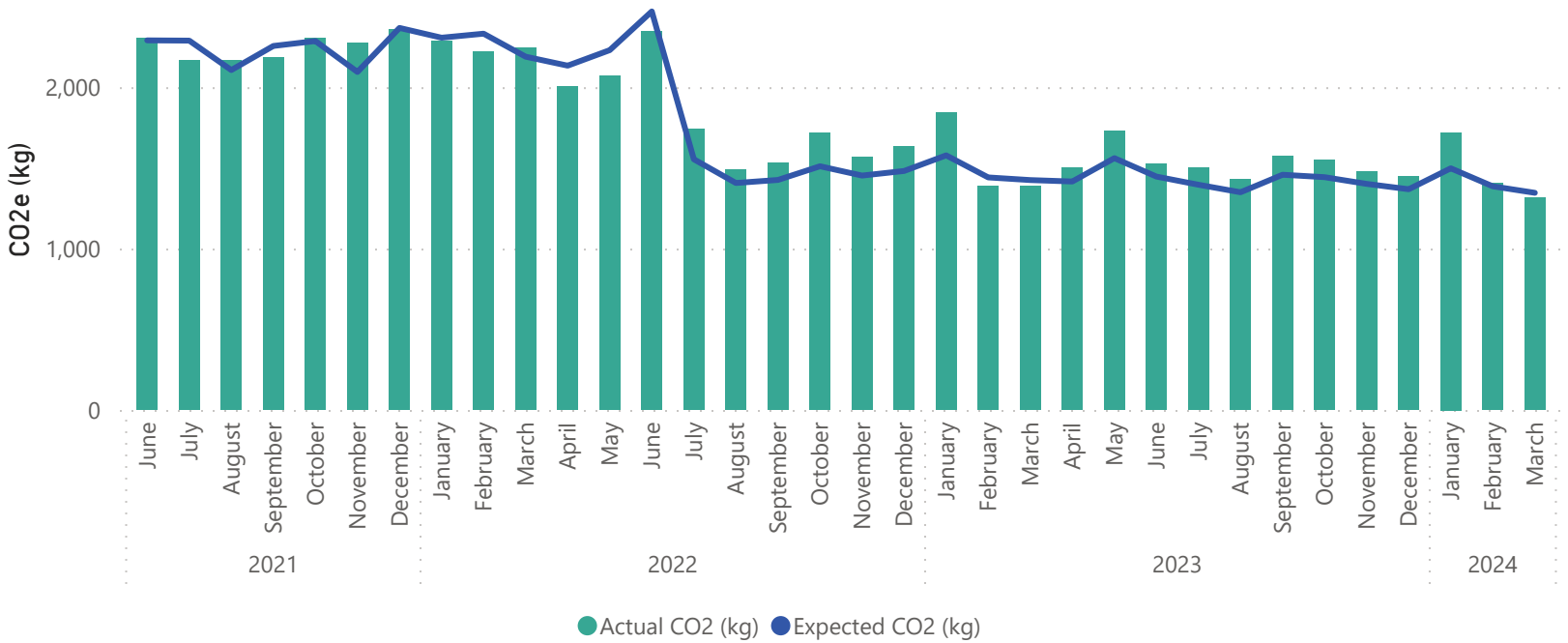


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

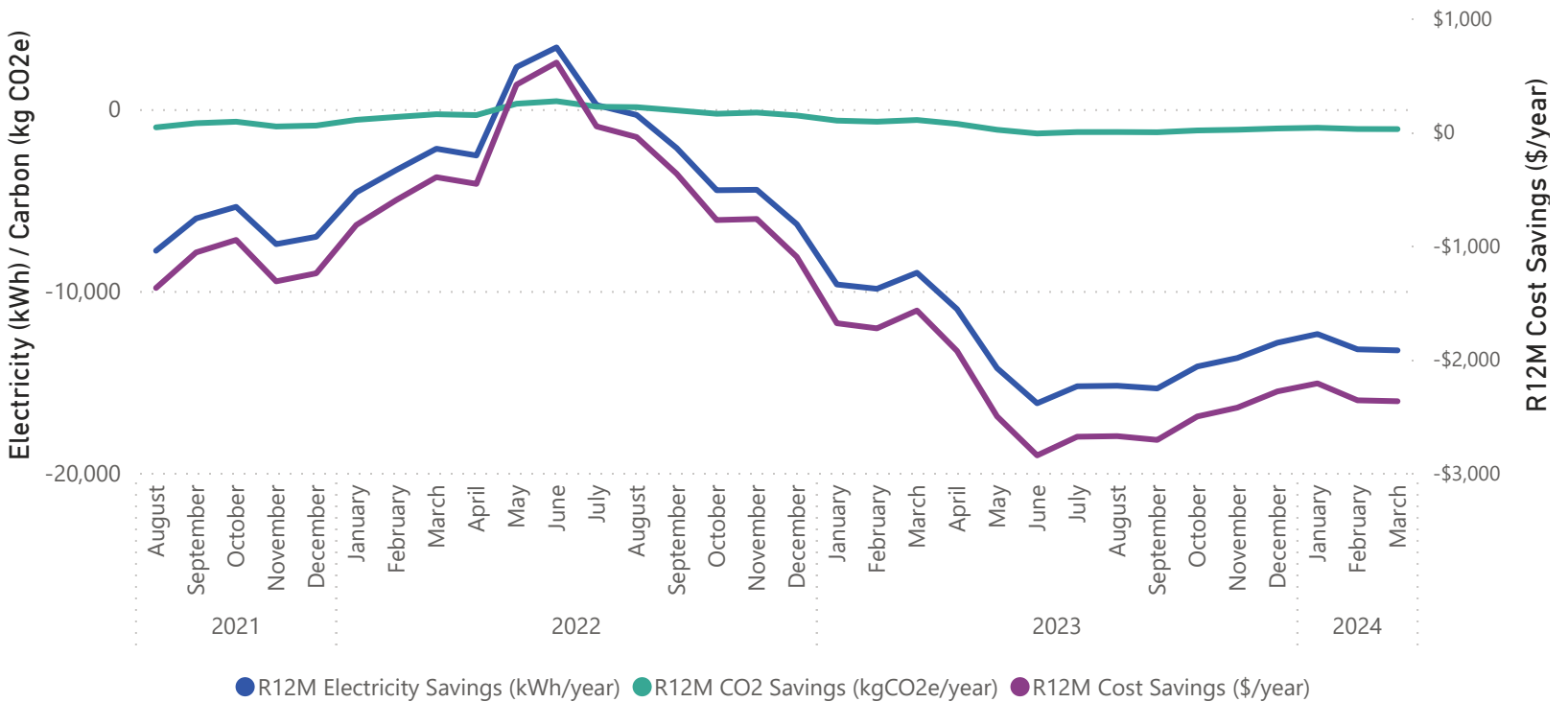
Whakatane District Council

Ohope Oxidation Ponds

Ohope Oxidation Ponds Carbon Emissions Compared to Baseline (kg CO2e)



Ohope Oxidation Ponds Rolling 12 Month Savings

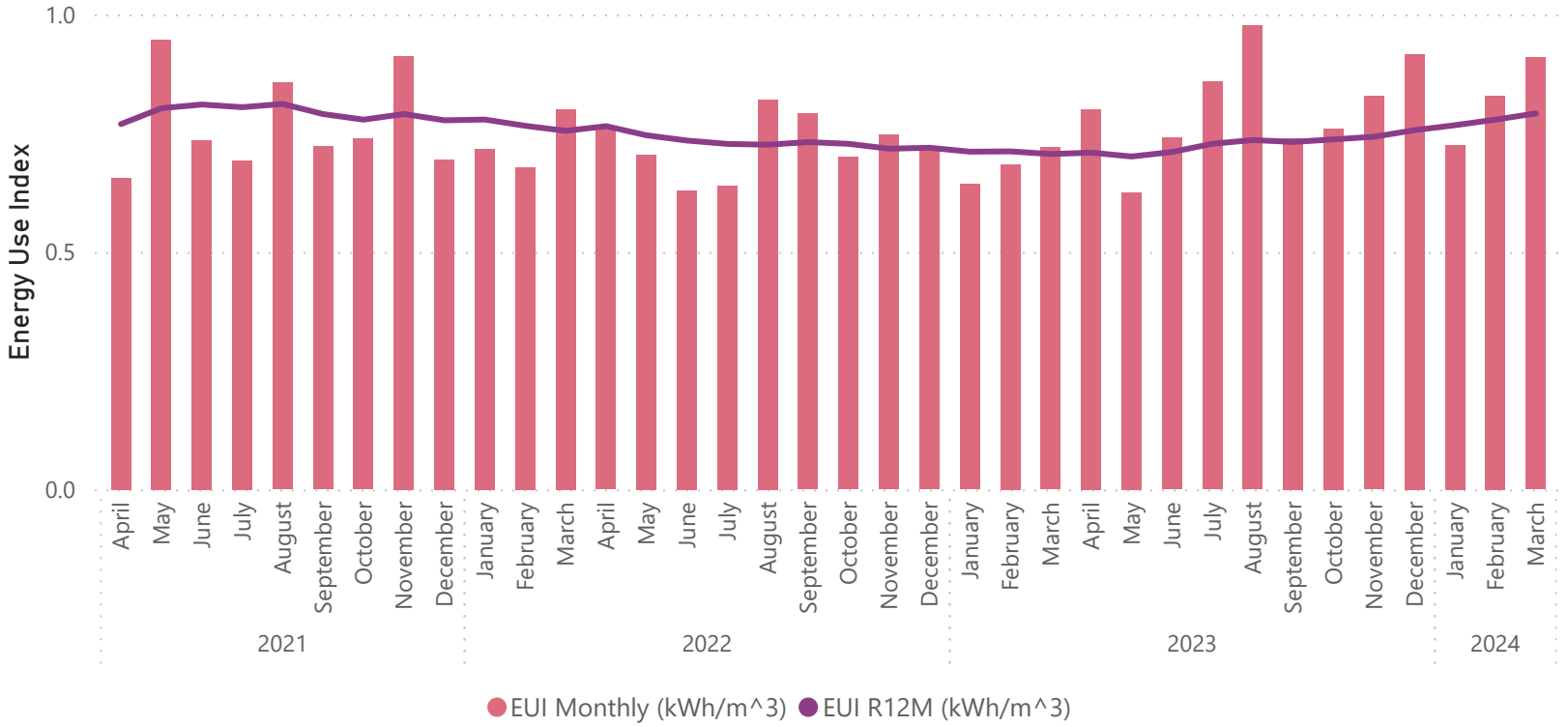


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Ohope Oxidation Ponds

Ohope Oxidation Ponds Energy Use Index by Month Compared to Rolling 12-Month Values



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Whakatane District Council

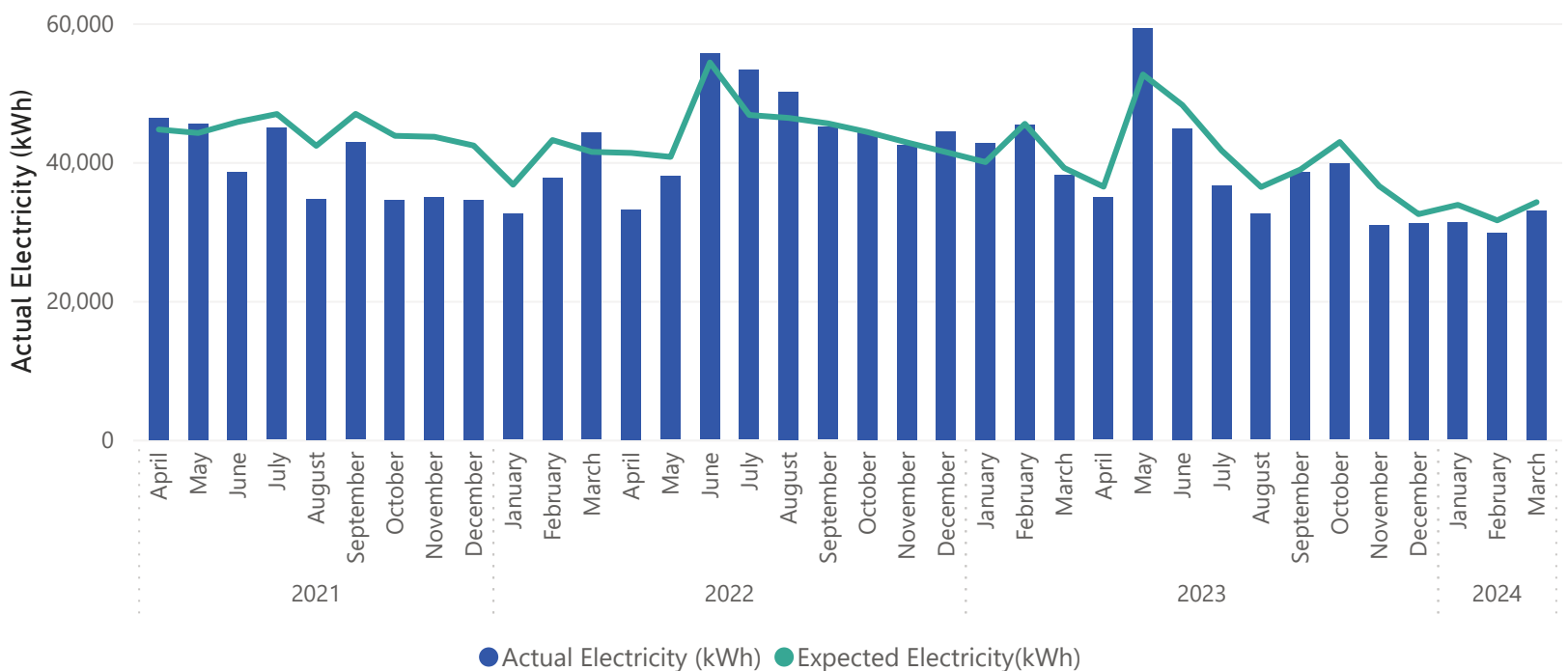
Whakatane Oxidation Ponds

<p>\$790 Monthly Energy Cost Savings</p>	<p>1,216 Elec. Savings (kWh/mo)</p>	<p>4% Elec. Savings (%)</p>	<p>23,187 R12M Electricity Savings (kWh/yr)</p>	<p>101 CO2e Savings (kg/mo)</p>
<p>\$4,779 R12M Energy Cost Savings</p>				<p>1,920 R12M CO2e Savings (kg/yr)</p>

Comments:

Electricity used and effluent treated by the Whakatane Oxidation Ponds has been trending down on average for the past 18 months. Electricity use has been below baseline for eleven of the past 12 months, including a 4% saving compared to baseline in March.

Whakatane Oxidation Ponds Electricity Use Compared to Baseline (kWh)

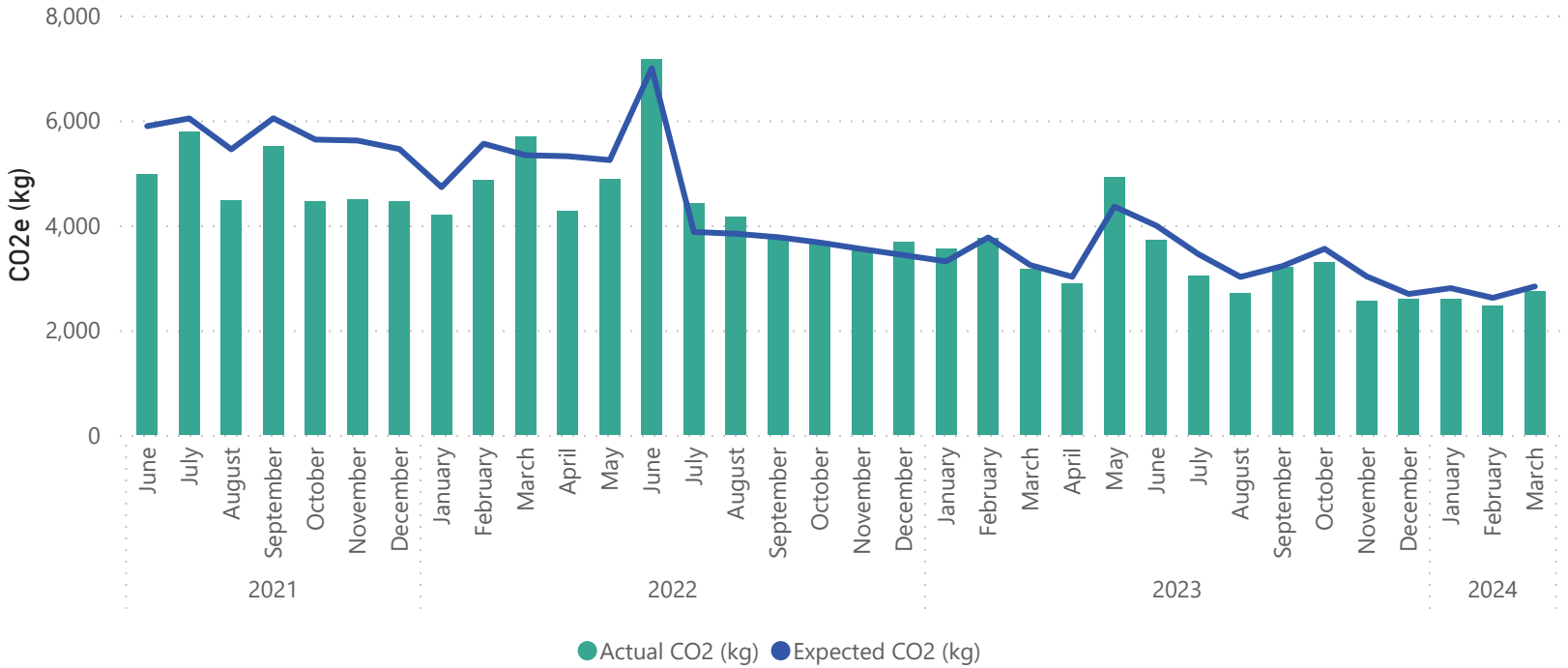


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

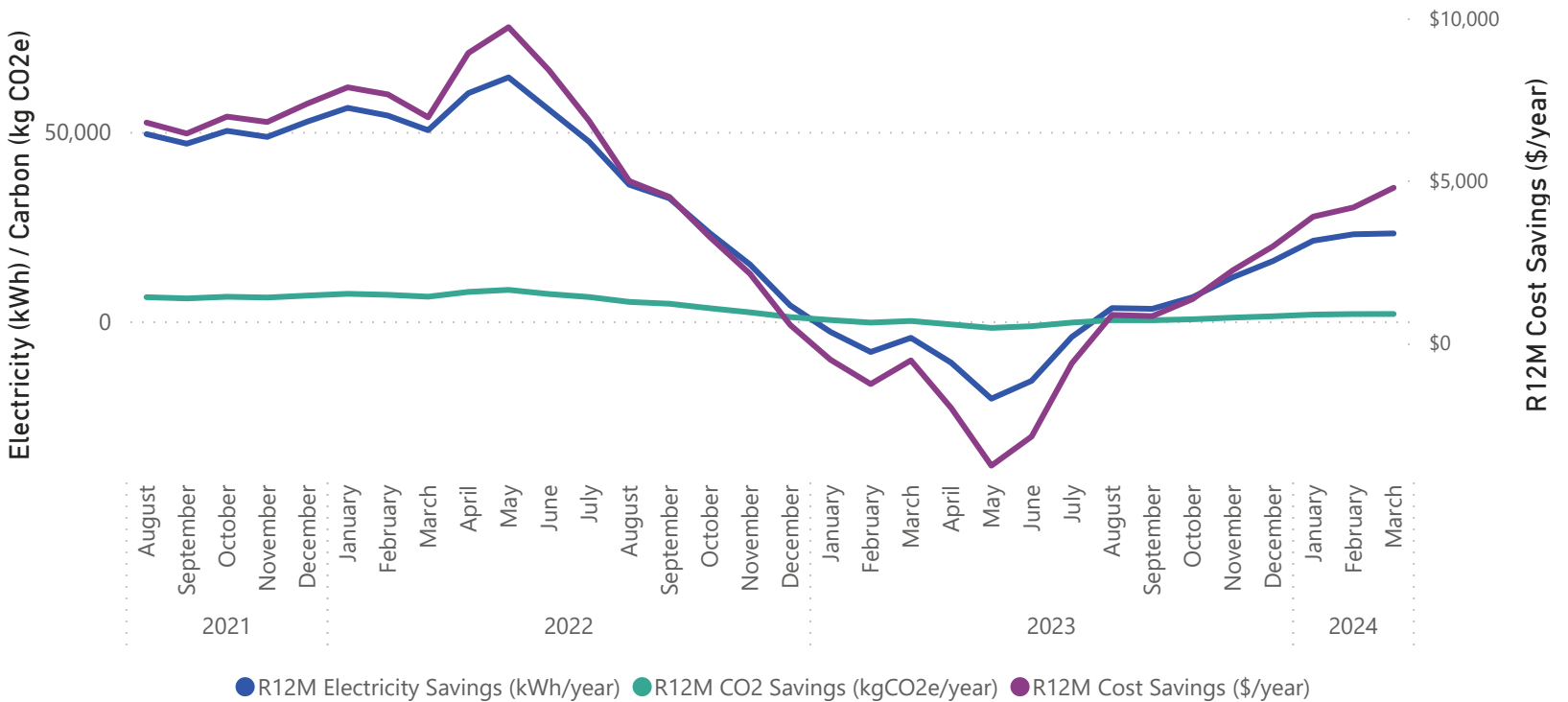
Whakatane District Council

Whakatane Oxidation Ponds

Whakatane Oxidation Ponds Carbon Emissions Compared to Baseline (kg CO2e)



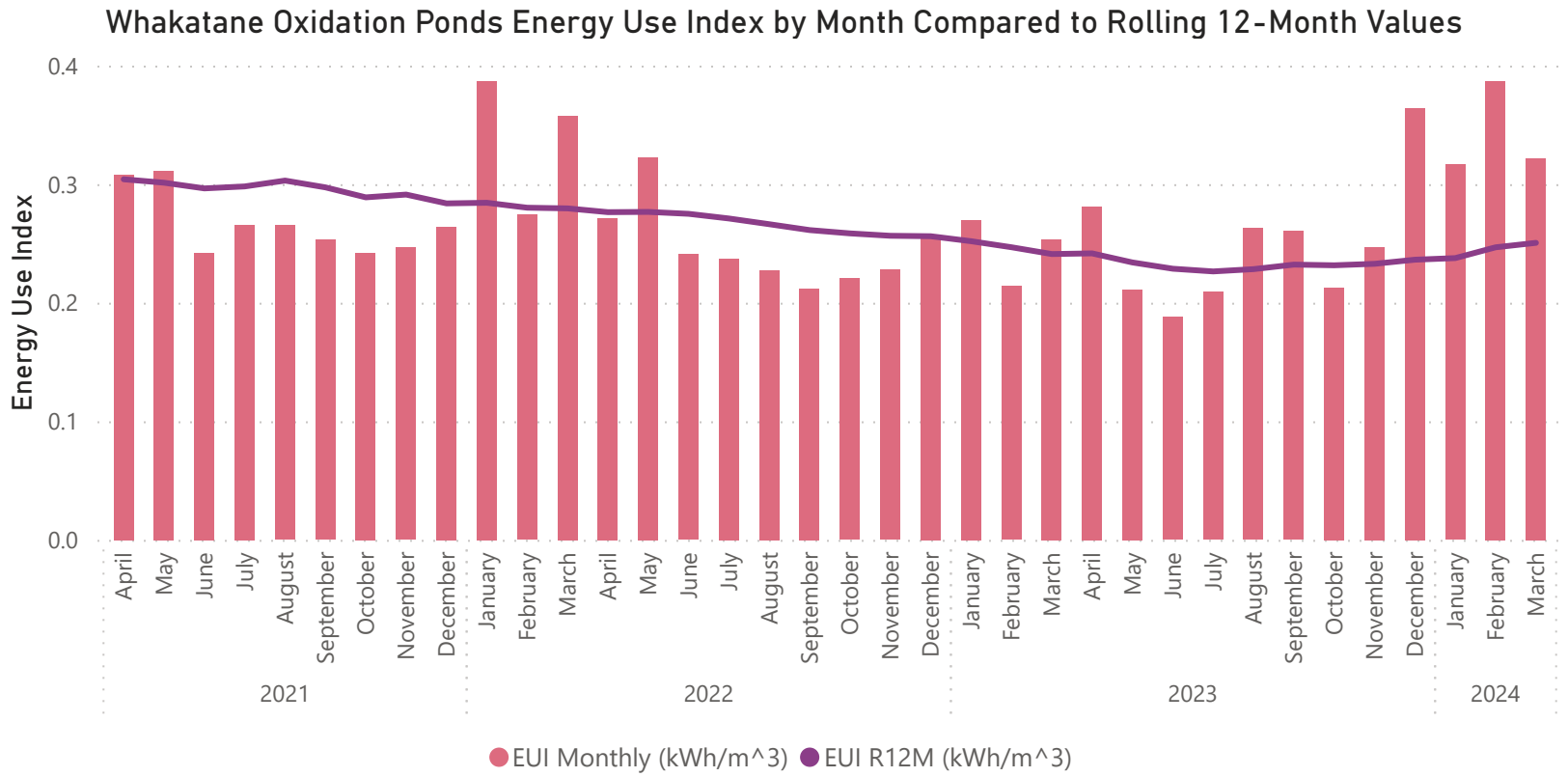
Whakatane Oxidation Ponds Rolling 12 Month Savings



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 **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Whakatane Oxidation Ponds



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Whakatane District Council

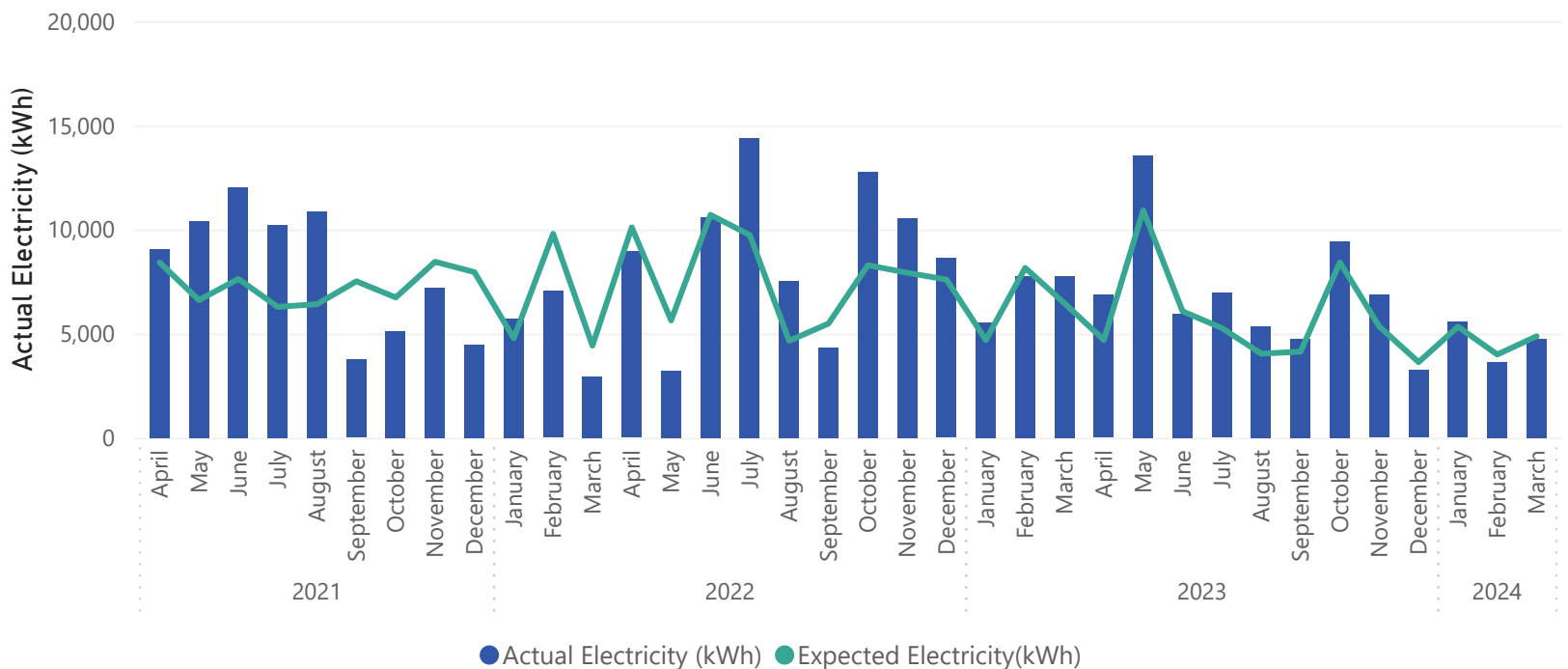
McAlister Street and Rose Garden Pump Stations

<p>\$207 Monthly Energy Cost Savings</p>	<p>128 Elec. Savings (kWh/mo)</p>	<p>3% Elec. Savings (%)</p>	<p>-10,173 R12M Electricity Savings (kWh/yr)</p>	<p>11 CO2e Savings (kg/mo)</p>
<p>\$1,187 R12M Energy Cost Savings</p>				<p>-842 R12M CO2e Savings (kg/yr)</p>

Comments:

McAlister Street and Rose Garden pump stations are part of a common system and are combined for energy monitoring. Electricity use is compared to a baseline using rainfall for the billing period. Electricity use was 3% below baseline overall in March.

McAlister and Rose Garden Pumps Electricity Use Compared to Baseline (kWh)

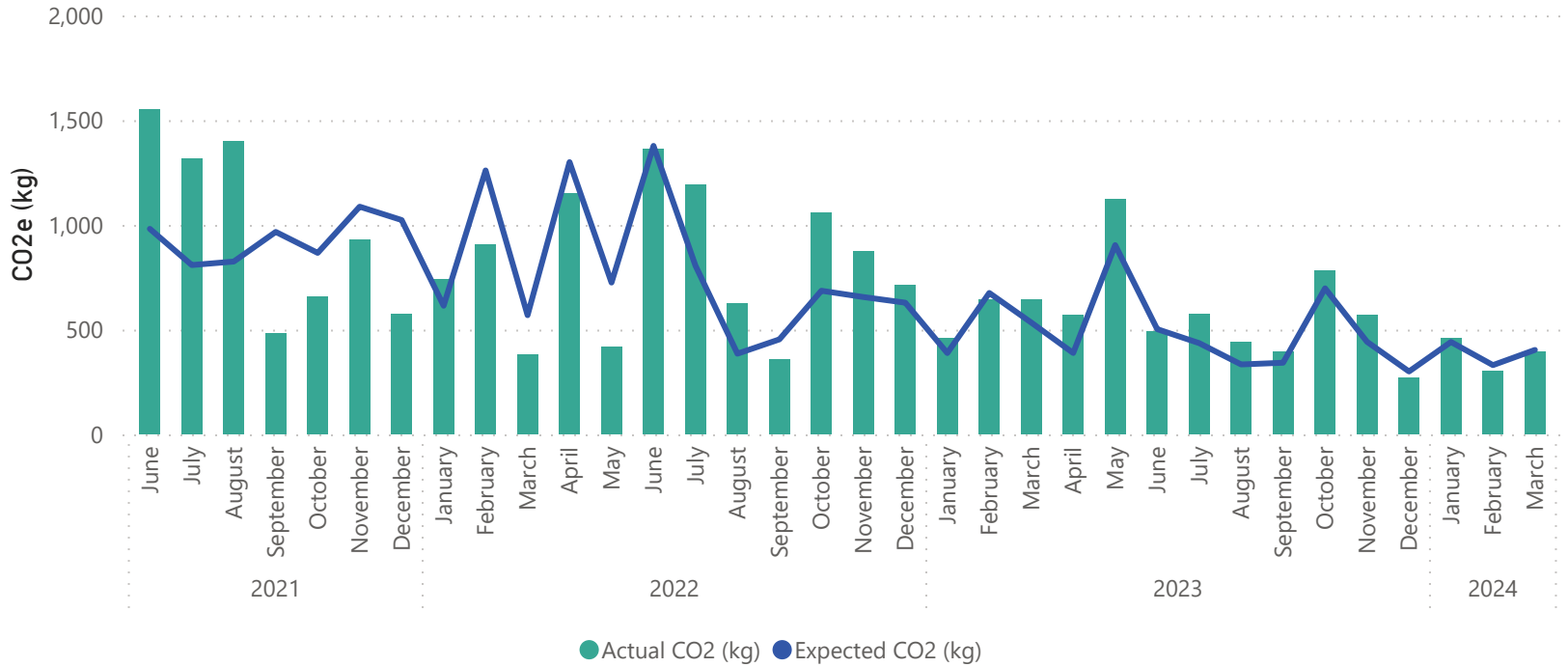


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

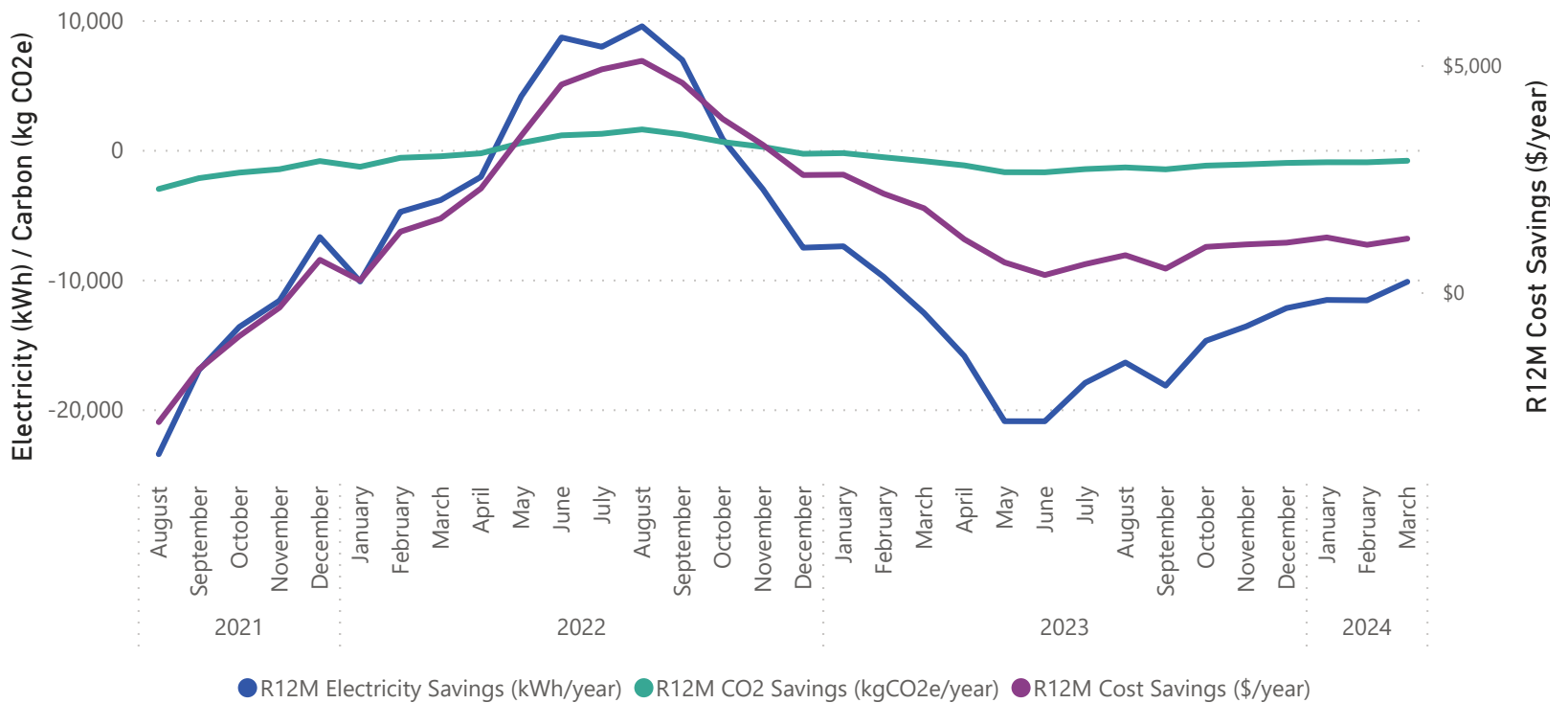
Whakatane District Council

McAlister Street and Rose Garden Pump Stations

McAlister and Rose Garden Pumps Carbon Emissions Compared to Baseline (kg CO2e)



McAlister and Rose Garden Pumps Rolling 12 Month Savings



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 **Baselines were updated for all sites from July 2022.**

Whakatane District Council

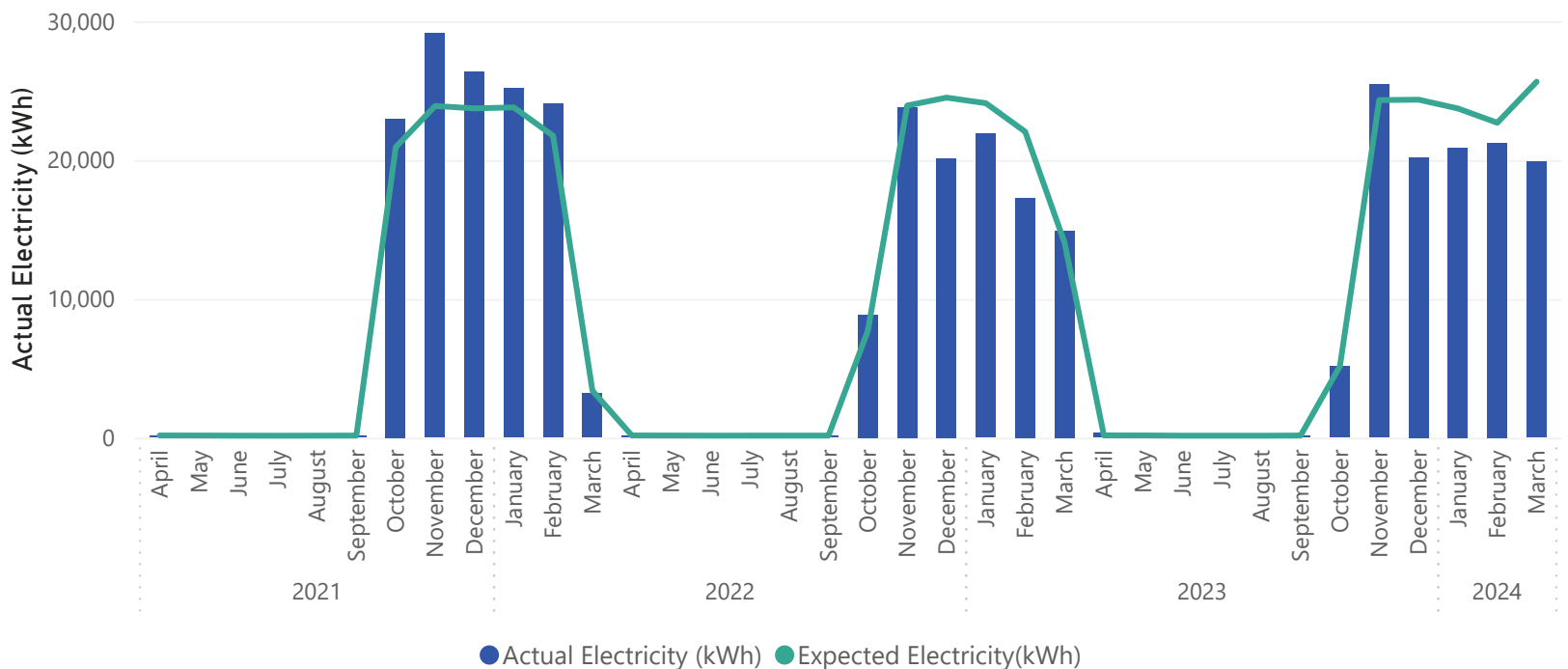
Murupara Pools

<p>\$965 Monthly Energy Cost Savings</p>	<p>5,769 Elec. Savings (kWh/mo)</p>	<p>22% Elec. Savings (%)</p>	<p>12,986 R12M Electricity Savings (kWh/yr)</p>	<p>478 CO2e Savings (kg/mo)</p>
<p>\$2,093 R12M Energy Cost Savings</p>				<p>1,075 R12M CO2e Savings (kg/yr)</p>

Comments:

Murupara Pools have used less electricity than expected overall this season, largely due to new pool covers that reduce evaporation and heat loss overnight. In the past two seasons, the pools have closed early or mid march. This year the pools were open to the end of March. Expected electricity increased in March due to cooler ambient temperature, however actual electricity went down slightly and was 22% below baseline for the month.

Murupara Pools Electricity Use Compared to Baseline (kWh)

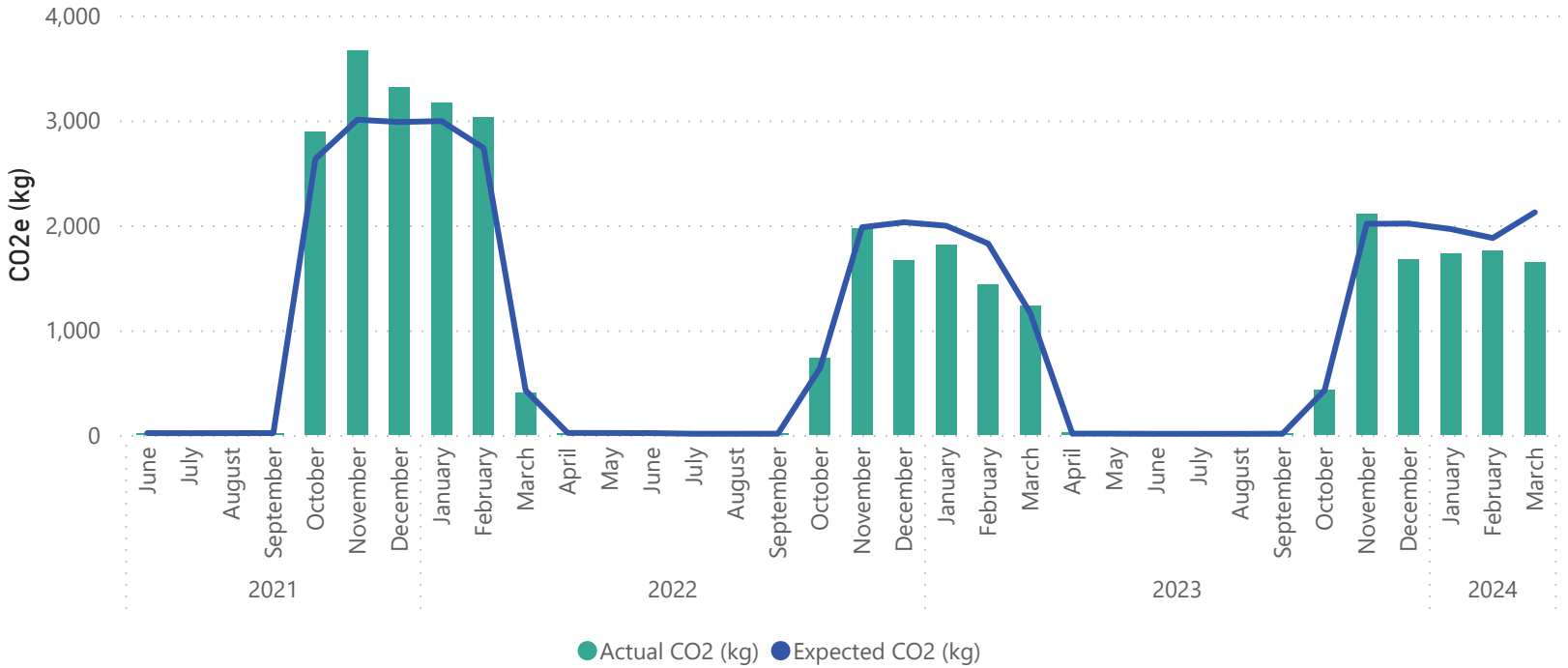


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

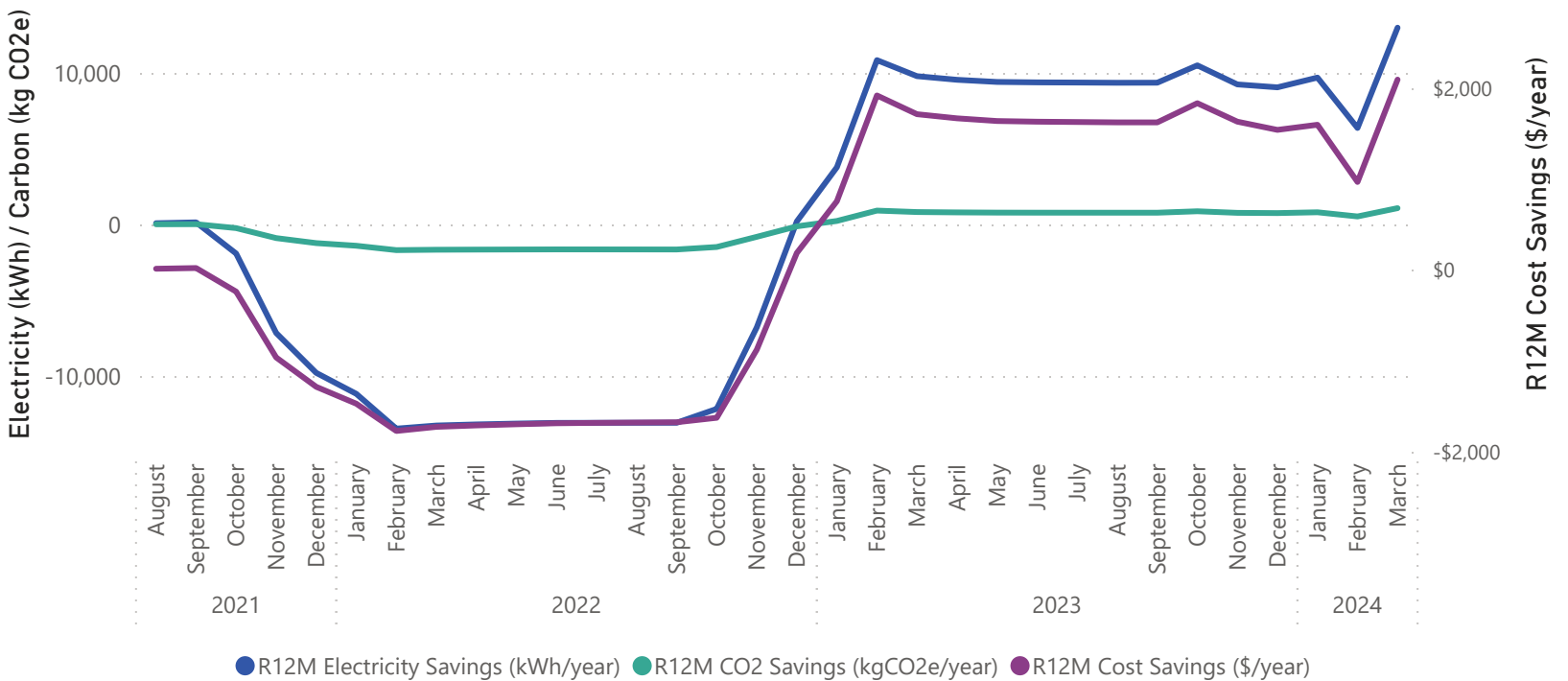
Whakatane District Council

Murupara Pools

Murupara Pools Carbon Emissions Compared to Baseline (kg CO2e)



Murupara Pools Rolling 12 Month Savings



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