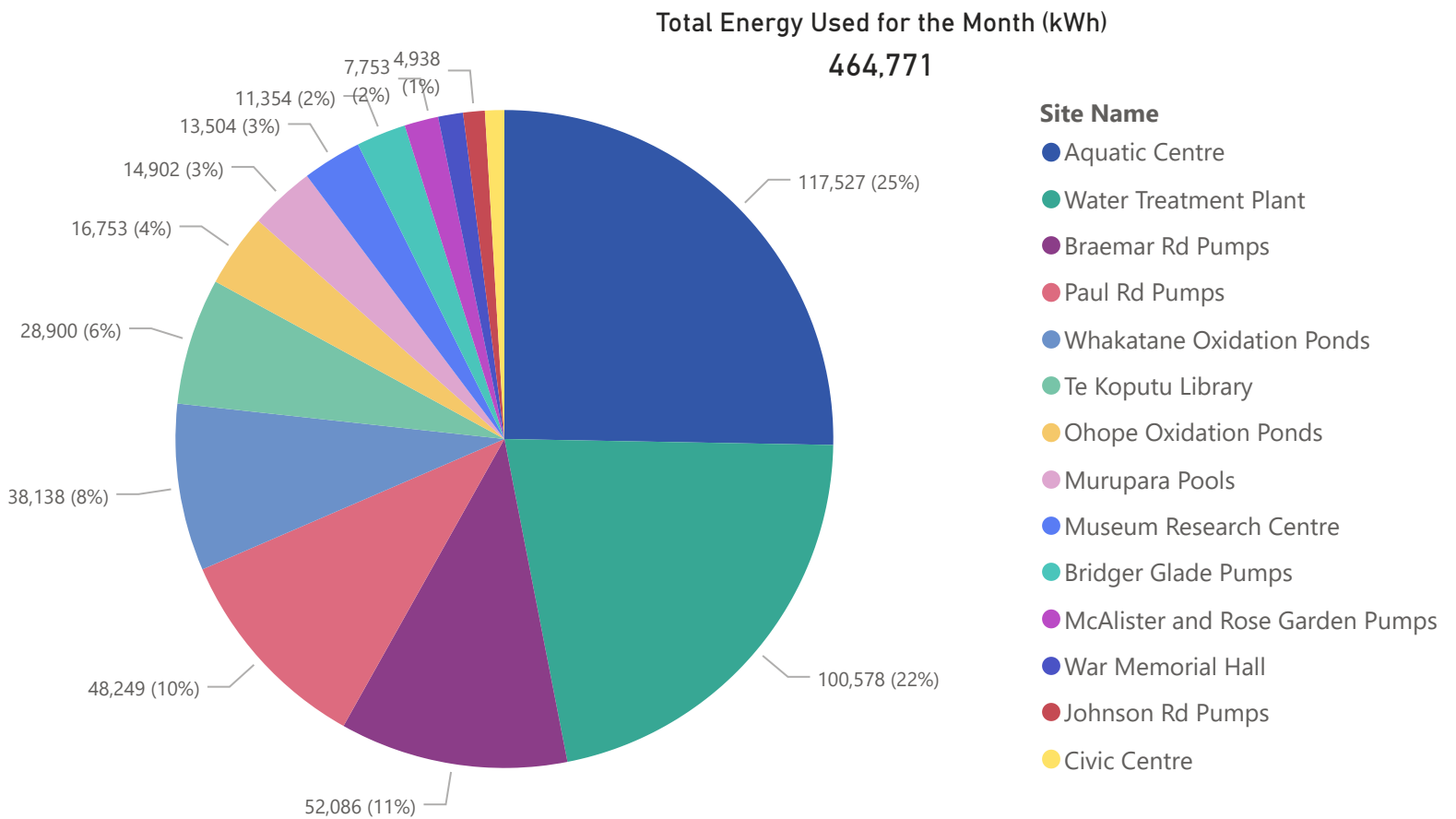


Whakatane District Council

Summary

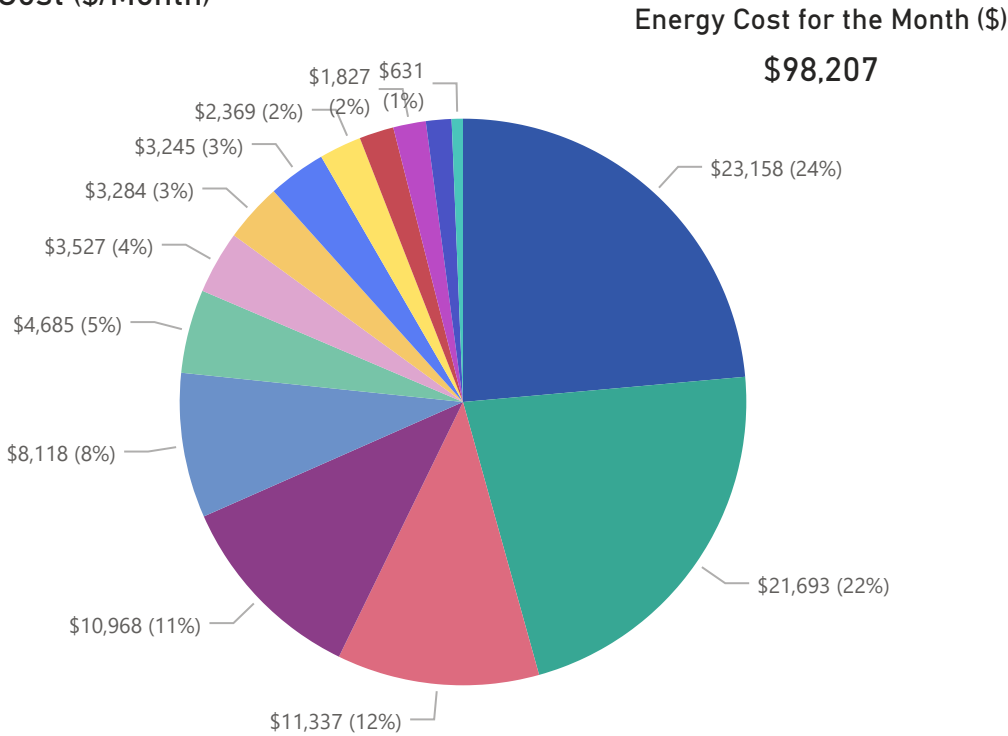
<p>\$13,621</p> <p>Monthly Energy Cost Savings</p>	<p>66,343</p> <p>Elec. Savings (kWh/mo)</p>	<p>13%</p> <p>Elec. Savings (%)</p>	<p>469,877</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>12,406</p> <p>CO2e Savings (kg/mo)</p>
<p>\$133,287</p> <p>R12M Energy Cost Savings</p>	<p>17,947</p> <p>Gas. Savings (kWh/mo)</p>	<p>50%</p> <p>Gas. Savings (%)</p>	<p>557,431</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>182,494</p> <p>R12M CO2e Savings (kg/yr)</p>

Total Energy (kWh/Month)



Whakatane District Council Summary

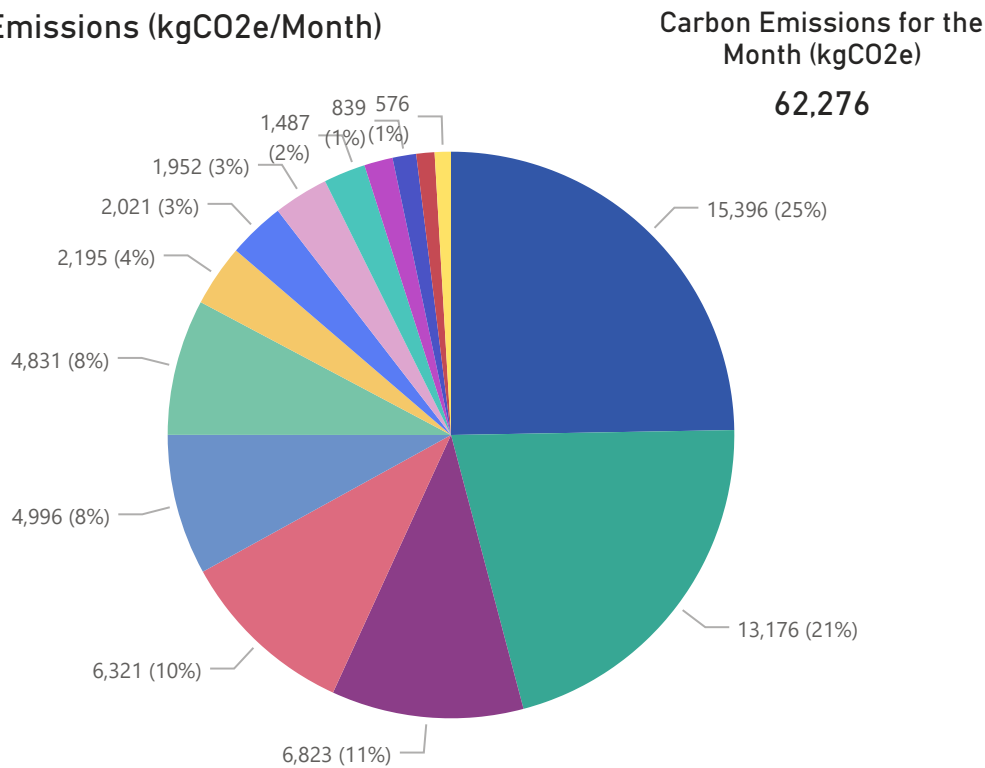
Energy Cost (\$/Month)



Site Name

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

Carbon Emissions (kgCO2e/Month)



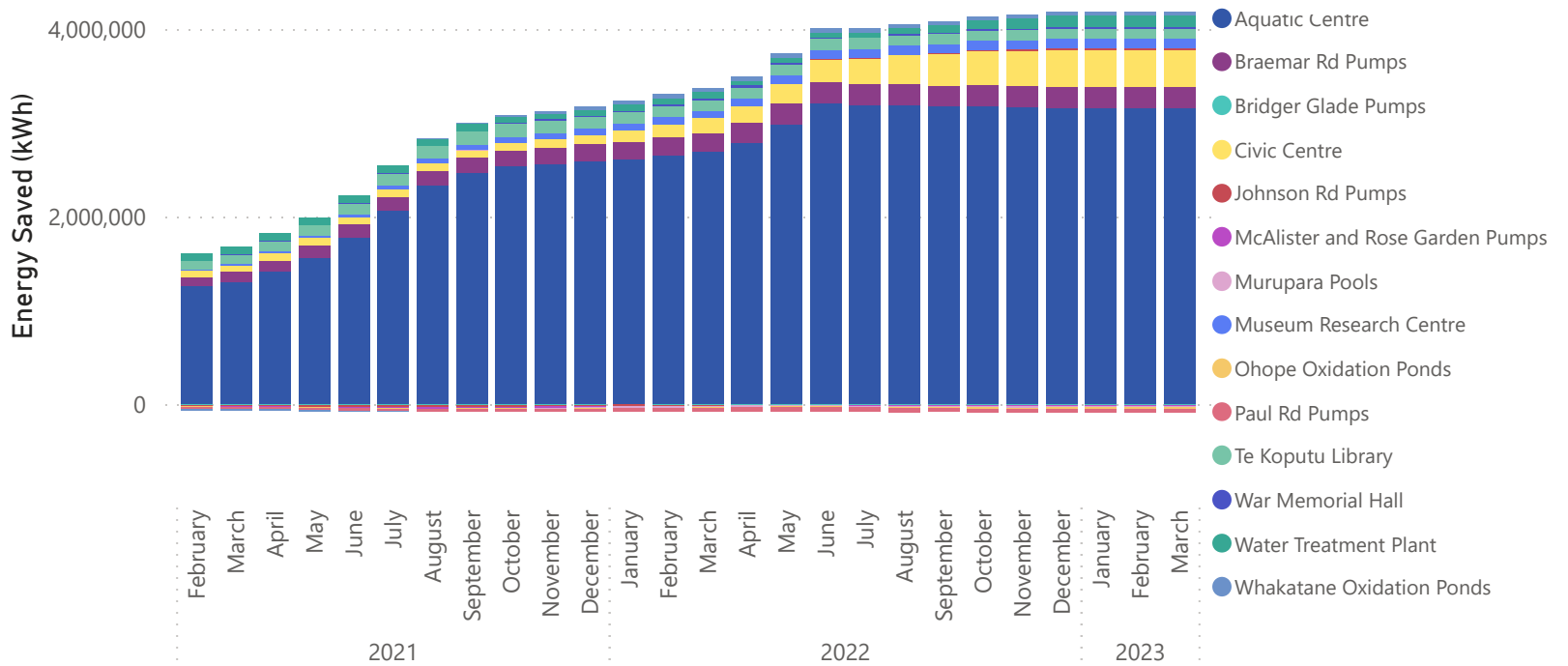
Site Name

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

Whakatane District Council

Summary

Cumulative Energy Savings (kWh)



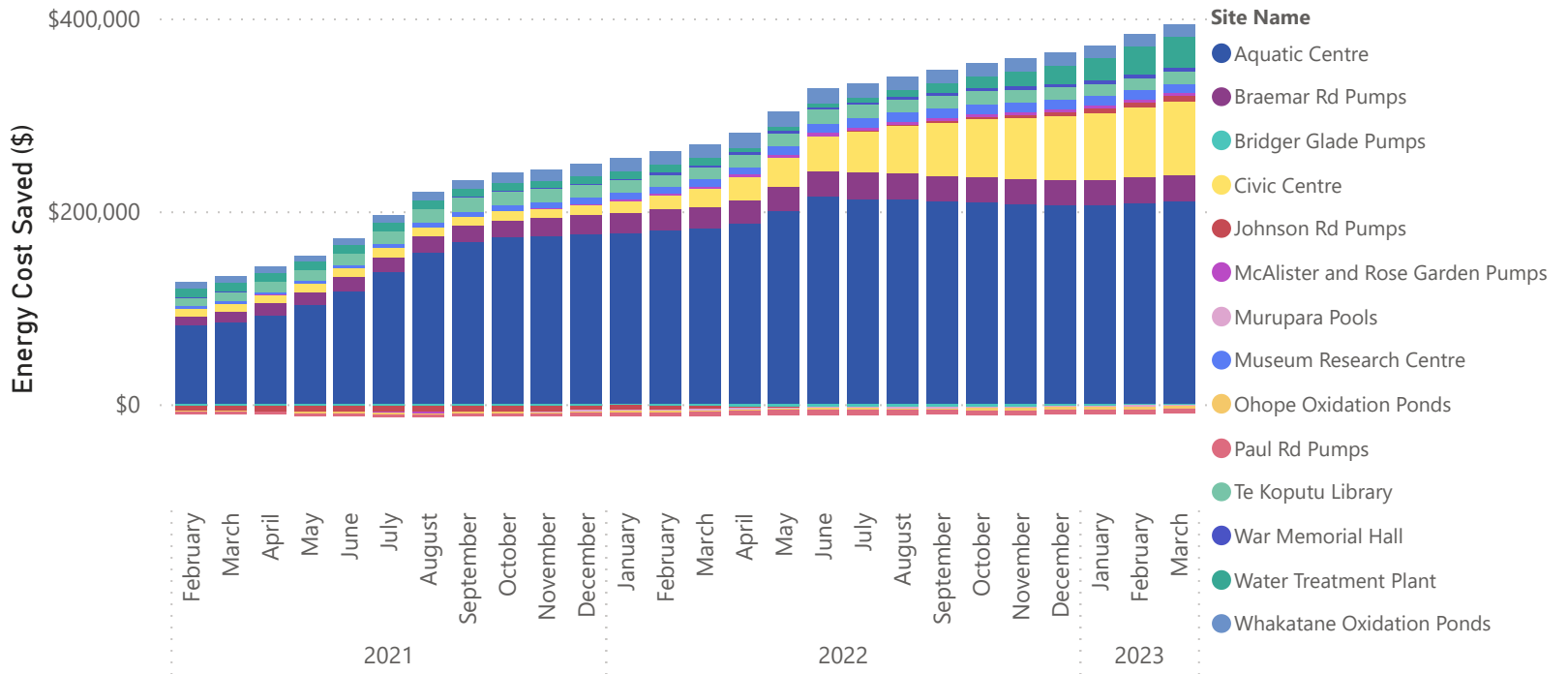
Note, cumulative savings are calculated starting July 2018

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

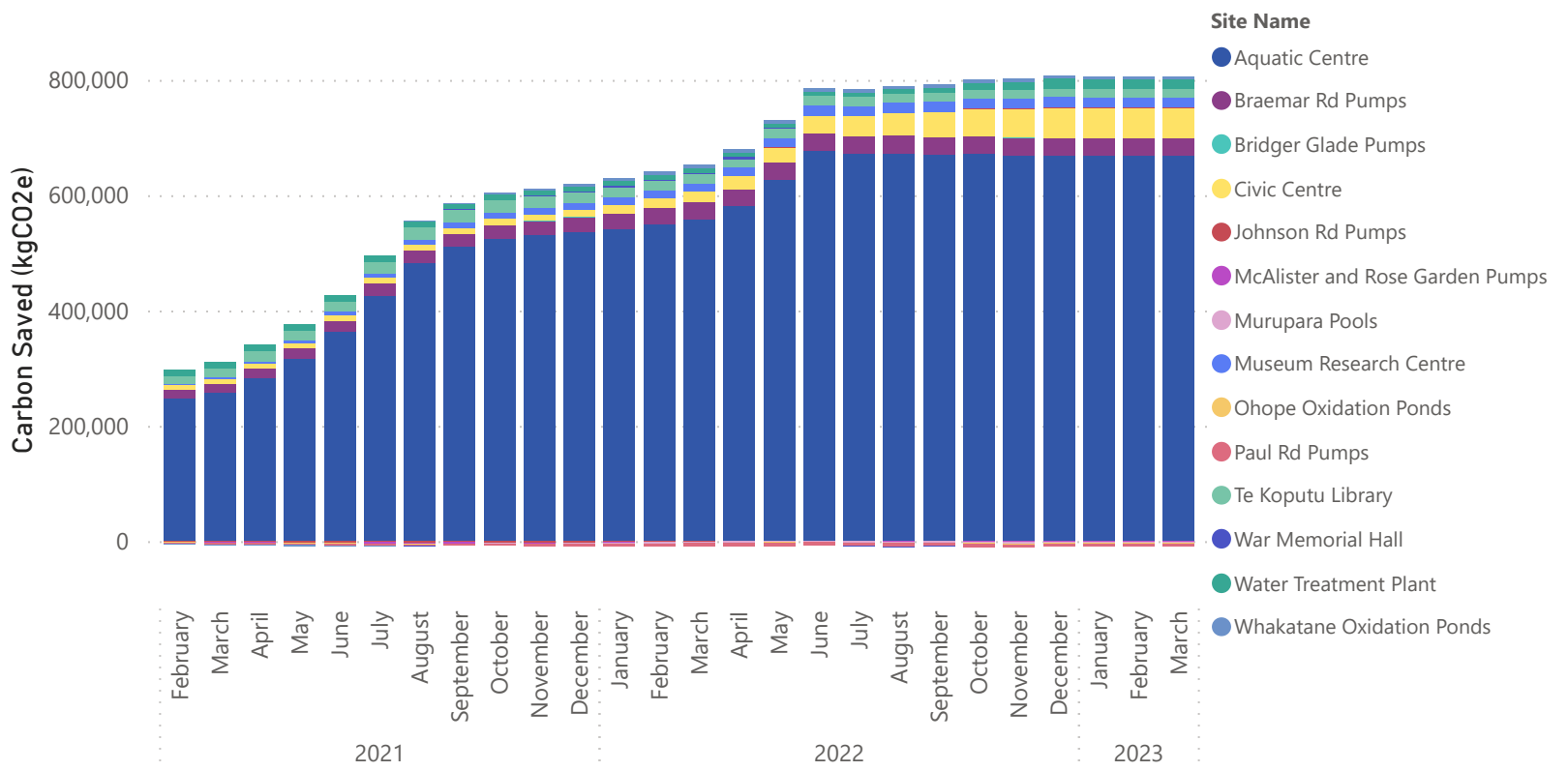
Summary

Cumulative Energy Cost Savings (\$)



Note, cumulative savings are calculated starting July 2018

Cumulative Carbon Savings (kgCO2e)



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

<p>\$4,179 Monthly Energy Cost Savings</p>	<p>23,635 Elec. Savings (kWh/mo)</p>	<p>84% Elec. Savings (%)</p>	<p>303,037 R12M Electricity Savings (kWh/yr)</p>	<p>3,096 CO2e Savings (kg/mo)</p>
<p>\$58,116 R12M Energy Cost Savings</p>				<p>39,423 R12M CO2e Savings (kg/yr)</p>

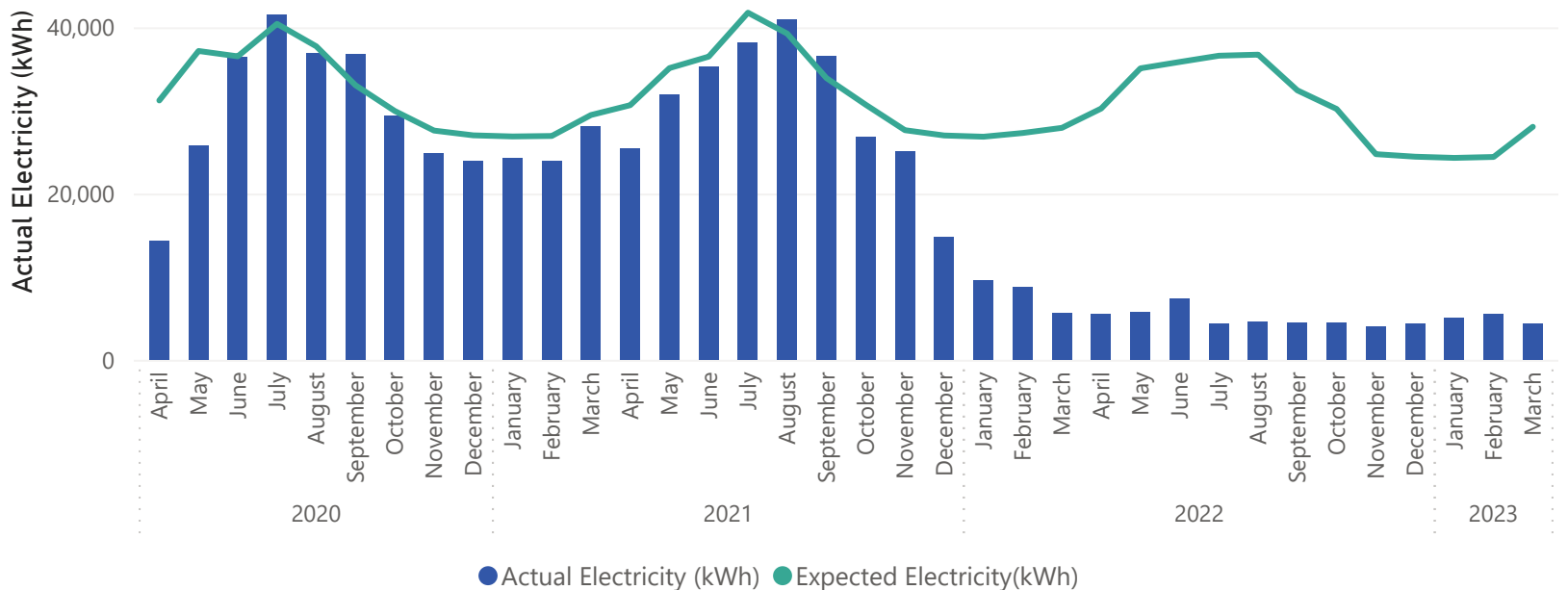
Comments:

The baseline for the Civic Centre has been updated, the baseline period was selected as Dec-2020 to Nov-2021, in order to exclude months where refurbishment was taking place.

Electricity use continues to be less than baseline for 2023, the Civic Centre renovation has displaced many office workers, which has decreased electricity demand.

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

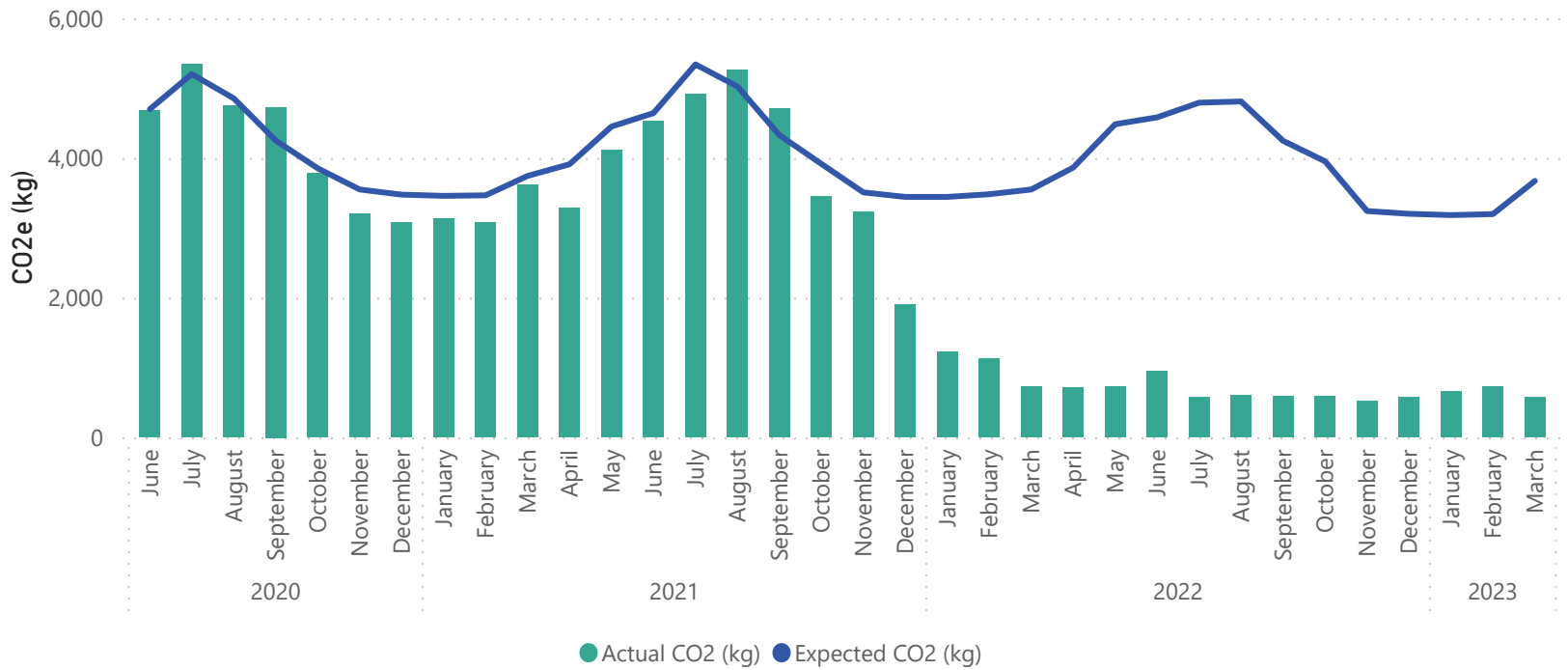
Civic Centre Electricity Use Compared to Baseline (kWh)



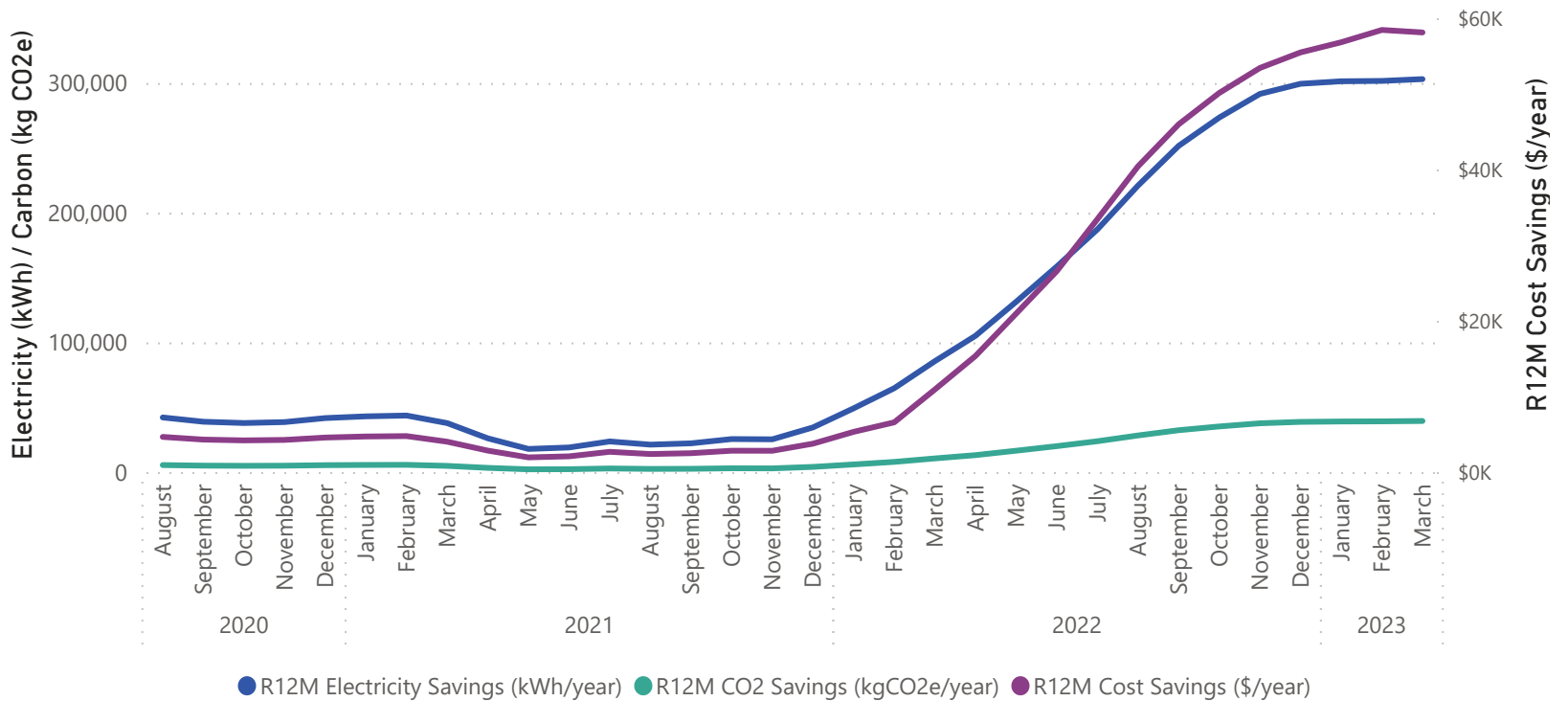
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Civic Centre

Civic Centre Carbon Emissions Compared to Baseline (kg CO2e)



Civic Centre Rolling 12 Month Savings

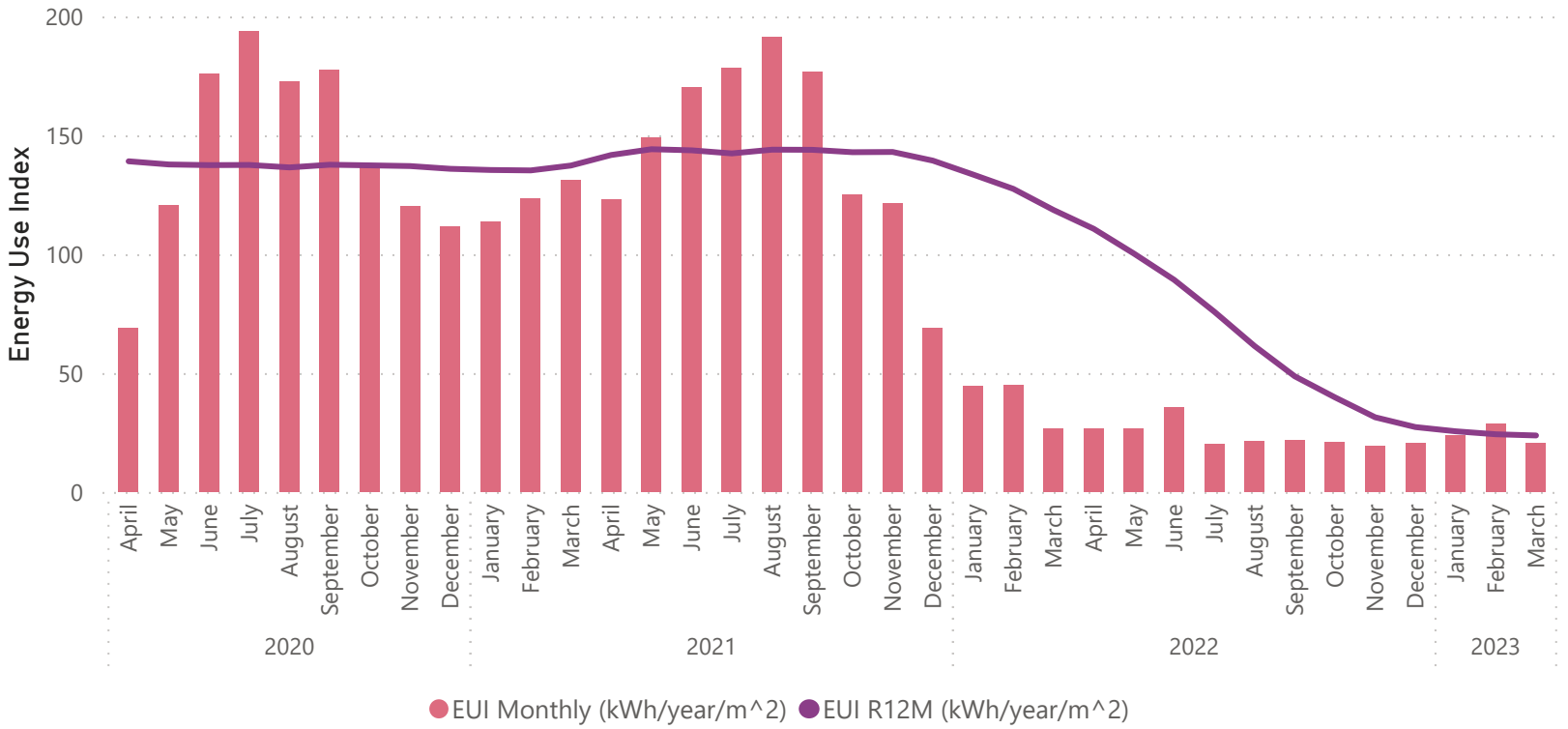


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Civic Centre

Civic Centre 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

Aquatic Centre

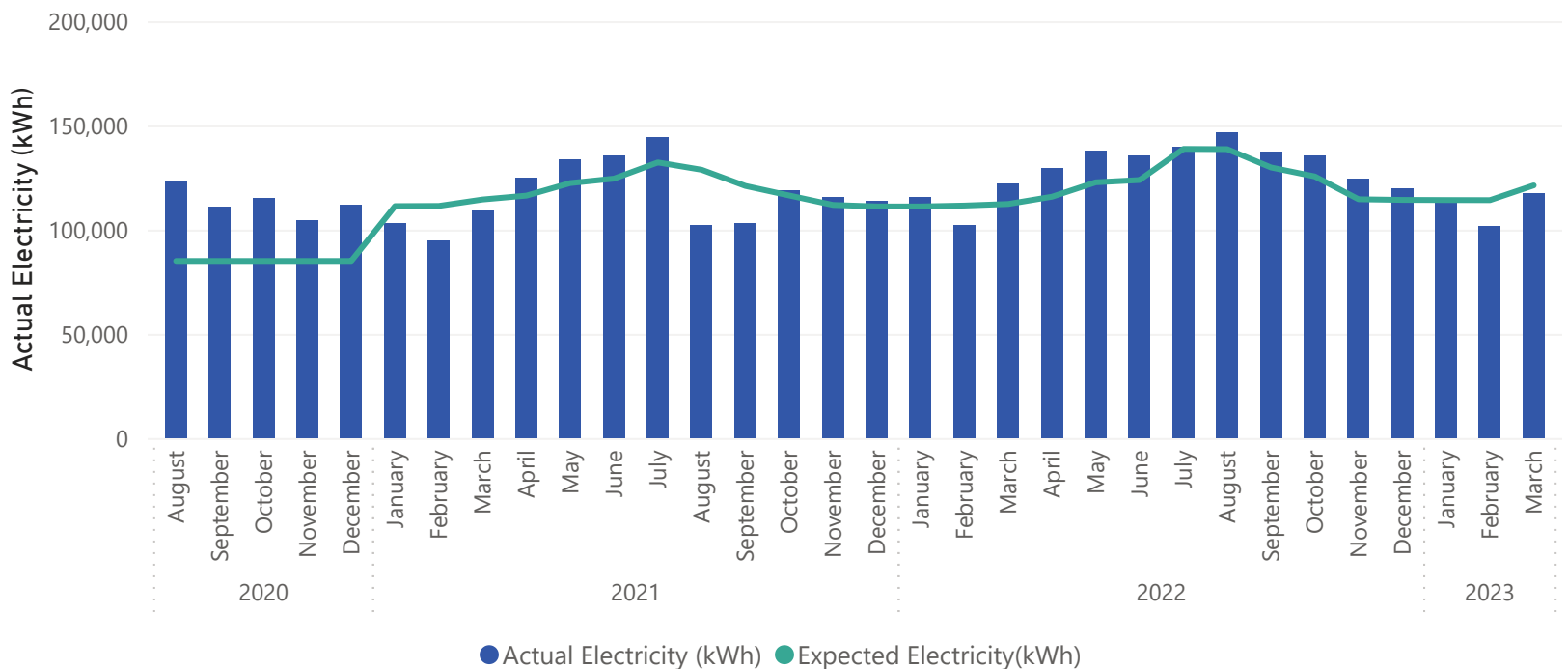
<p>\$2,193</p> <p>Monthly Energy Cost Savings</p>	<p>3,729</p> <p>Elec. Savings (kWh/mo)</p>	<p>3%</p> <p>Elec. Savings (%)</p>	<p>-65,090</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>4,501</p> <p>CO2e Savings (kg/mo)</p>
<p>\$28,352</p> <p>R12M Energy Cost Savings</p>	<p>19,385</p> <p>Gas. Savings (kWh/mo)</p>	<p>100%</p> <p>Gas. Savings (%)</p>	<p>572,865</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>115,791</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

Electricity and natural gas baselines have been updated for the Aquatic Centre, the baseline period is May 2021 to June 2022 and excludes Aug. and Sept. 2021 due to changes in Covid-19 alert levels and partial closure. The outdoor pool is open year-round and the baseline reflects this change.

Electricity use was less than expected in March 2023. The Aquatic Centre did not use any gas this month, the boilers have been turned off since 17 December. The EUI for the month is lower than the average for the past 12 months, which is excellent.

Aquatic Centre Electricity Use Compared to Baseline (kWh)

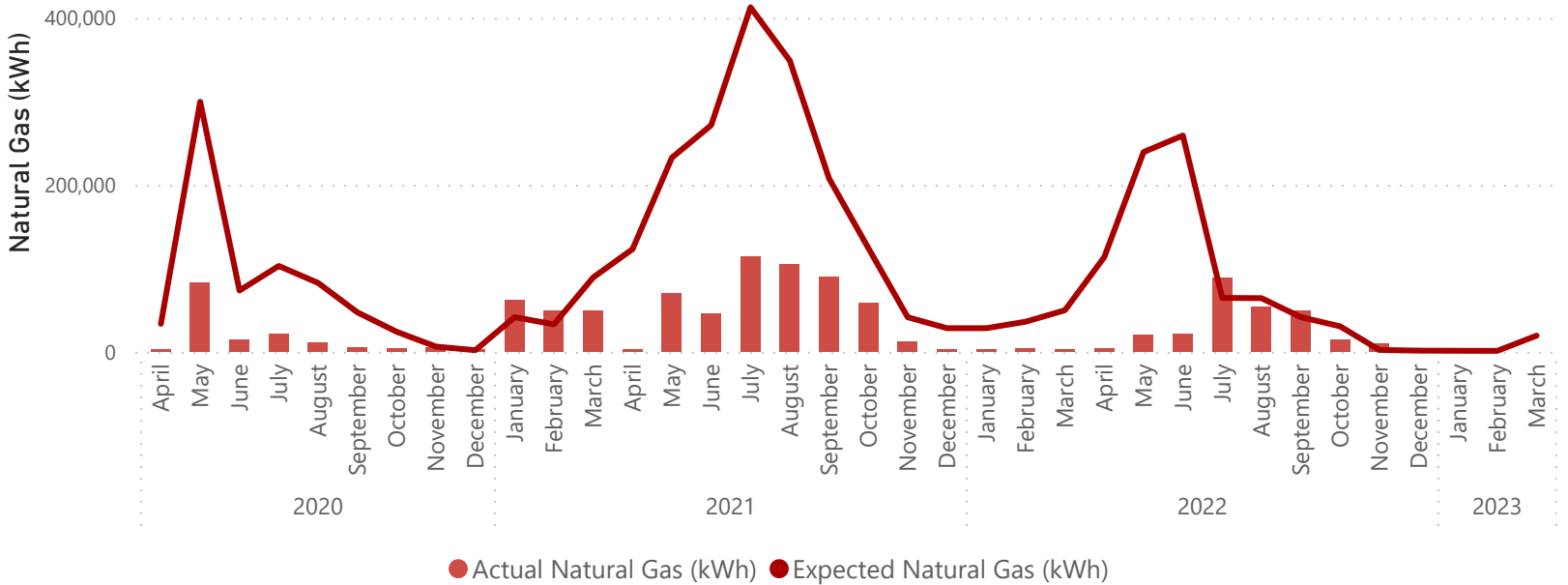


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

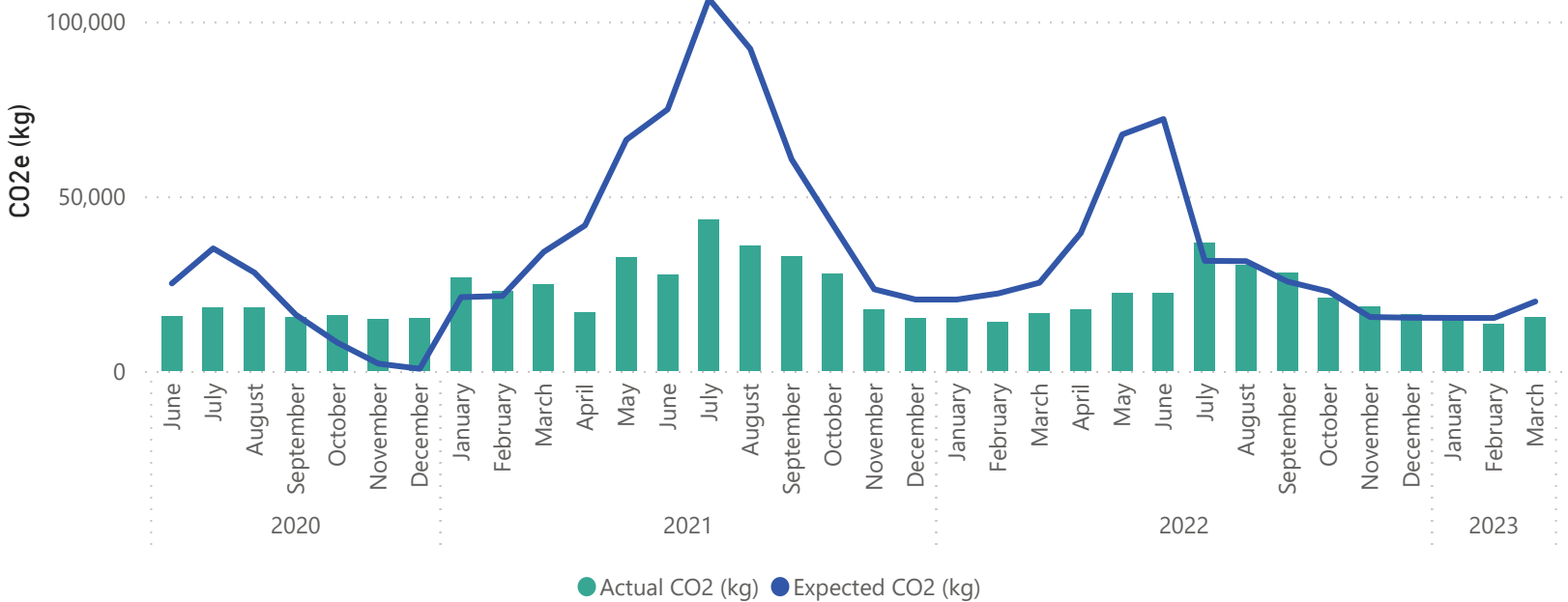
Whakatane District Council

Aquatic Centre

Aquatic Centre Natural Gas Compared to Baseline (kWh)



Aquatic Centre Carbon Emissions Compared to Baseline (kg CO2e)

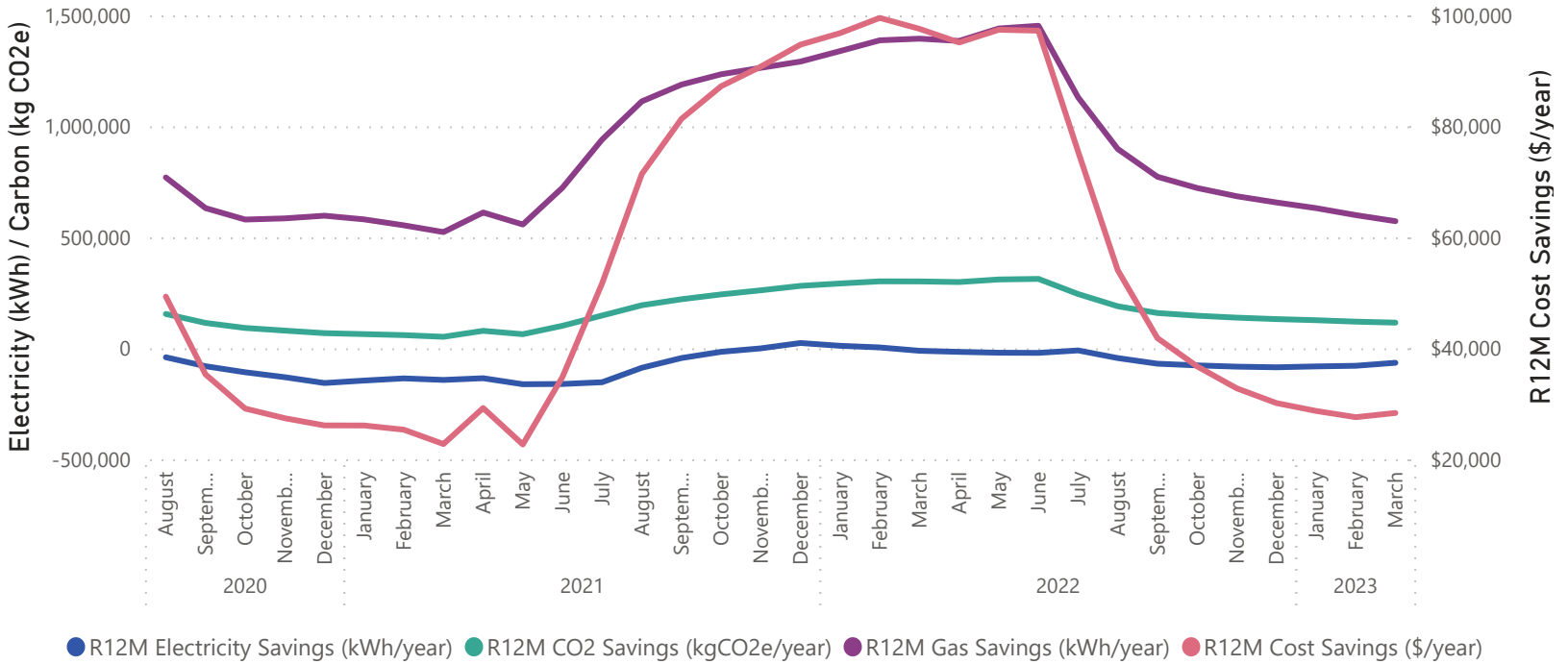


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

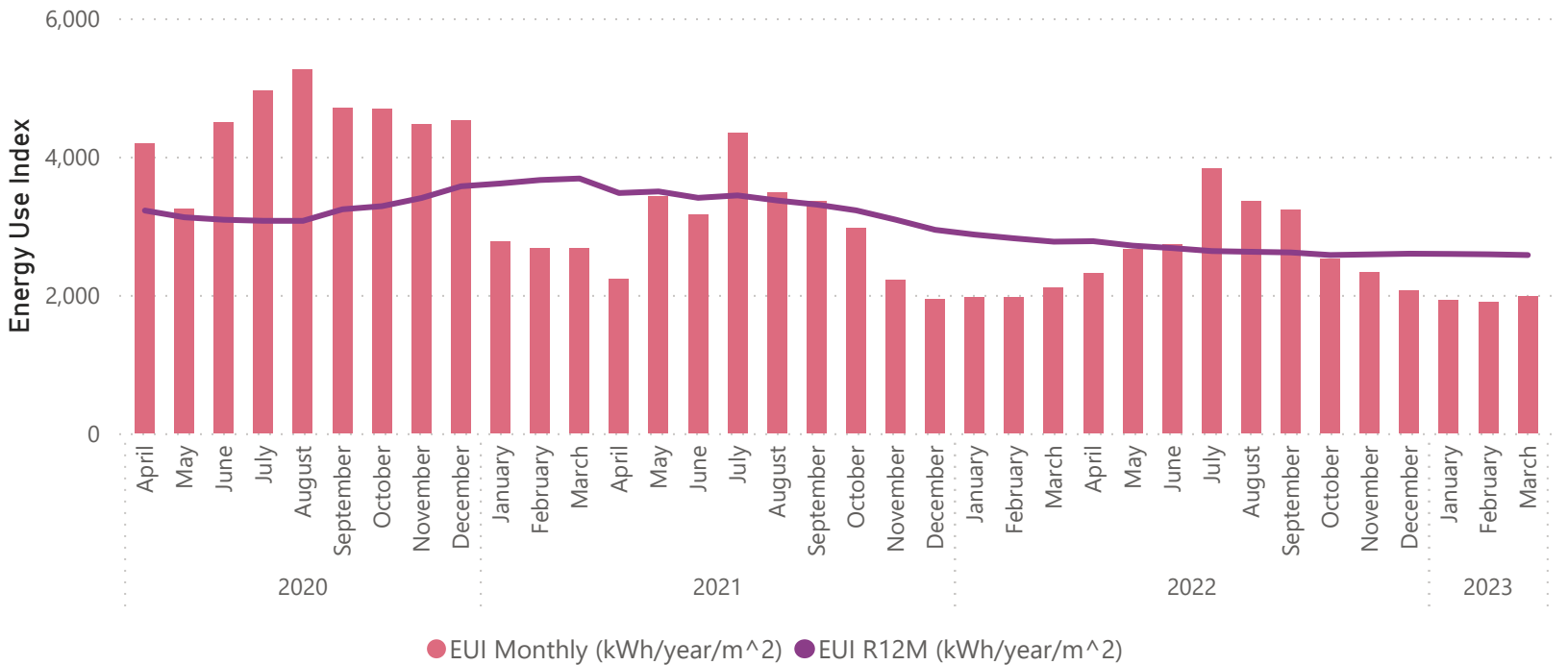
Whakatane District Council

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

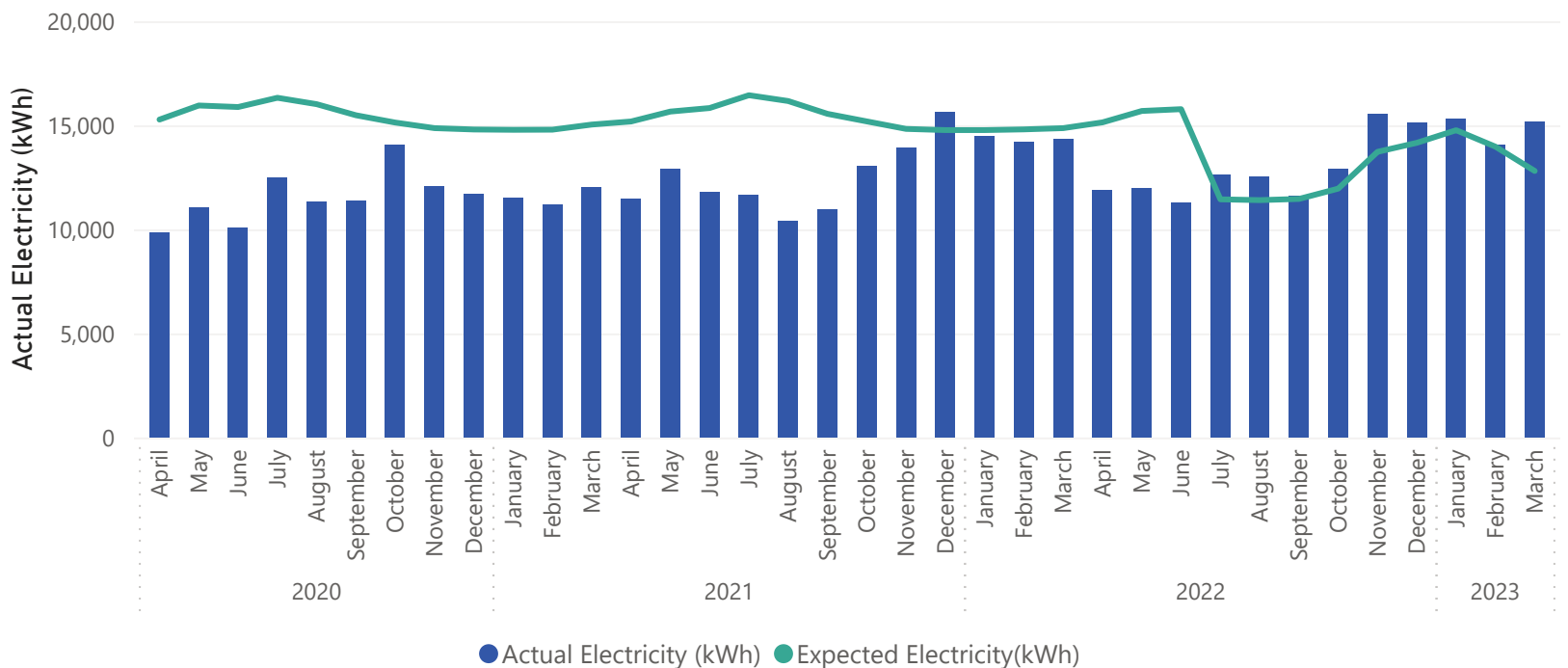
<p>-\$598</p> <p>Monthly Energy Cost Savings</p>	<p>-2,344 -18% 2,324</p> <p>Elec. Savings (kWh/mo) Elec. Savings (%) R12M Electricity Savings (kWh/yr)</p>			<p>-746</p> <p>CO2e Savings (kg/mo)</p>
<p>\$124</p> <p>R12M Energy Cost Savings</p>	<p>-2,120 -18% -10,104</p> <p>Gas. Savings (kWh/mo) Gas. Savings (%) R12M Gas Savings (kWh/yr)</p>			<p>-1,784</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

New baselines were established for electricity and natural gas at the Library, the baseline period is July 2021 to June 2022 and use cooling degree days as the independent variable.

Electricity and natural gas use were more than expected for the month. The average daily temperature in March 2023 was approximately one degree cooler than March 2022, March was also a relatively humid month, averaging 93% humidity at 9am.

Te Koputu Library Electricity Use Compared to Baseline (kWh)

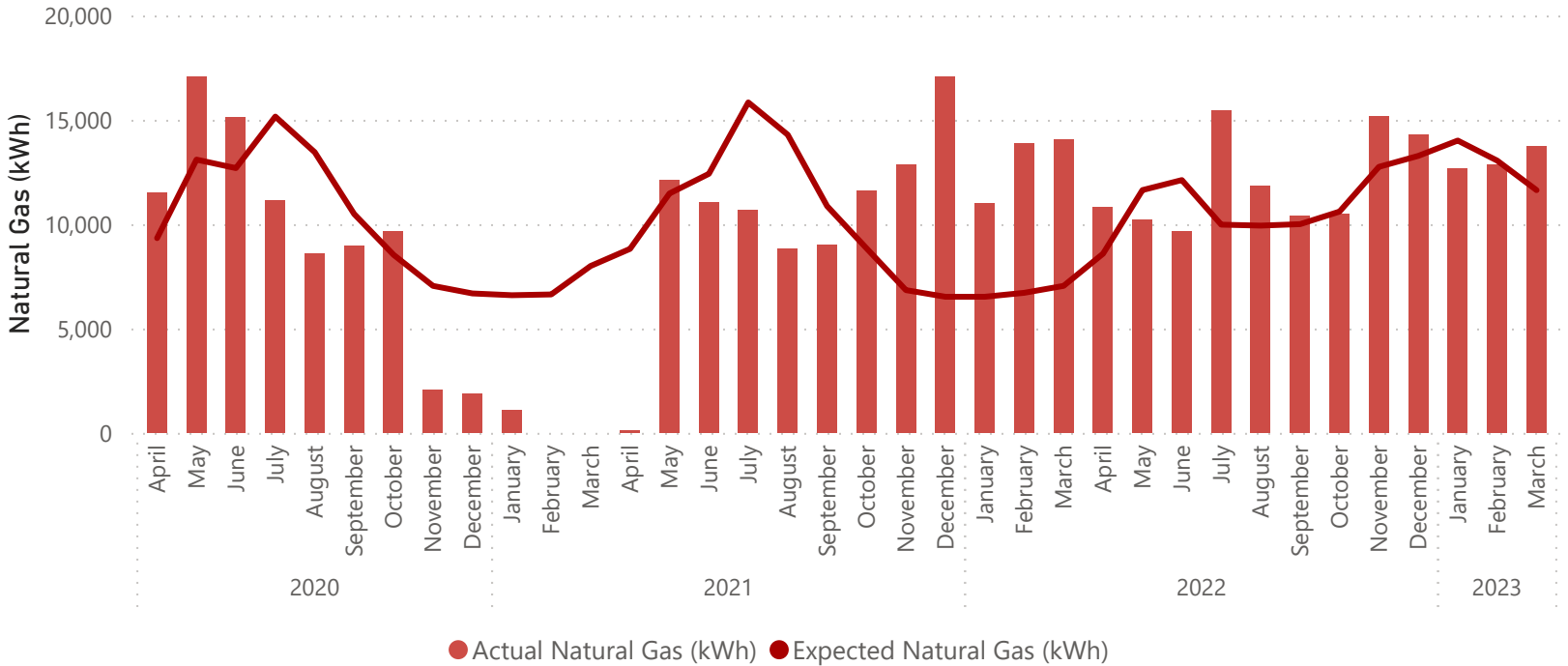


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

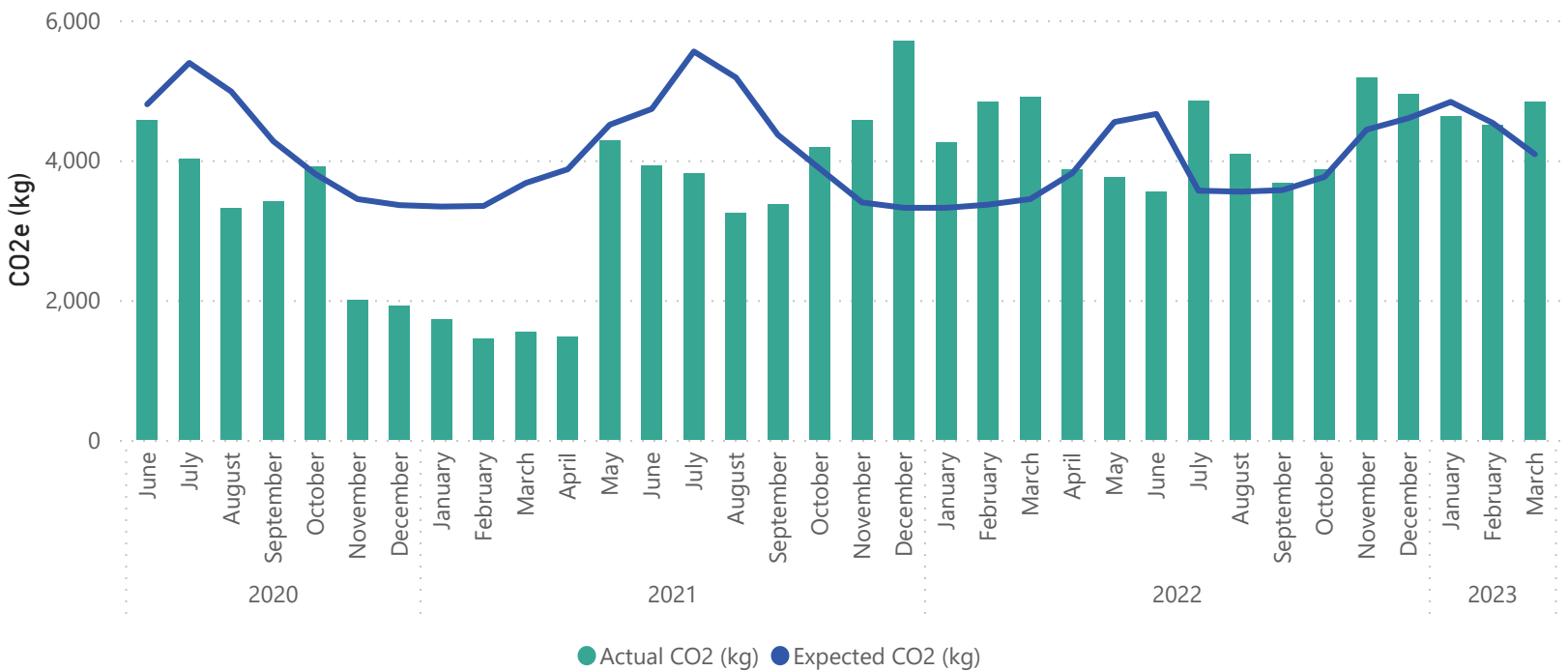
Whakatane District Council

Te Koputu Library

Te Koputu Library Natural Gas Compared to Baseline (kWh)



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

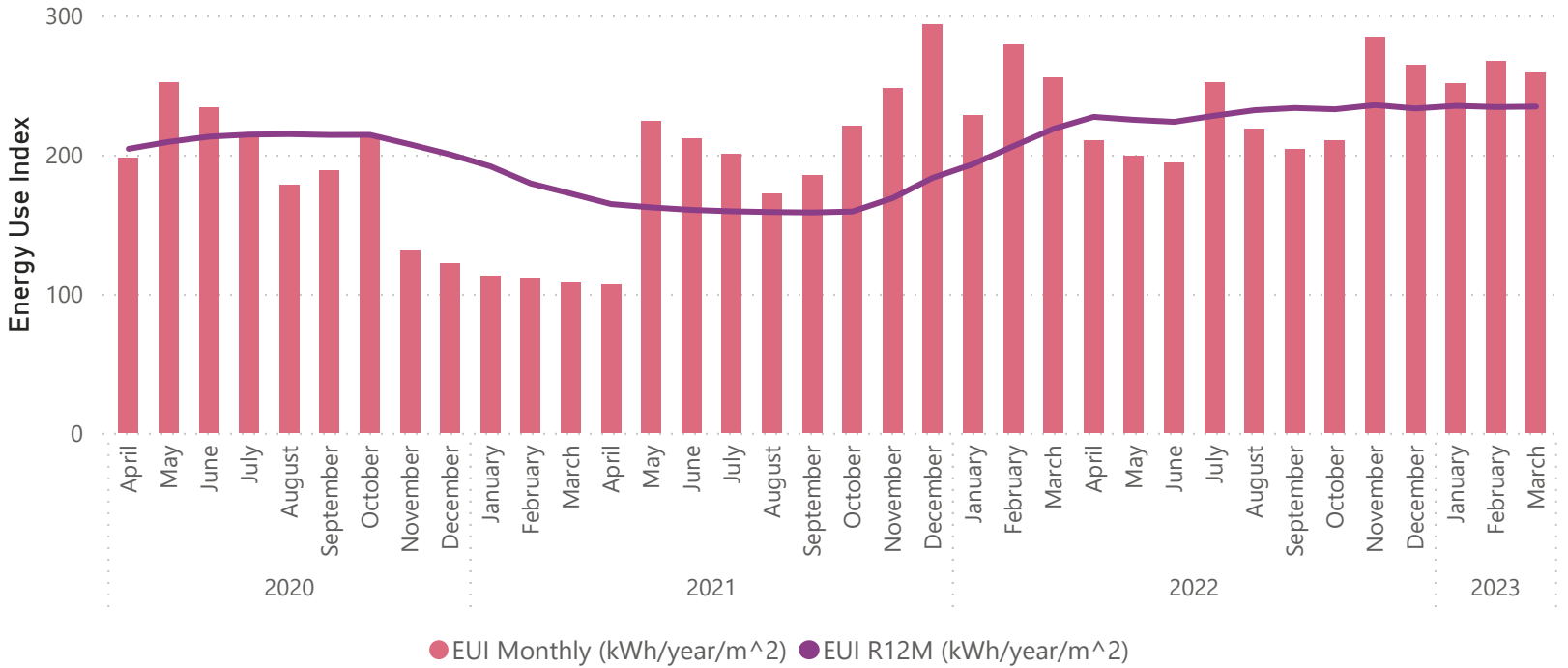


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

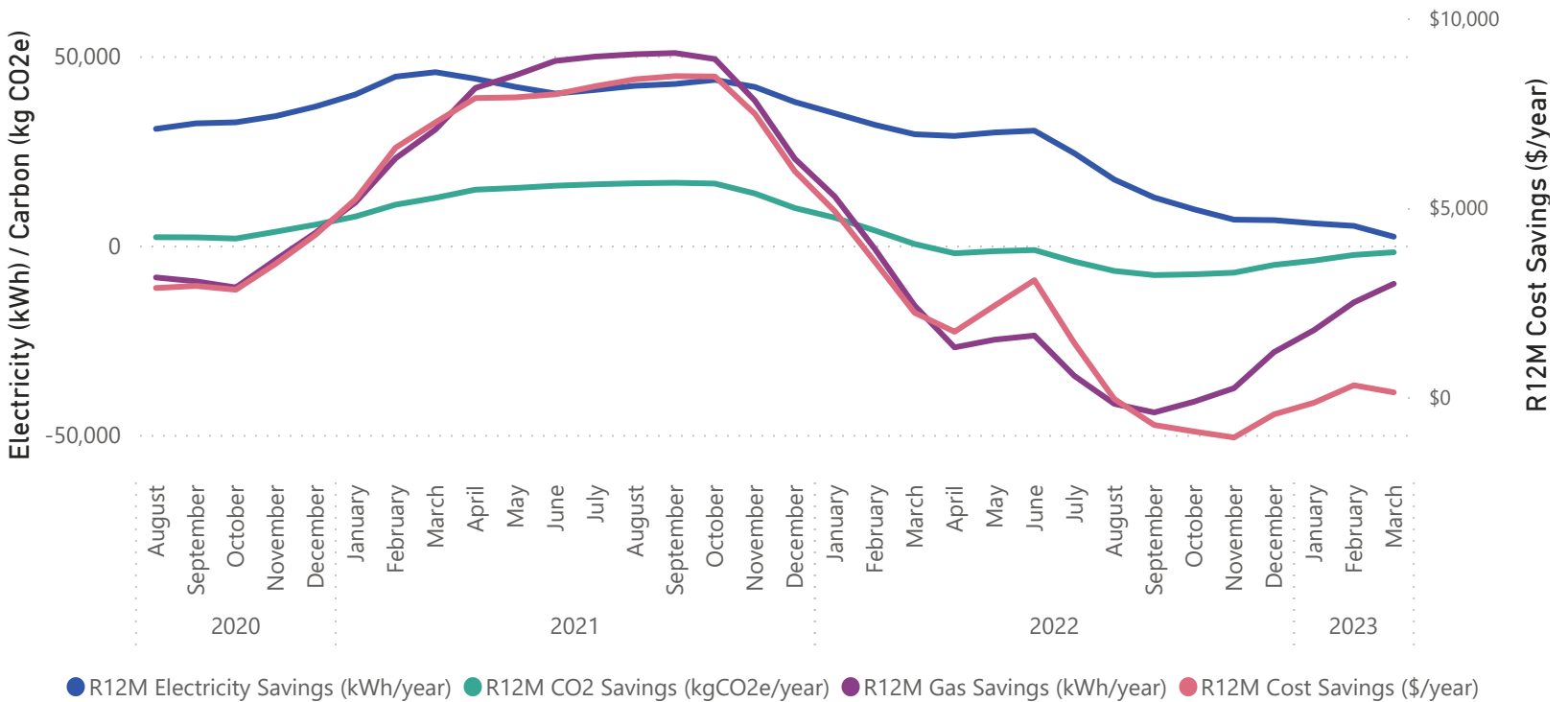
Whakatane District Council

Te Koputu Library

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



Te Koputu Library 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

Museum and Research Centre

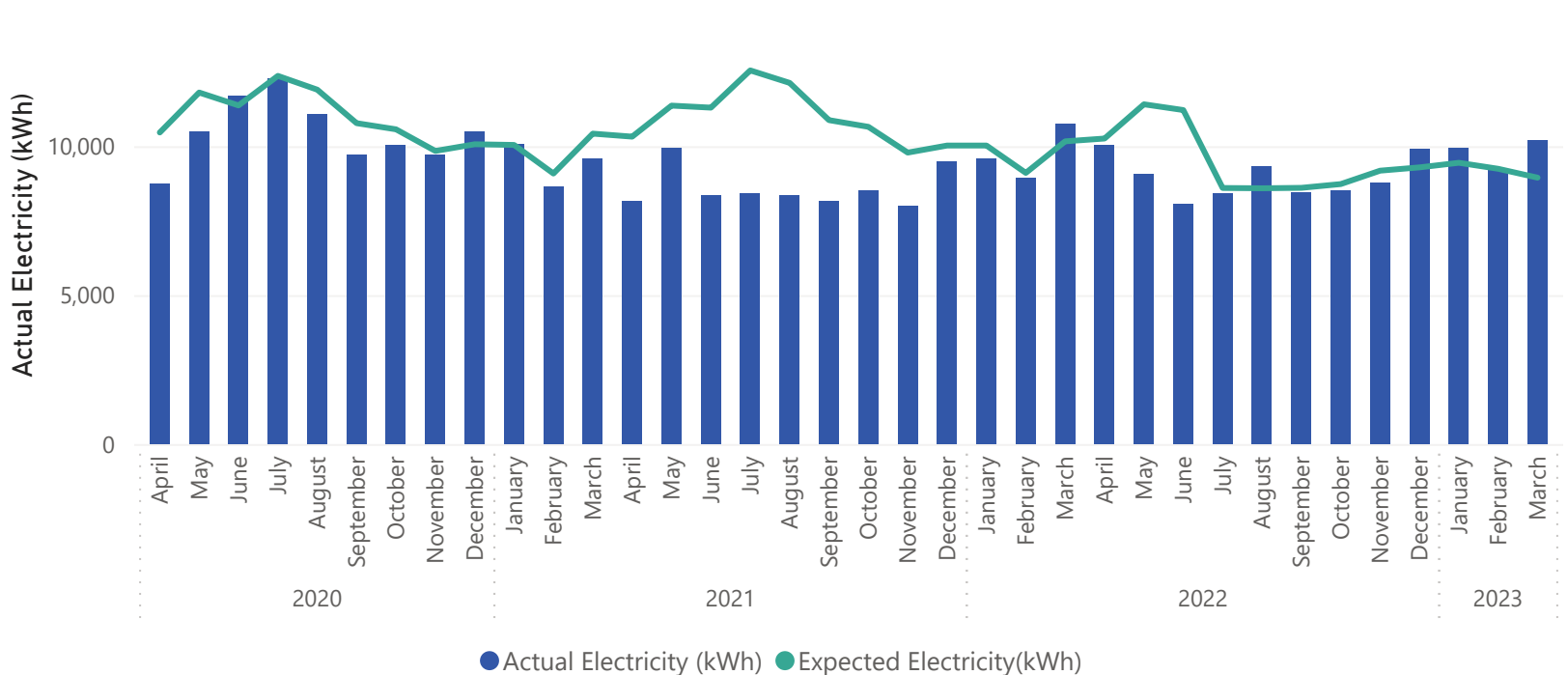
<p>-\$264</p> <p>Monthly Energy Cost Savings</p>	<p>-1,248</p> <p>Elec. Savings (kWh/mo)</p>	<p>-14%</p> <p>Elec. Savings (%)</p>	<p>3,618</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>-257</p> <p>CO2e Savings (kg/mo)</p>
<p>\$1,742</p> <p>R12M Energy Cost Savings</p>	<p>-452</p> <p>Gas. Savings (kWh/mo)</p>	<p>-16%</p> <p>Gas. Savings (%)</p>	<p>10,950</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>2,843</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

New baselines were established for electricity and natural gas at the Museum and Research Centre, the baseline period is July 2021 to June 2022. The electricity baseline uses cooling degree days as the independent variable and the natural gas baseline uses heating degree days as the independent variable.

Natural gas and electricity use was higher than expected, which is likely due to dehumidification requirements.

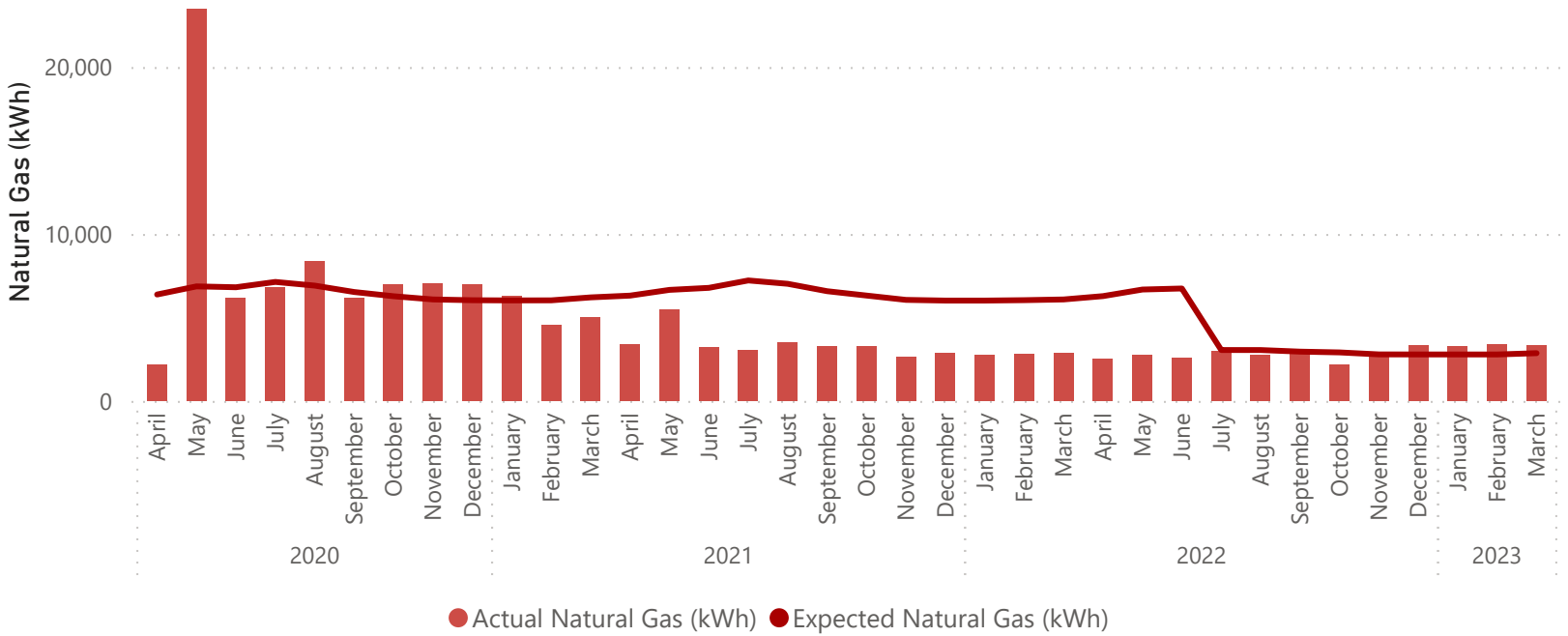
Museum Research Centre Electricity Use Compared to Baseline (kWh)



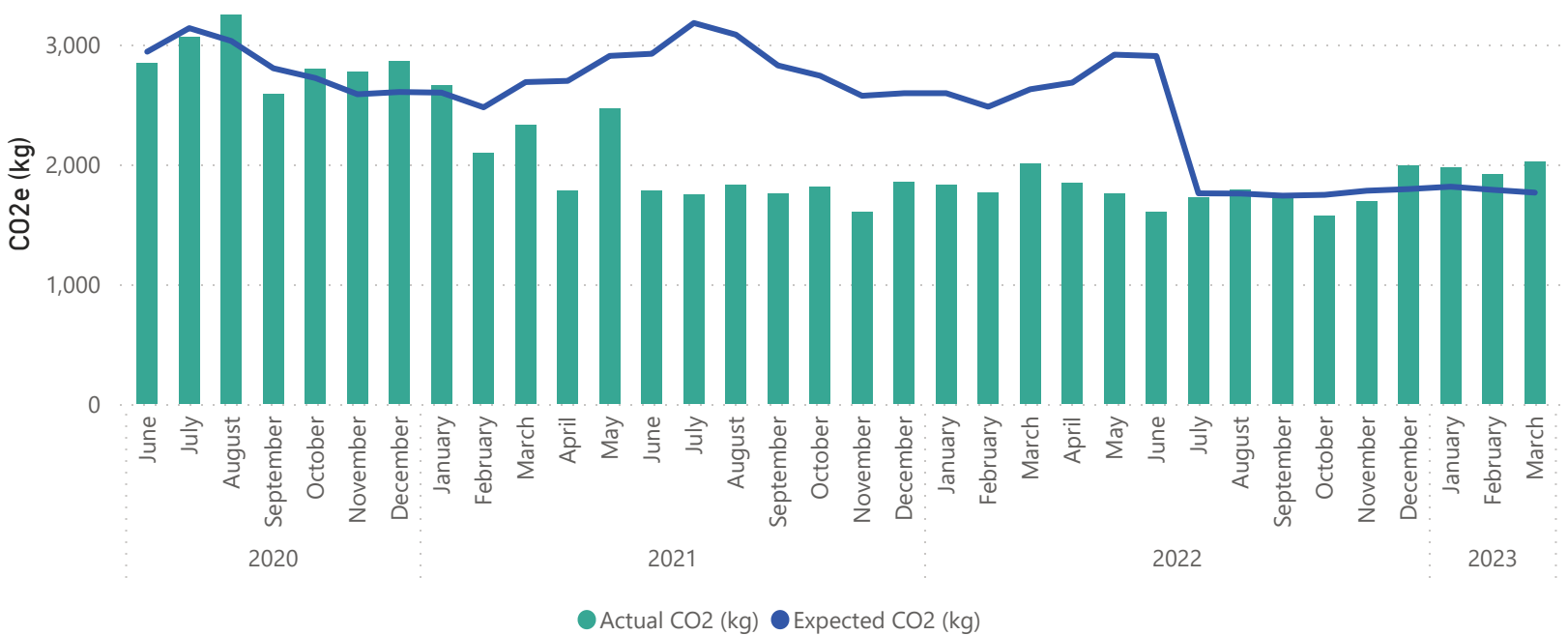
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

Whakatane District Council Museum and Research Centre

Museum Research Centre Natural Gas Compared to Baseline (kWh)



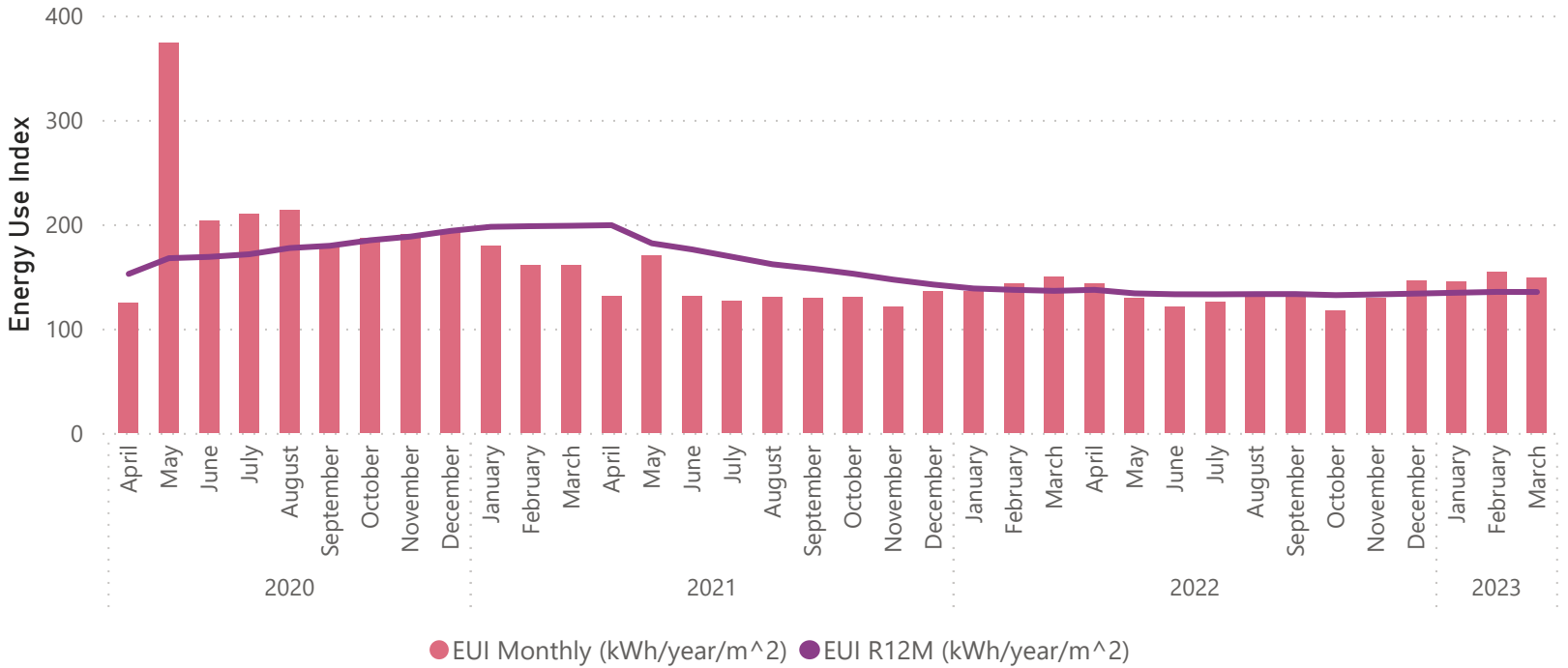
Museum Research Centre Carbon Emissions Compared to Baseline (kg CO2e)



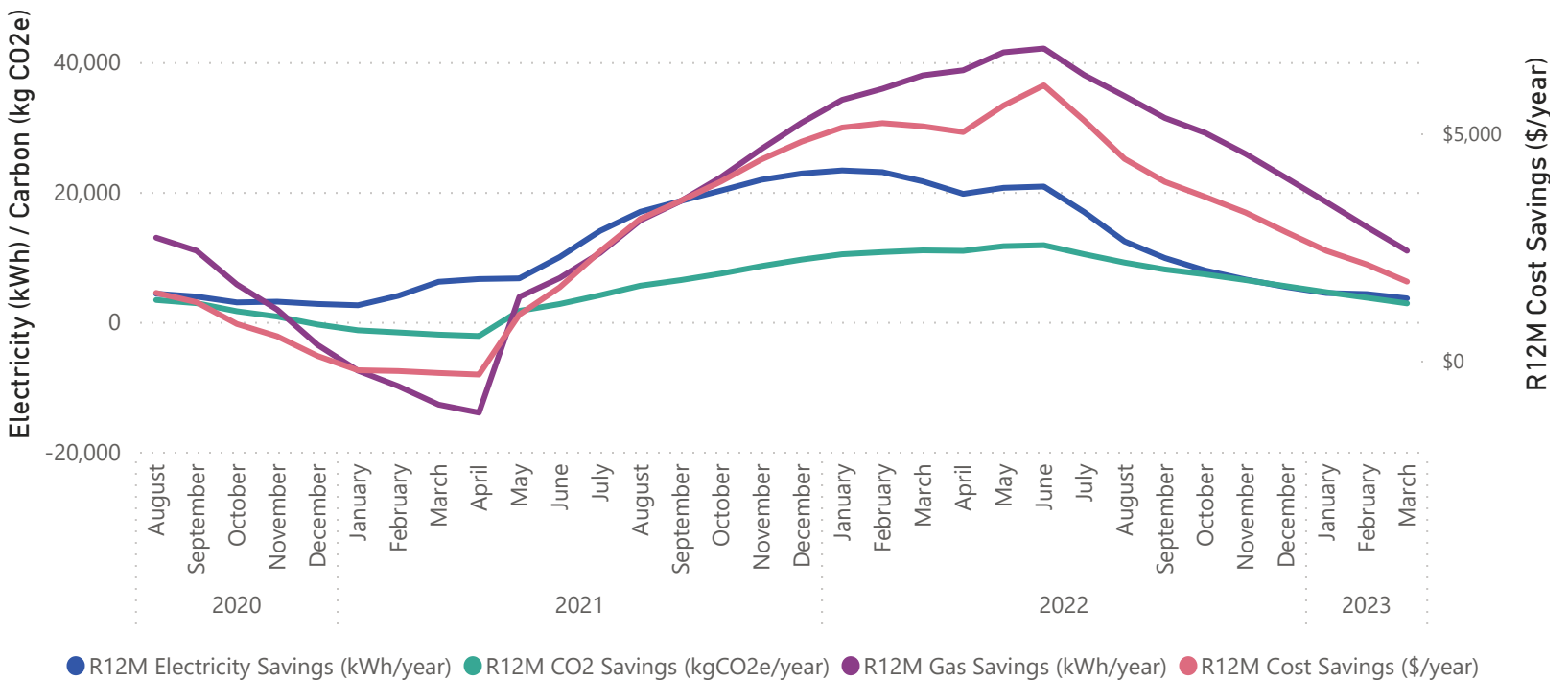
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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



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

War Memorial Hall

<p>\$381</p> <p>Monthly Energy Cost Savings</p>	<p>1,591</p> <p>Elec. Savings (kWh/mo)</p>	<p>26%</p> <p>Elec. Savings (%)</p>	<p>18,370</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>443</p> <p>CO2e Savings (kg/mo)</p>
<p>\$2,508</p> <p>R12M Energy Cost Savings</p>	<p>1,133</p> <p>Gas. Savings (kWh/mo)</p>	<p>48%</p> <p>Gas. Savings (%)</p>	<p>-16,281</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>-1,088</p> <p>R12M CO2e Savings (kg/yr)</p>

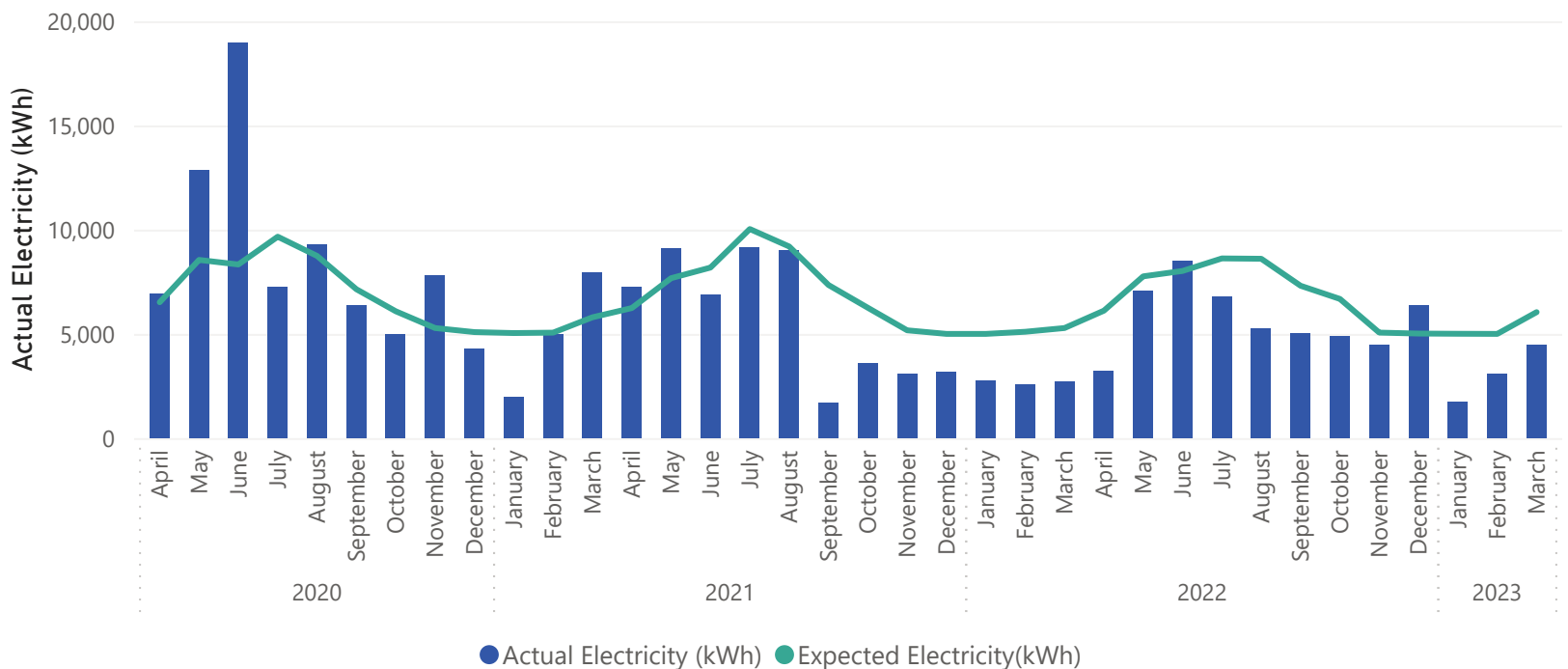
Comments:

The baseline was updated for War Memorial Hall, the baseline adjusts for ambient temperature. The baseline period is July 2021 to June 2022. The War Memorial Hall uses more electricity and gas in winter months.

The War Memorial Hall has NHH accounts for both natural gas and electricity. Some months' usage may be estimated by the retailer and captured by a subsequent meter reading. It is recommended that manual meter readings are taken, which would improve accuracy of electricity and gas usage.

The War Memorial Hall has achieved significant gas and electricity savings from January to March 2023. December 2022 used more electricity than expected, this may be partly due to when the electricity meter was read, The War Memorial Hall may have also seen higher occupancy in December with holiday events.

War Memorial Hall Electricity Use Compared to Baseline (kWh)

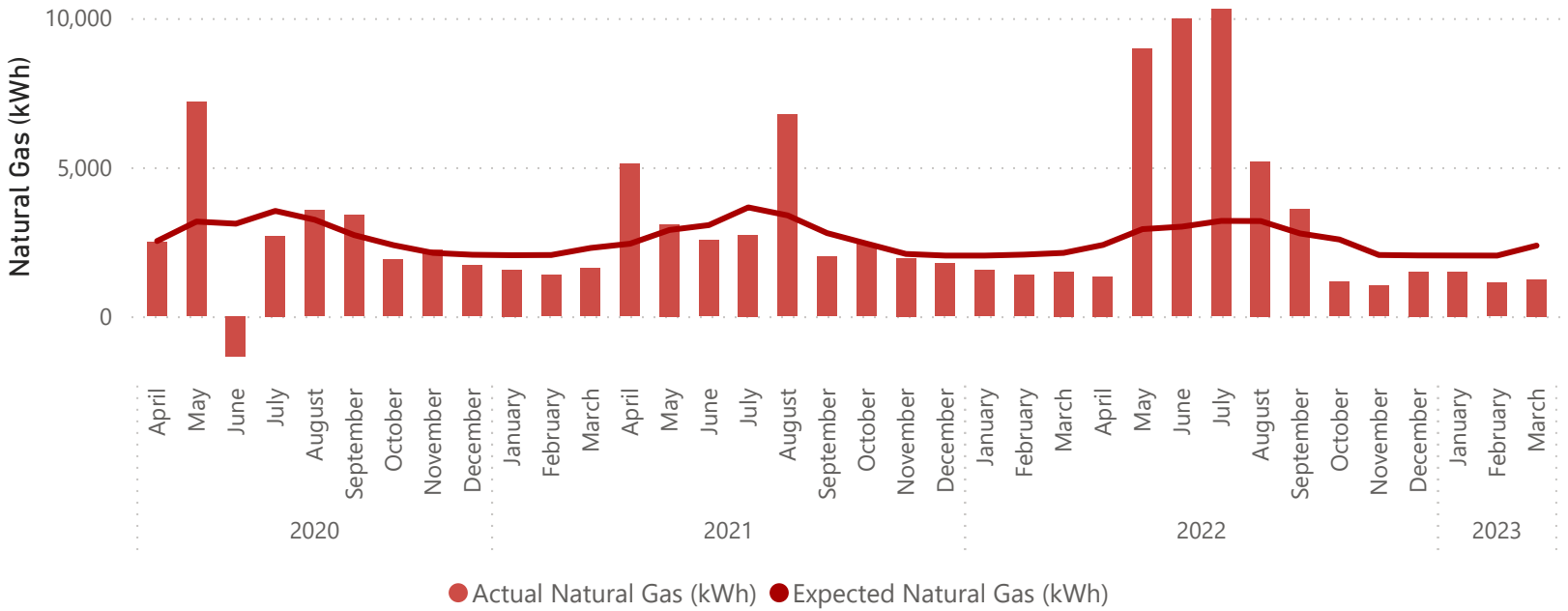


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

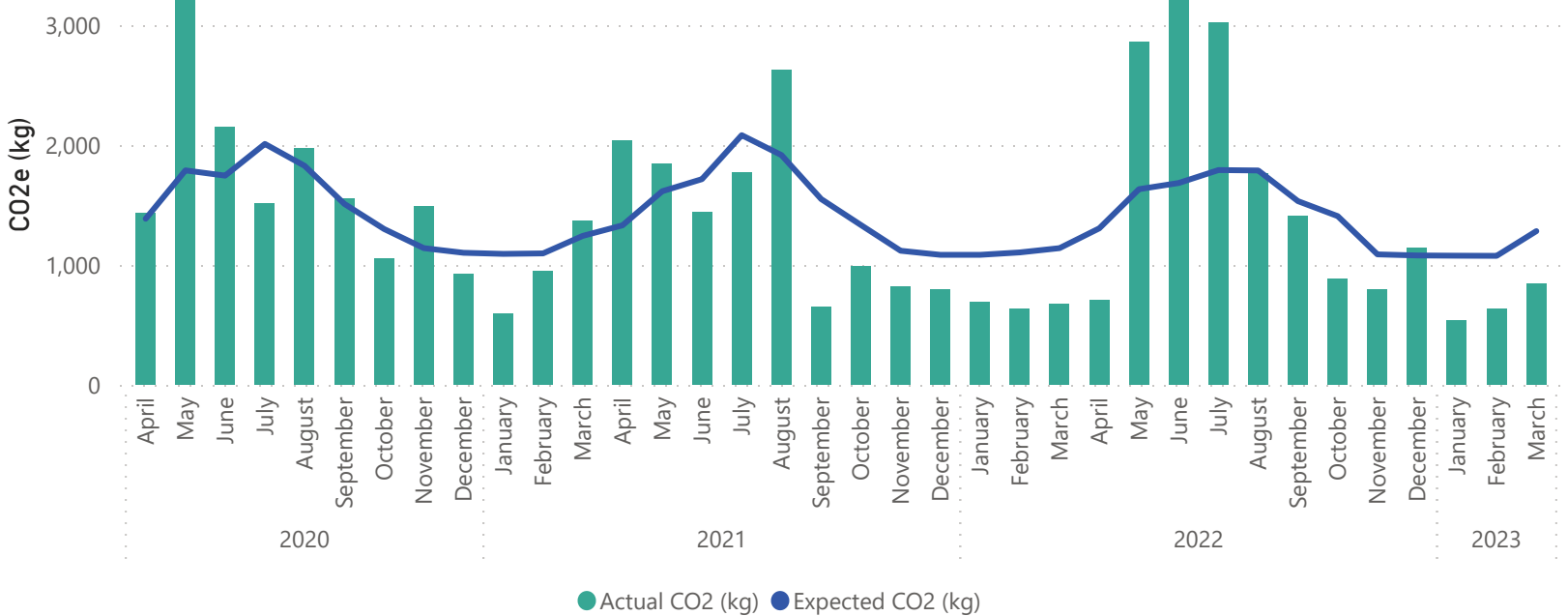
Whakatane District Council

War Memorial Hall

War Memorial Hall Natural Gas Compared to Baseline (kWh)



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

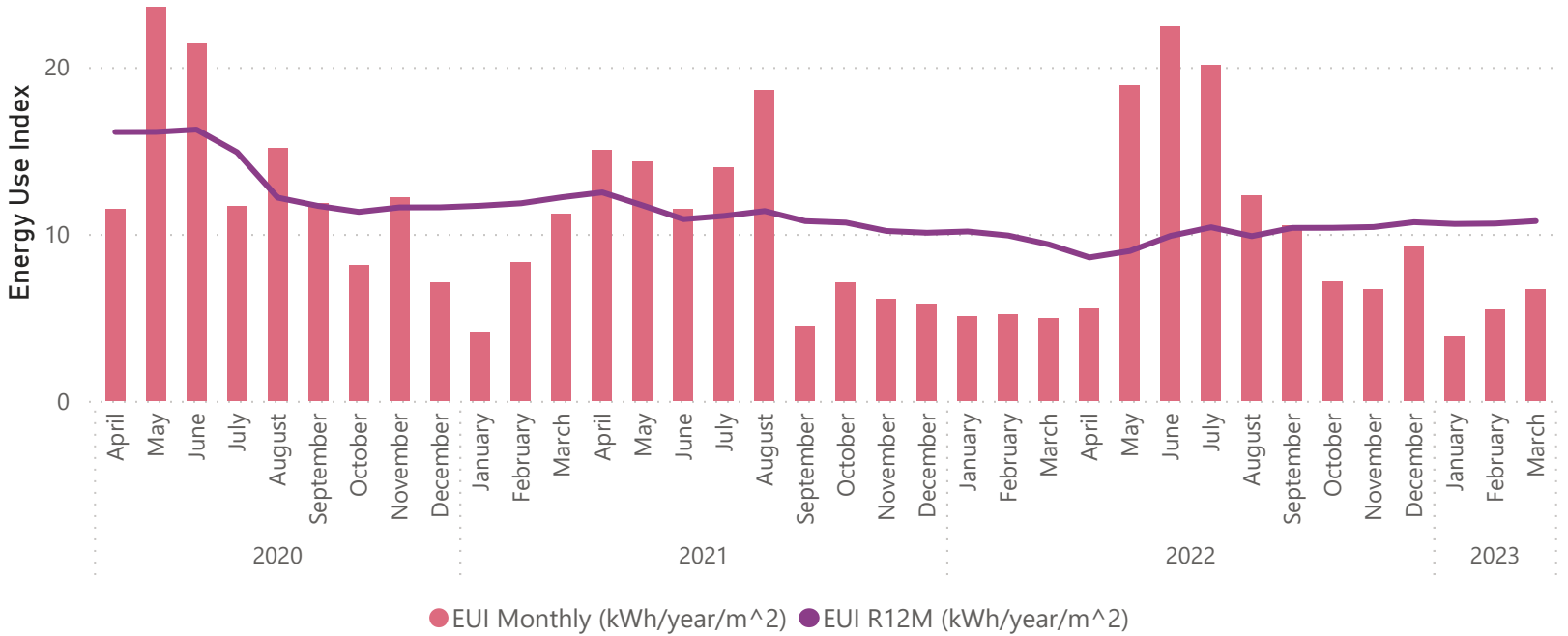


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

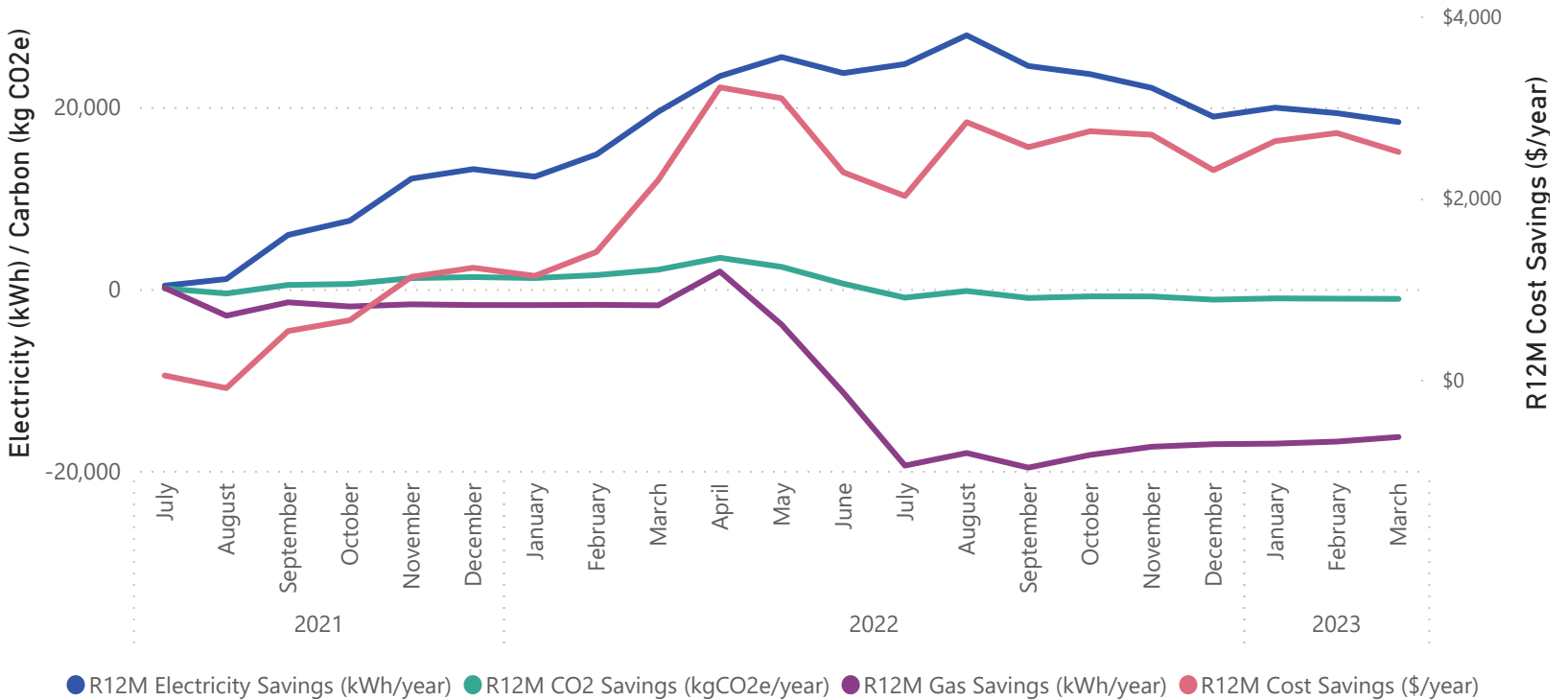
Whakatane District Council

War Memorial Hall

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



War Memorial Hall 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

Water Treatment Plant

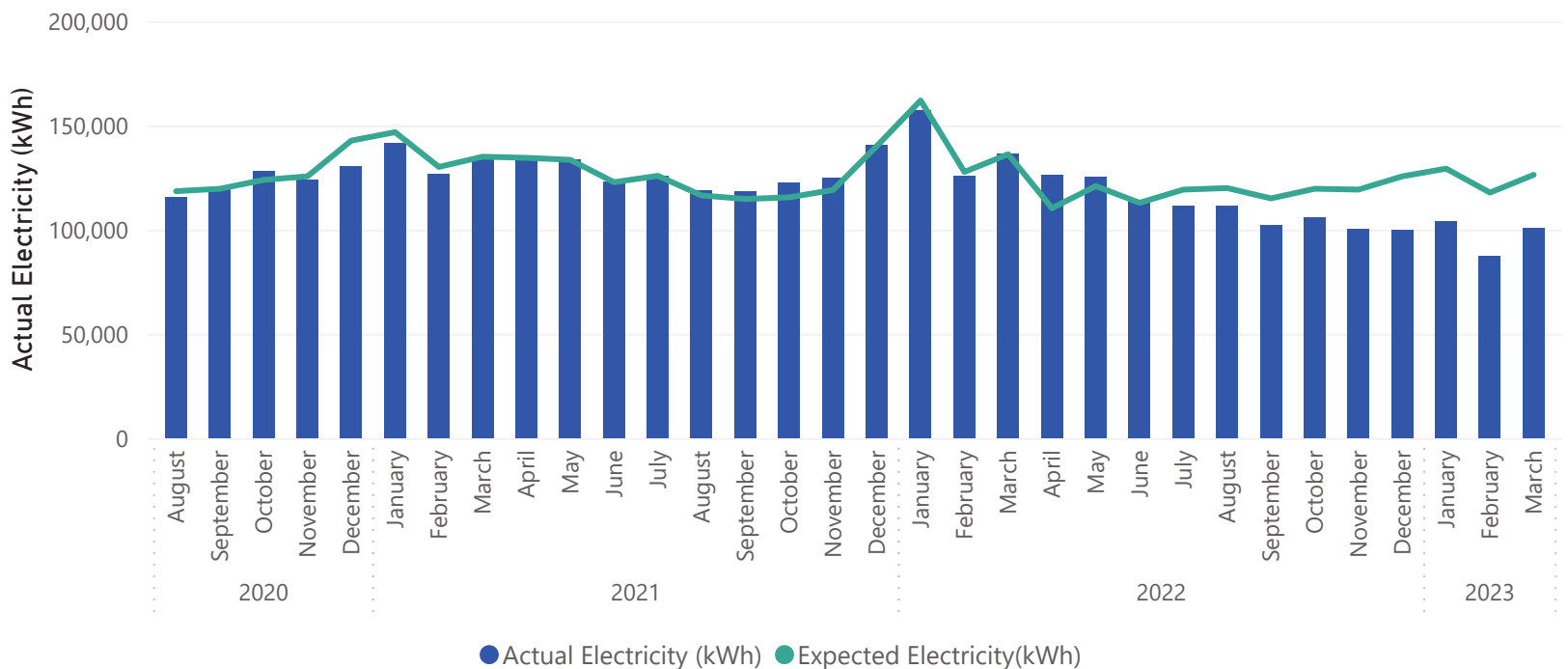
<p>\$4,508 Monthly Energy Cost Savings</p>	<p>25,759 Elec. Savings (kWh/mo)</p>	<p>20% Elec. Savings (%)</p>	<p>148,443 R12M Electricity Savings (kWh/yr)</p>	<p>3,374 CO2e Savings (kg/mo)</p>
<p>\$25,259 R12M Energy Cost Savings</p>				<p>19,495 R12M CO2e Savings (kg/yr)</p>

Comments:

The electricity use baseline was updated for the Water Treatment Plant, the baseline period is July 2021 to June 2022. The electricity baseline uses the amount of water pumped (m³) as the independent variable.

Another month of good savings has been achieved at the WTP in March 2023. The monthly EUI is less than the average over the last 12 months and rolling 12-month savings are increasing, which is excellent. Less water has been treated in March 2023 compared to March 2022.

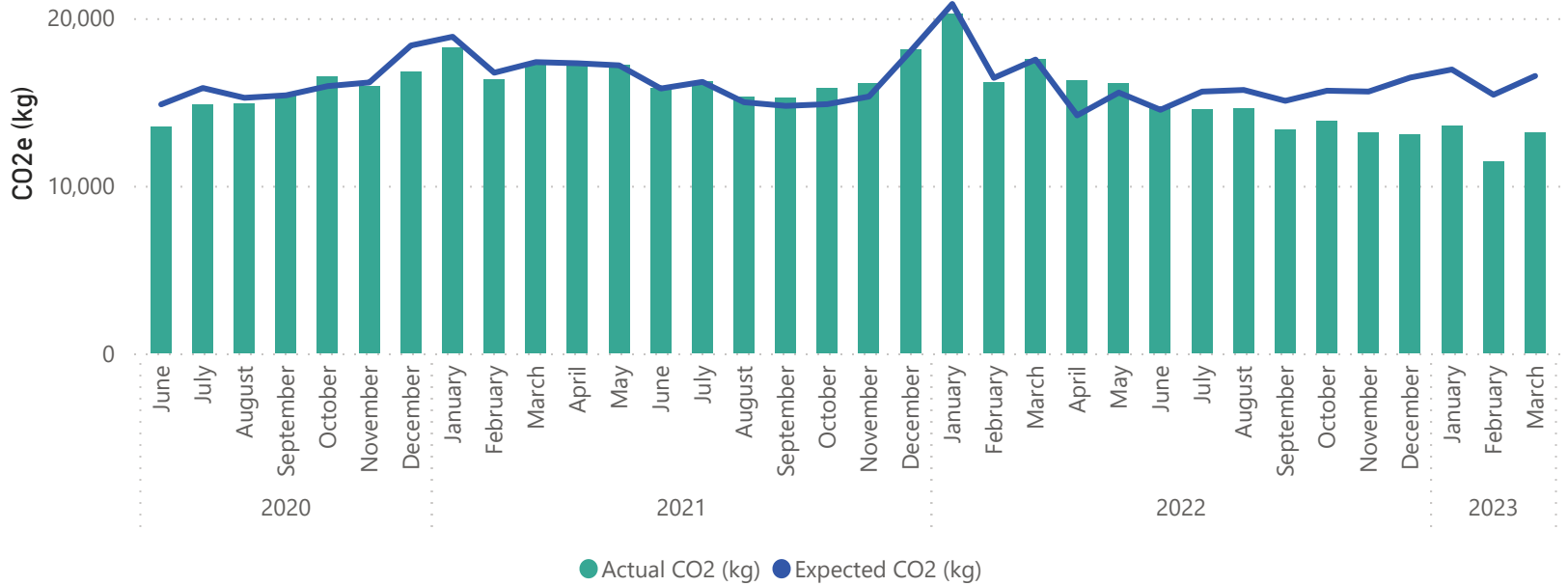
Water Treatment Plant Electricity Use Compared to Baseline (kWh)



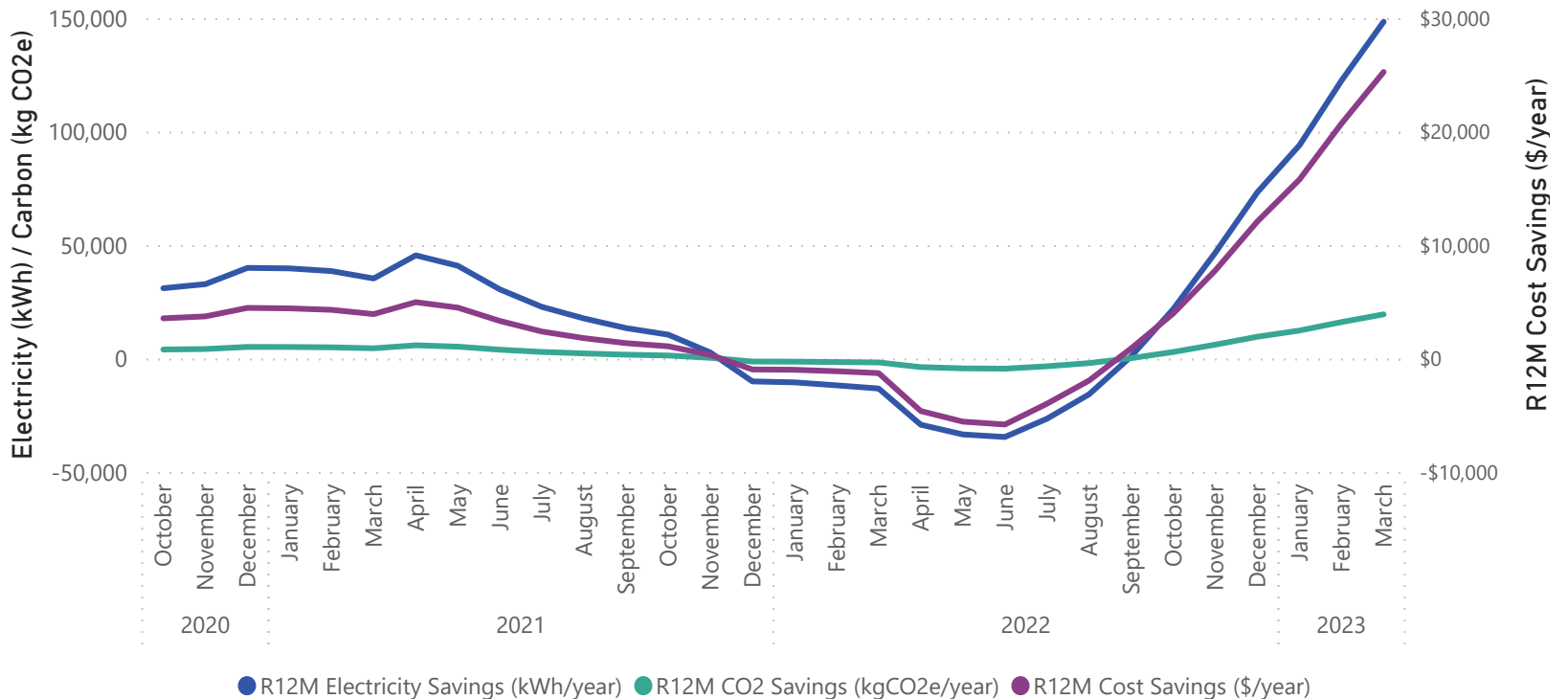
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Water Treatment Plant

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



Water Treatment Plant Rolling 12 Month Savings

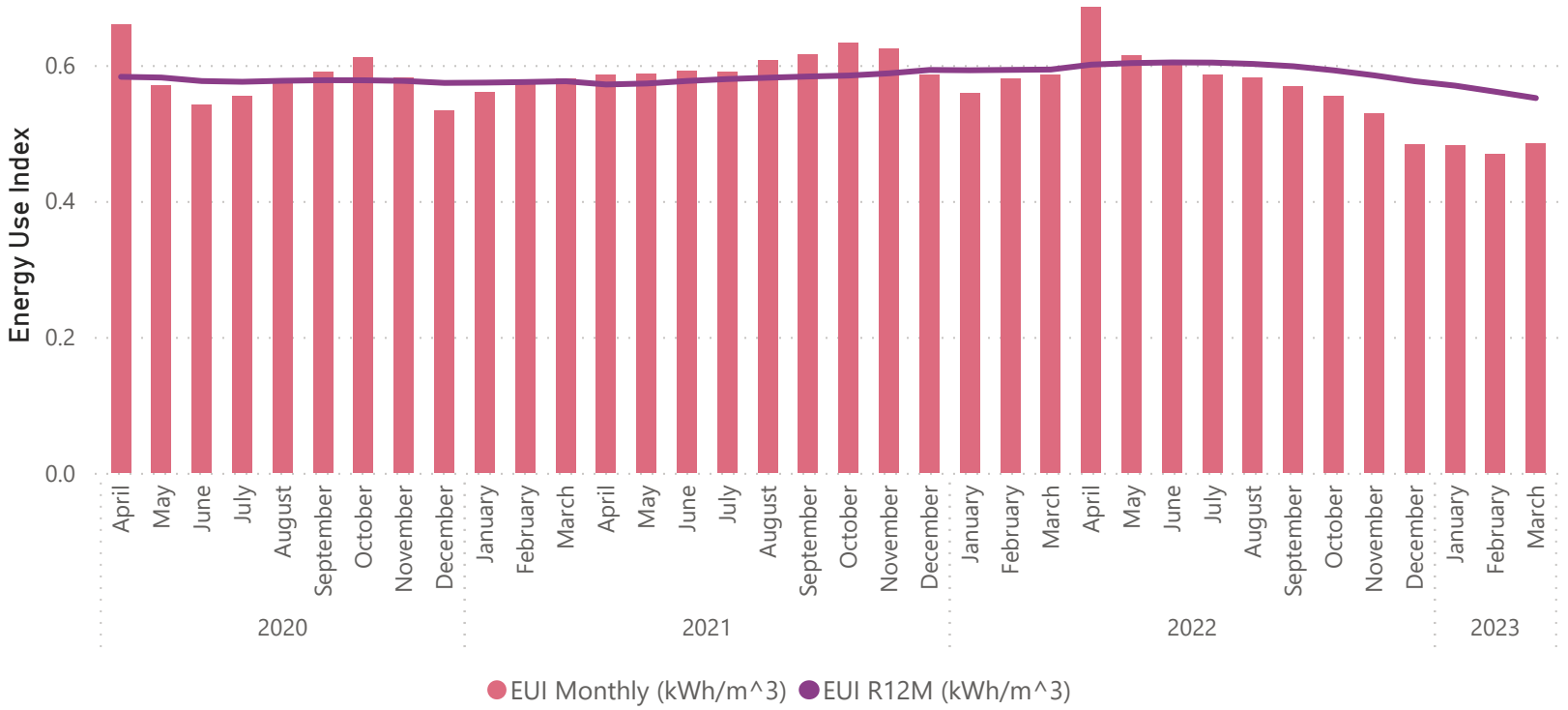


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Water Treatment Plant

Water Treatment Plant 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

Braemar Road Pump Station

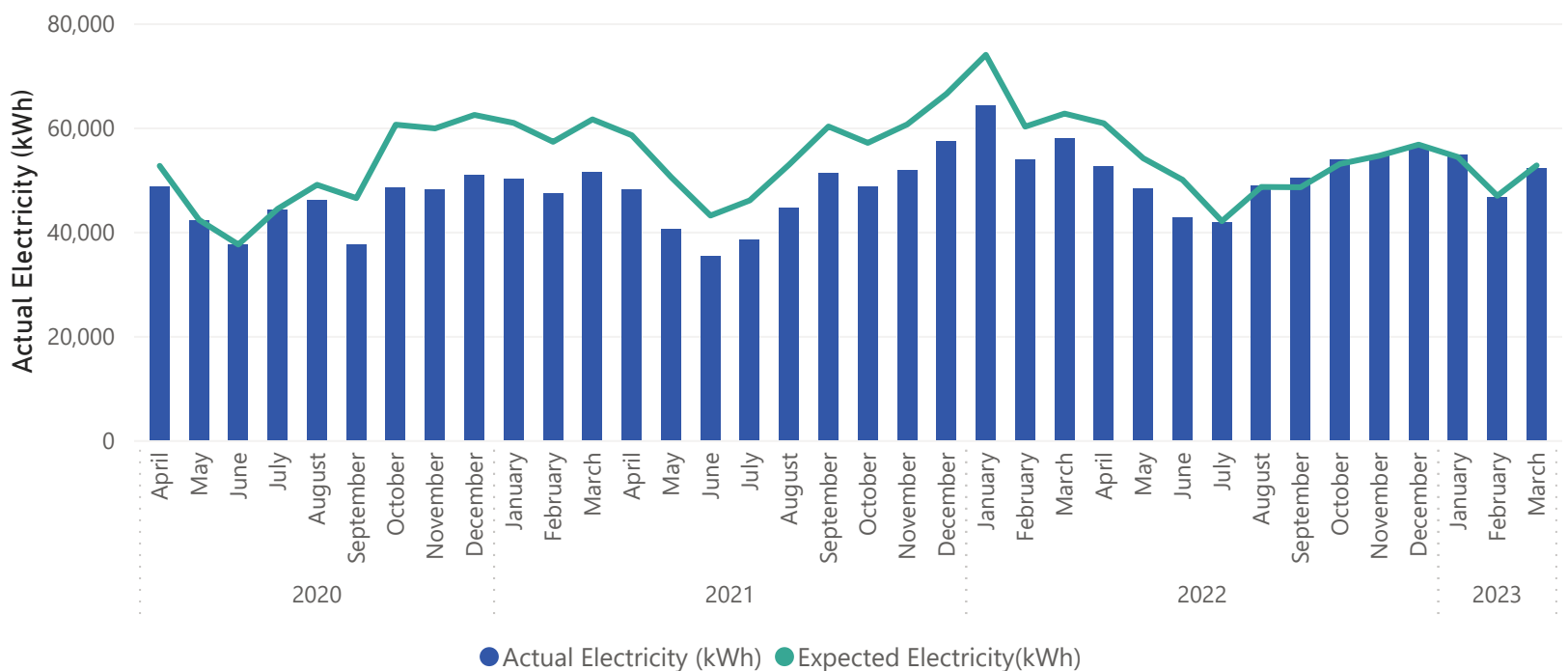
<p>\$109 Monthly Energy Cost Savings</p>	<p>618 Elec. Savings (kWh/mo)</p>	<p>1% Elec. Savings (%)</p>	<p>19,248 R12M Electricity Savings (kWh/yr)</p>	<p>81 CO2e Savings (kg/mo)</p>
<p>\$4,347 R12M Energy Cost Savings</p>				<p>2,627 R12M CO2e Savings (kg/yr)</p>

Comments:

The electricity use baseline was updated for the Braemar Road Pump Station, the baseline period is July 2021 to June 2022. The electricity baseline uses the amount of water pumped (m³) as the independent variable.

Savings from the high efficiency pumps and motors will no longer be visible when comparing to the new baseline and rolling 12-month savings will decrease. However, real savings have been achieved since September 2020, using approximately 15% less electricity compared to the older pumps and motors, which is evident in the EUI chart.

Braemar Rd Pumps Electricity Use Compared to Baseline (kWh)

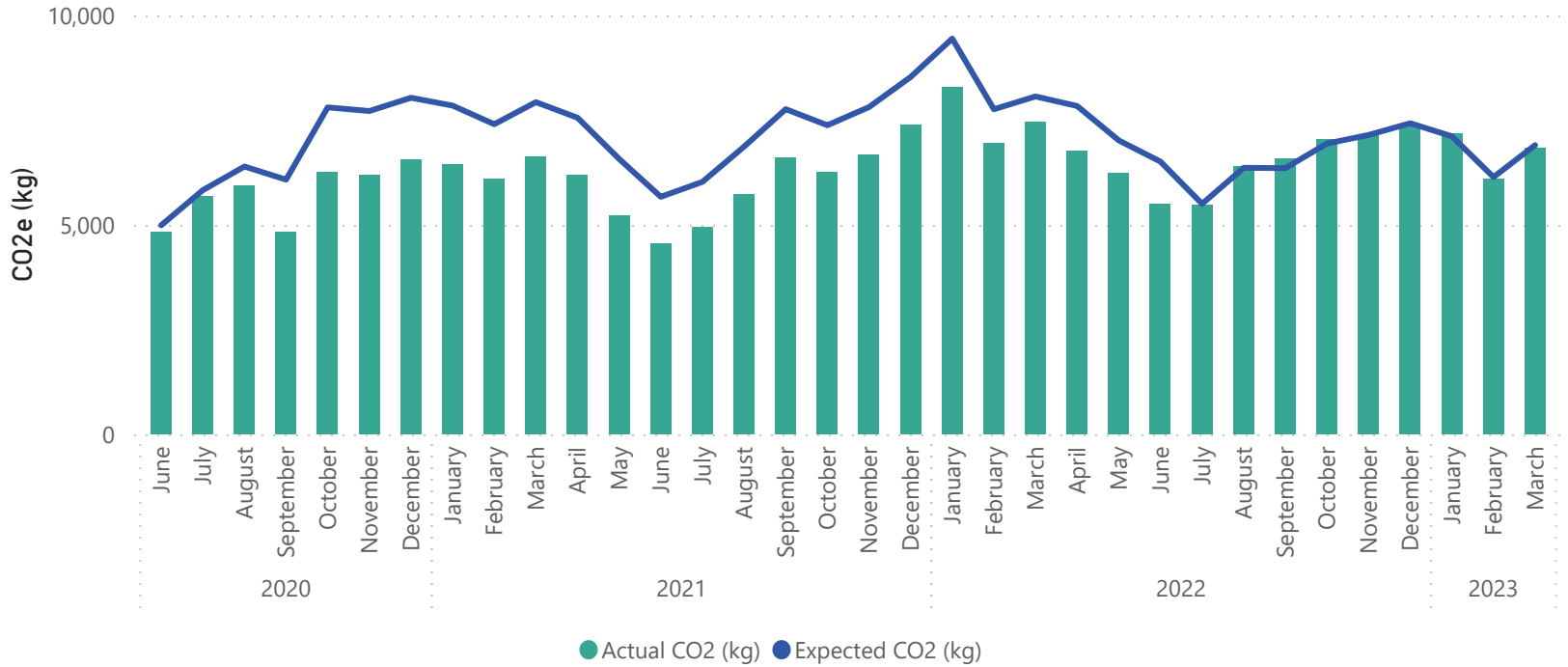


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

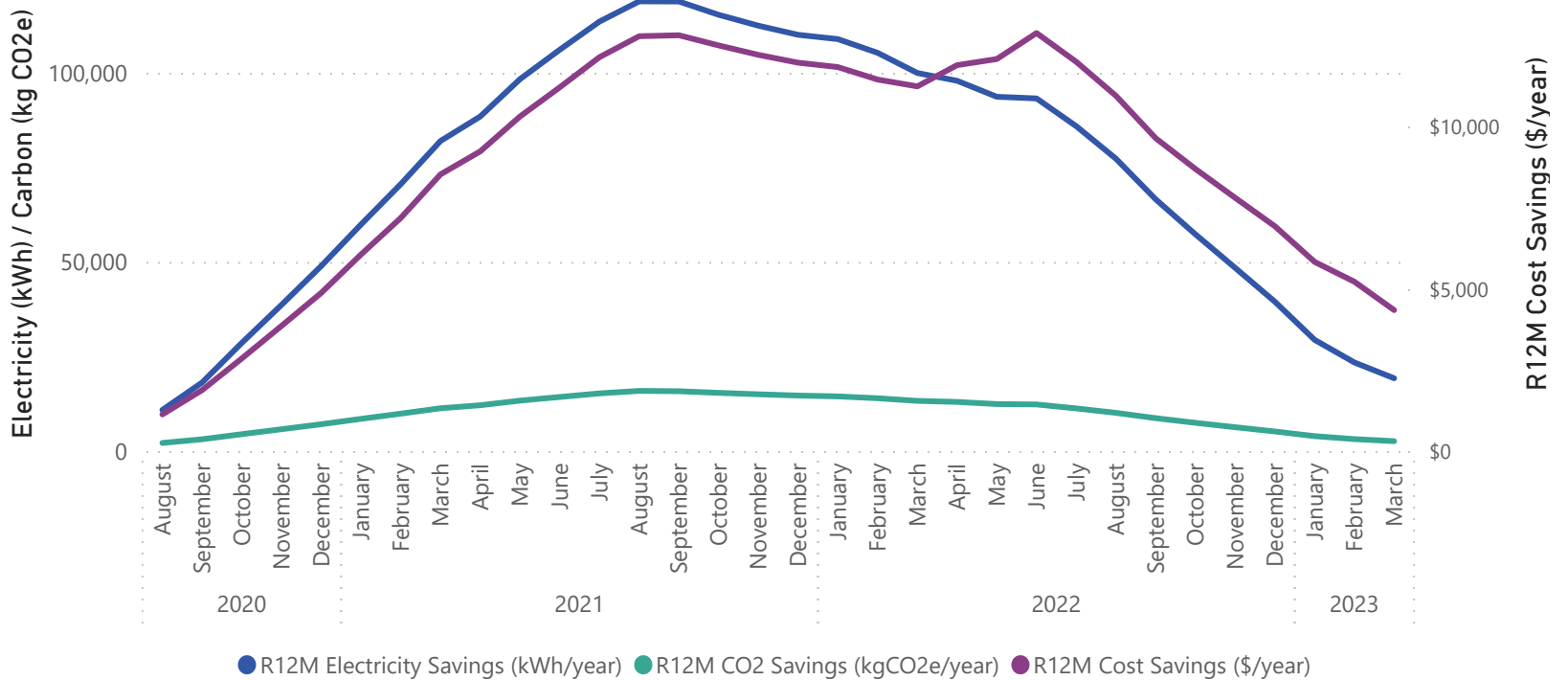
Whakatane District Council

Braemar Road Pump Station

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



Braemar Rd Pumps Rolling 12 Month Savings

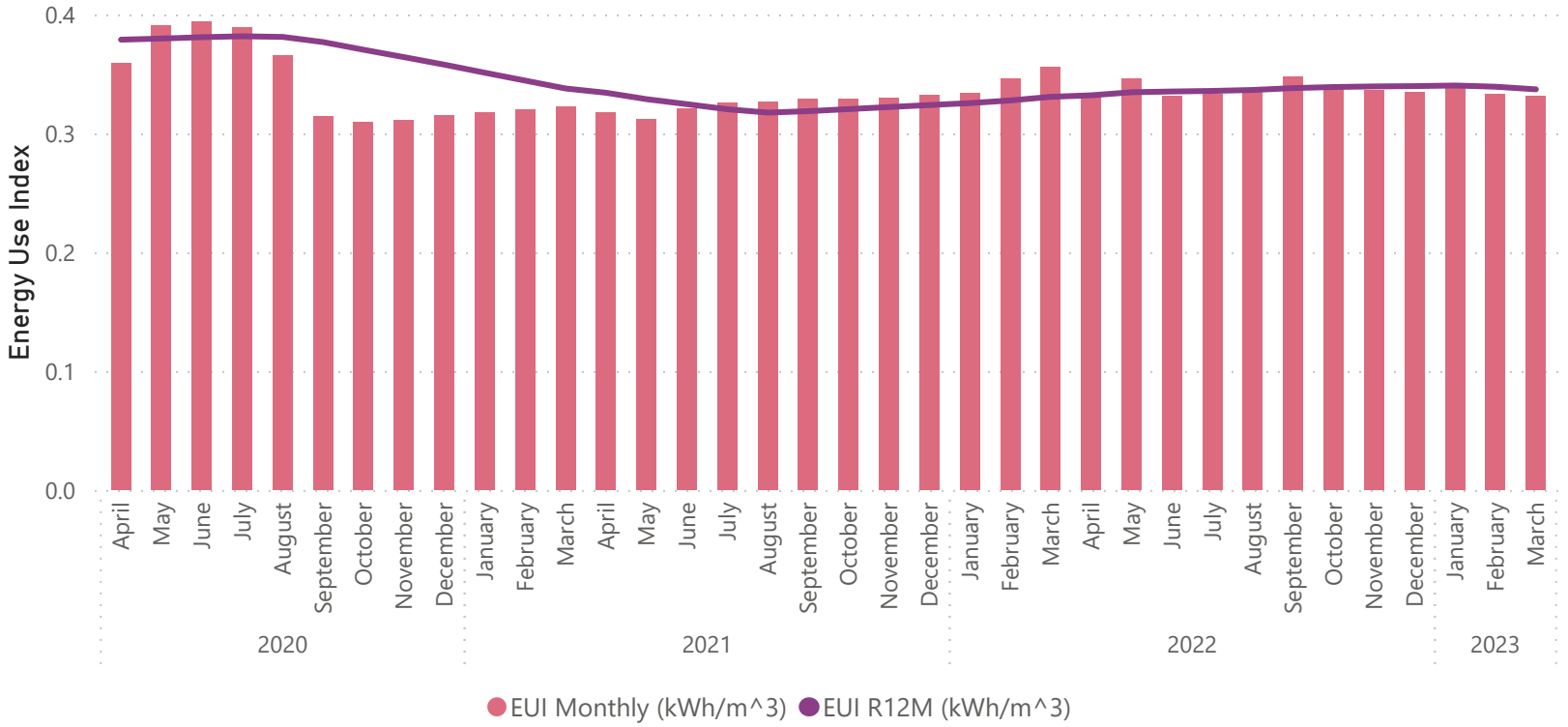


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Braemar Road Pump Station

Braemar 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

Paul Road Pump Station

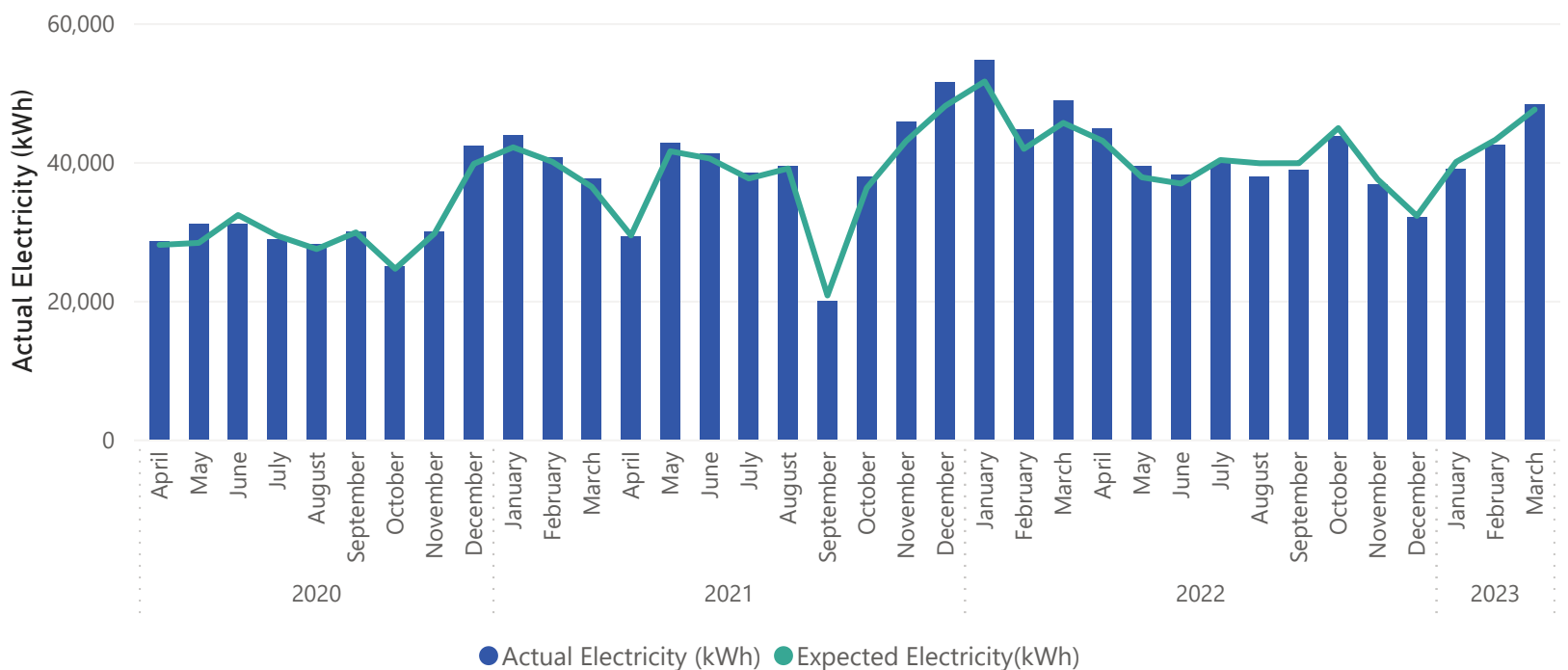
<p>-\$124 Monthly Energy Cost Savings</p>	<p>-696 Elec. Savings (kWh/mo)</p>	<p>-1% Elec. Savings (%)</p>	<p>1,787 R12M Electricity Savings (kWh/yr)</p>	<p>-91 CO2e Savings (kg/mo)</p>
<p>\$227 R12M Energy Cost Savings</p>				<p>248 R12M CO2e Savings (kg/yr)</p>

Comments:

The electricity use baseline was updated for the Paul Road Pump Station, the baseline period is July 2021 to June 2022. The electricity baseline uses the amount of water pumped (m³) as the independent variable. The updated baseline has a smaller baseload factor and a larger variable component.

Electricity use was slightly more than expected at Paul Road Pump Station. The monthly EUI is above average over the past 12 months. Rolling 12 month savings are increasing and are positive for the first time in several years, which is good.

Paul Rd Pumps Electricity Use Compared to Baseline (kWh)

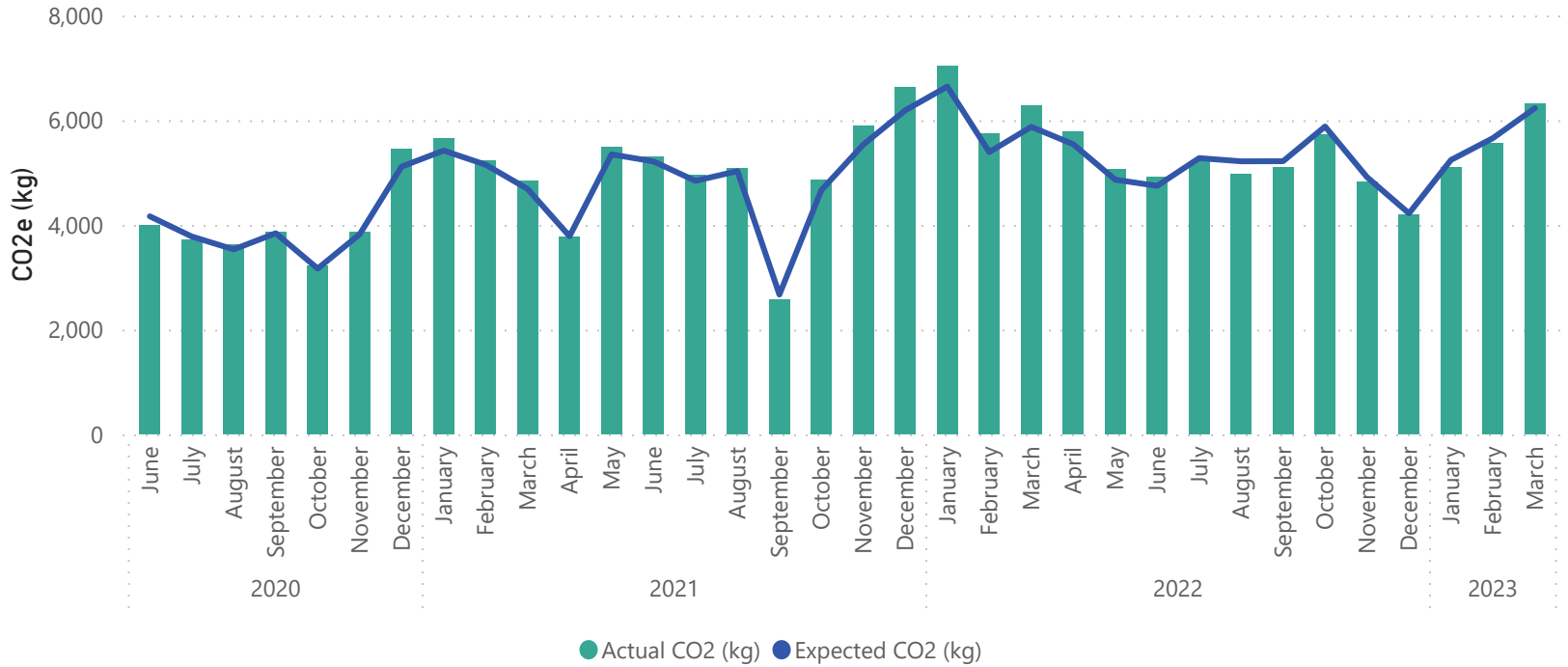


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

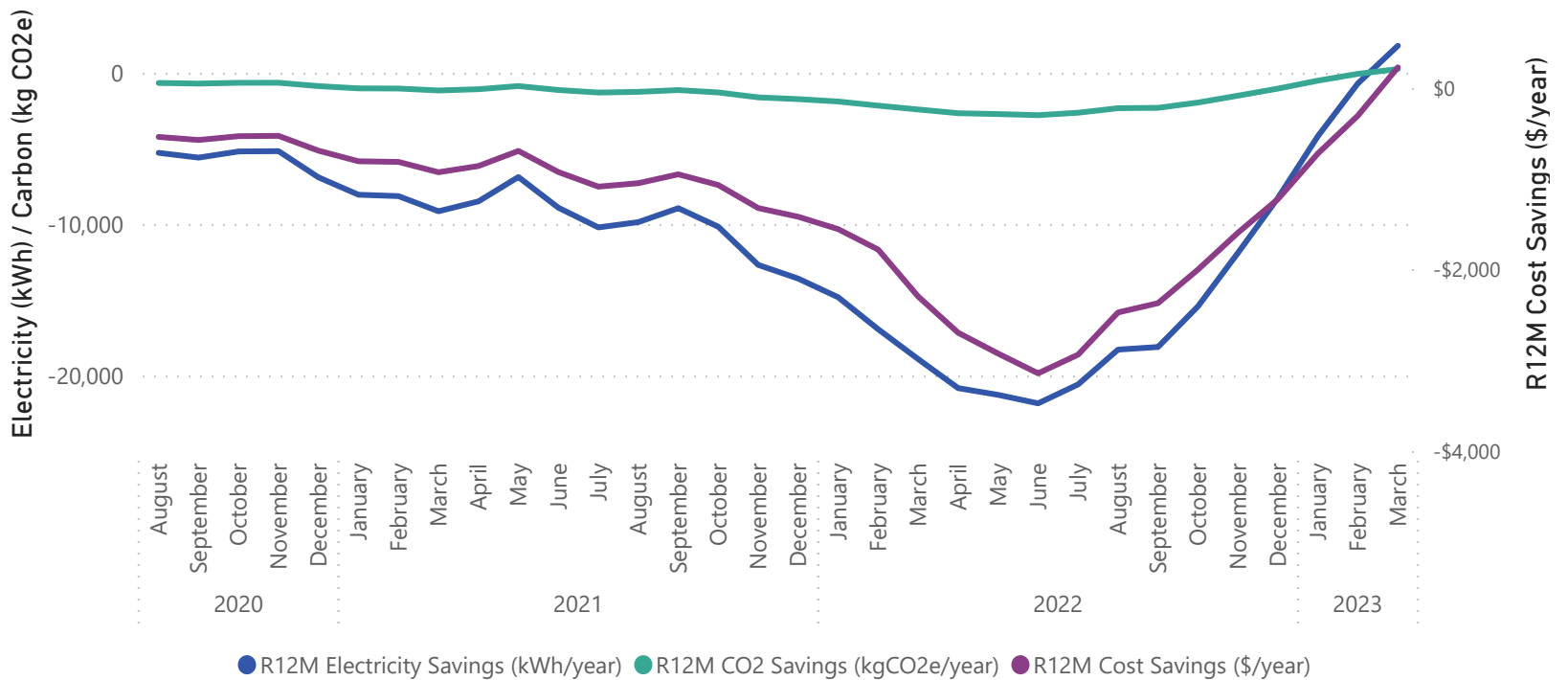
Whakatane District Council

Paul Road Pump Station

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



Paul Rd Pumps Rolling 12 Month Savings

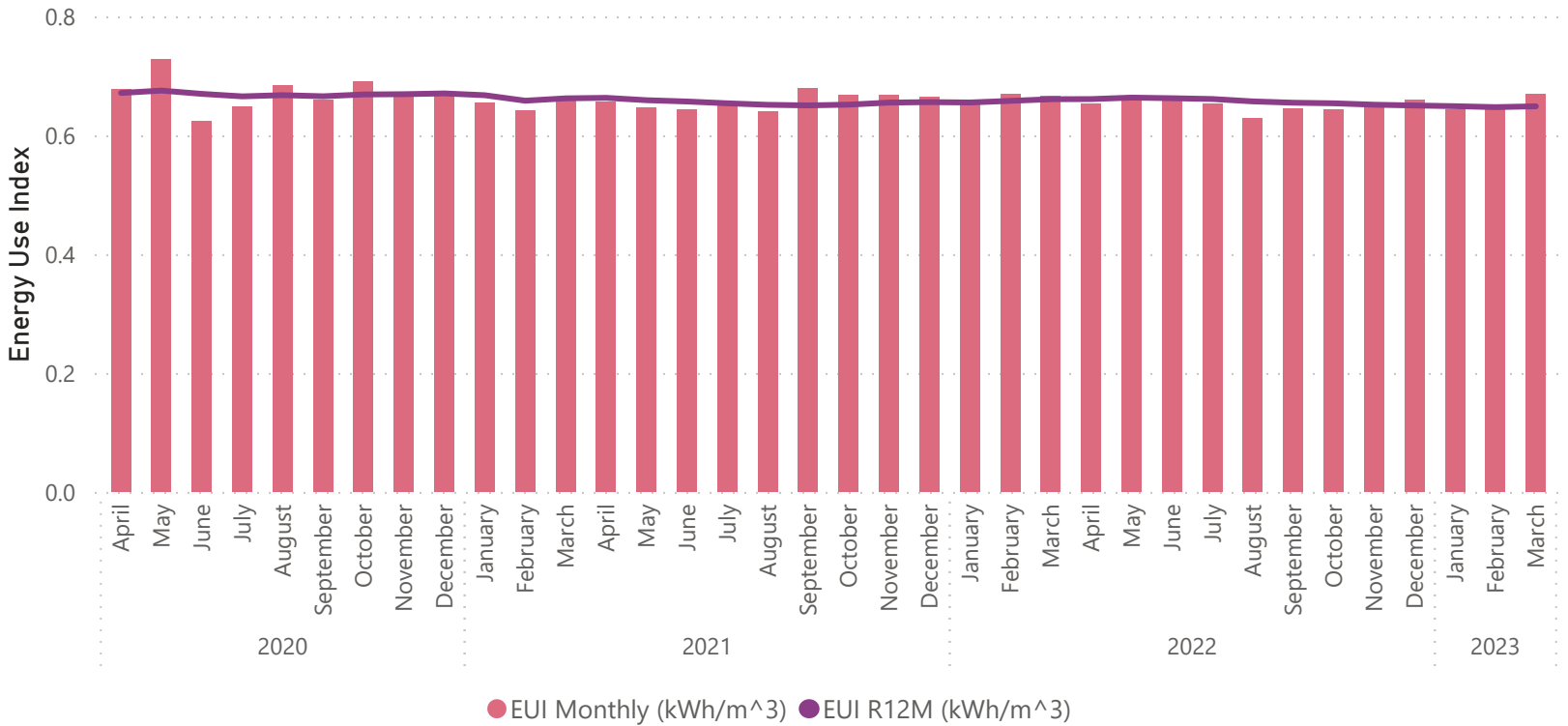


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

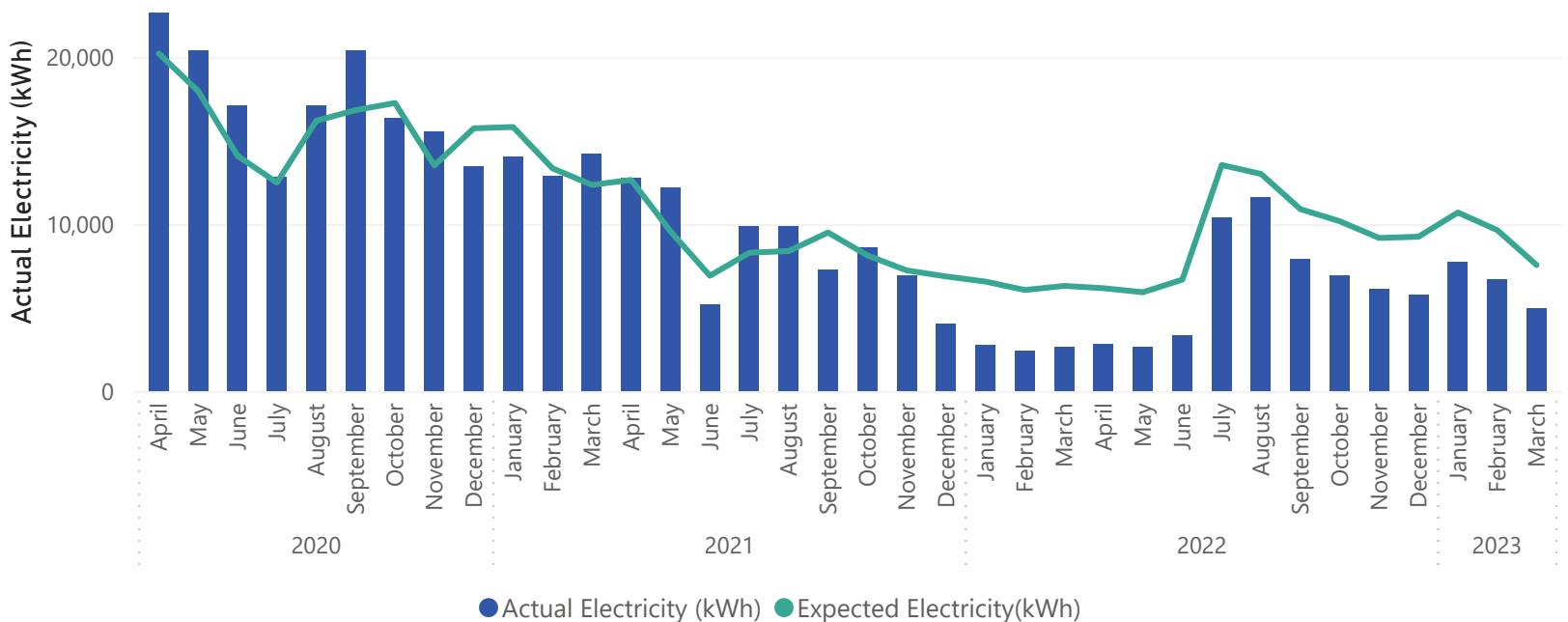
<p>\$562 Monthly Energy Cost Savings</p>	<p>2,613 Elec. Savings (kWh/mo)</p>	<p>35% Elec. Savings (%)</p>	<p>35,883 R12M Electricity Savings (kWh/yr)</p>	<p>342 CO2e Savings (kg/mo)</p>
<p>\$7,775 R12M Energy Cost Savings</p>				<p>4,678 R12M CO2e Savings (kg/yr)</p>

Comments:

The electricity use baseline was updated for the Johnson Road Pump Station, the baseline period is Aug 2018 to June 2022. The electricity baseline uses the amount of water pumped (m³) as the independent variable. The updated baseline has a smaller baseload factor and a larger variable component.

Another good month of savings for the month at Johnson Rd Pump Station, using 35% less electricity than expected.

Johnson Rd Pumps Electricity Use Compared to Baseline (kWh)

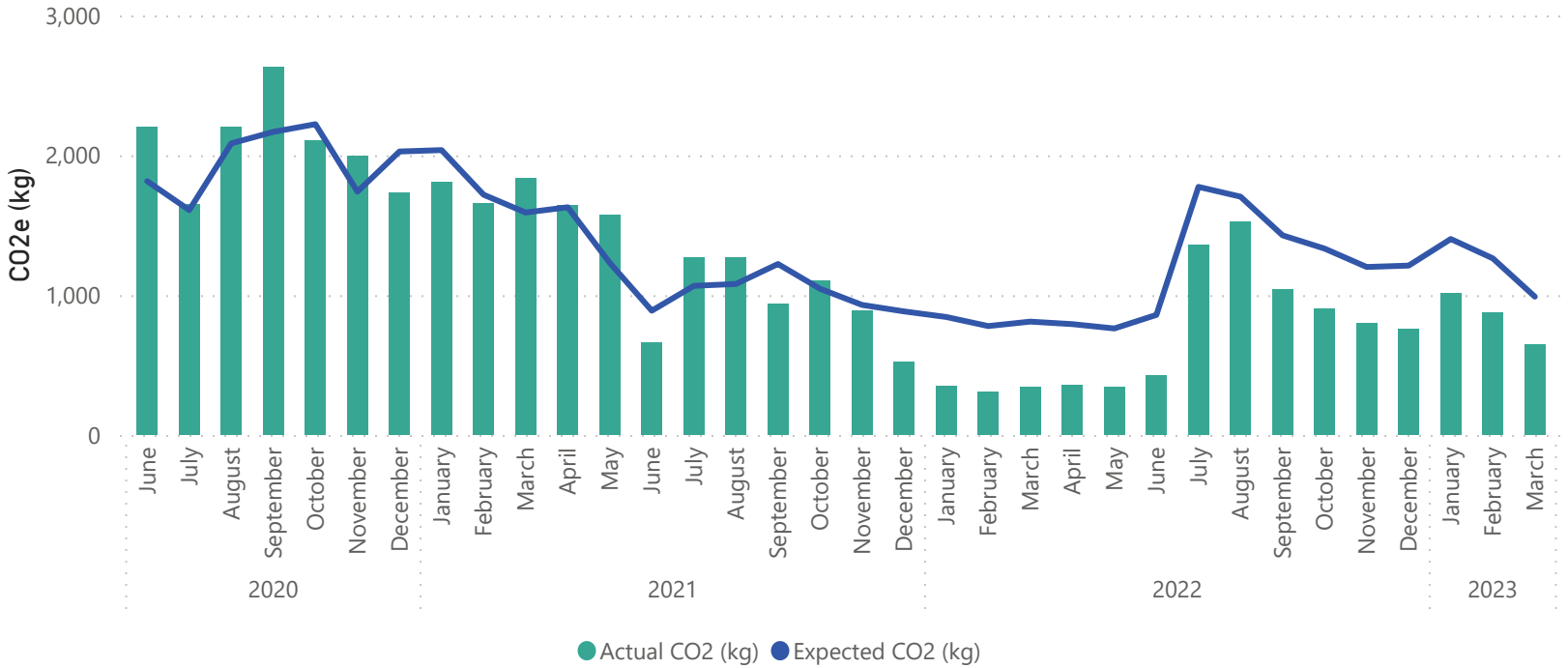


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

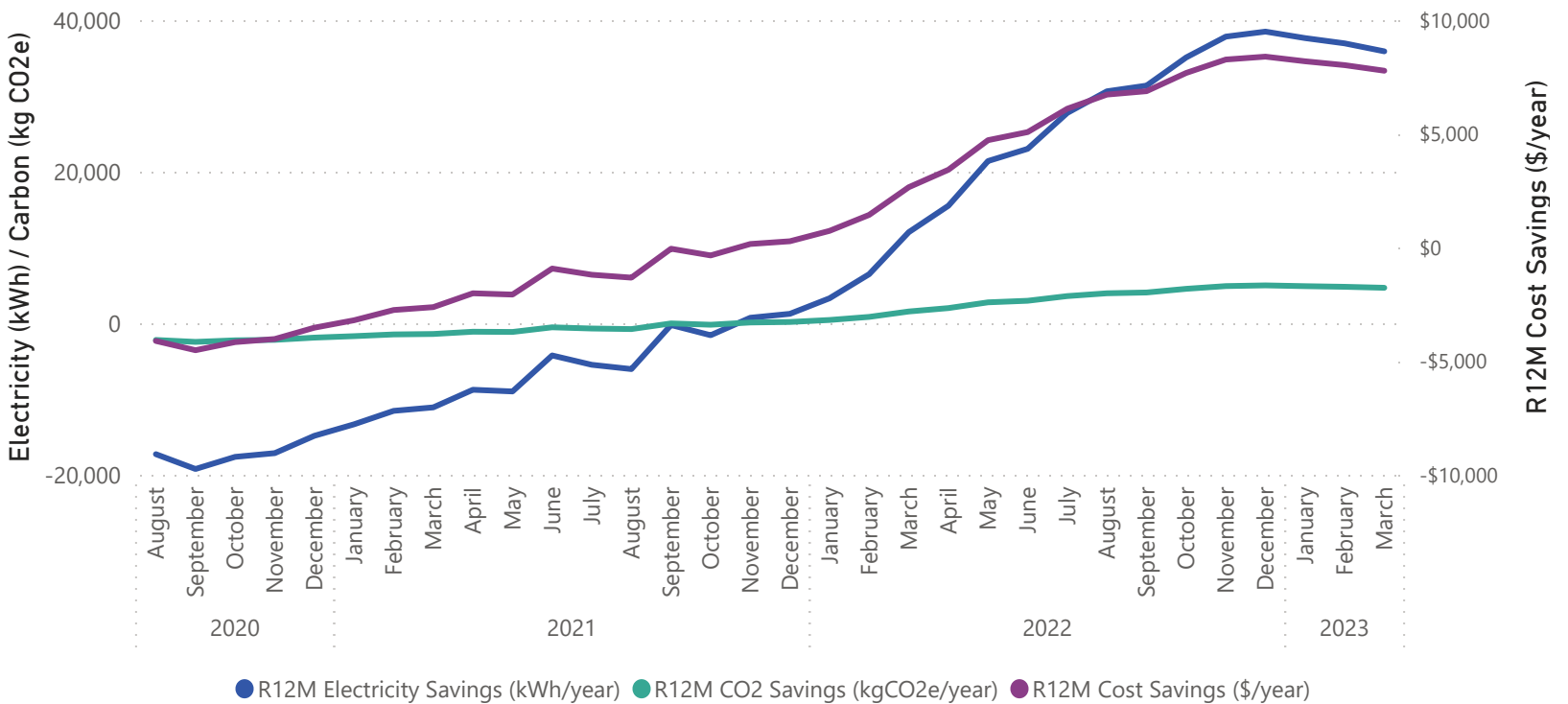
Whakatane District Council

Johnson Road Pump Station

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



Johnson Rd Pumps Rolling 12 Month Savings

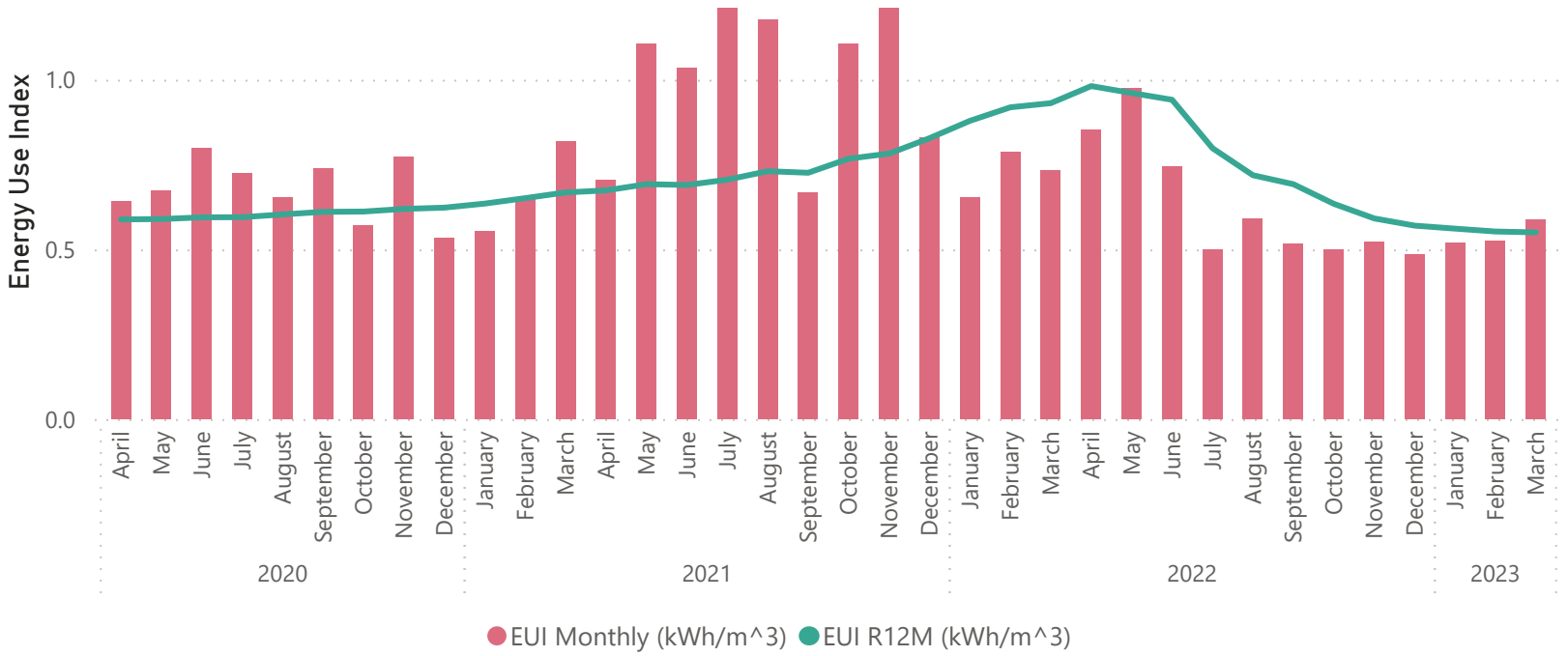


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Johnson Road Pump Station

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



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

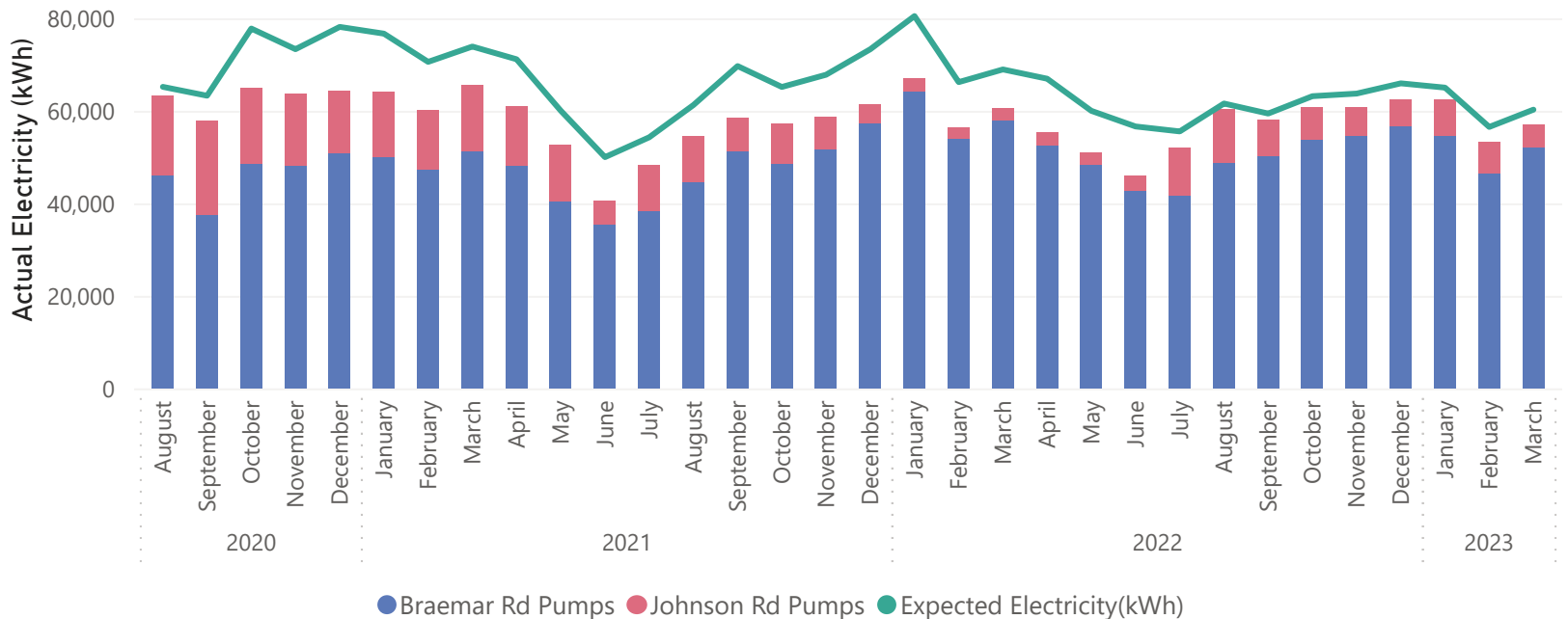
<p>\$672 Monthly Energy Cost Savings</p>	<p>3,231 Elec. Savings (kWh/mo)</p>	<p>5% Elec. Savings (%)</p>	<p>55,131 R12M Electricity Savings (kWh/yr)</p>	<p>423 CO2e Savings (kg/mo)</p>
<p>\$12,122 R12M Energy Cost Savings</p>				<p>7,305 R12M CO2e Savings (kg/yr)</p>

Comments:

Baselines were updated for Johnson Road and Braemar Road pump stations.

Johnson Rd achieved savings in March 2023, Braemar Rd pump station's electricity use slightly less than expected for the month. The monthly EUI for the two pumps has shown a trend of decreasing energy use in recent months, which is good.

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

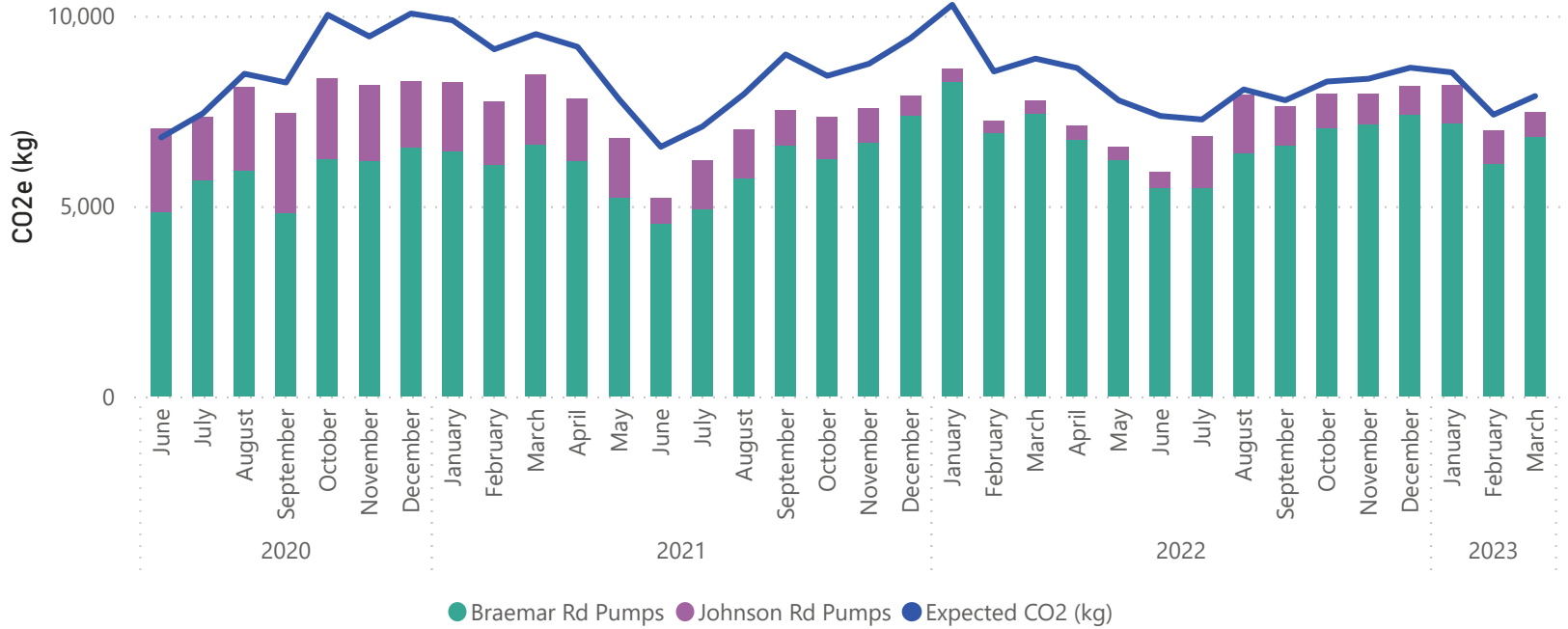


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

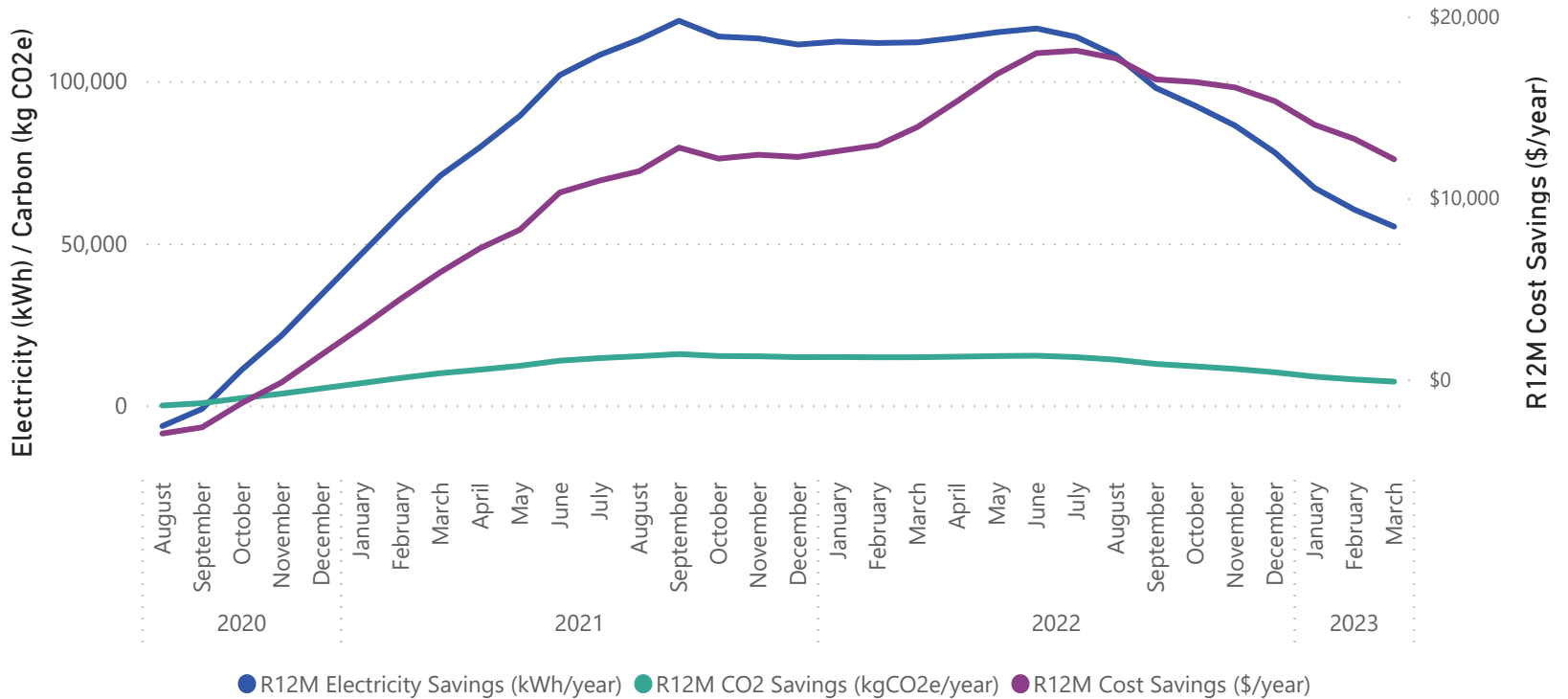
Whakatane District Council

Johnson and Braemar Rd Pump Stations

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



Johnson and Braemar Rd Pump Stations Cumulative Rolling 12 Month Savings

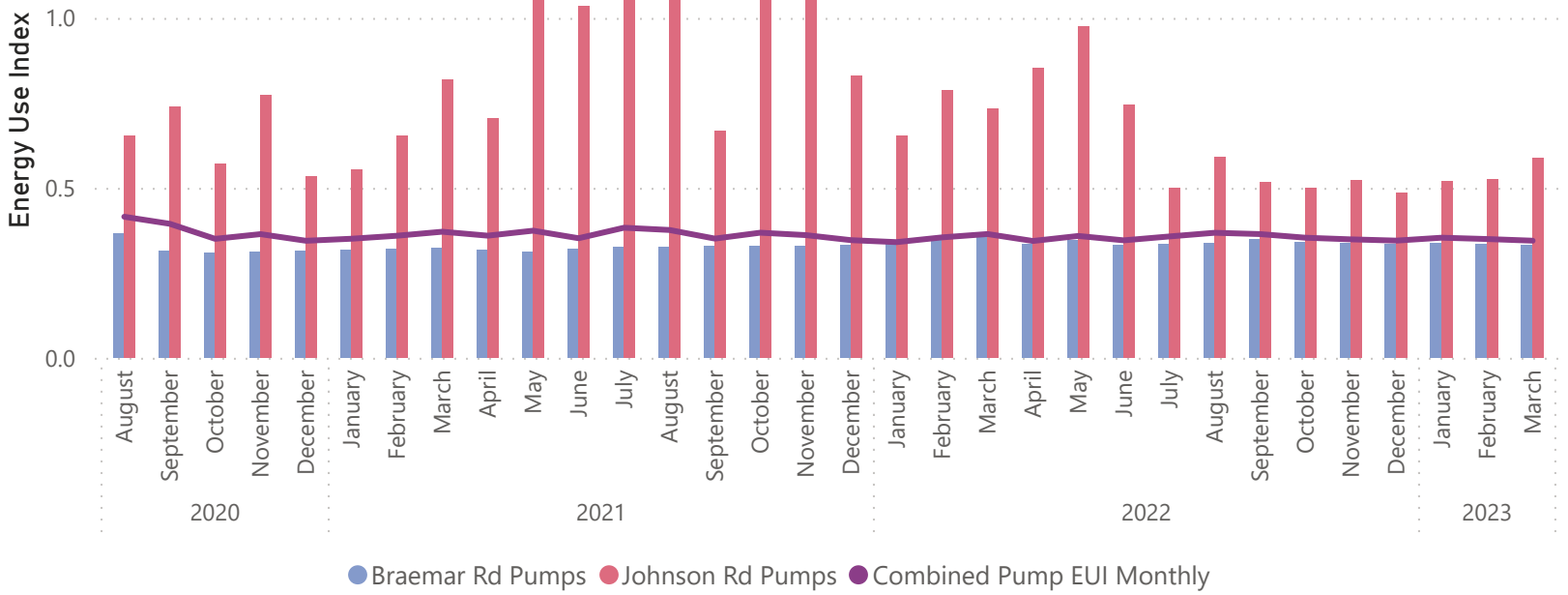


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Johnson 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
Baselines were updated for all sites from July 2022.

Whakatane District Council

Bridger Glade Pump Station

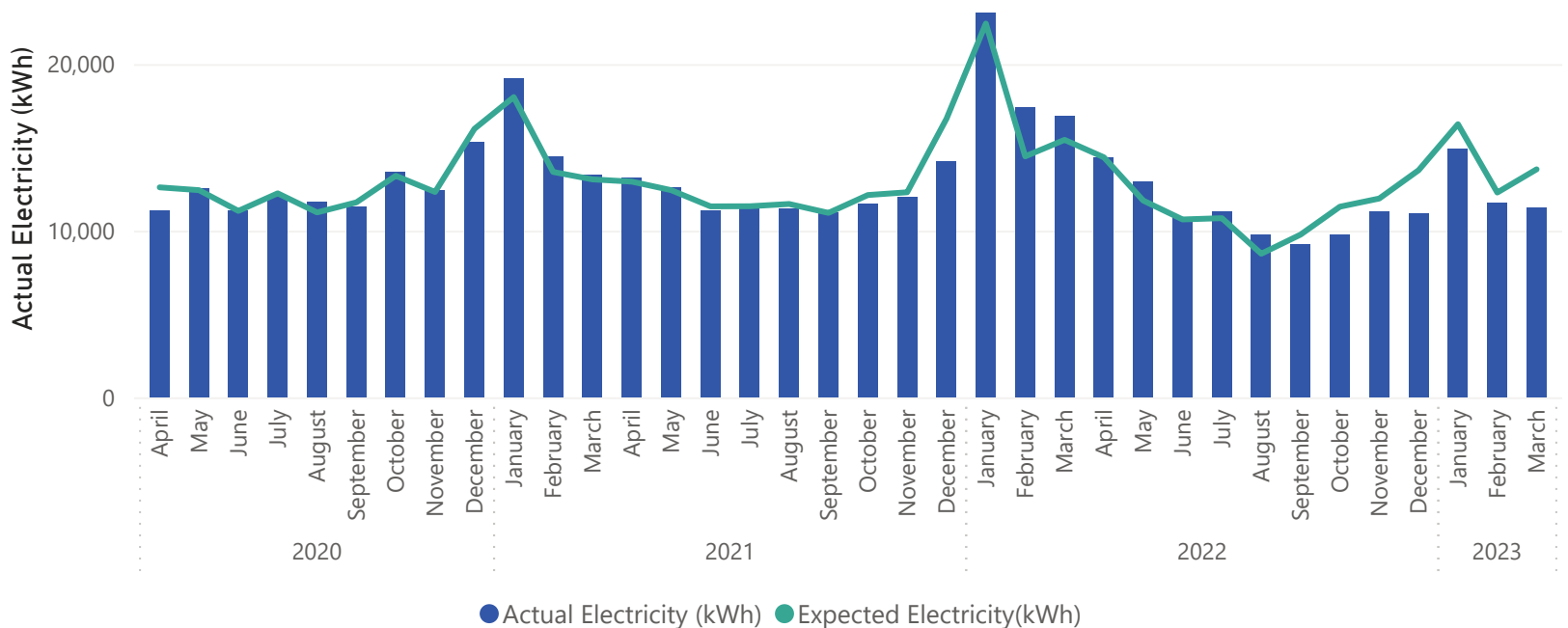
<p>\$411 Monthly Energy Cost Savings</p>	<p>2,329 Elec. Savings (kWh/mo)</p>	<p>17% Elec. Savings (%)</p>	<p>7,351 R12M Electricity Savings (kWh/yr)</p>	<p>305 CO2e Savings (kg/mo)</p>
<p>\$1,288 R12M Energy Cost Savings</p>				<p>966 R12M CO2e Savings (kg/yr)</p>

Comments:

The electricity use baseline was updated for the Bridger Glade Pump Station, the baseline period is July 2021 to June 2022. The electricity baseline uses the amount of water pumped (m³) as the independent variable. The updated baseline has no baseload factor and a marginally larger variable component.

March is the seventh month in a row that the Bridger Glade Pump Station has used less electricity than expected, this is due to new supply pumps that were installed in late August 2022. The monthly EUI is less than average over the last 12 months.

Bridger Glade Pumps Electricity Use Compared to Baseline (kWh)

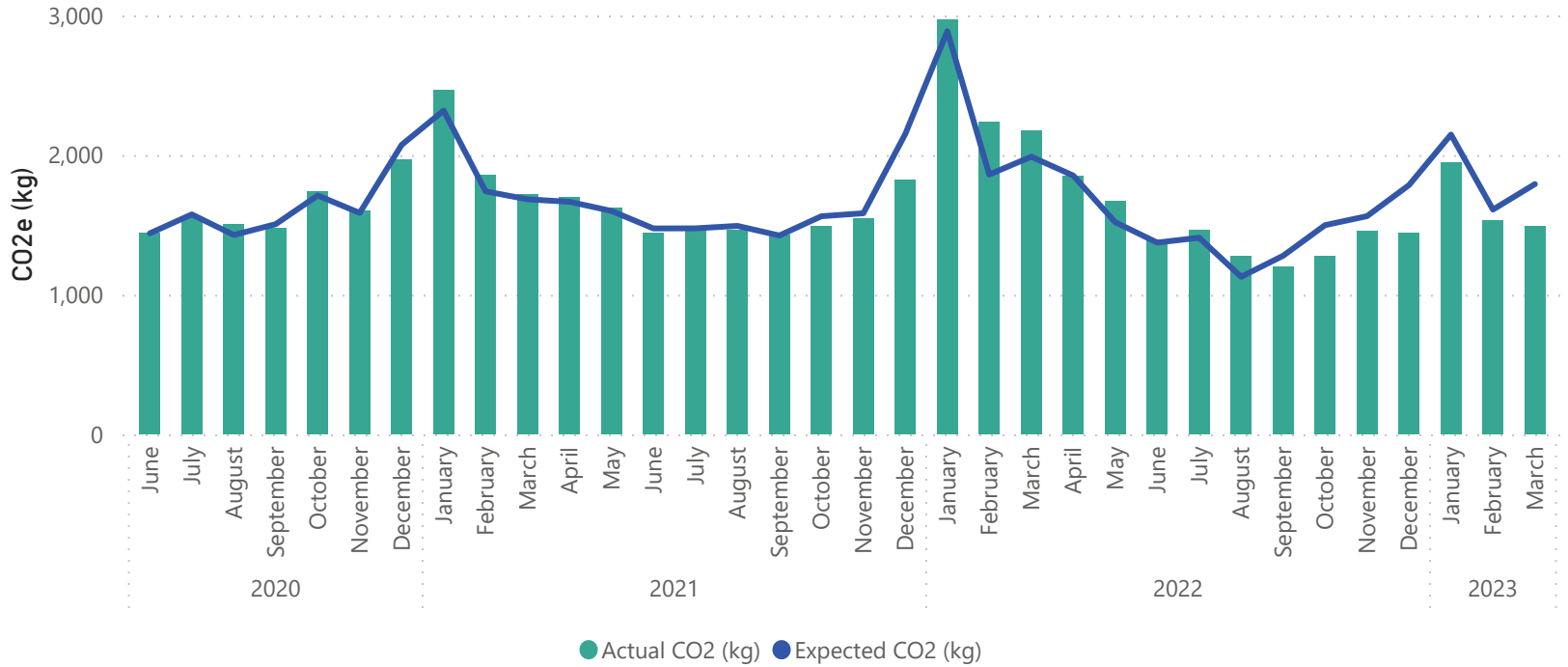


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

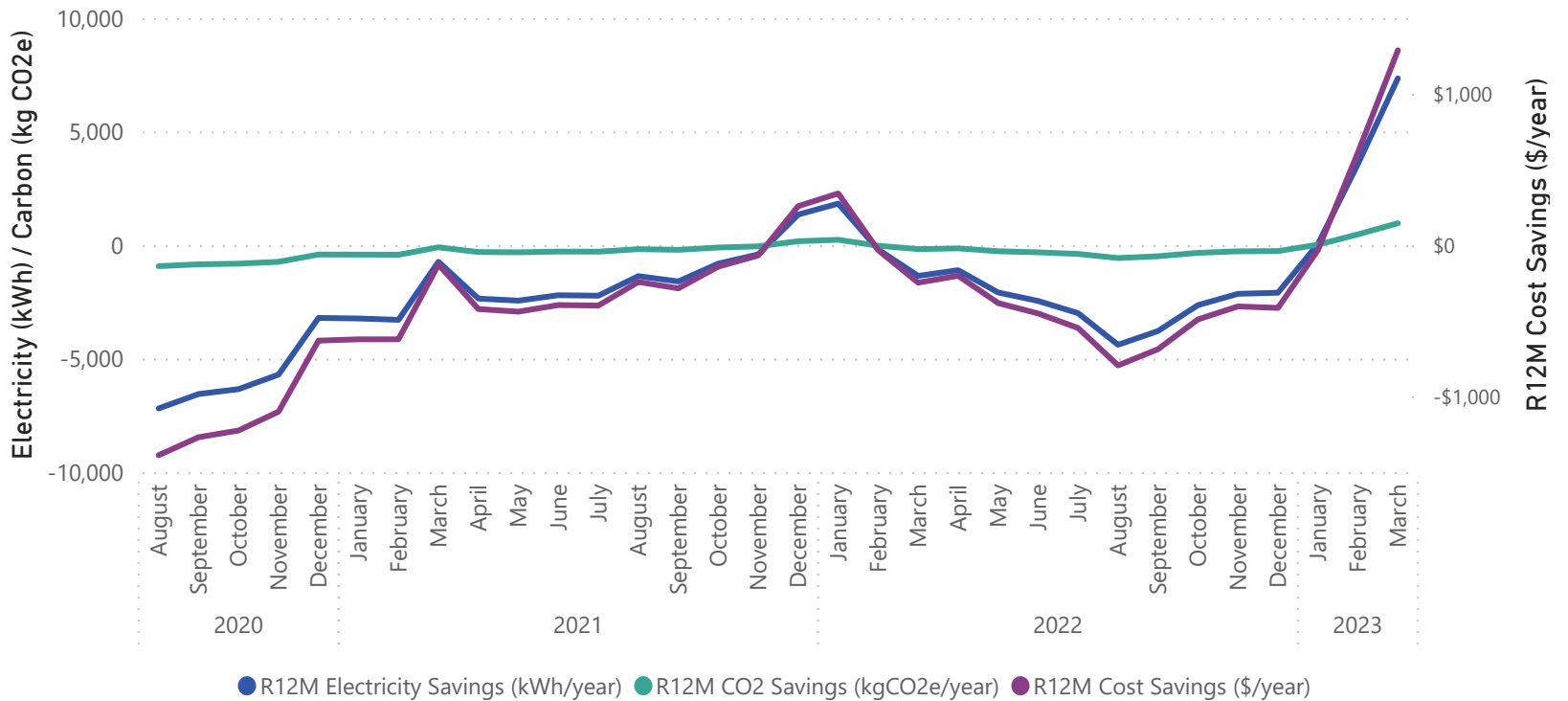
Whakatane District Council

Bridger Glade Pump Station

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



Bridger Glade Pumps Rolling 12 Month Savings

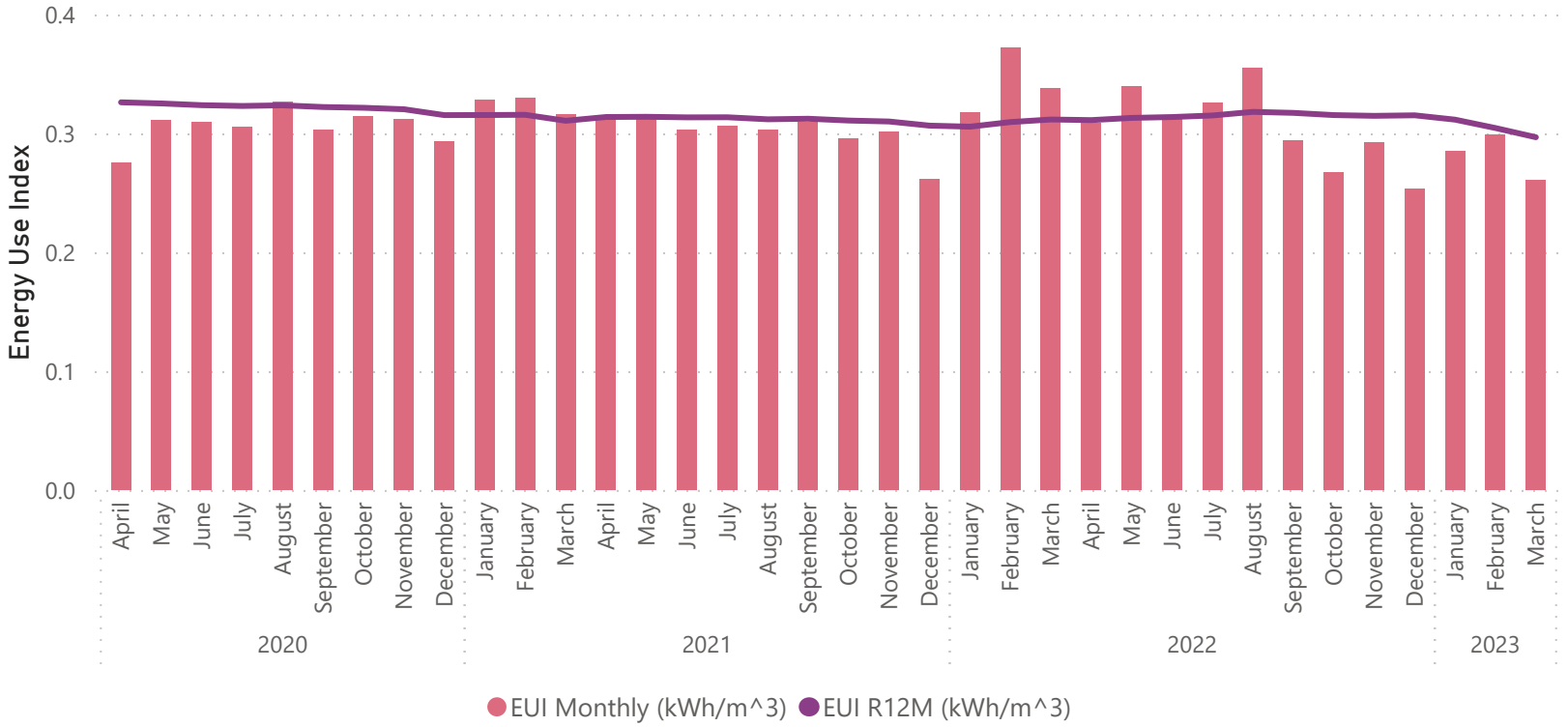


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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
Baselines were updated for all sites from July 2022.

Whakatane District Council

Ohope Oxidation Ponds

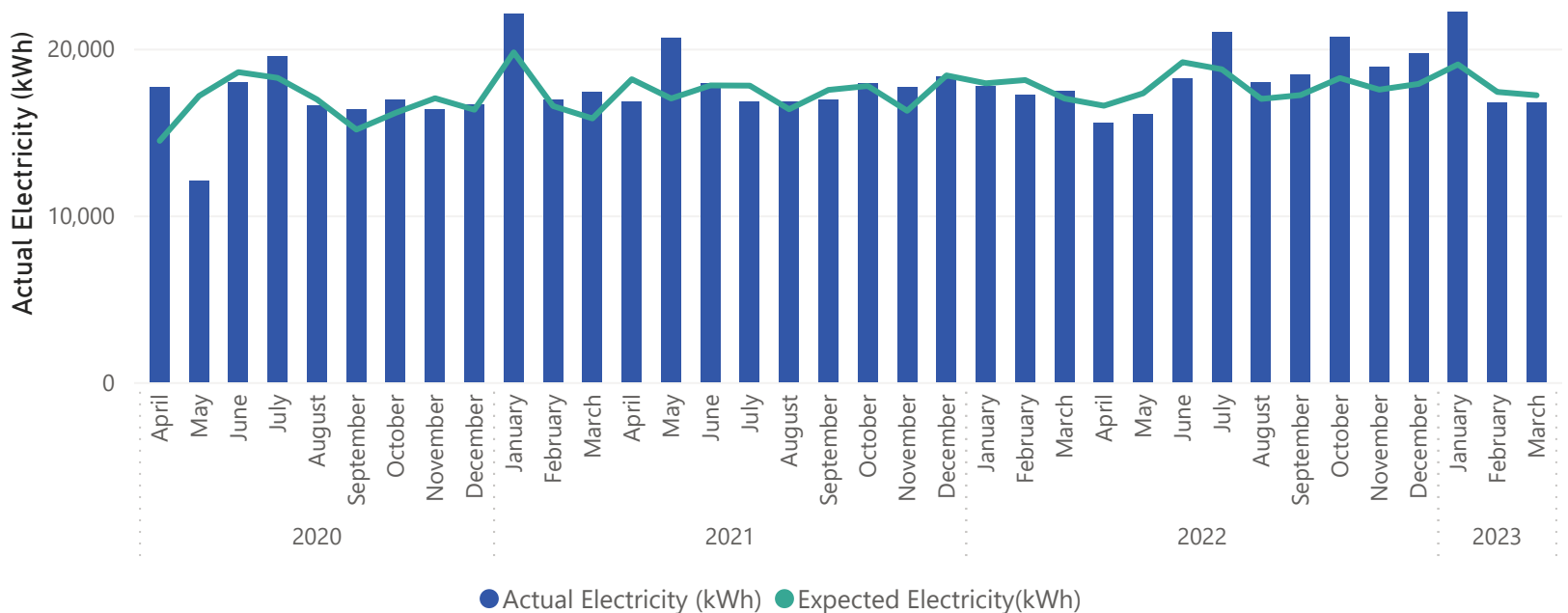
<p>\$79 Monthly Energy Cost Savings</p>	<p>449 Elec. Savings (kWh/mo)</p>	<p>3% Elec. Savings (%)</p>	<p>-8,998 R12M Electricity Savings (kWh/yr)</p>	<p>59 CO2e Savings (kg/mo)</p>
<p>-\$1,572 R12M Energy Cost Savings</p>				<p>-1,186 R12M CO2e Savings (kg/yr)</p>

Comments:

The baseline for electricity use was updated for the Ohope Oxidation Ponds, the baseline period is July 2021 to June 2022. The electricity baseline uses the amount of effluent pumped (m³) as the independent variable. The updated baseline has a larger baseload factor and a smaller variable component.

Ohope Oxidation Ponds have used more electricity than expected in 7 of the last 12 months. Rainfall has generally been higher than usual, which may contribute to higher electricity usage.

Ohope Oxidation Ponds Electricity Use Compared to Baseline (kWh)

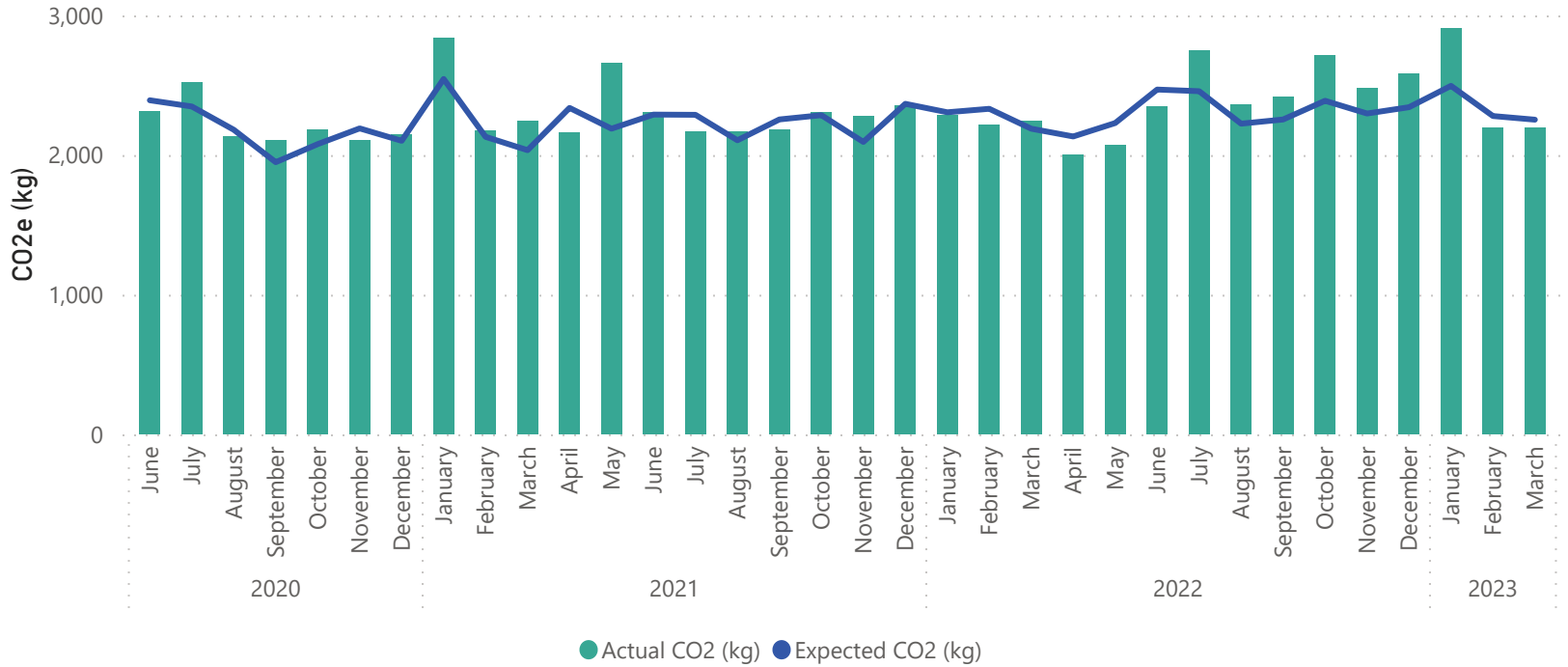


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

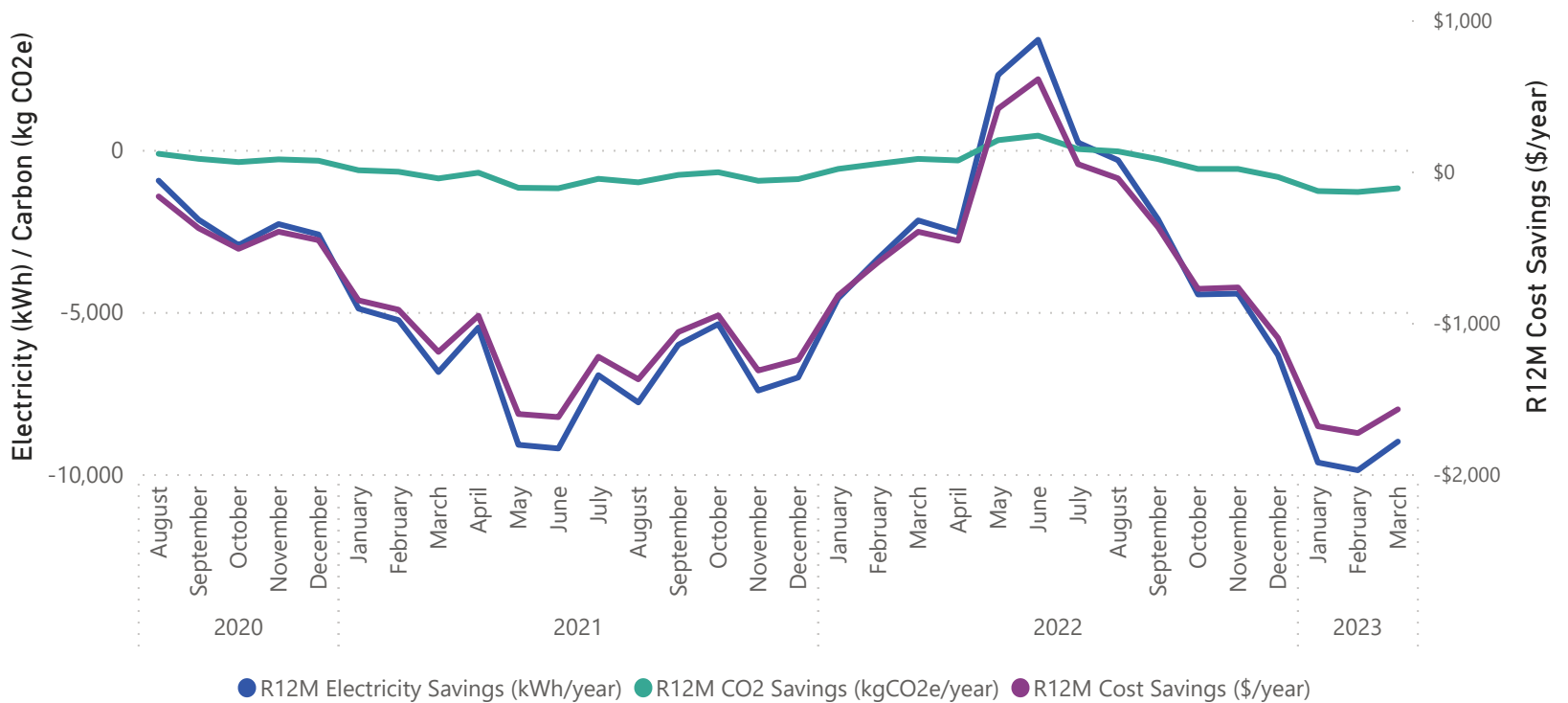
Whakatane District Council

Ohope Oxidation Ponds

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



Ohope Oxidation Ponds Rolling 12 Month Savings

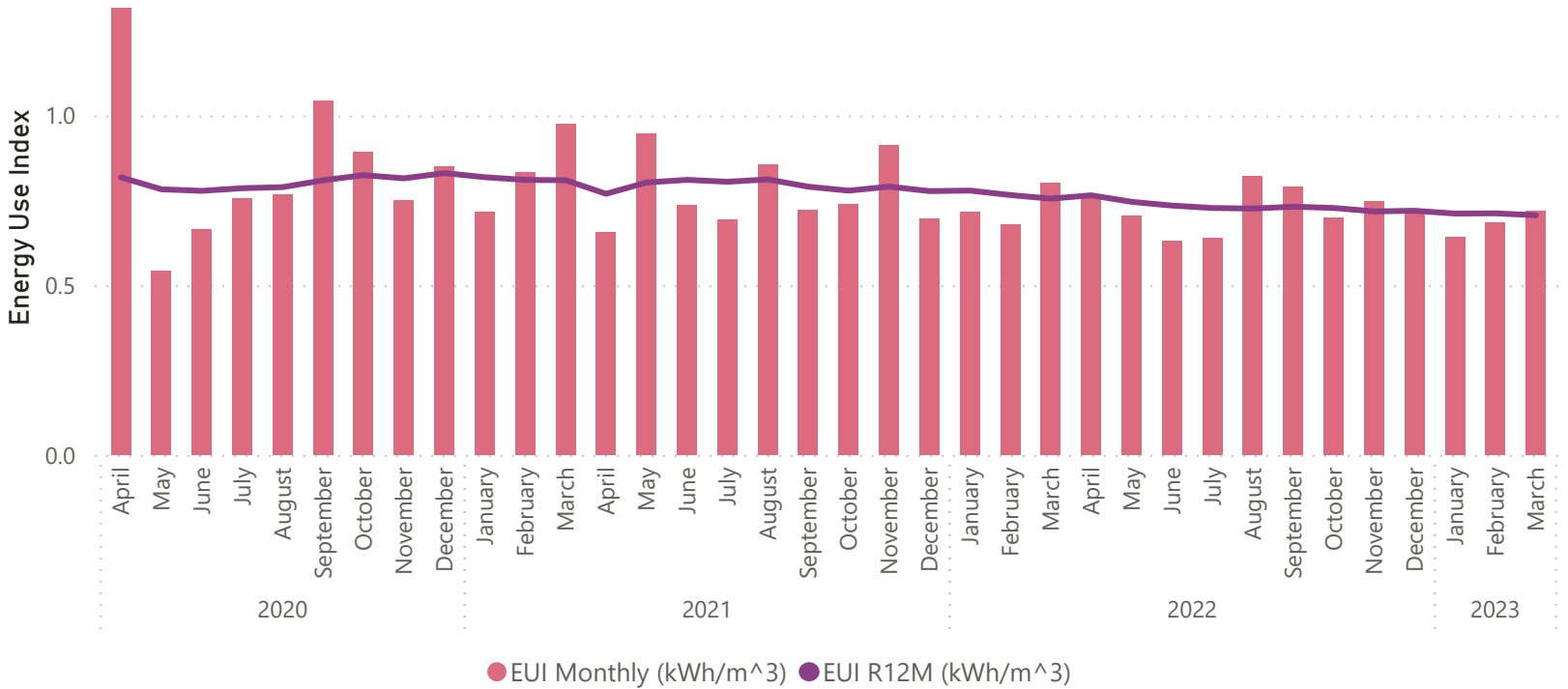


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Ohope Oxidation Ponds

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



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

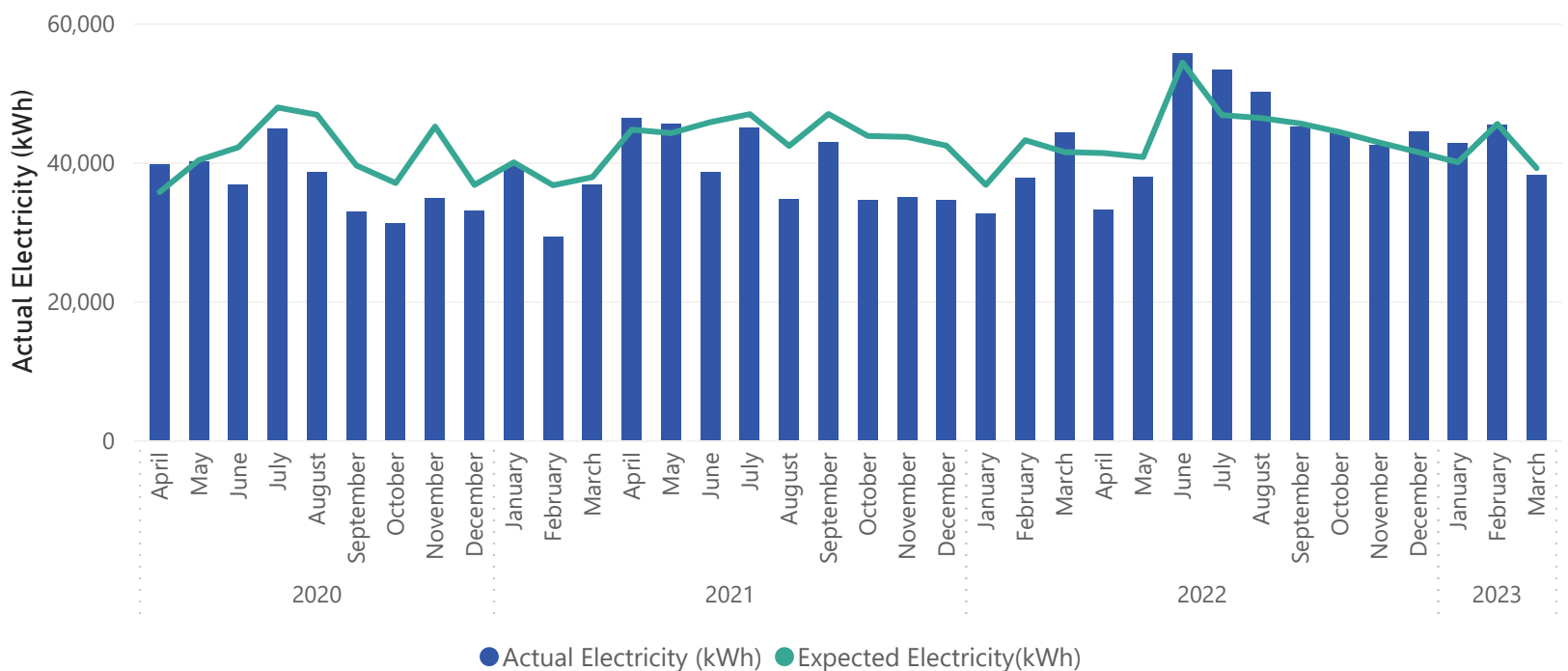
<p>\$183 Monthly Energy Cost Savings</p>	<p>996 Elec. Savings (kWh/mo)</p>	<p>3% Elec. Savings (%)</p>	<p>-4,370 R12M Electricity Savings (kWh/yr)</p>	<p>130 CO2e Savings (kg/mo)</p>
<p>-\$538 R12M Energy Cost Savings</p>				<p>-595 R12M CO2e Savings (kg/yr)</p>

Comments:

The electricity use baseline was updated for the Whakatane Oxidation Ponds, the baseline period is July 2021 to June 2022. The electricity baseline combines electricity use for the NHH and TOU account and uses the effluent volumes each month (m³) as the independent variable. The updated baseline has a smaller baseload factor and a smaller variable component.

The oxidation ponds' electricity use is less than expected in March 2023. The monthly EUI has increased above the 12 month average; however, the 12 month average EUI is trending downwards, which is good.

Whakatane Oxidation Ponds Electricity Use Compared to Baseline (kWh)

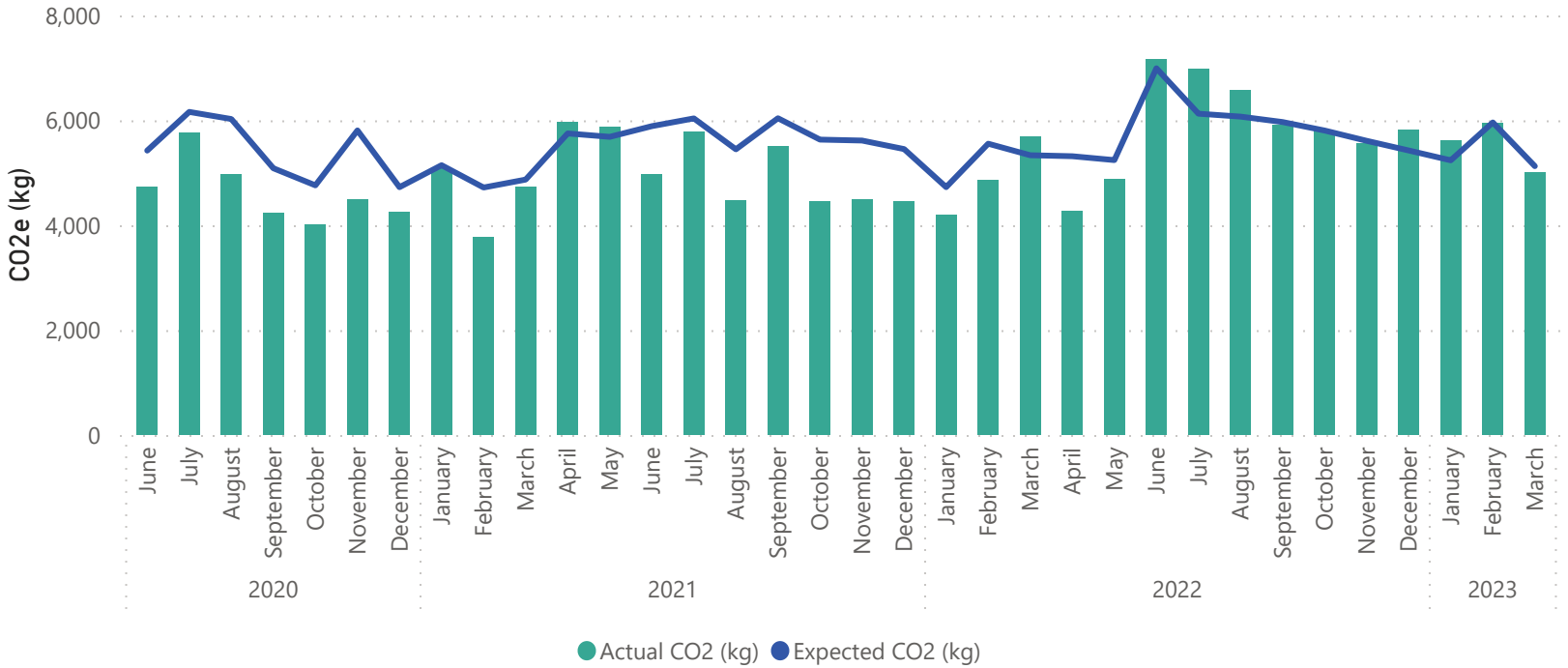


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

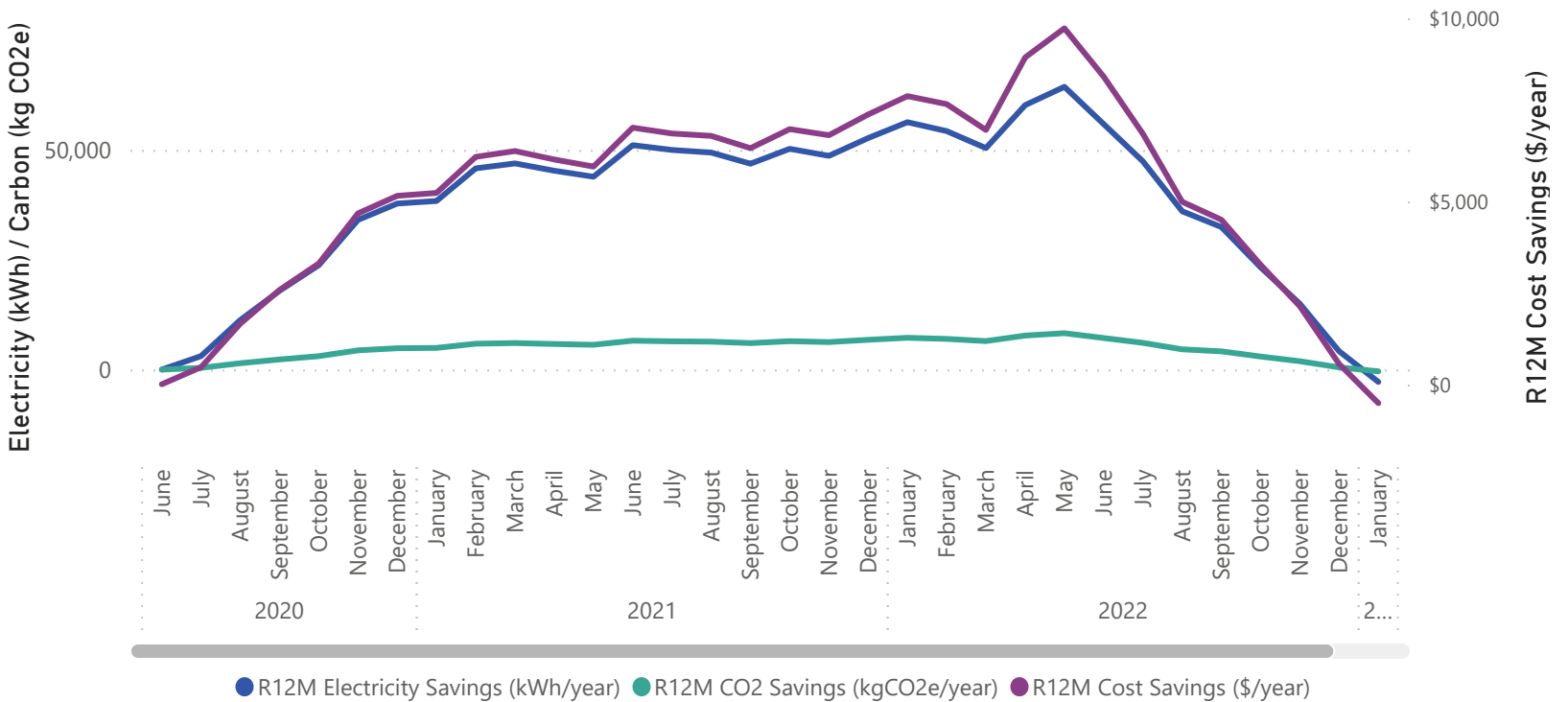
Whakatane District Council

Whakatane Oxidation Ponds

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



Whakatane Oxidation Ponds Rolling 12 Month Savings

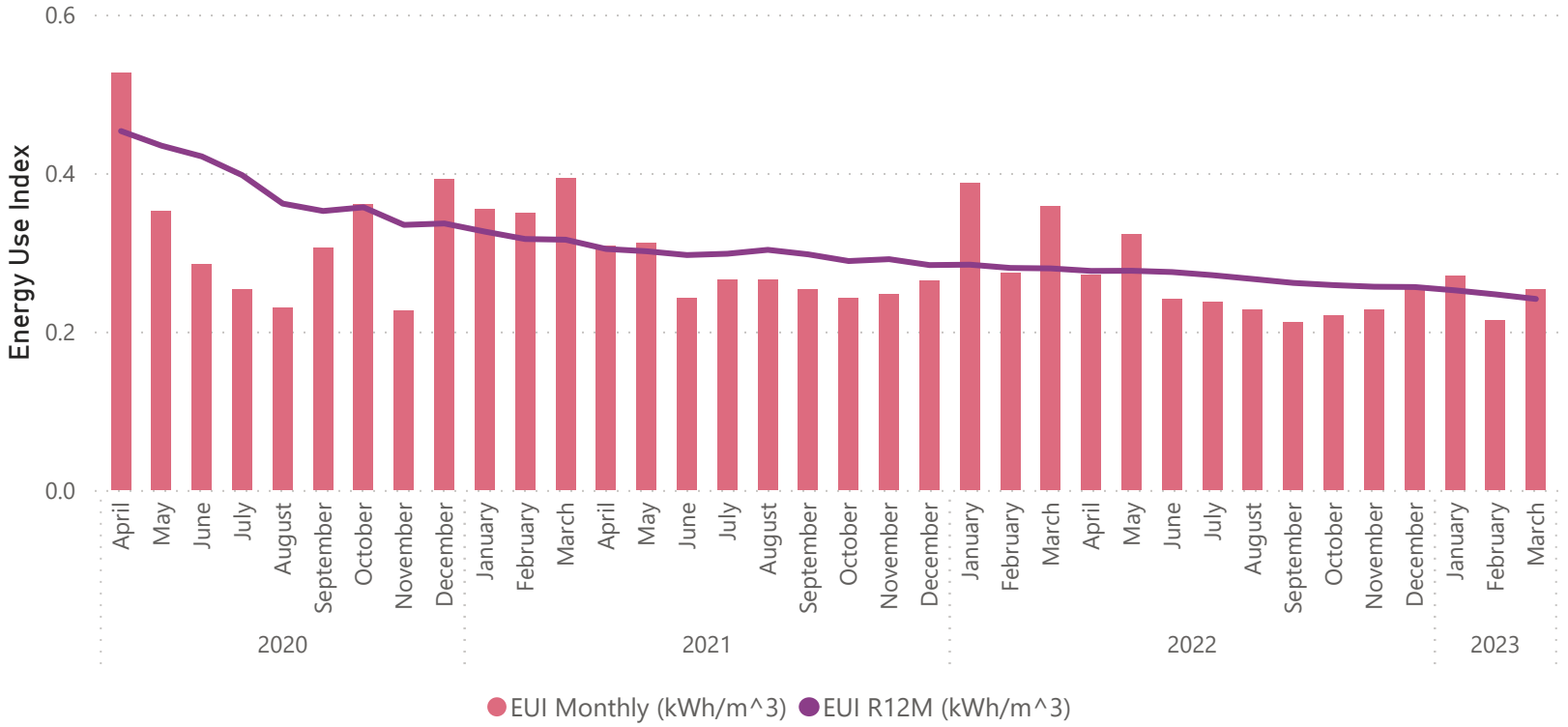


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council

Whakatane Oxidation Ponds

Whakatane Oxidation Ponds 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

McAlister Street and Rose Garden Pump Stations

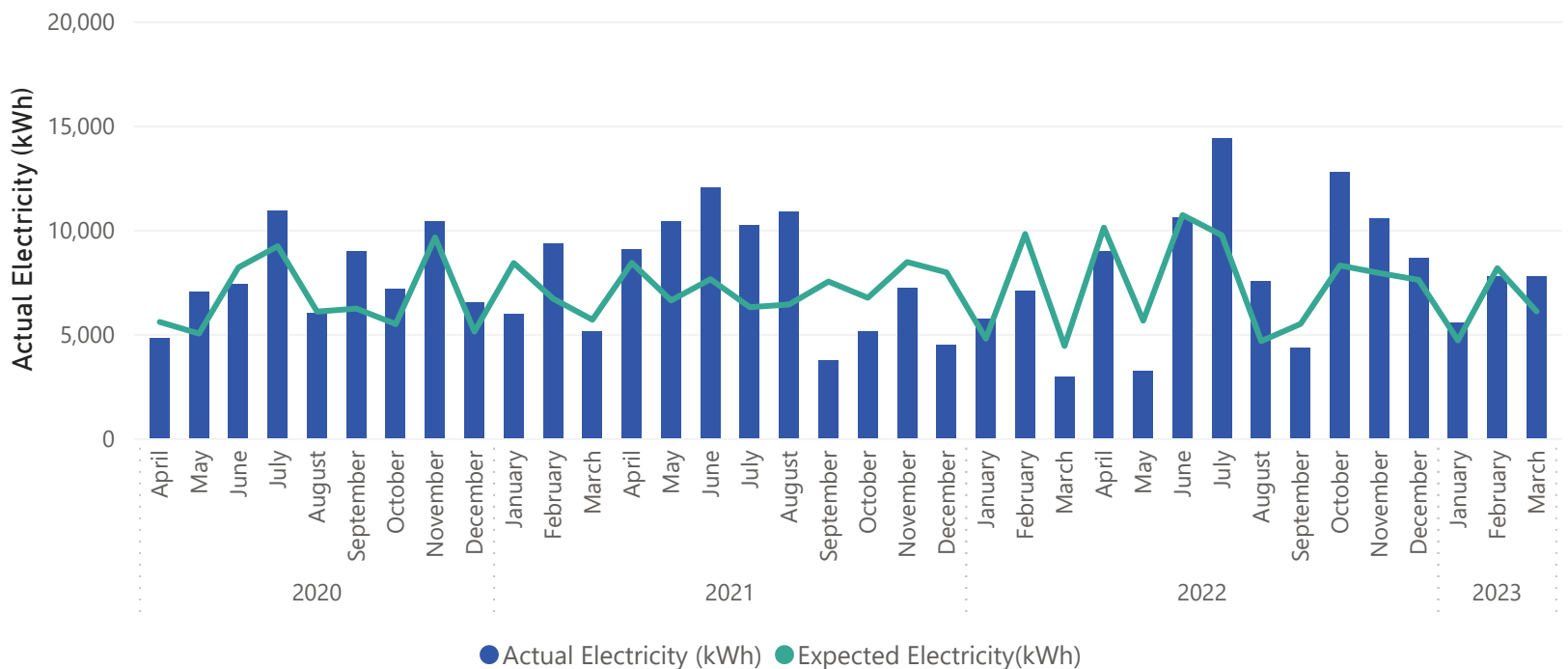
<p>\$6 Monthly Energy Cost Savings</p>	<p>-1,672 Elec. Savings (kWh/mo)</p>	<p>-28% Elec. Savings (%)</p>	<p>-12,948 R12M Electricity Savings (kWh/yr)</p>	<p>-219 CO2e Savings (kg/mo)</p>
<p>\$1,792 R12M Energy Cost Savings</p>				<p>-1,705 R12M CO2e Savings (kg/yr)</p>

Comments:

The baseline for McAlister St and Rose Garden Pumps was updated, the baseline adjusts for the amount of rainfall at the Kopeopeo weather station. Expected electricity is for McAlister St and Rose Gardens combined. The baseline period uses data from July 2021 to June 2022. The updated baseline uses a smaller baseload and a marginally smaller variable component.

The pump stations used more electricity than expected this month. March 2023 was a moderate to high rainfall month. Approximately 130mm of rain coincided within the billing period.

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

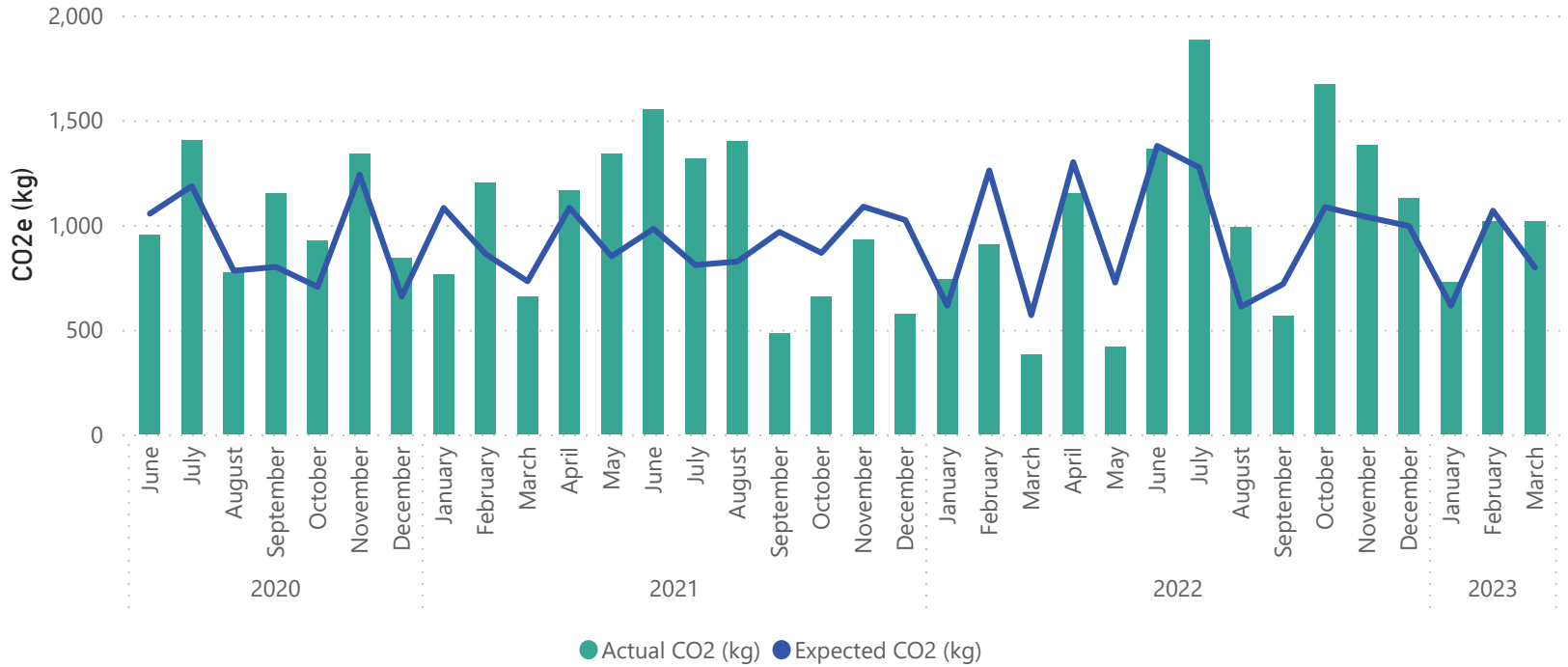


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

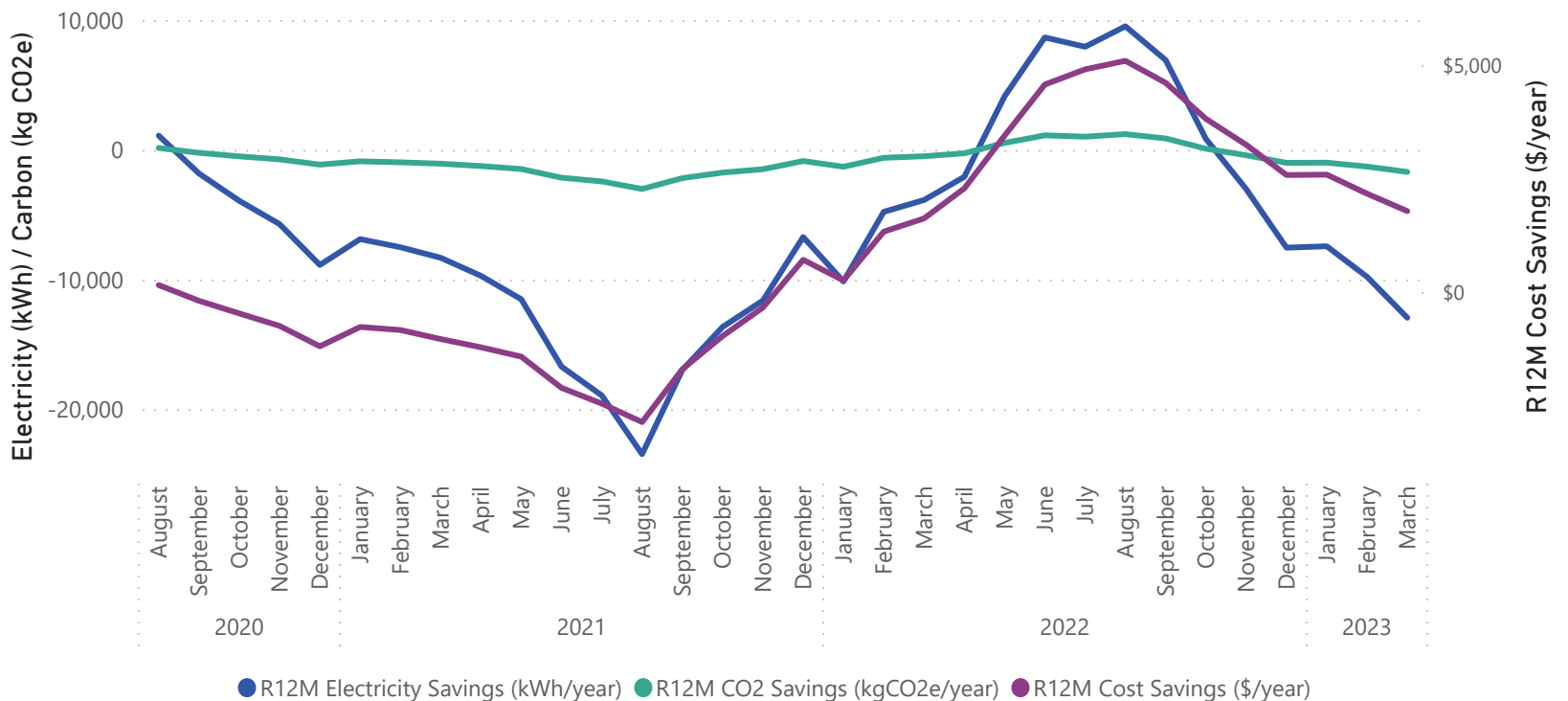
Whakatane District Council

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

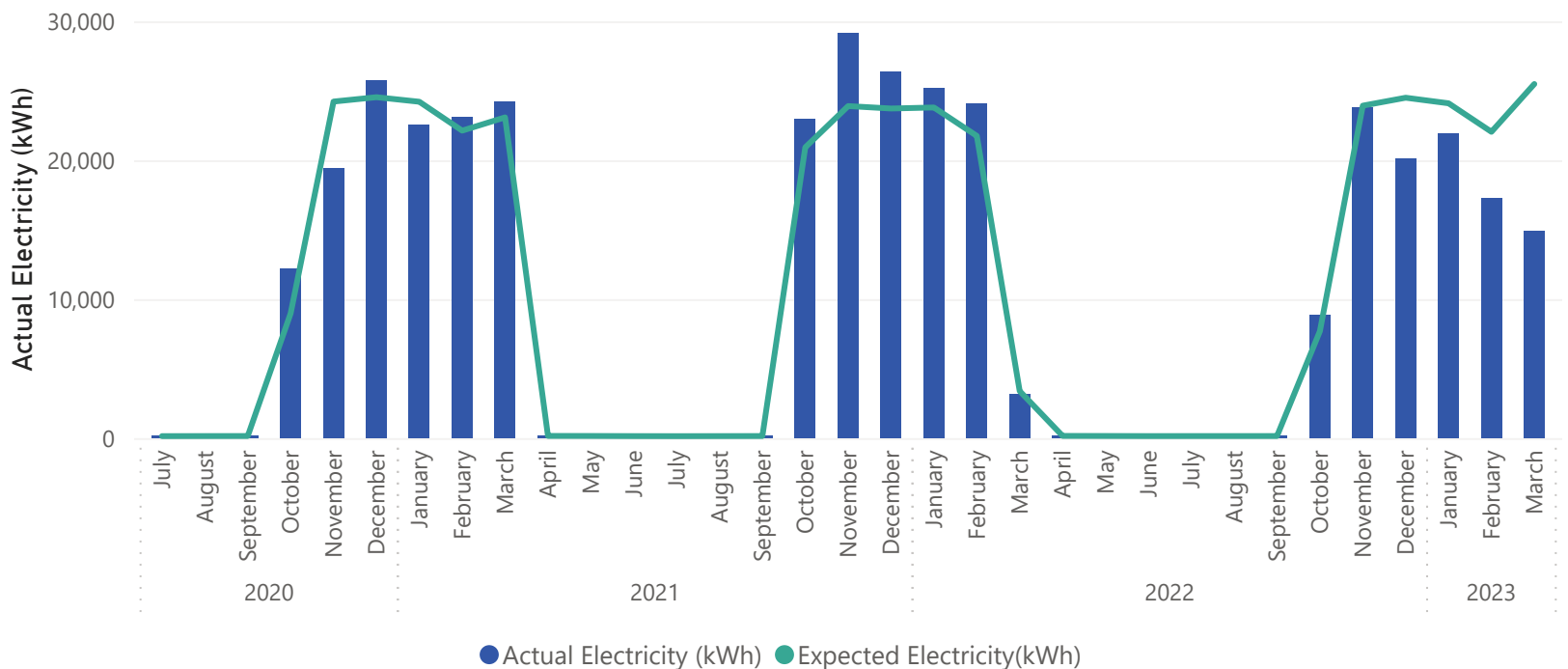
<p>\$1,994</p> <p>Monthly Energy Cost Savings</p>	<p>10,583</p> <p>Elec. Savings (kWh/mo)</p>	<p>42%</p> <p>Elec. Savings (%)</p>	<p>21,220</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>1,386</p> <p>CO2e Savings (kg/mo)</p>
<p>\$3,868</p> <p>R12M Energy Cost Savings</p>				<p>2,780</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

Murupara Pools have been added to reporting in December 2022. The baseline period uses data from July 2021 to June 2022 and adjusts for ambient temperature as well as how many days in the month the pool is open or closed.

The pools used less electricity than expected in March 2023, even though it was a cooler month compared to previous seasons, which usually requires more electricity for heating.

Murupara Pools Electricity Use Compared to Baseline (kWh)

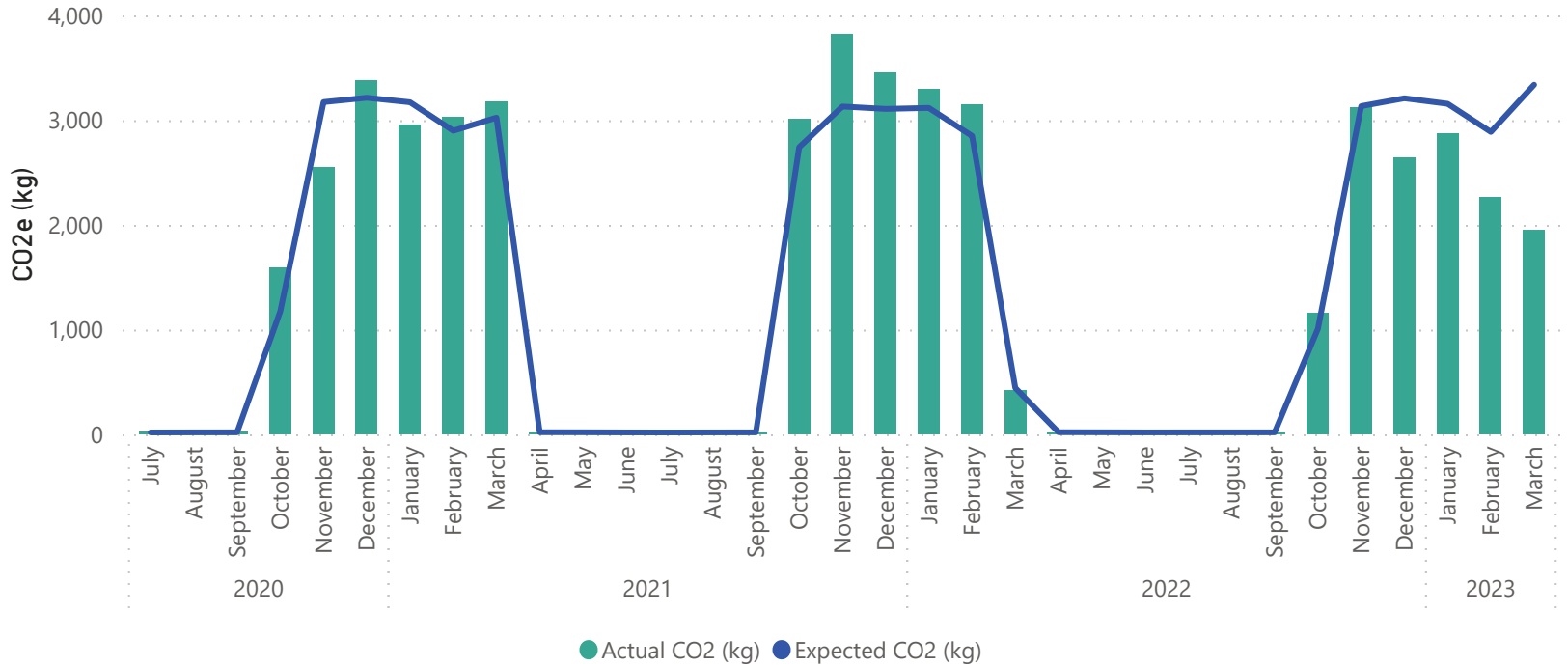


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

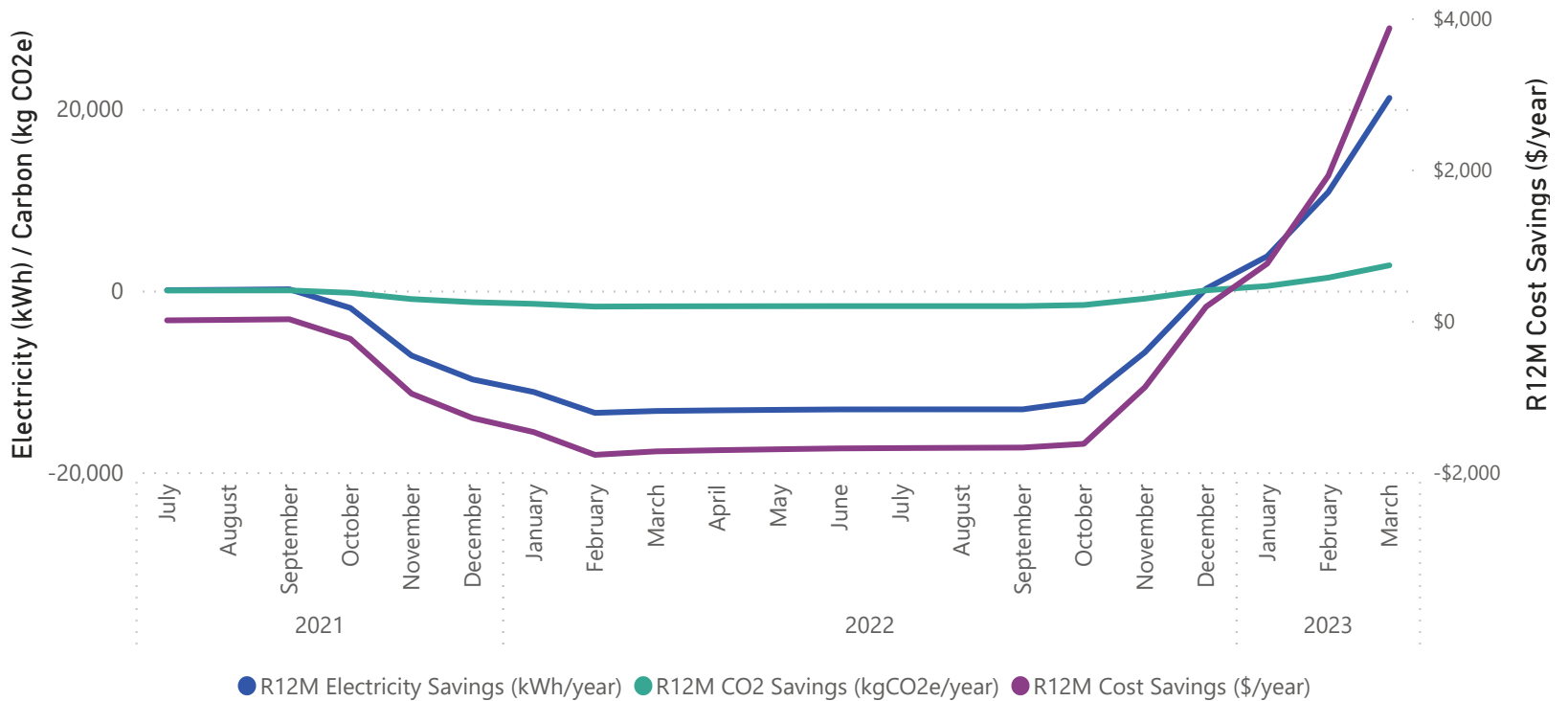
Whakatane District Council

Murupara Pools

Murupara Pools Carbon Emissions Compared to Baseline (kg CO2e)



Murupara Pools Rolling 12 Month Savings



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.**