

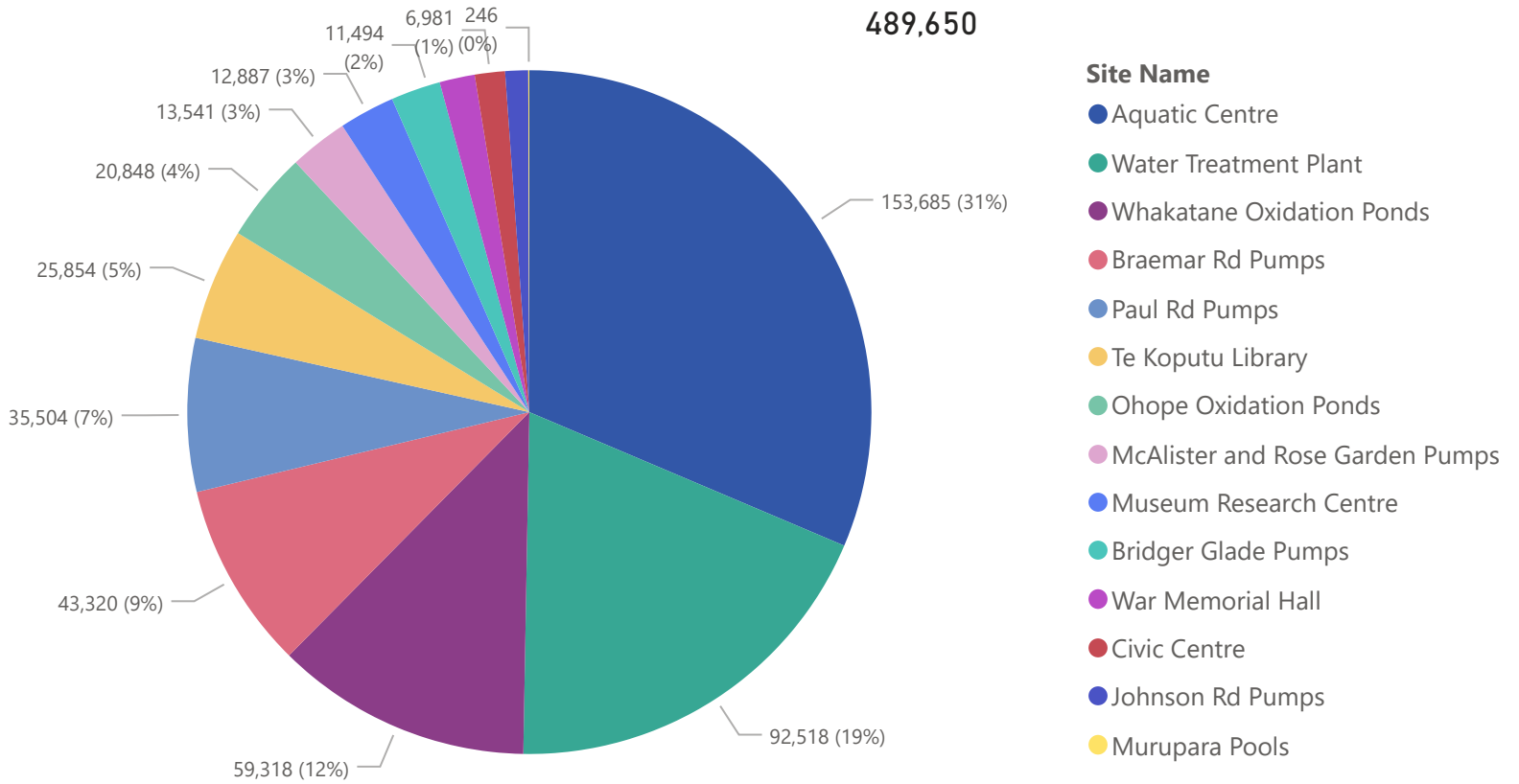
Whakatane District Council

Summary

<p>\$10,741</p> <p>Monthly Energy Cost Savings</p>	<p>52,900</p> <p>Elec. Savings (kWh/mo)</p>	<p>11%</p> <p>Elec. Savings (%)</p>	<p>504,145</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>7,748</p> <p>CO2e Savings (kg/mo)</p>
<p>\$115,799</p> <p>R12M Energy Cost Savings</p>	<p>3,951</p> <p>Gas. Savings (kWh/mo)</p>	<p>8%</p> <p>Gas. Savings (%)</p>	<p>245,483</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>119,200</p> <p>R12M CO2e Savings (kg/yr)</p>

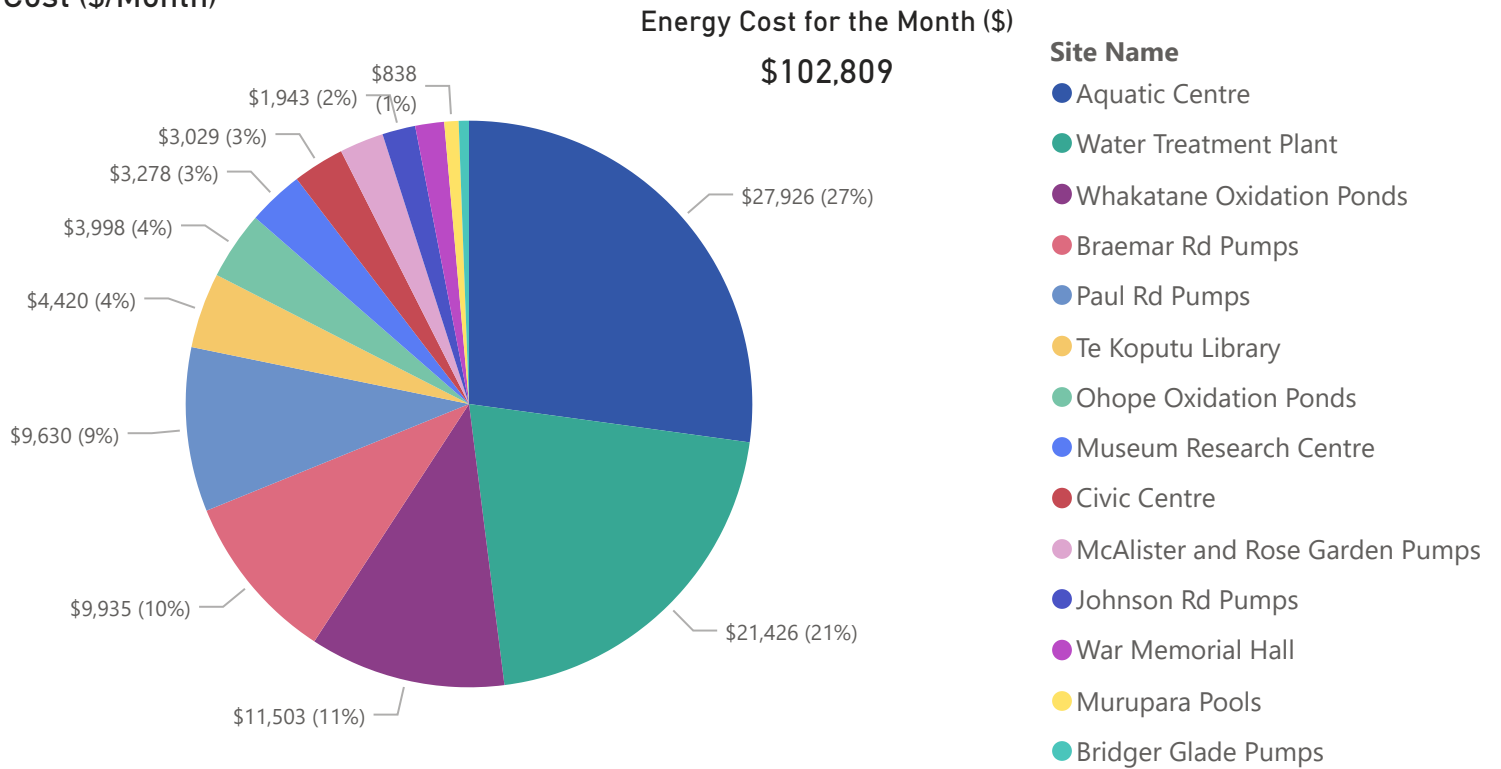
Total Energy (kWh/Month)

Total Energy Used for the Month (kWh)
489,650

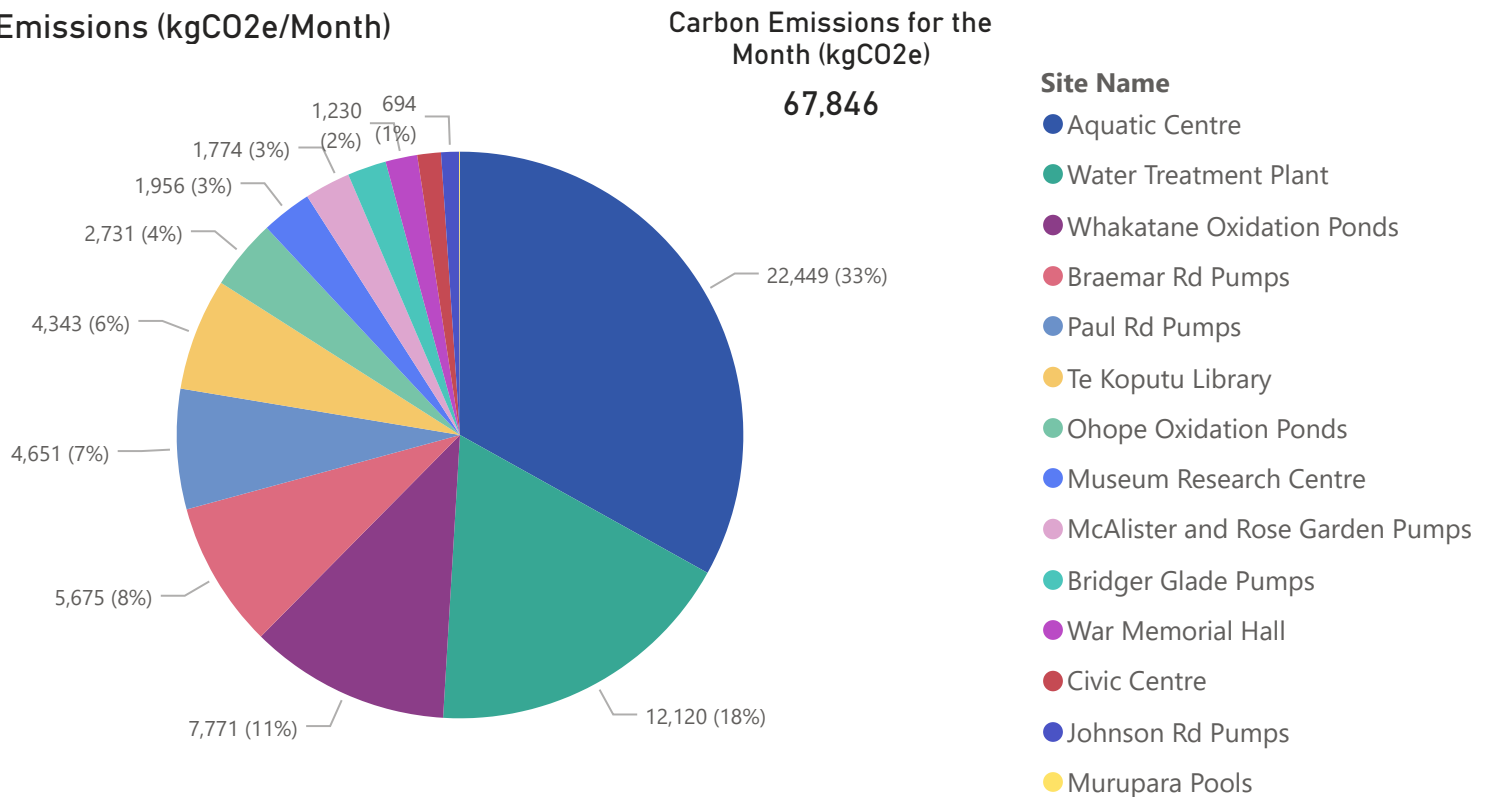


Whakatane District Council Summary

Energy Cost (\$/Month)



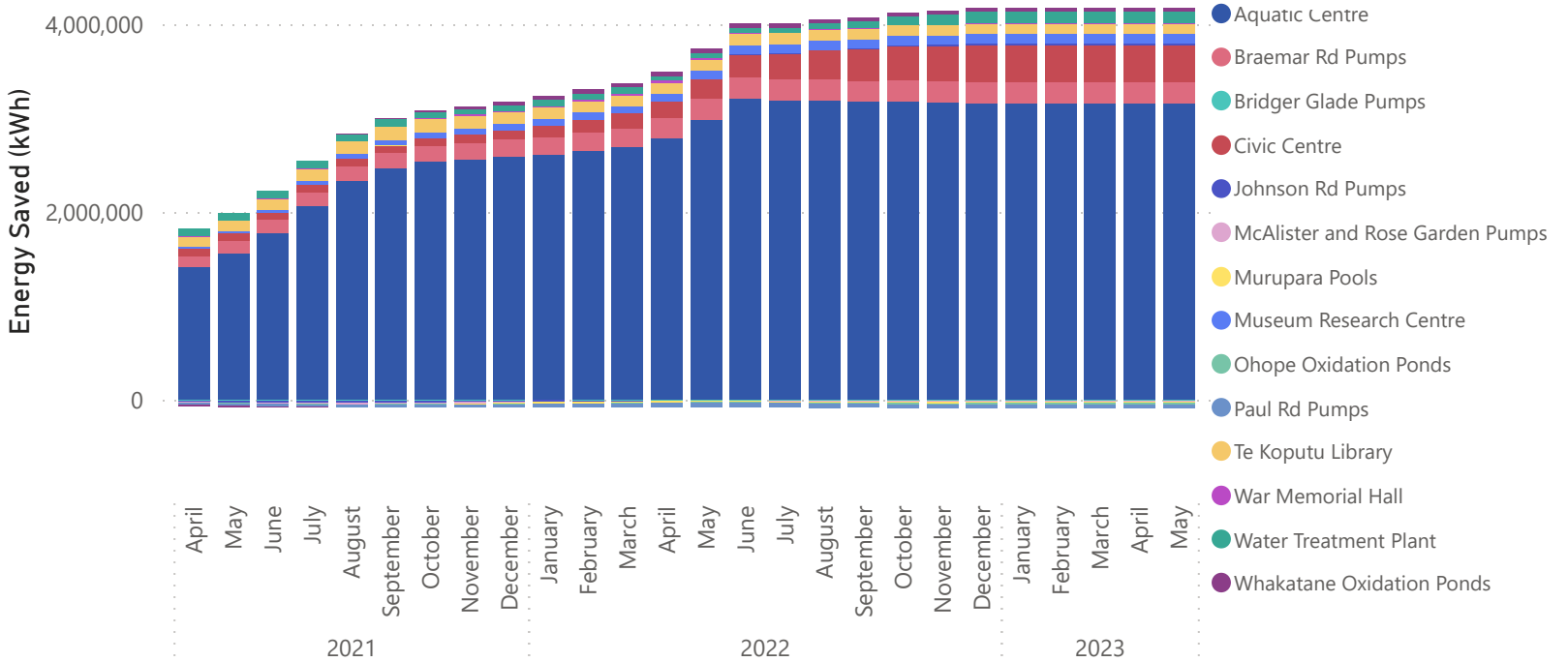
Carbon Emissions (kgCO2e/Month)



Whakatane District Council

Summary

Cumulative Energy Savings (kWh)



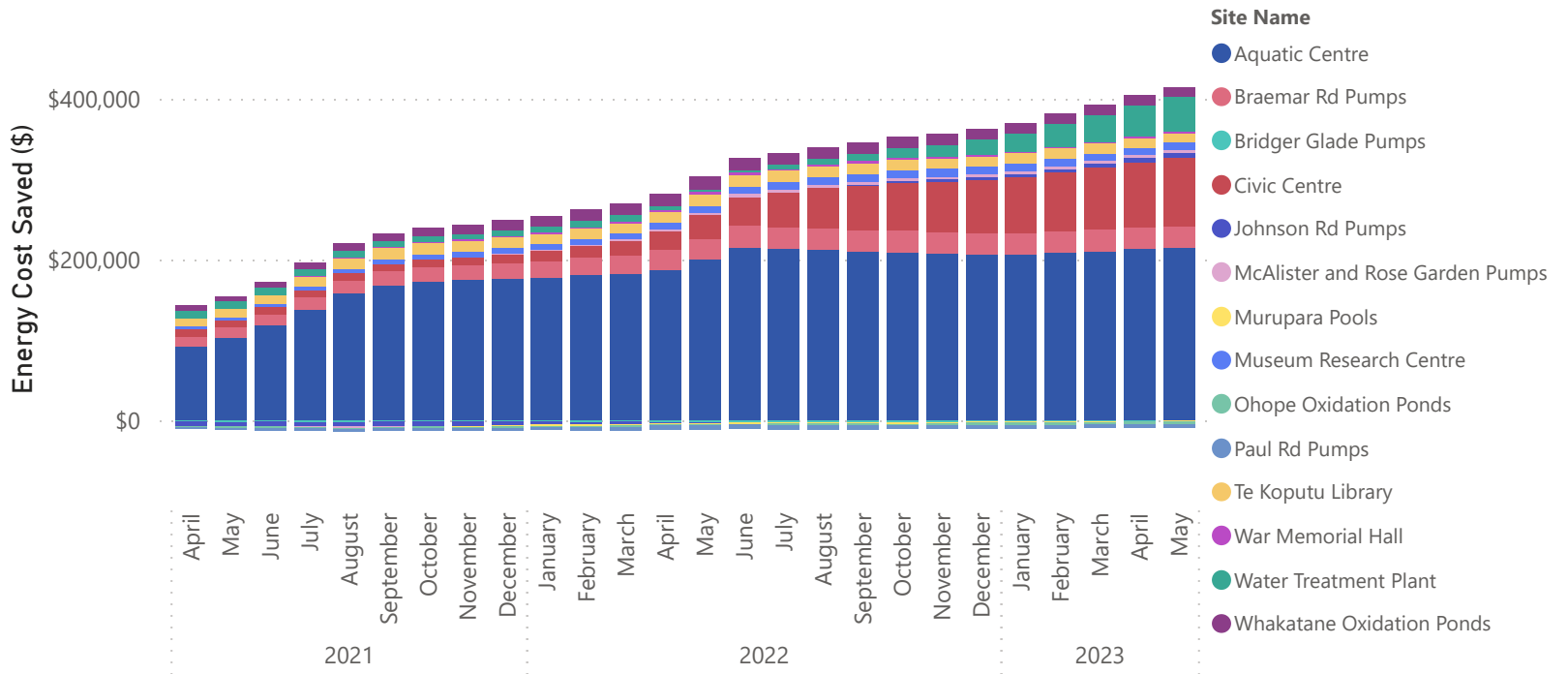
Note, cumulative savings are calculated starting July 2018

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

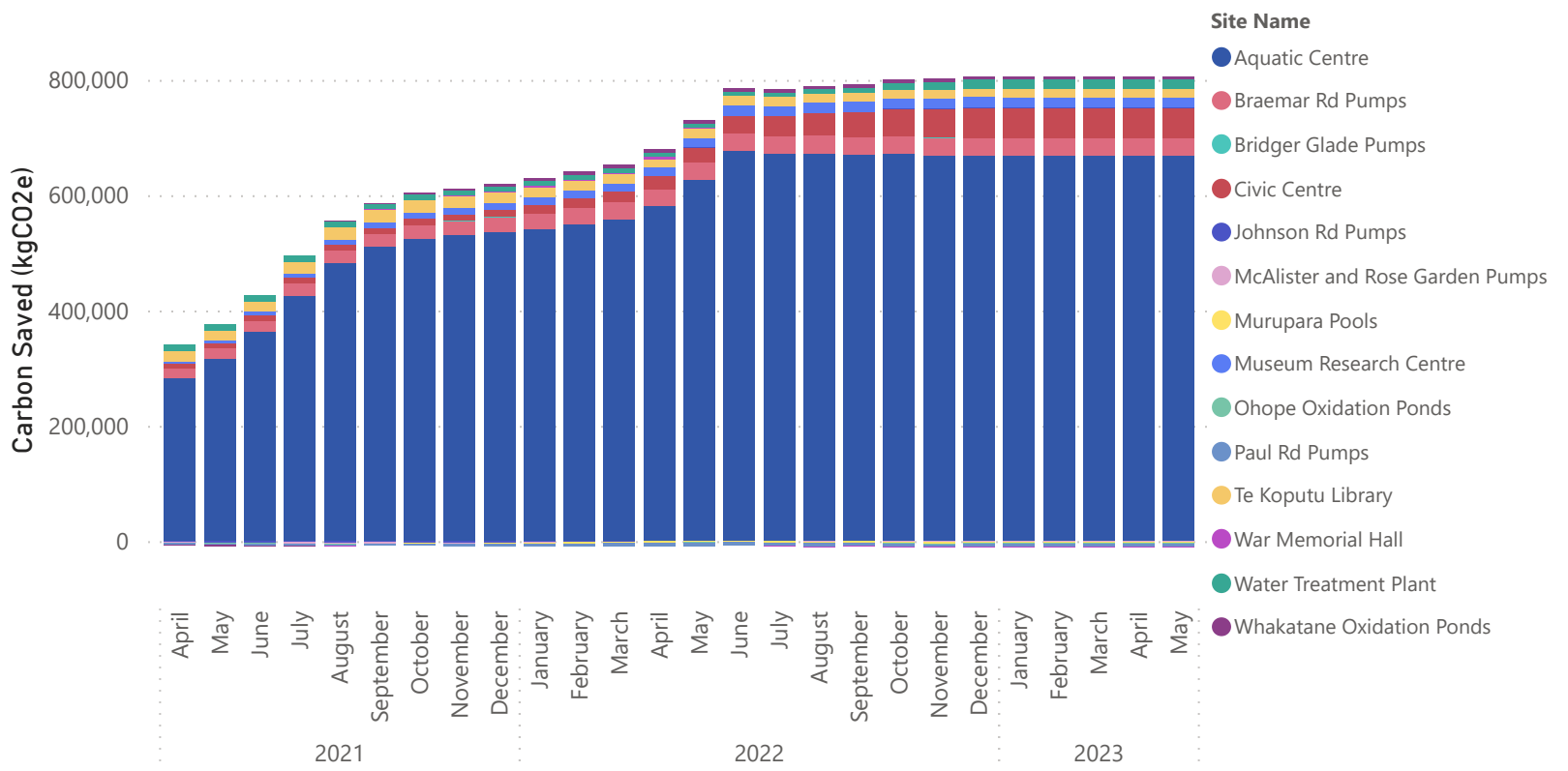
Summary

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>\$4,430 Monthly Energy Cost Savings</p>	<p>24,053 Elec. Savings (kWh/mo)</p>	<p>78% Elec. Savings (%)</p>	<p>294,721 R12M Electricity Savings (kWh/yr)</p>	<p>3,151 CO2e Savings (kg/mo)</p>
<p>\$55,351 R12M Energy Cost Savings</p>				<p>38,513 R12M CO2e Savings (kg/yr)</p>

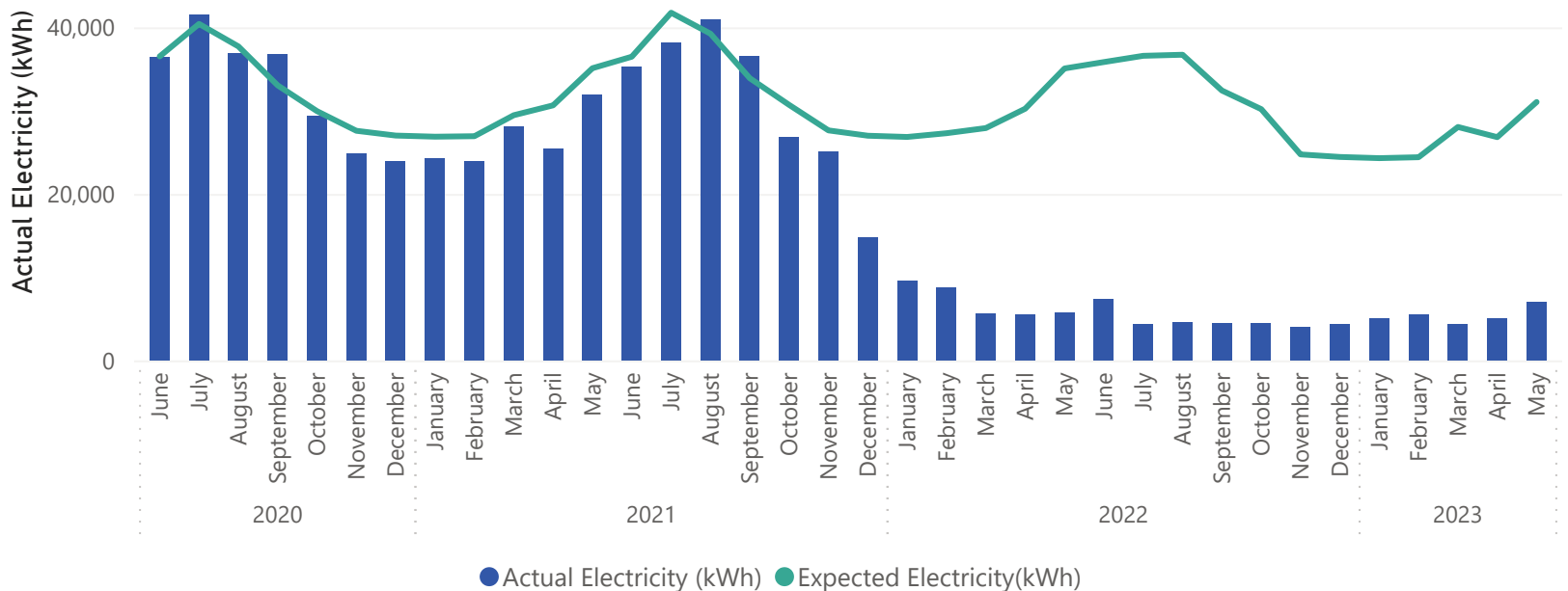
Comments:

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.

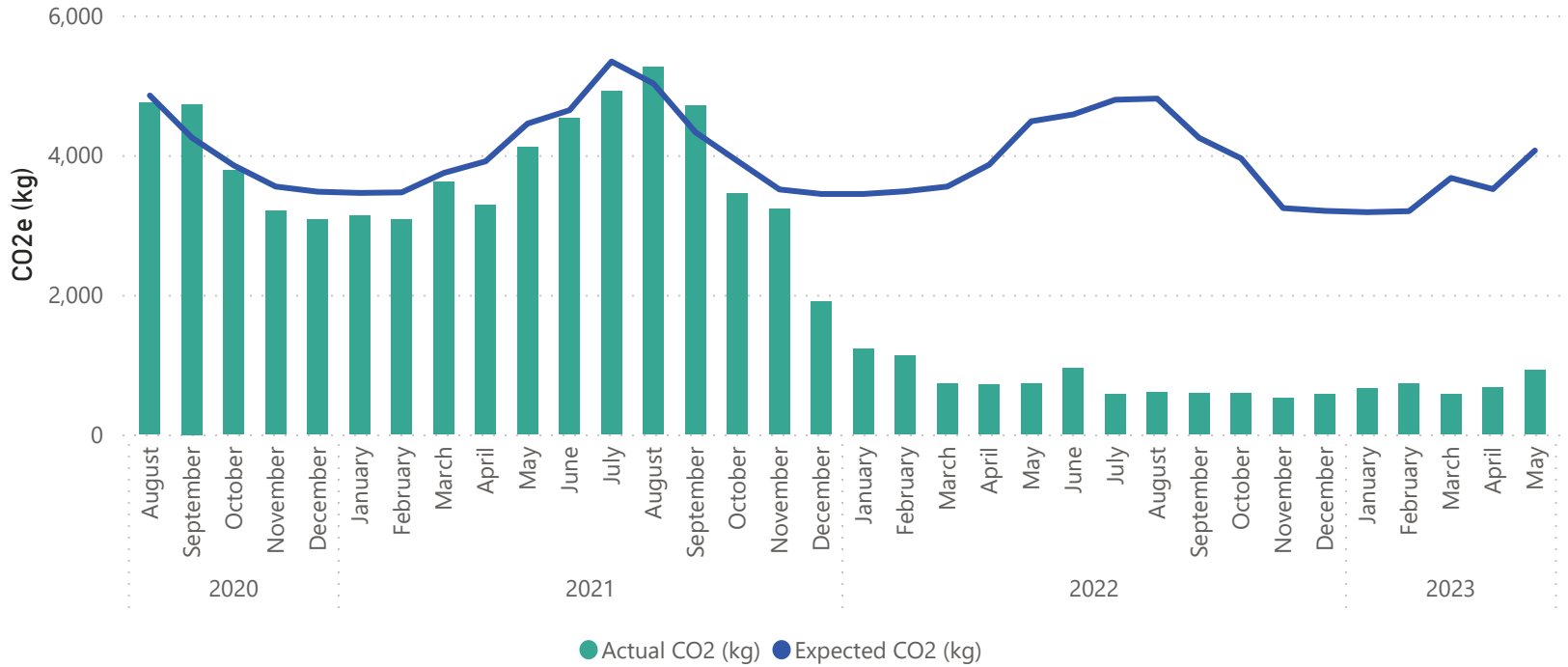
Civic Centre Electricity Use Compared to Baseline (kWh)



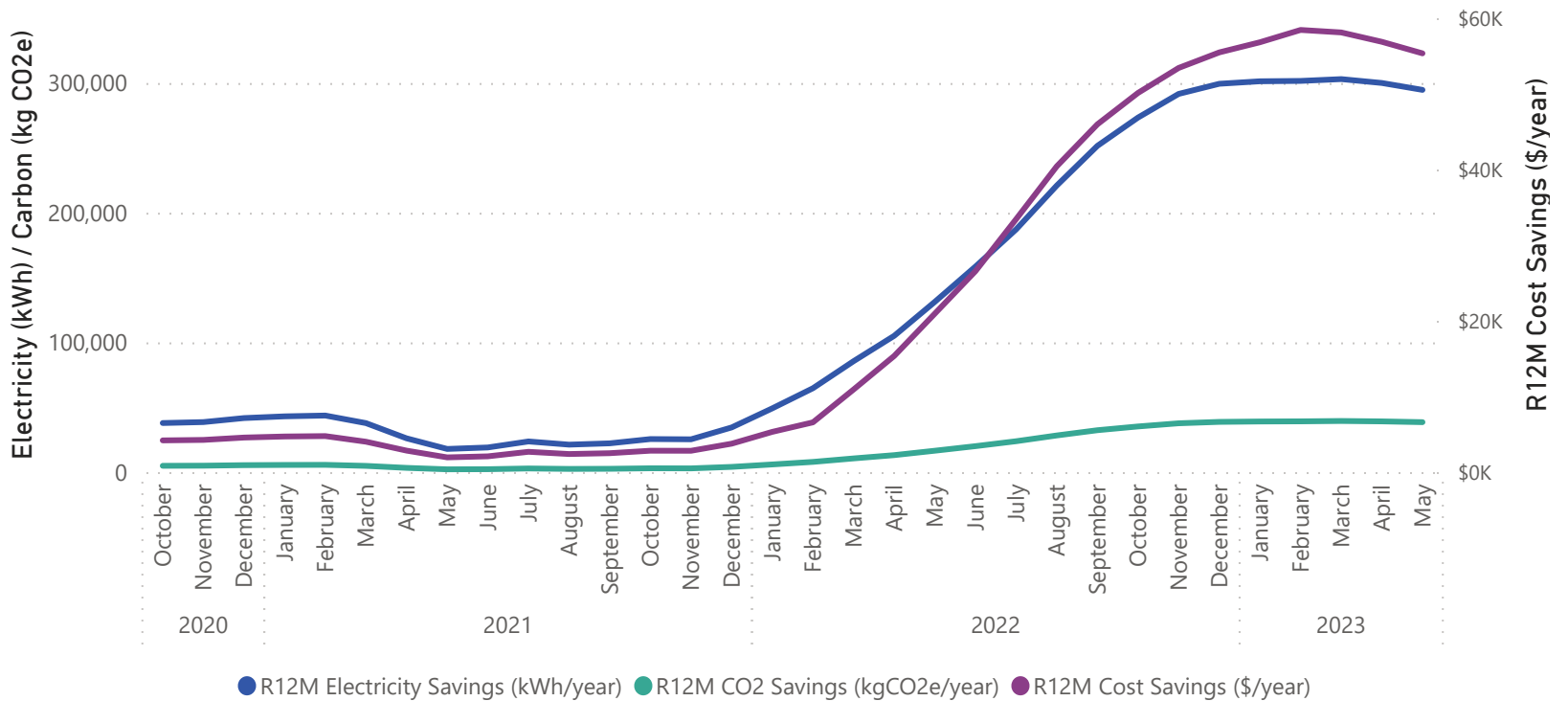
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Civic Centre

Civic Centre Carbon Emissions Compared to Baseline (kg CO2e)



Civic Centre Rolling 12 Month Savings

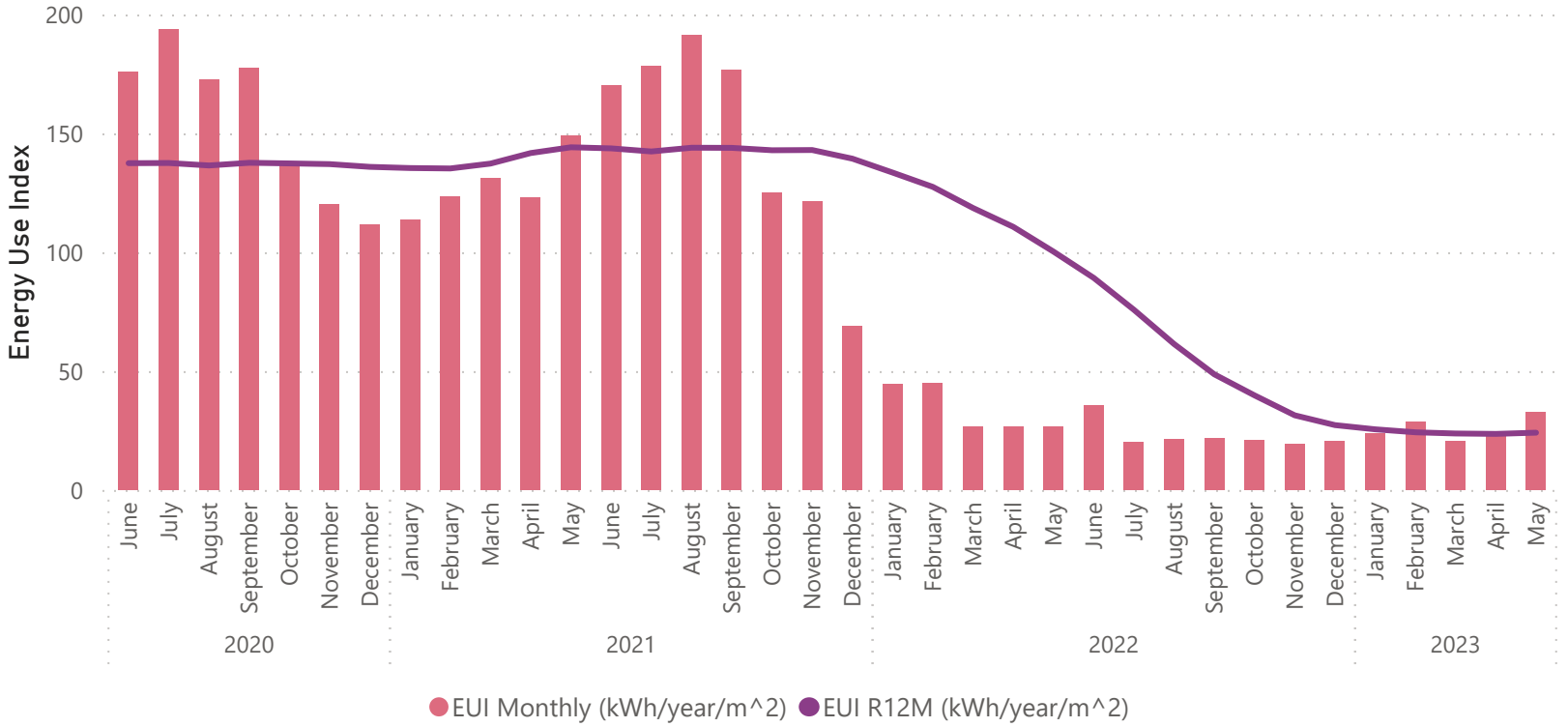


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

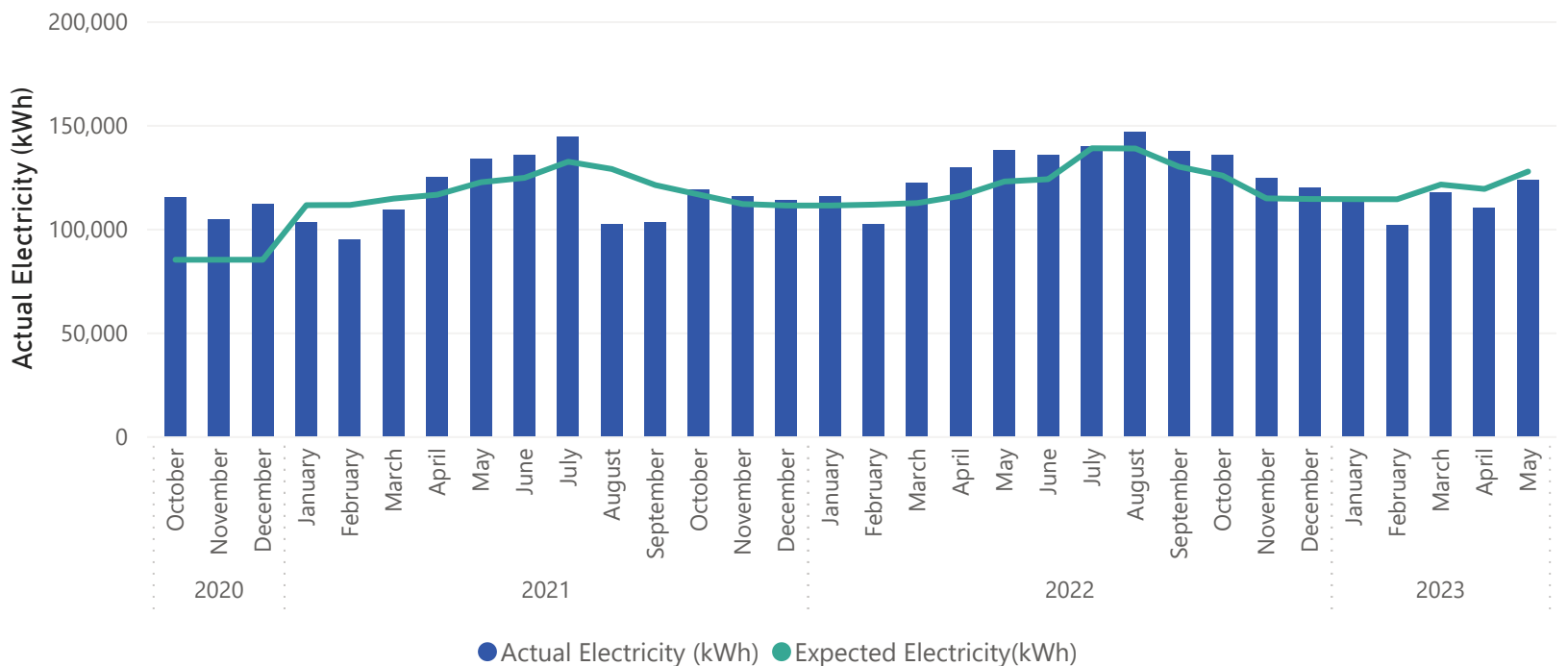
<p>\$1,206</p> <p>Monthly Energy Cost Savings</p>	<p>4,312</p> <p>Elec. Savings (kWh/mo)</p>	<p>3%</p> <p>Elec. Savings (%)</p>	<p>-23,498</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>1,620</p> <p>CO2e Savings (kg/mo)</p>
<p>\$14,289</p> <p>R12M Energy Cost Savings</p>	<p>5,097</p> <p>Gas. Savings (kWh/mo)</p>	<p>14%</p> <p>Gas. Savings (%)</p>	<p>263,017</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>53,754</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 May 2023. The Aquatic Centre used gas this month, boilers were switched on from 6 May. Previously gas was switched off from 17 December and heating had been primarily provided by heat pumps. The EUI for the month is lower than the it was last May, which is good.

Aquatic Centre Electricity Use Compared to Baseline (kWh)

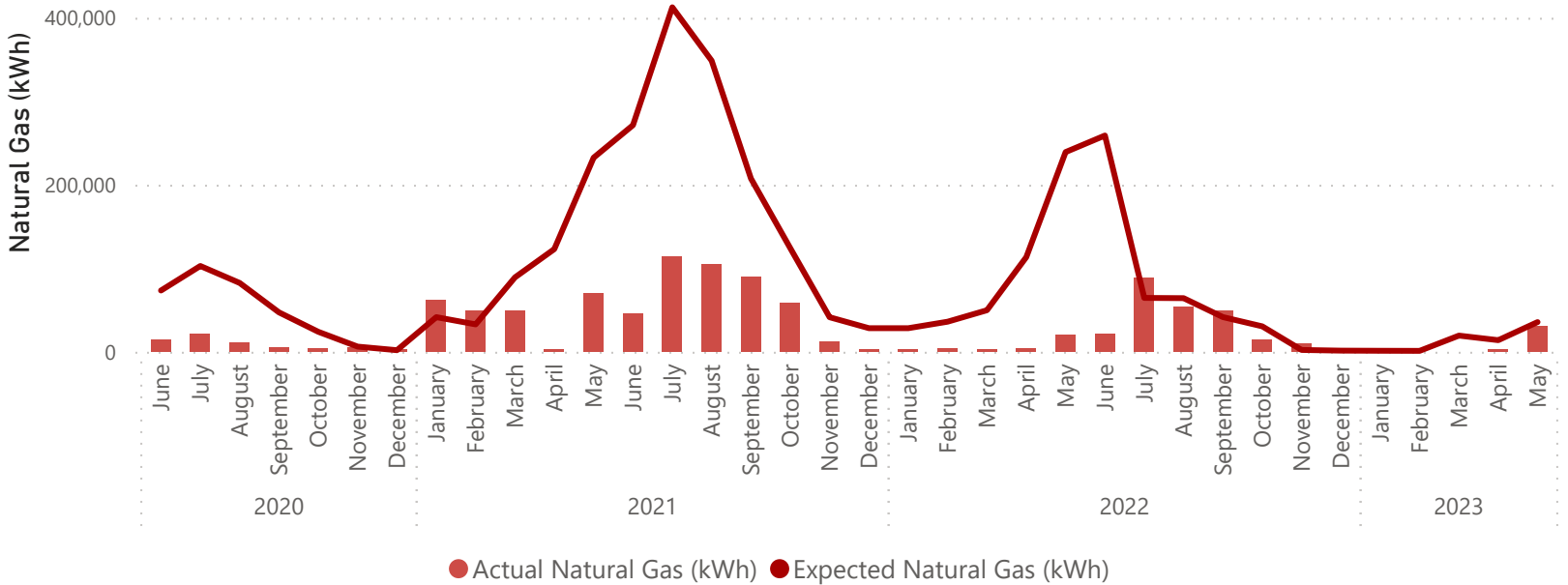


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

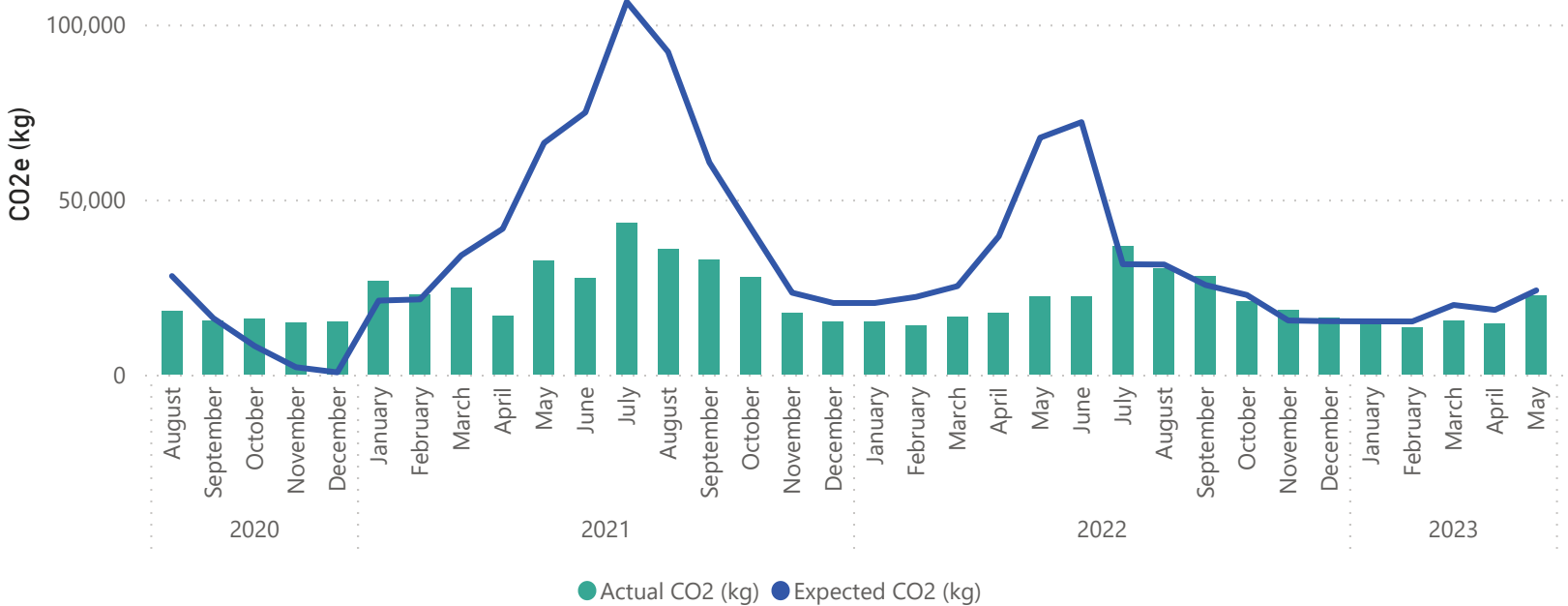
Whakatane District Council

Aquatic Centre

Aquatic Centre Natural Gas Compared to Baseline (kWh)



Aquatic Centre Carbon Emissions Compared to Baseline (kg CO2e)

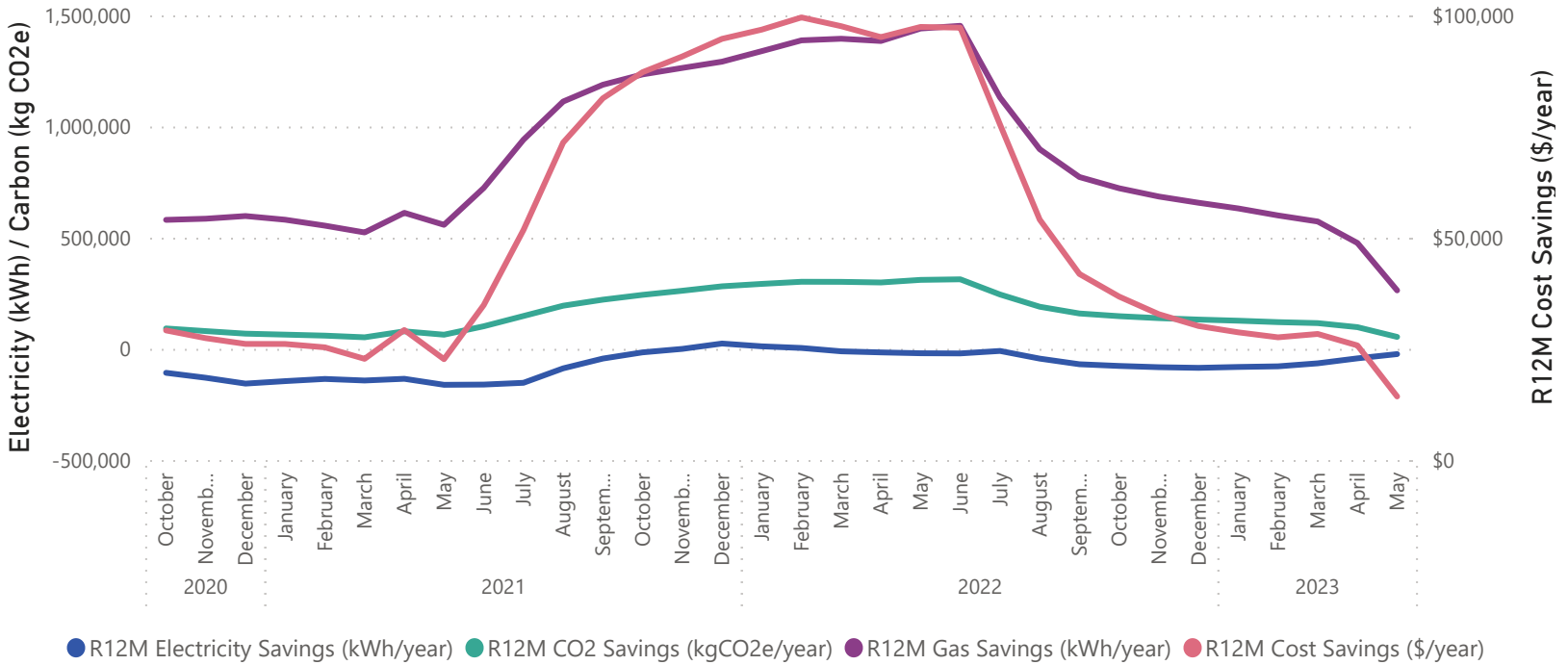


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

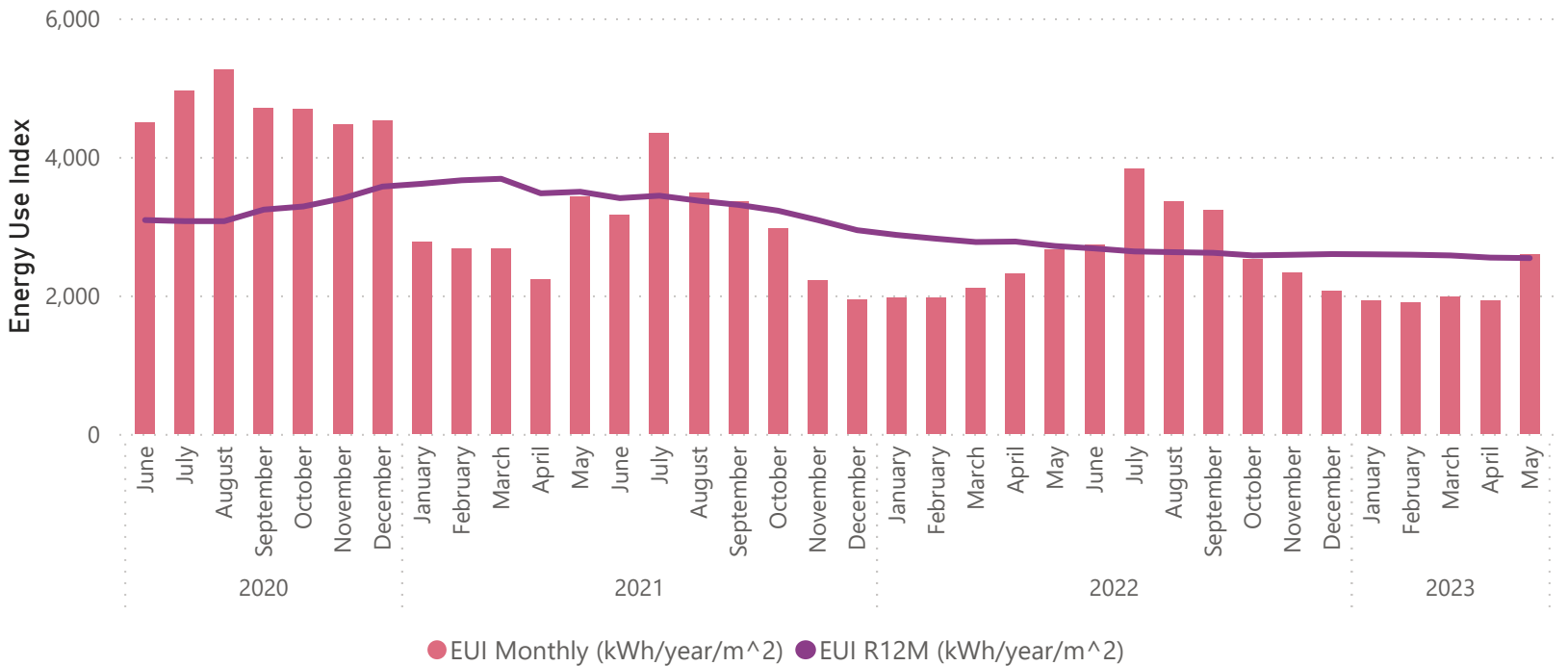
Whakatane District Council

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

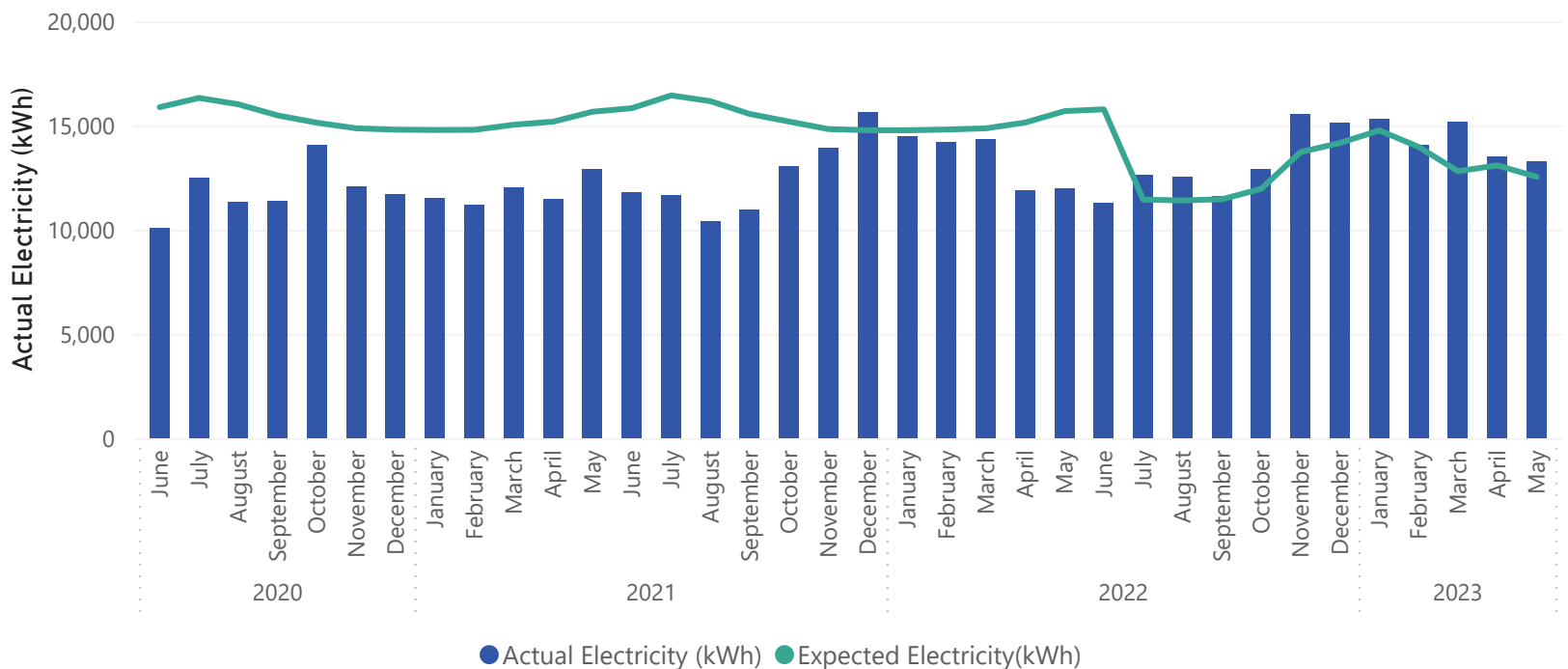
<p>-\$243 Monthly Energy Cost Savings</p>	<p>-741 Elec. Savings (kWh/mo)</p>	<p>-6% Elec. Savings (%)</p>	<p>-5,779 R12M Electricity Savings (kWh/yr)</p>	<p>-360 CO2e Savings (kg/mo)</p>
<p>-\$1,676 R12M Energy Cost Savings</p>	<p>-1,272 Gas. Savings (kWh/mo)</p>	<p>-11% Gas. Savings (%)</p>	<p>-10,401 R12M Gas Savings (kWh/yr)</p>	<p>-2,892 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 use was more than expected for the month, natural gas use was also more than expected. The average daily temperature in May 2023 was approximately two degree warmer than May 2022. May 2023 was also a month of high rainfall and high humidity which would have increased dehumidification loads.

Te Koputu Library Electricity Use Compared to Baseline (kWh)

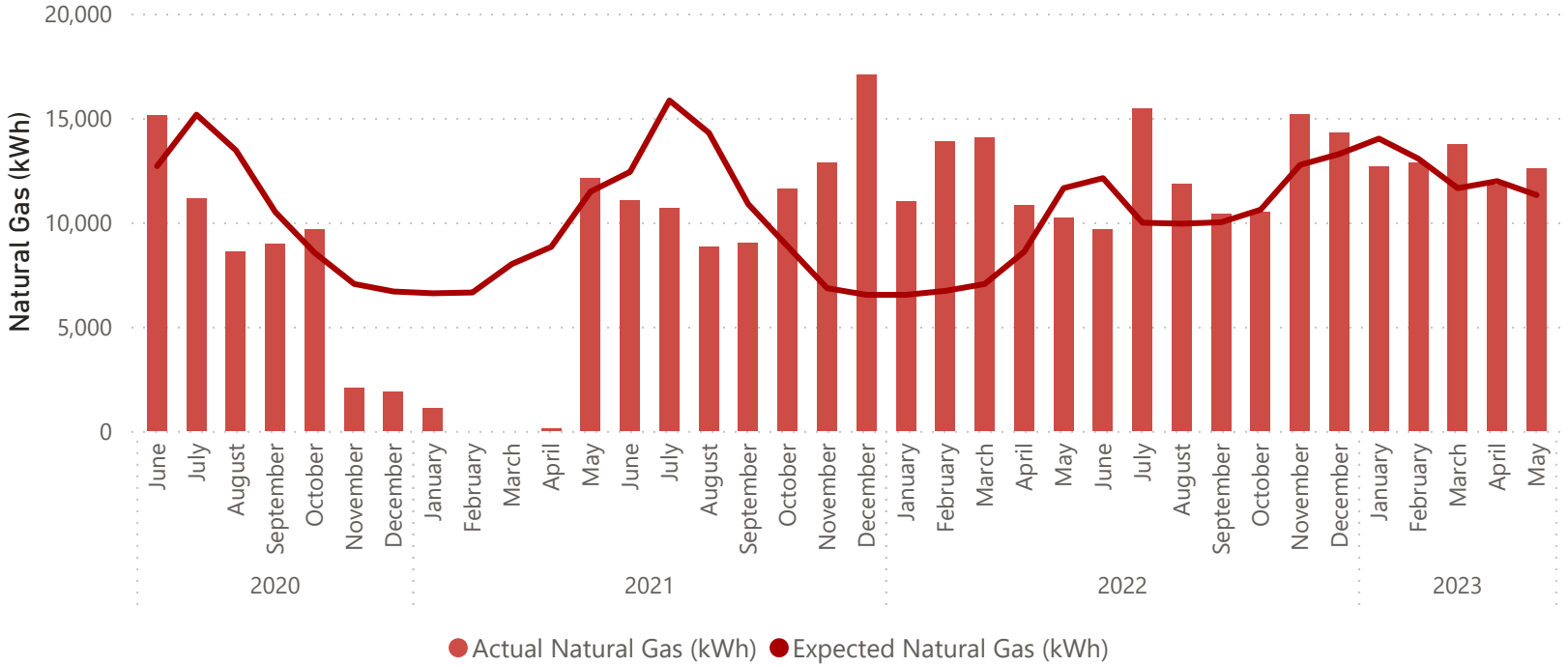


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

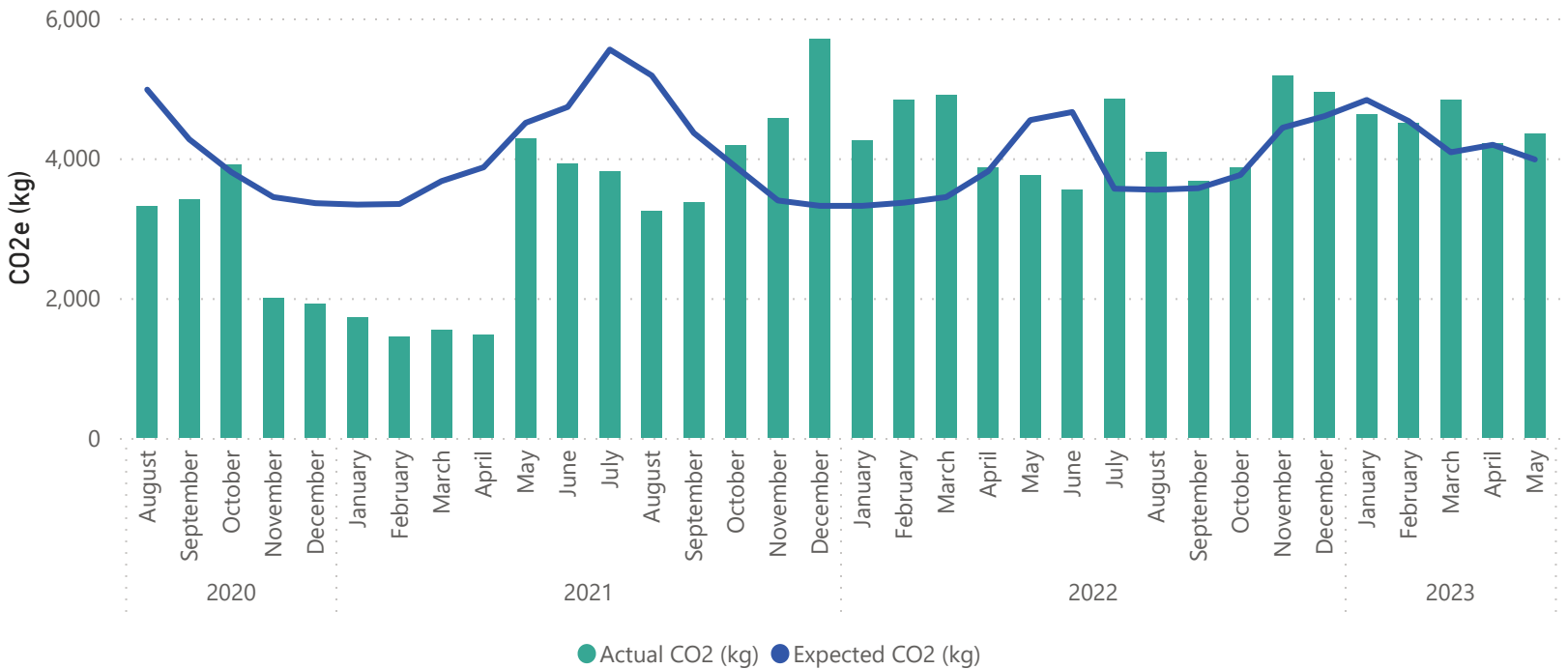
Whakatane District Council

Te Koputu Library

Te Koputu Library Natural Gas Compared to Baseline (kWh)



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

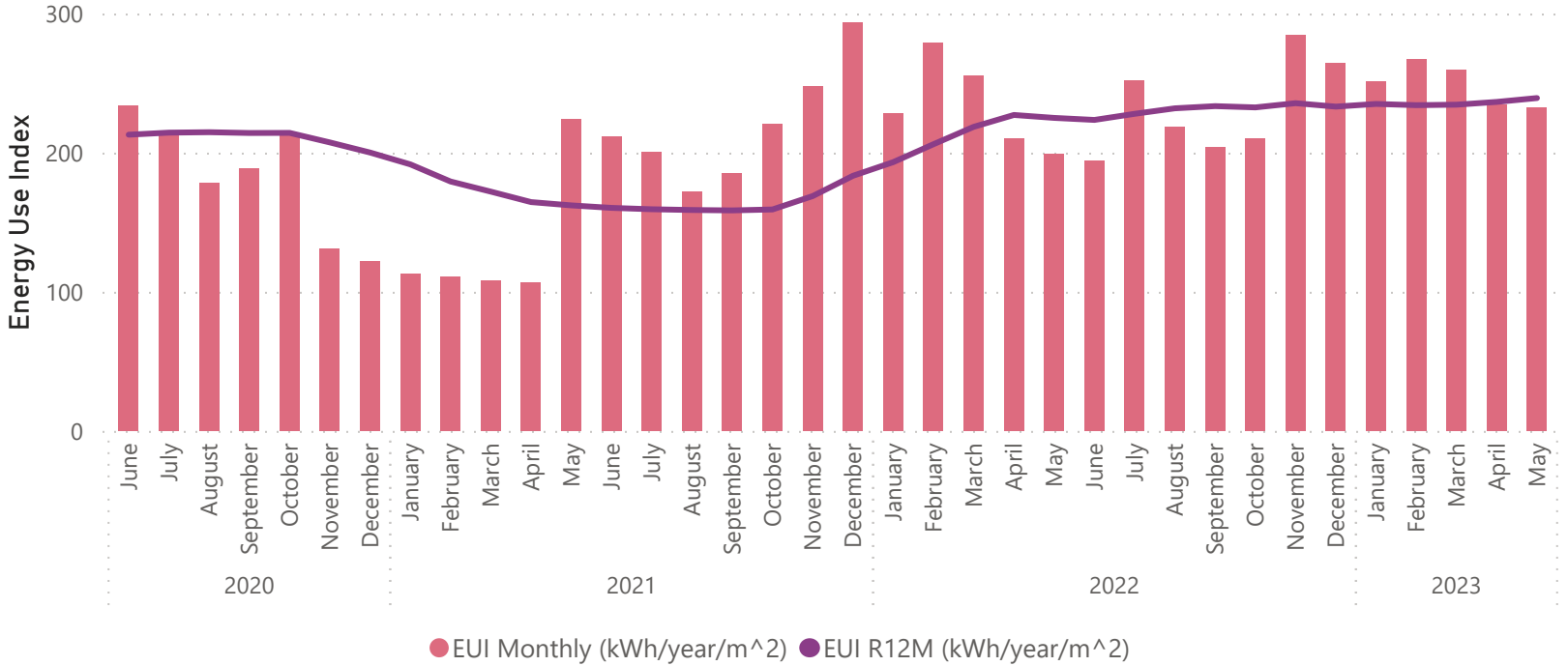


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

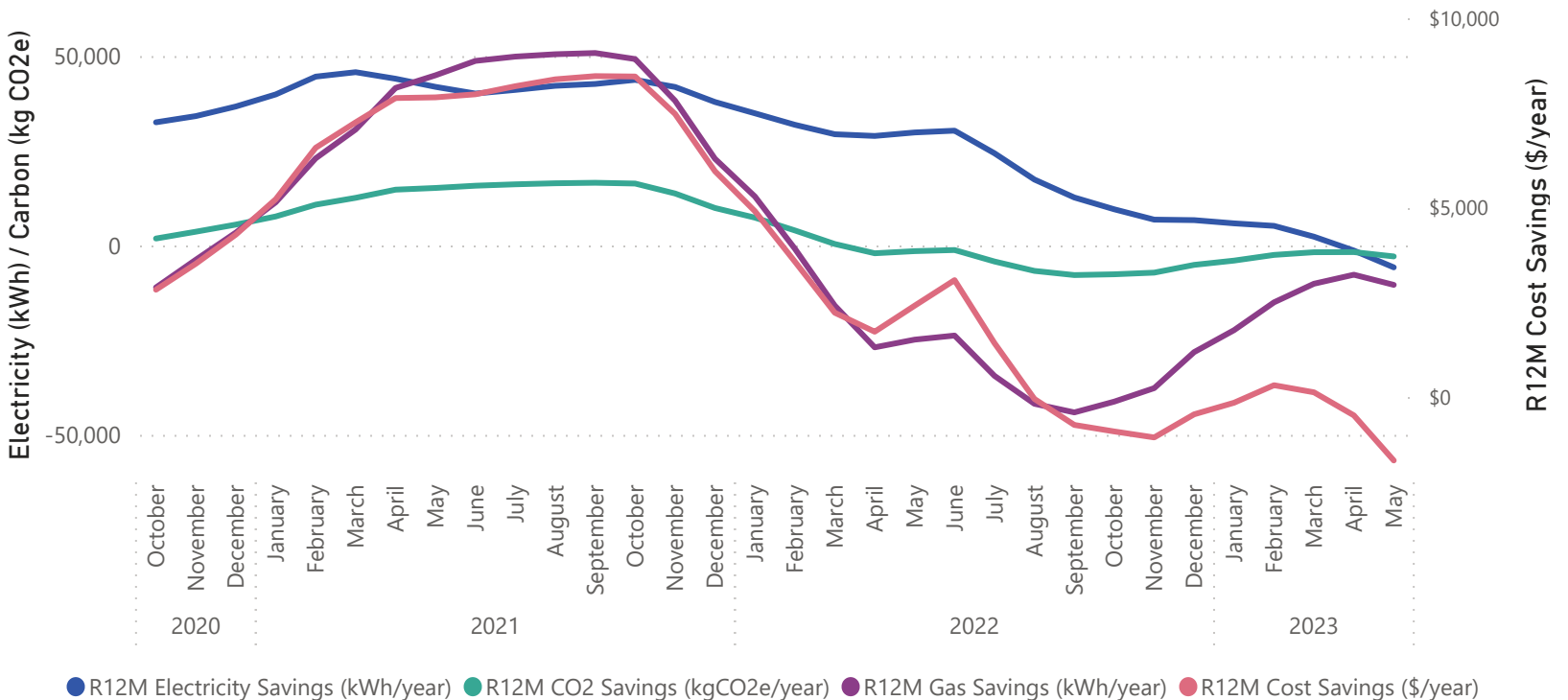
Whakatane District Council

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

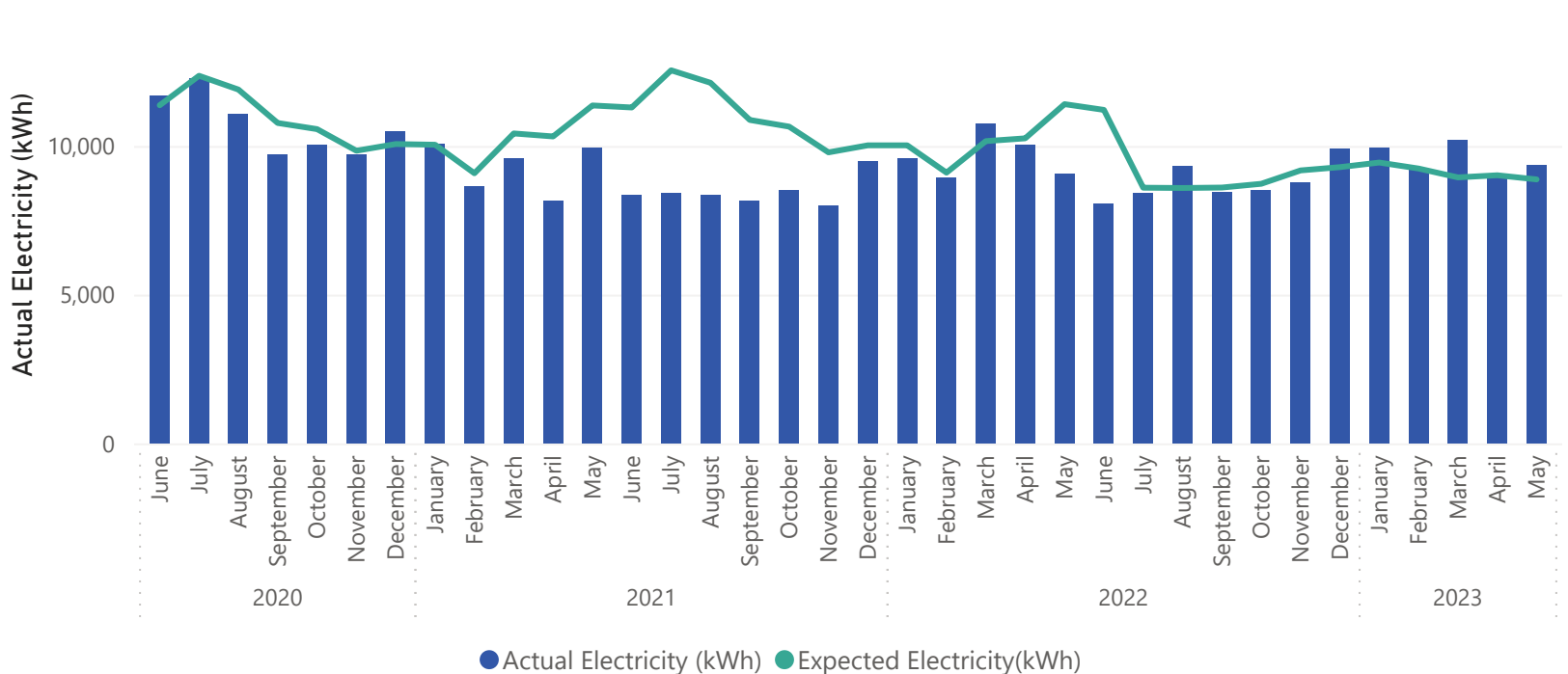
<p>-\$140</p> <p>Monthly Energy Cost Savings</p>	<p>-483</p> <p>Elec. Savings (kWh/mo)</p>	<p>-5%</p> <p>Elec. Savings (%)</p>	<p>642</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>-187</p> <p>CO2e Savings (kg/mo)</p>
<p>\$432</p> <p>R12M Energy Cost Savings</p>	<p>-599</p> <p>Gas. Savings (kWh/mo)</p>	<p>-20%</p> <p>Gas. Savings (%)</p>	<p>2,247</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>582</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 use was 20% higher than expected and electricity use was 5% higher than expected which may be due to dehumidification requirements. Natural gas use has remained relatively flat from December 2022. Energy use index for the month is close to average over the last 12 months.

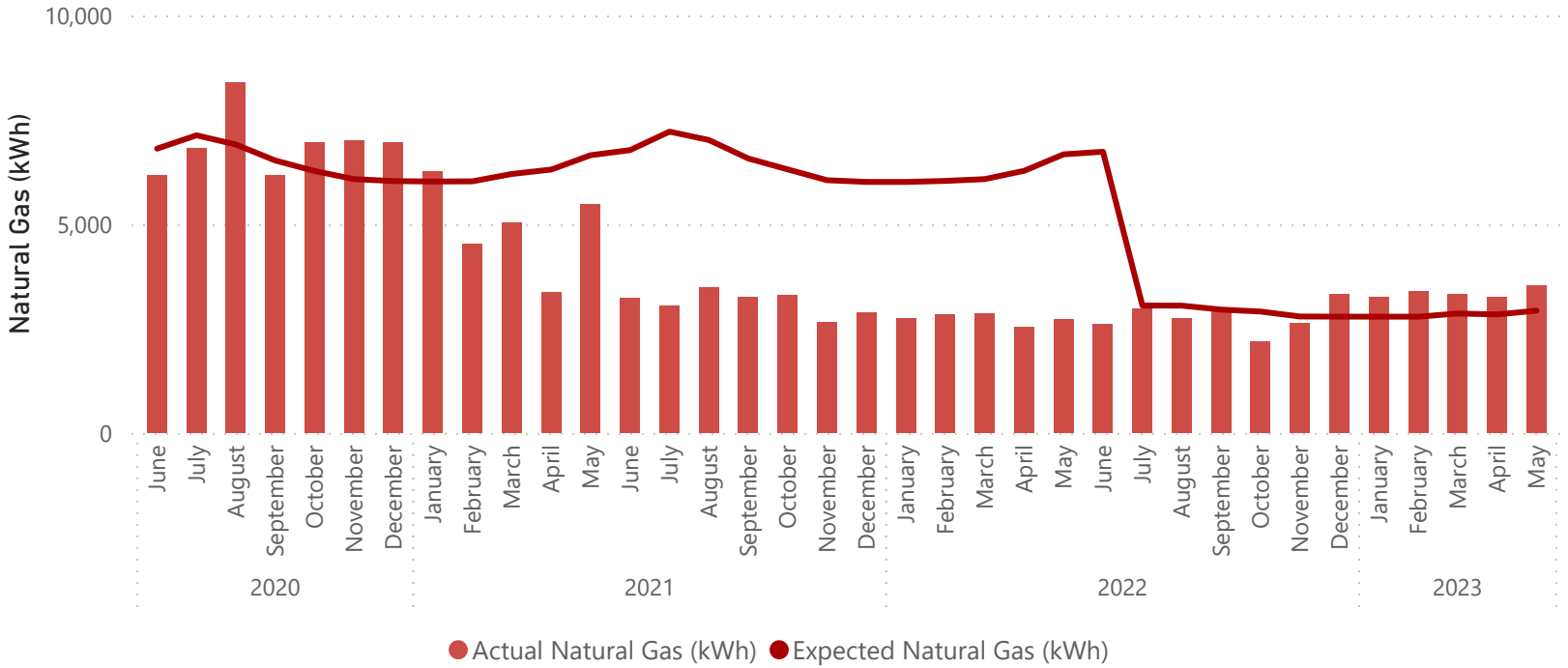
Museum Research Centre Electricity Use Compared to Baseline (kWh)



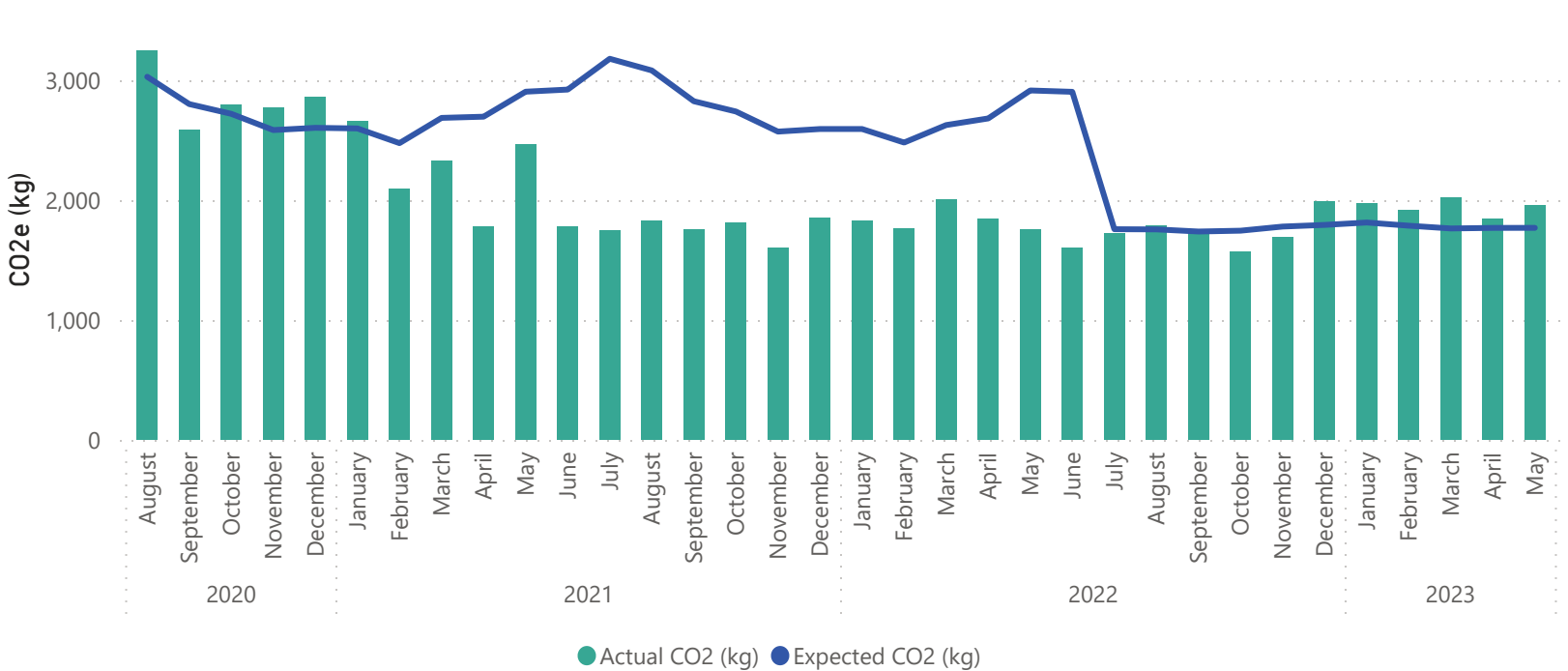
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Museum and Research Centre

Museum Research Centre Natural Gas Compared to Baseline (kWh)



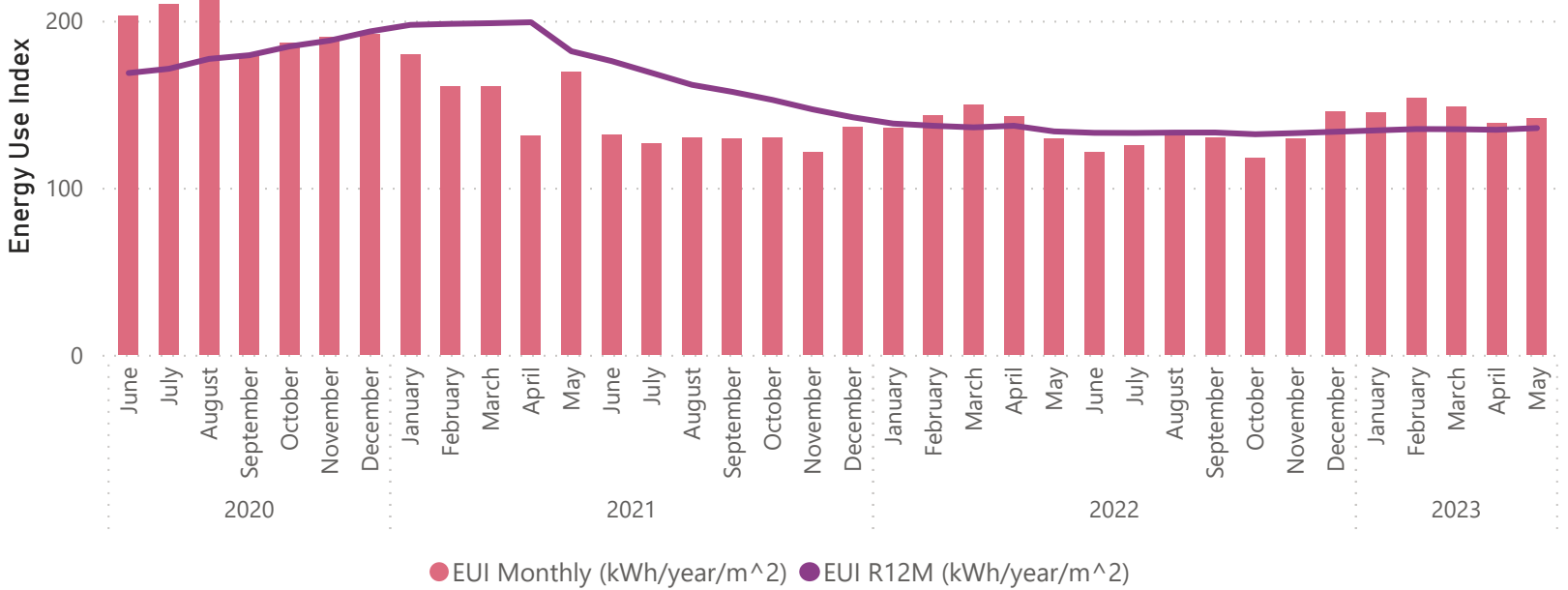
Museum Research Centre Carbon Emissions Compared to Baseline (kg CO2e)



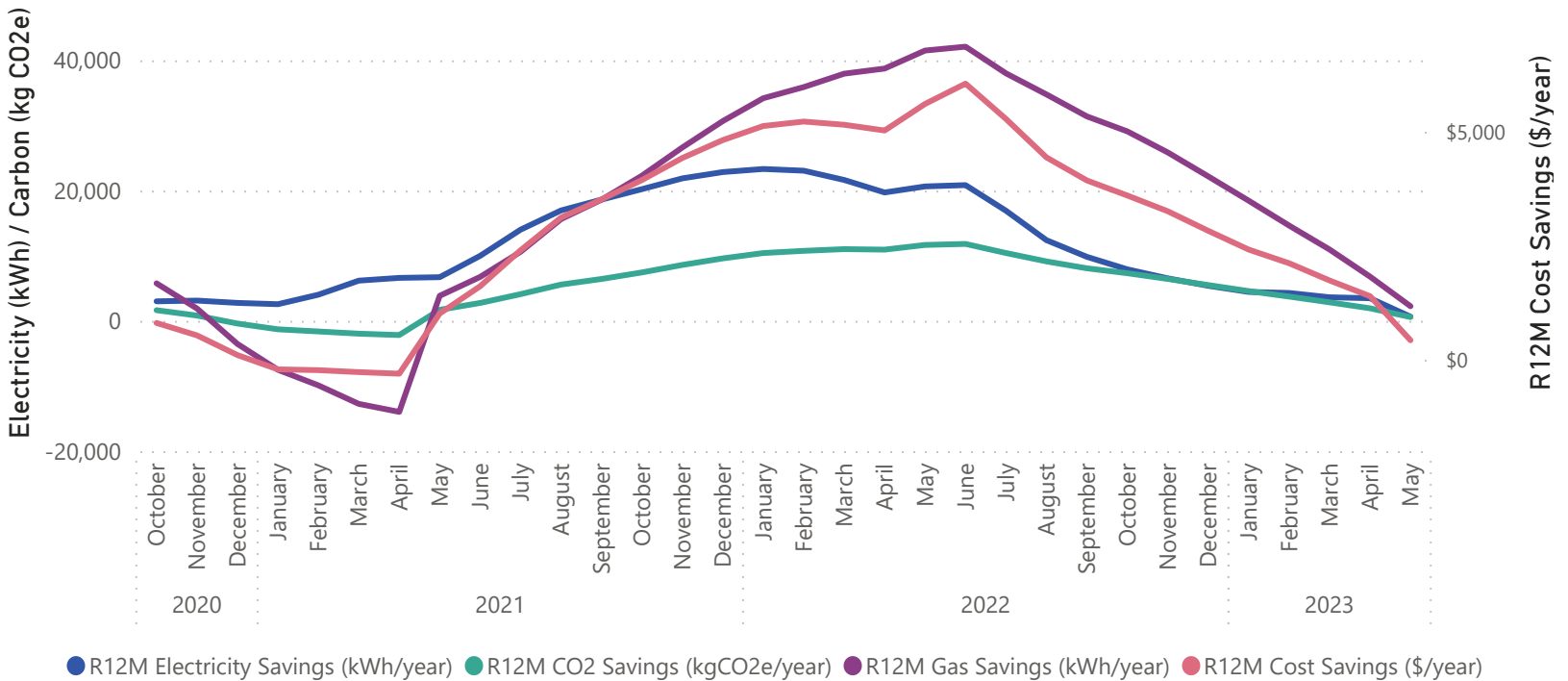
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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>-\$119</p> <p>Monthly Energy Cost Savings</p>	<p>-927 -18% -5,906</p> <p>Elec. Savings (kWh/mo) Elec. Savings (%) R12M Electricity Savings (kWh/yr)</p>			<p>29</p> <p>CO2e Savings (kg/mo)</p>
<p>-\$1,595</p> <p>R12M Energy Cost Savings</p>	<p>725 25% -9,380</p> <p>Gas. Savings (kWh/mo) Gas. Savings (%) R12M Gas Savings (kWh/yr)</p>			<p>-2,783</p> <p>R12M CO2e Savings (kg/yr)</p>

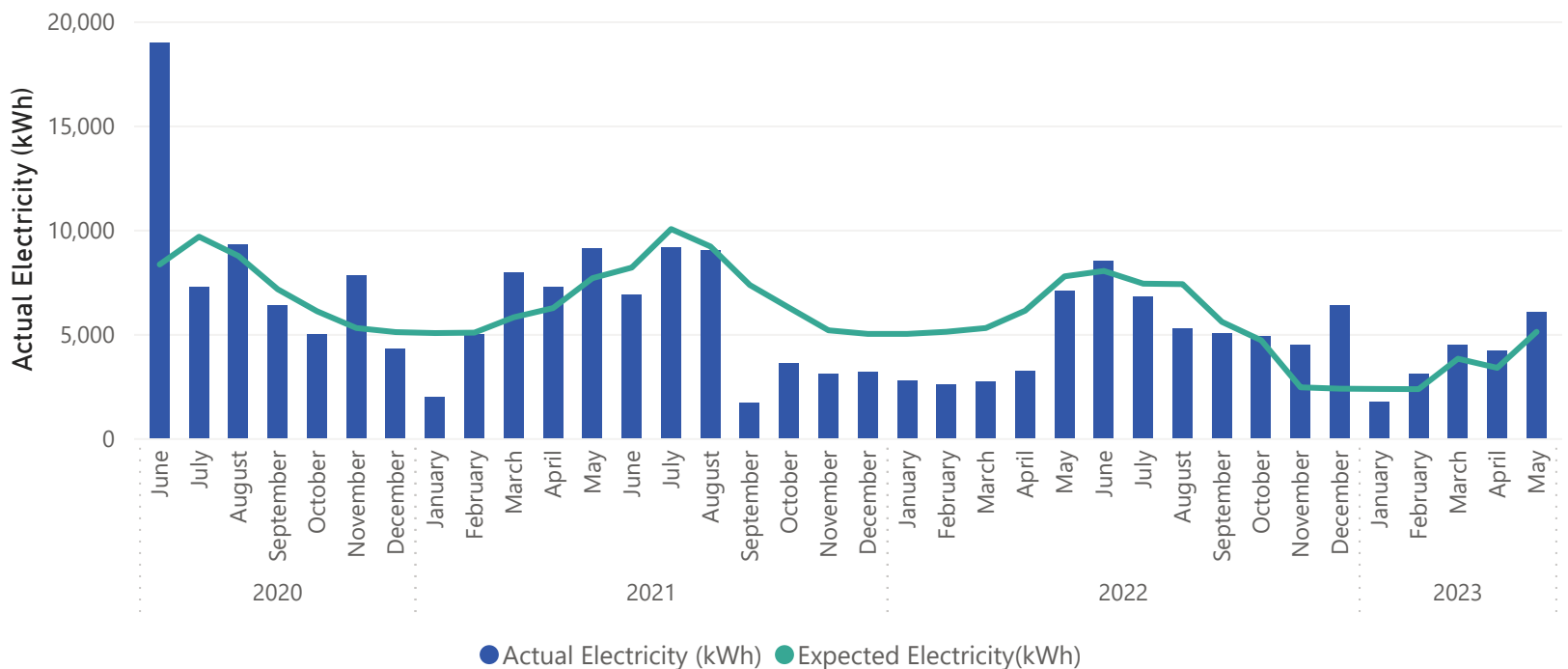
Comments:

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 change in baseline can be observed in monitoring starting July 2022.

The War Memorial Hall has used more electricity than expected in the past four months, approximately 20% more on average.

The hall has used less natural gas than expected since October 2022, which is excellent. Natural gas savings have averaged approximately 30% over the past four months.

War Memorial Hall Electricity Use Compared to Baseline (kWh)

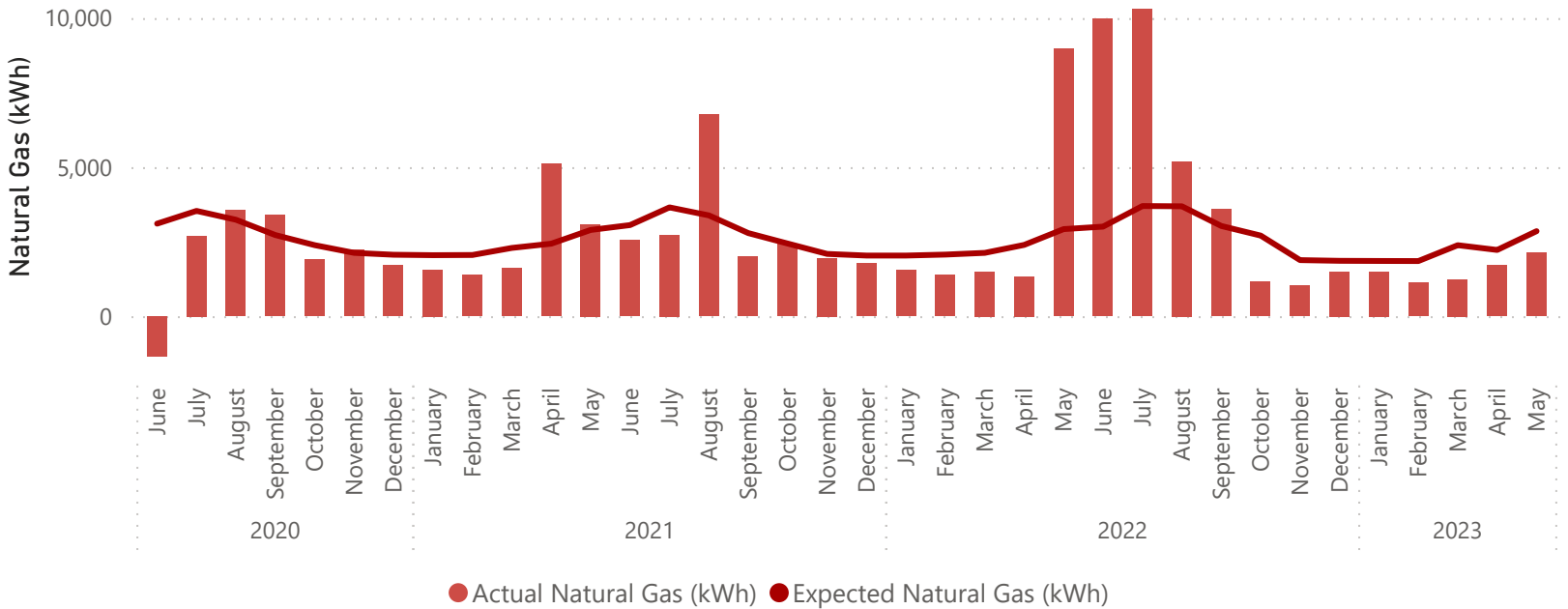


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

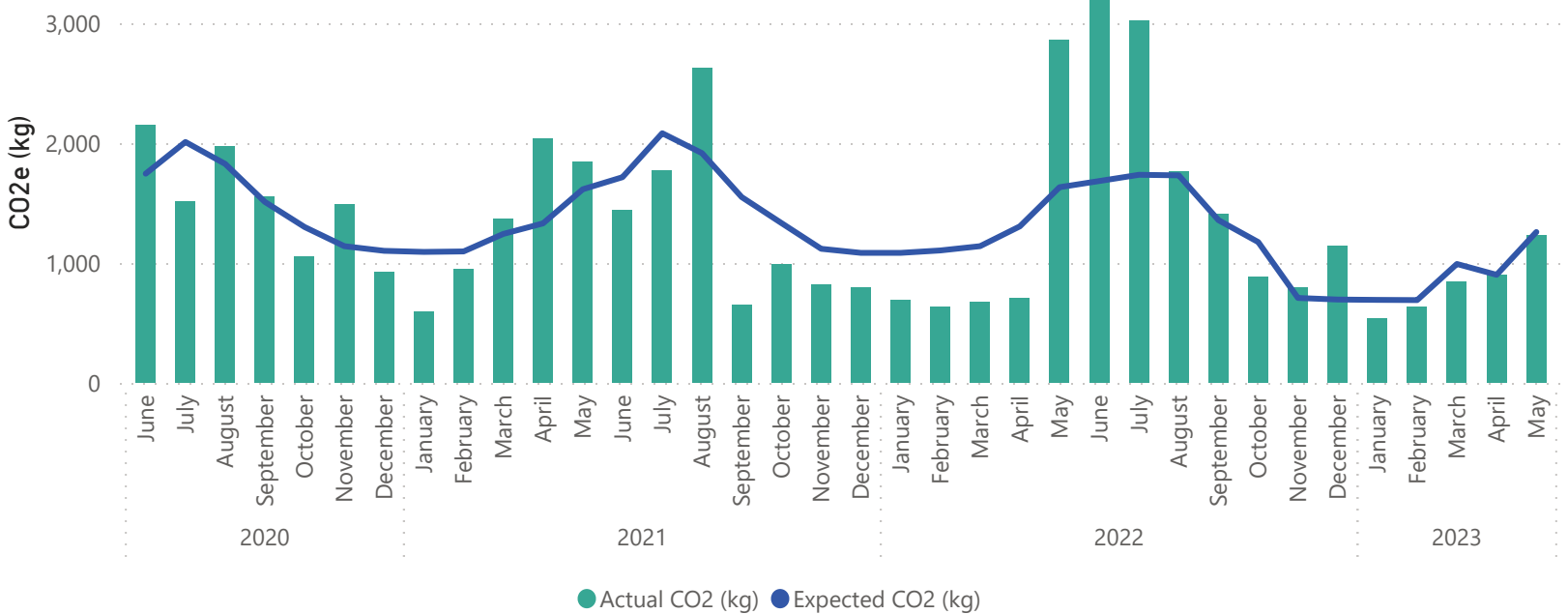
Whakatane District Council

War Memorial Hall

War Memorial Hall Natural Gas Compared to Baseline (kWh)



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

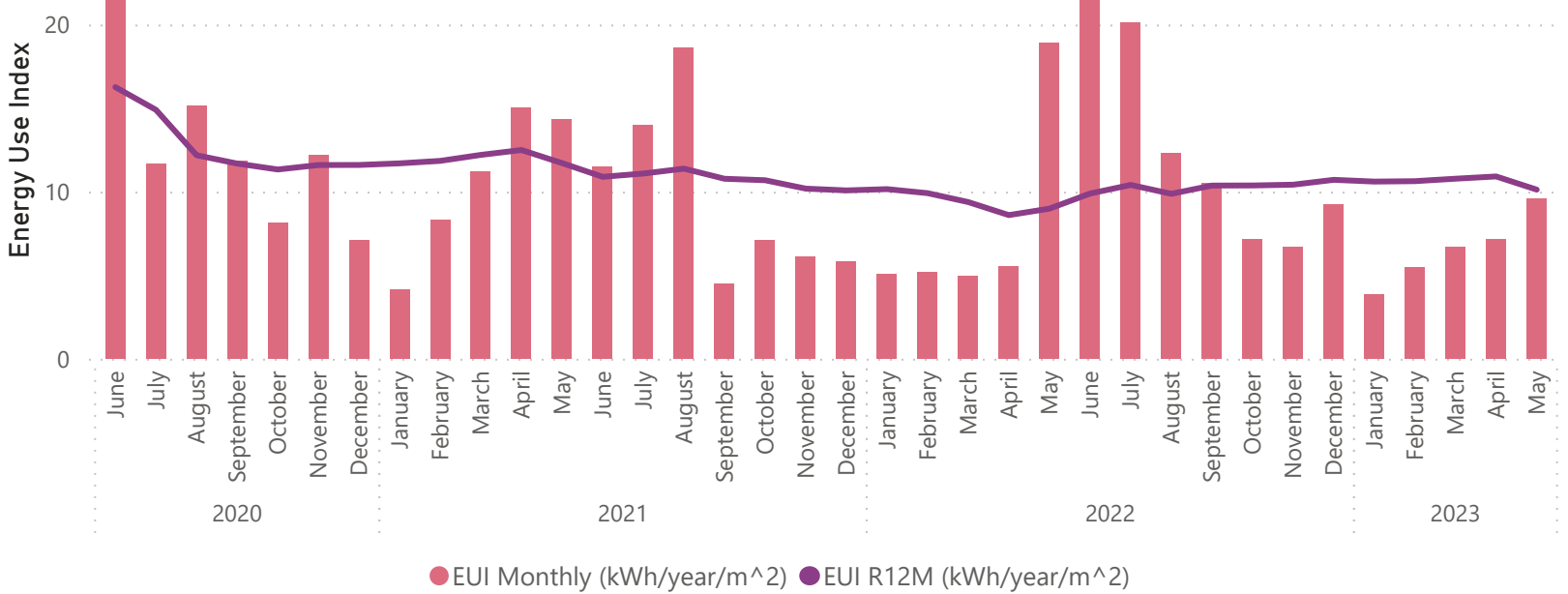


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

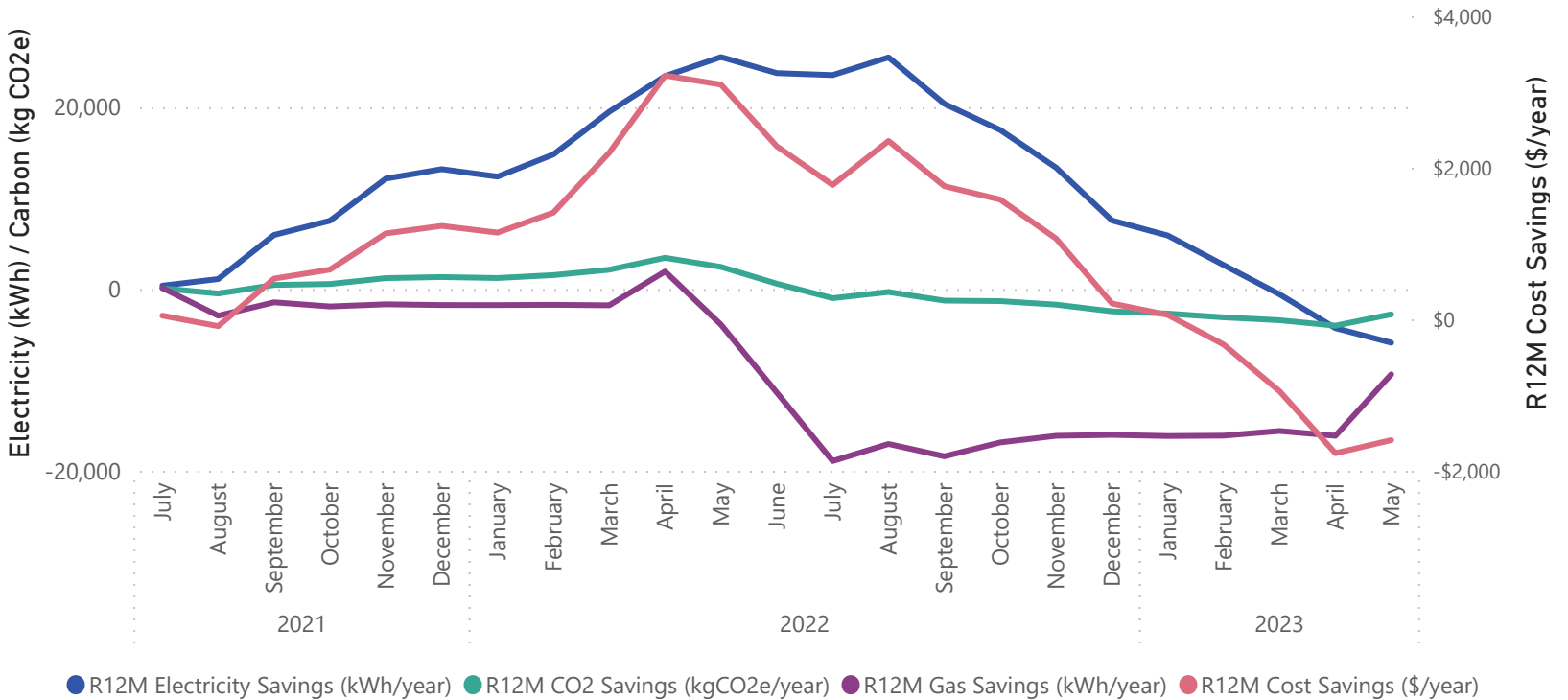
Whakatane District Council

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

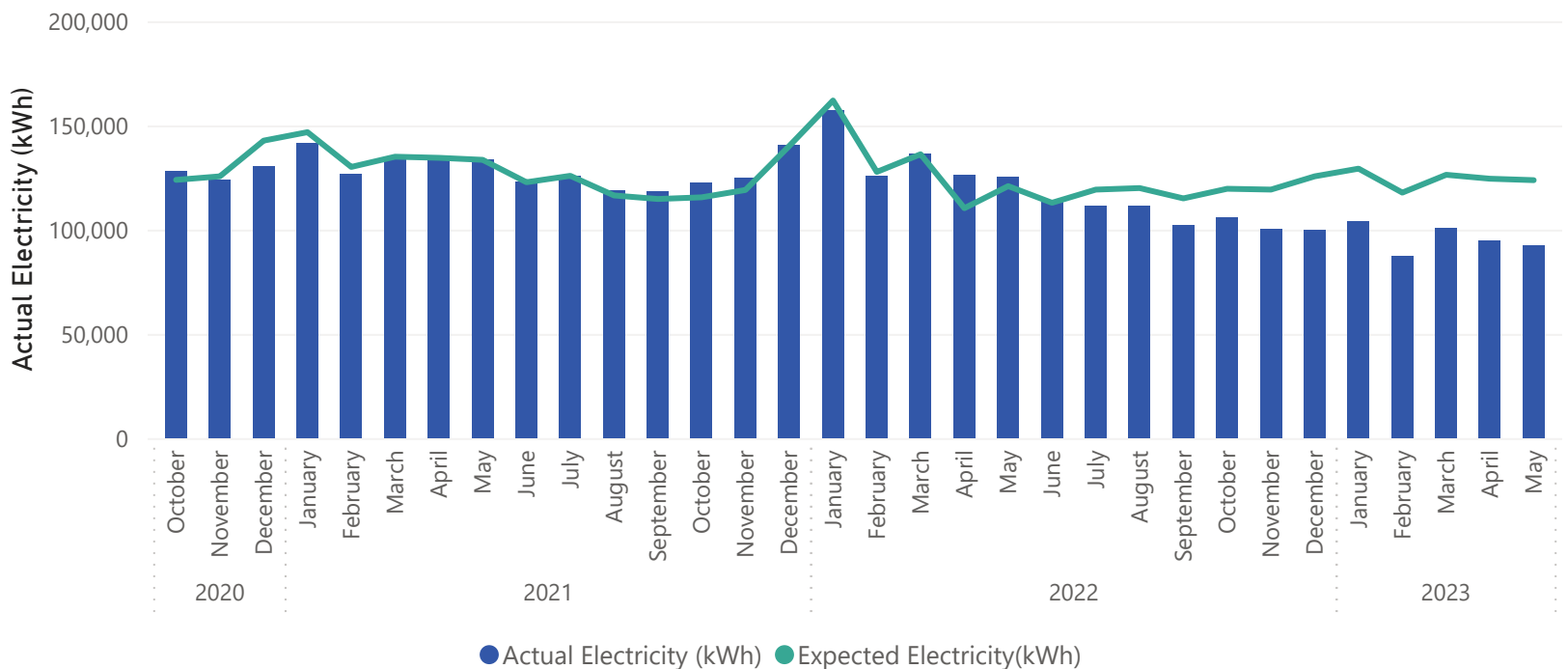
<p>\$5,728 Monthly Energy Cost Savings</p>	<p>31,239 Elec. Savings (kWh/mo)</p>	<p>25% Elec. Savings (%)</p>	<p>229,646 R12M Electricity Savings (kWh/yr)</p>	<p>4,092 CO2e Savings (kg/mo)</p>
<p>\$40,454 R12M Energy Cost Savings</p>				<p>30,086 R12M CO2e Savings (kg/yr)</p>

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 savings has been achieved at the WTP in May 2023. Consistent savings between 15-25% have been observed since November 2022. Rolling 12 month savings have been increasing, with \$40,000 saved in the past 12 months.

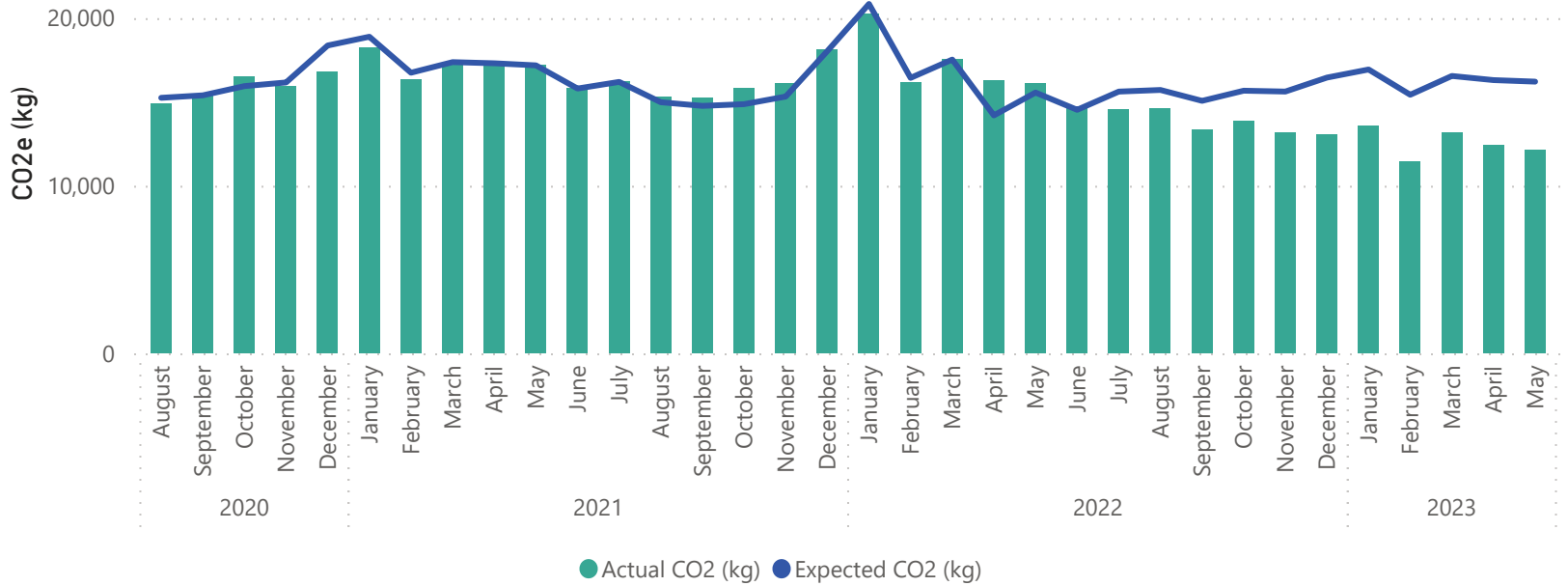
Water Treatment Plant Electricity Use Compared to Baseline (kWh)



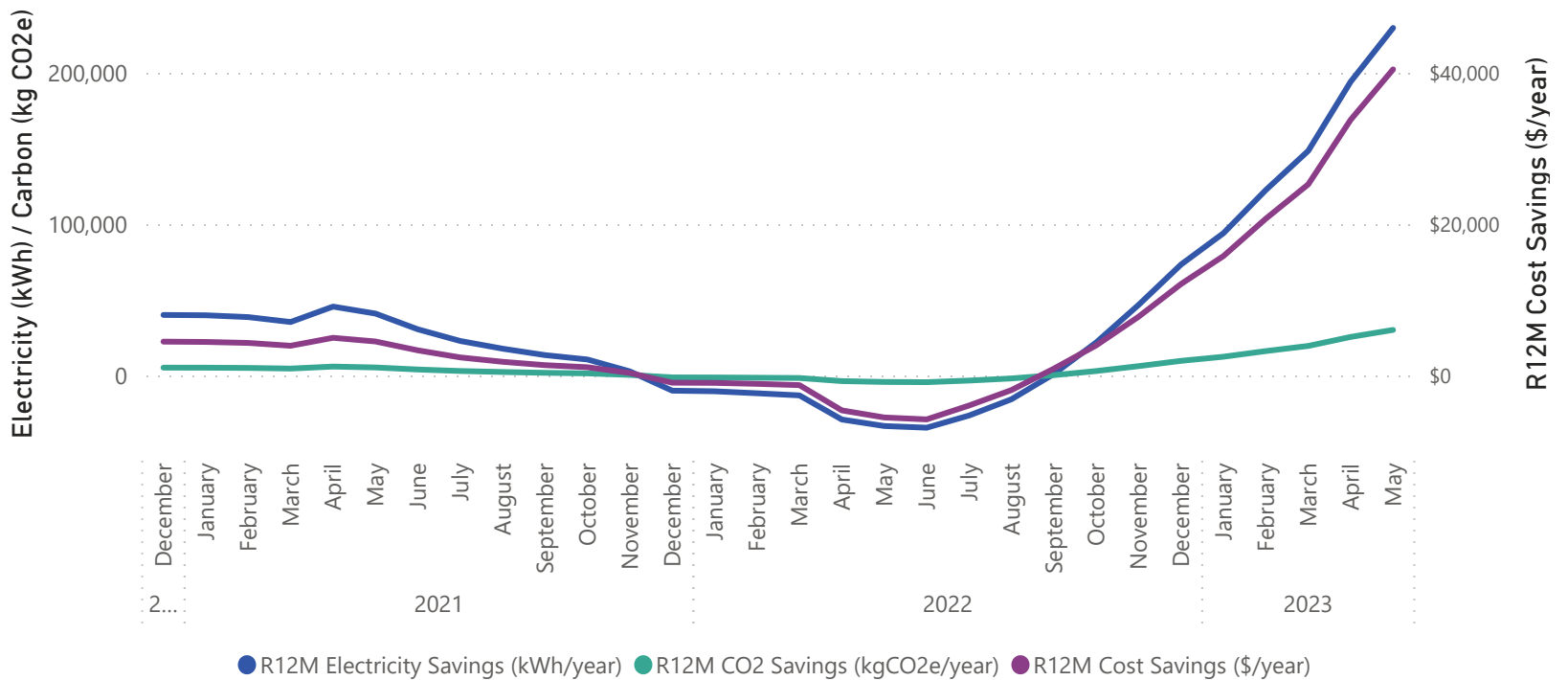
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

Whakatane District Council Water Treatment Plant

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



Water Treatment Plant Rolling 12 Month Savings

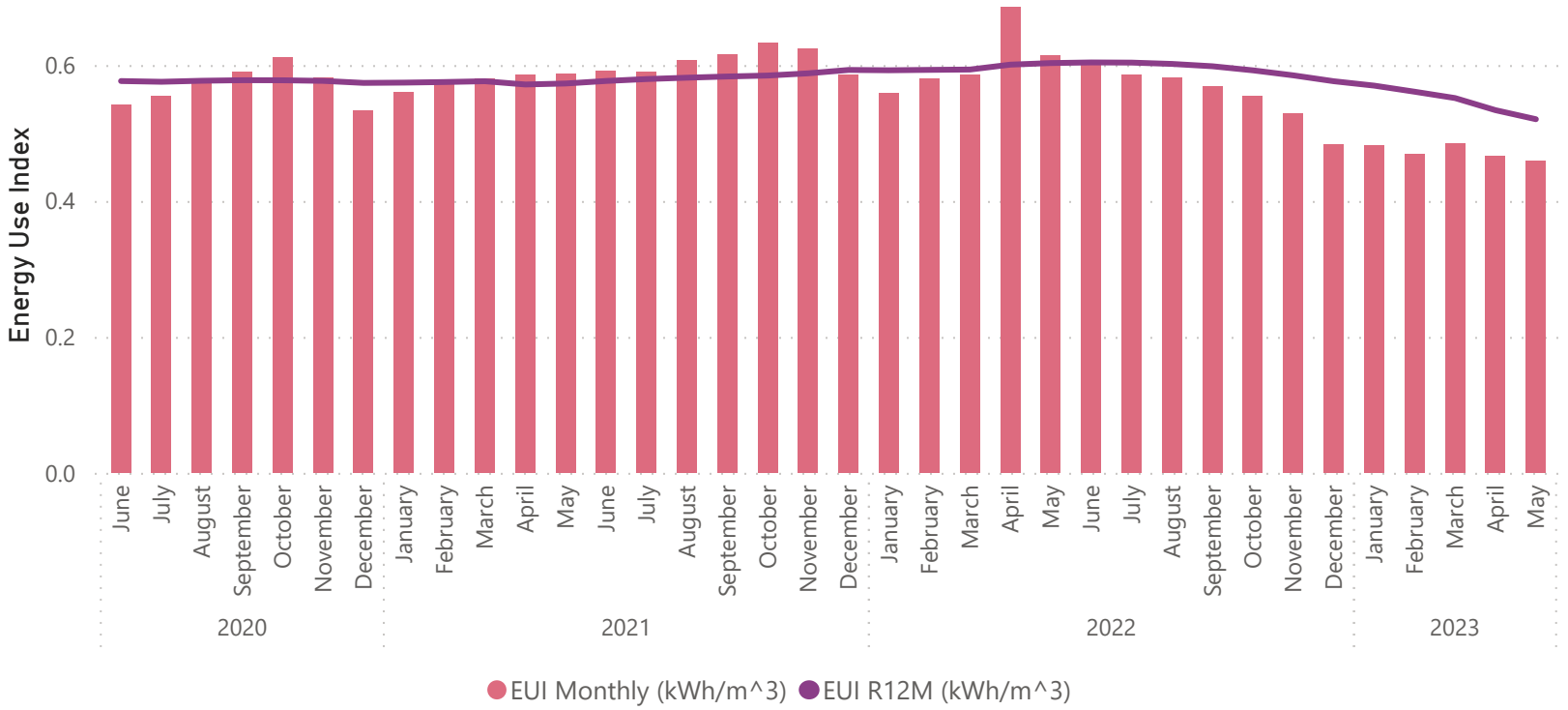


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

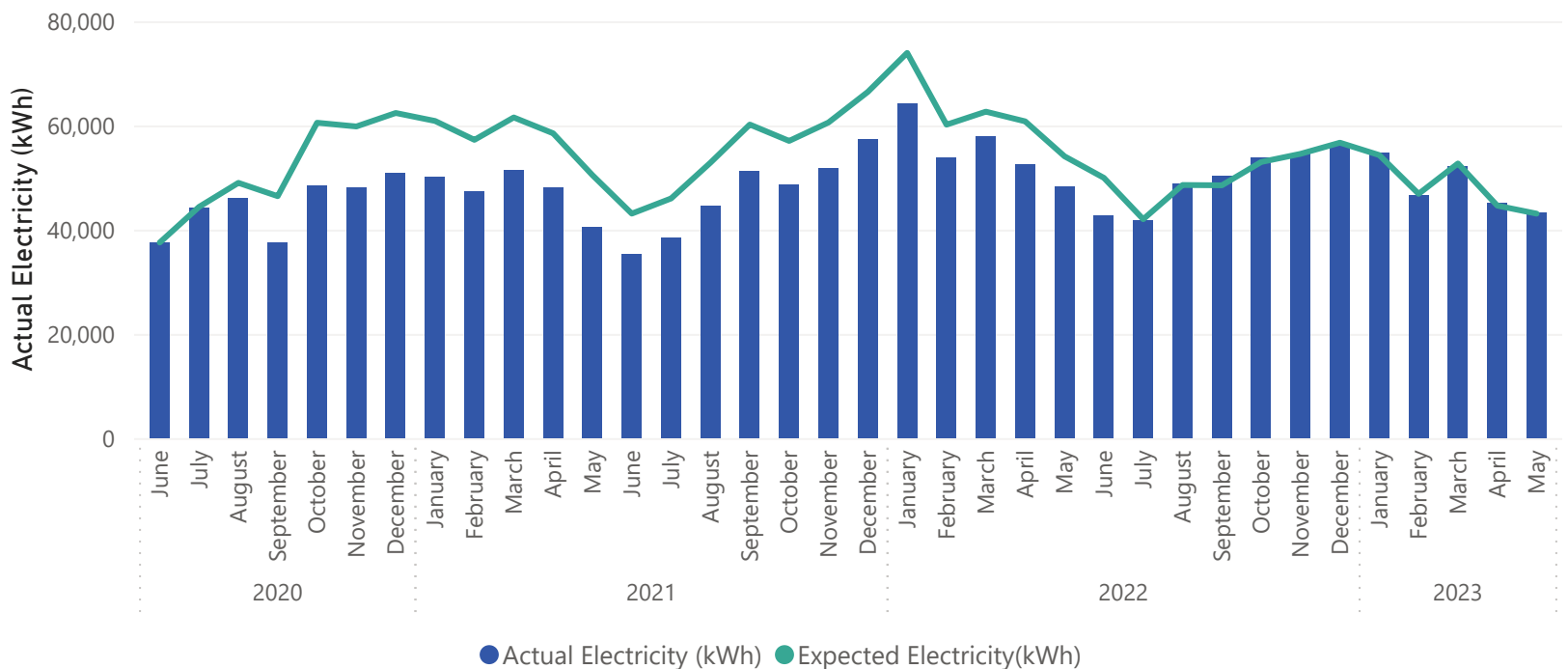
<p>-\$45 Monthly Energy Cost Savings</p>	<p>-245 Elec. Savings (kWh/mo)</p>	<p>-1% Elec. Savings (%)</p>	<p>4,475 R12M Electricity Savings (kWh/yr)</p>	<p>-32 CO2e Savings (kg/mo)</p>
<p>\$1,171 R12M Energy Cost Savings</p>				<p>652 R12M CO2e Savings (kg/yr)</p>

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)

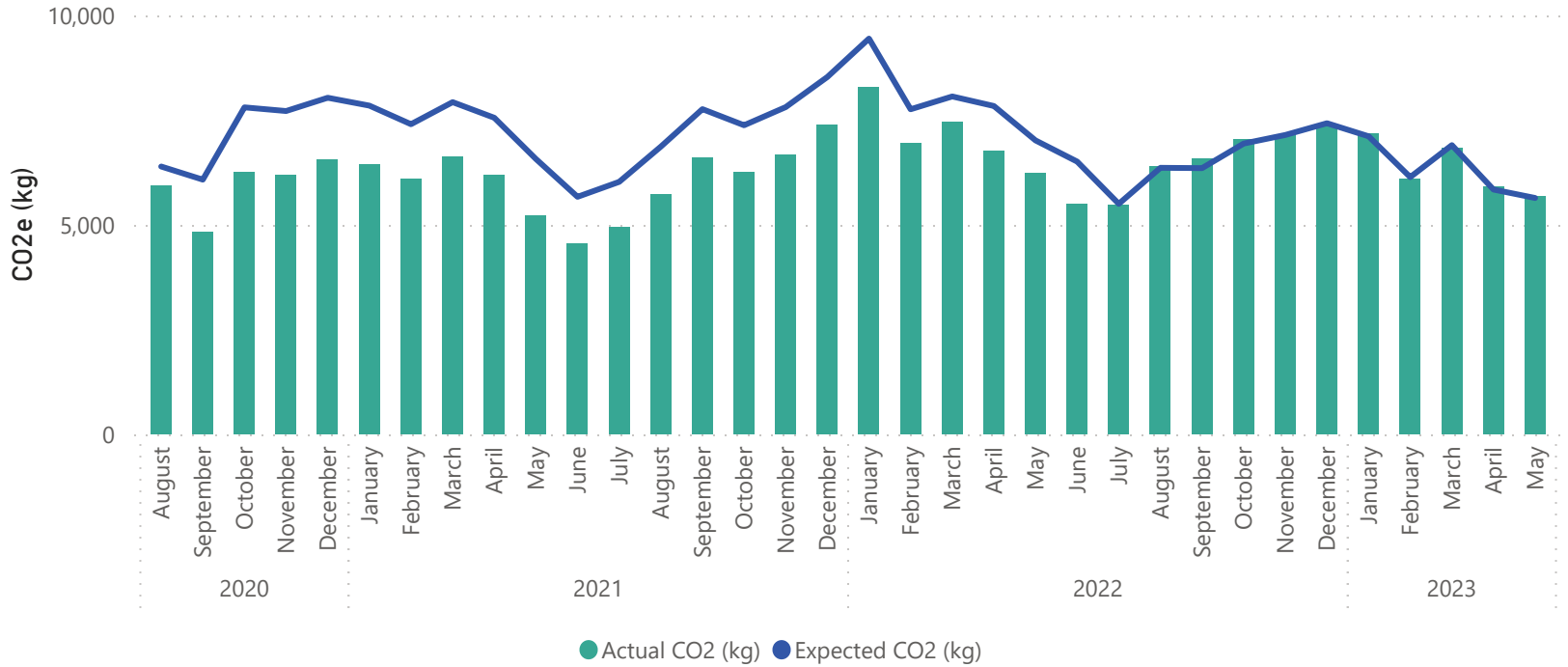


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

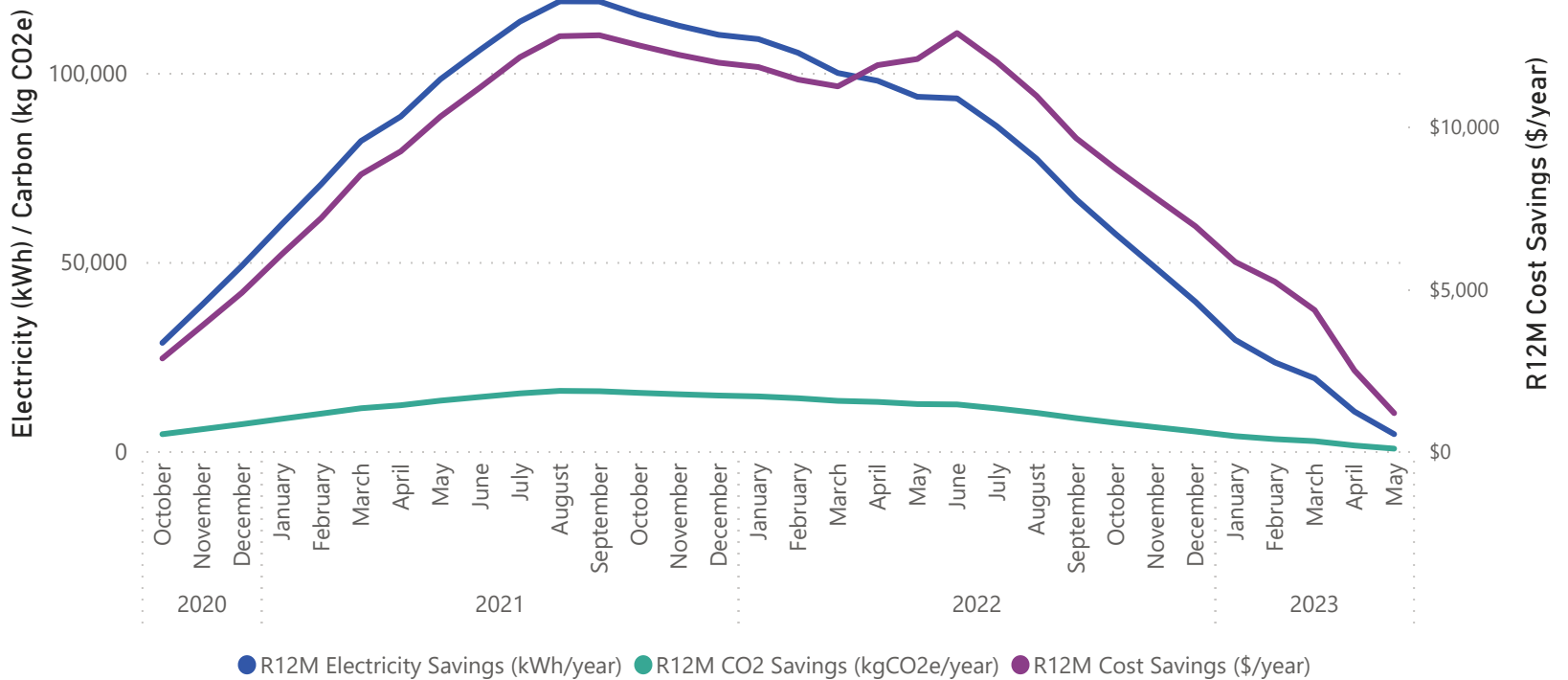
Whakatane District Council

Braemar Road Pump Station

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



Braemar Rd Pumps Rolling 12 Month Savings

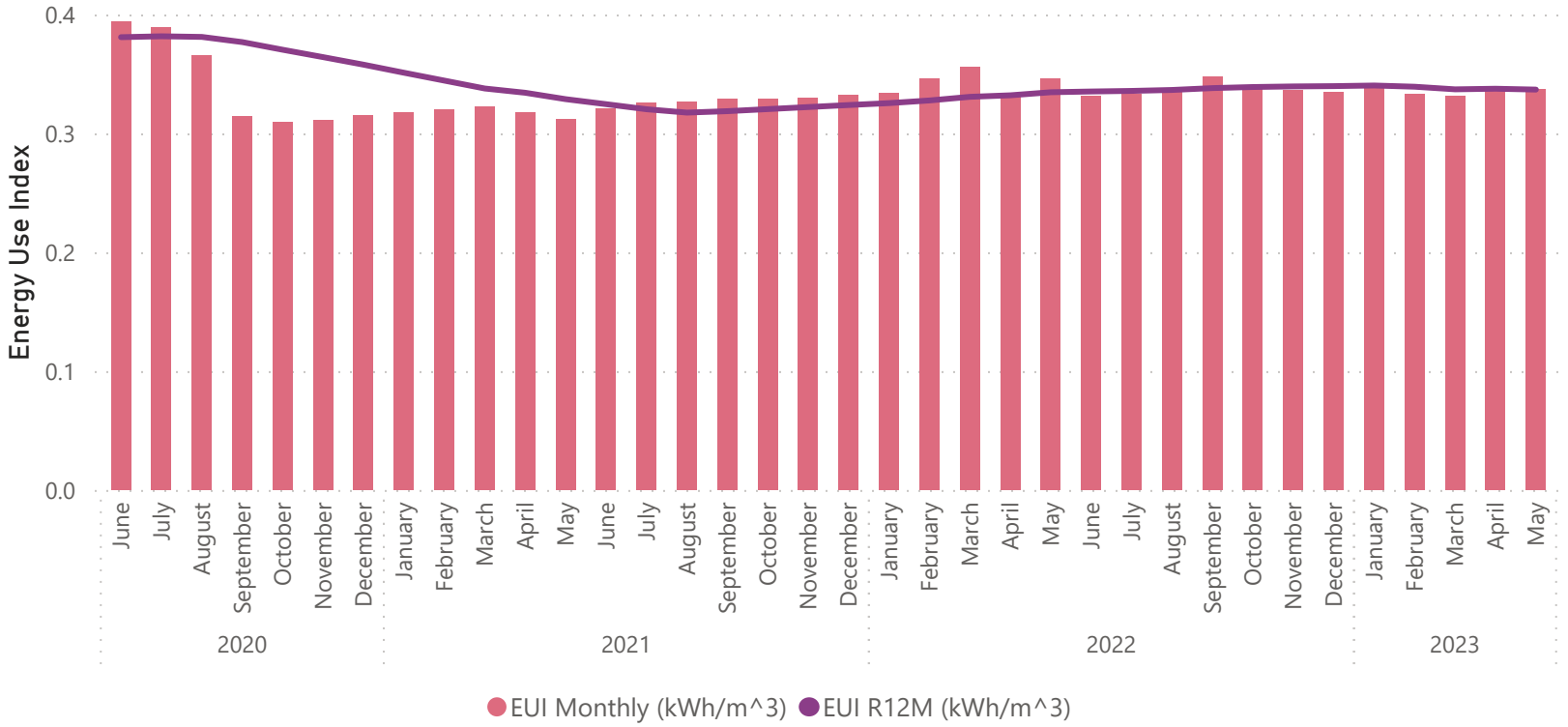


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

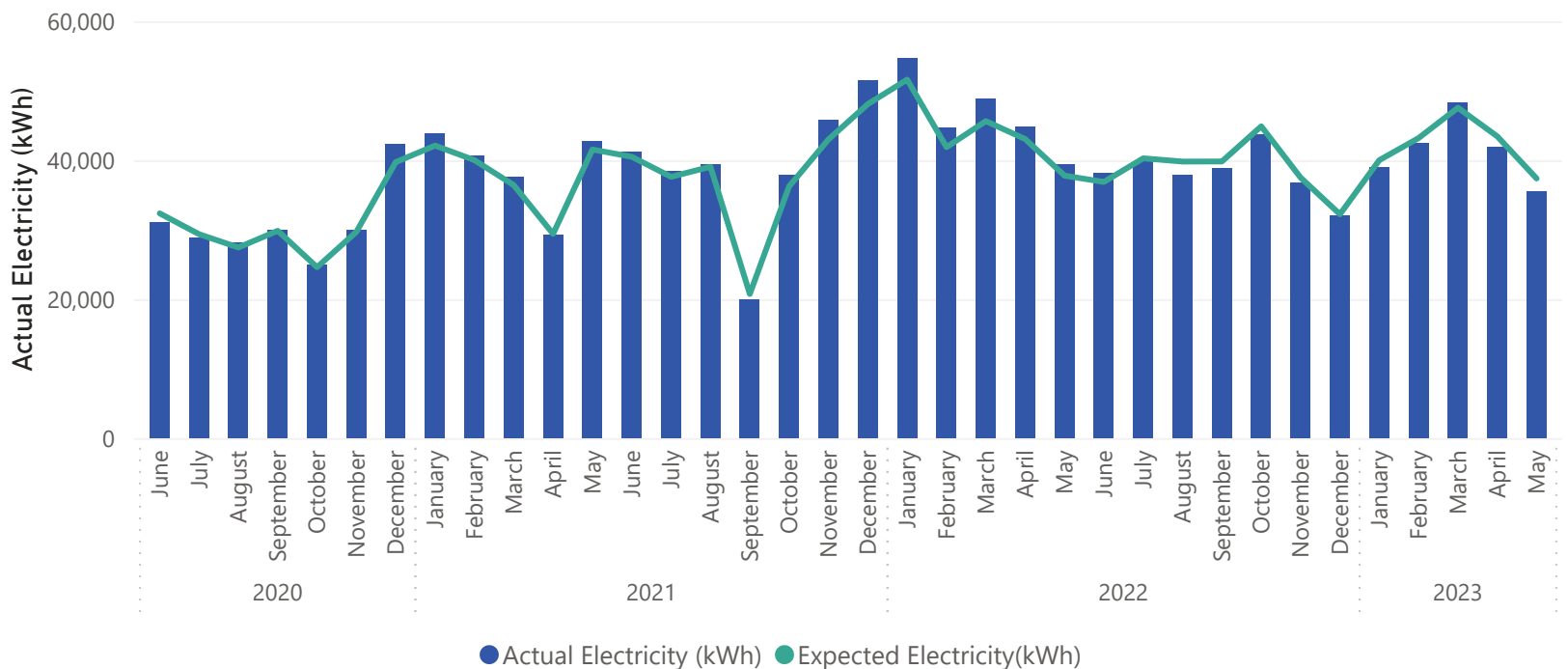
<p>\$345 Monthly Energy Cost Savings</p>	<p>1,859 Elec. Savings (kWh/mo)</p>	<p>5% Elec. Savings (%)</p>	<p>8,591 R12M Electricity Savings (kWh/yr)</p>	<p>244 CO2e Savings (kg/mo)</p>
<p>\$1,587 R12M Energy Cost Savings</p>				<p>1,129 R12M CO2e Savings (kg/yr)</p>

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 less than expected at Paul Road Pump Station. The monthly EUI is below average over the past 12 months. Rolling 12 month savings are increasing and from March 2023 are positive, with 8,600 kWh and \$1,600 saved in the past 12 months.

Paul Rd Pumps Electricity Use Compared to Baseline (kWh)

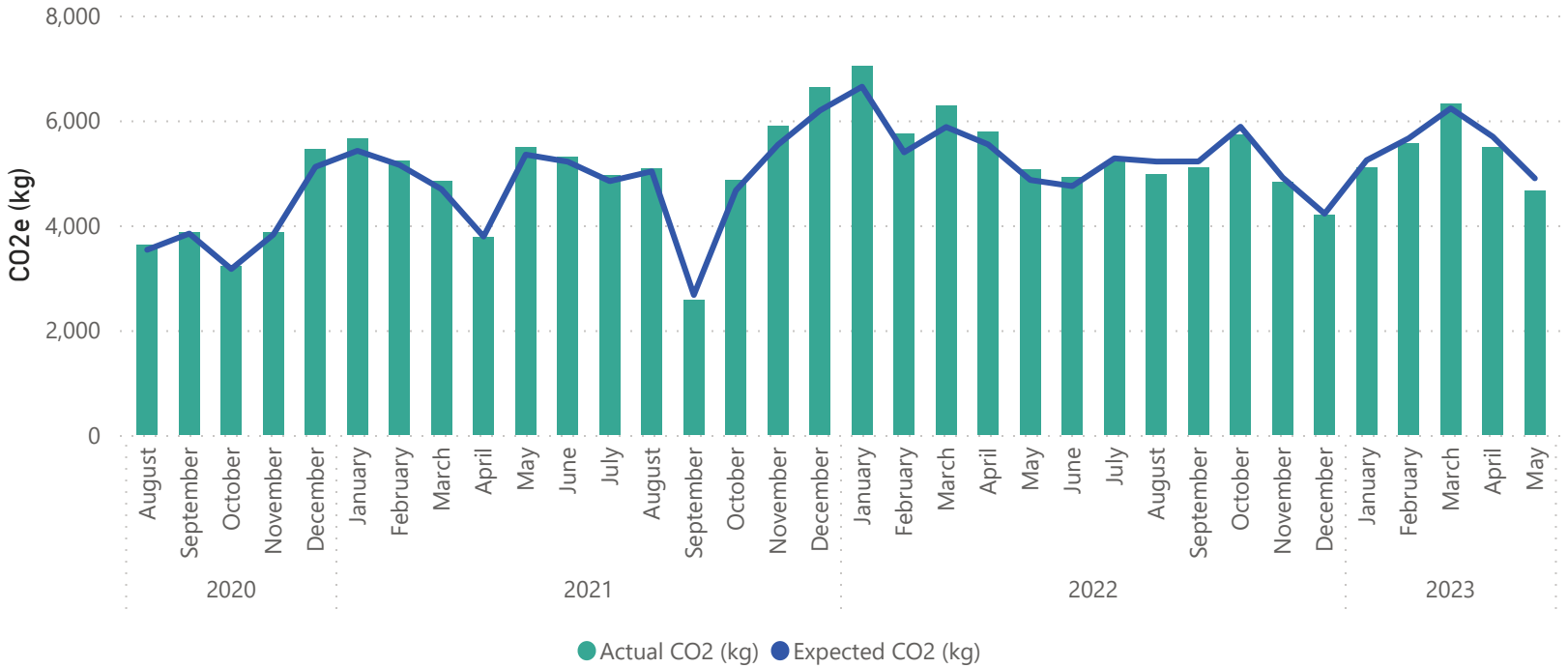


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

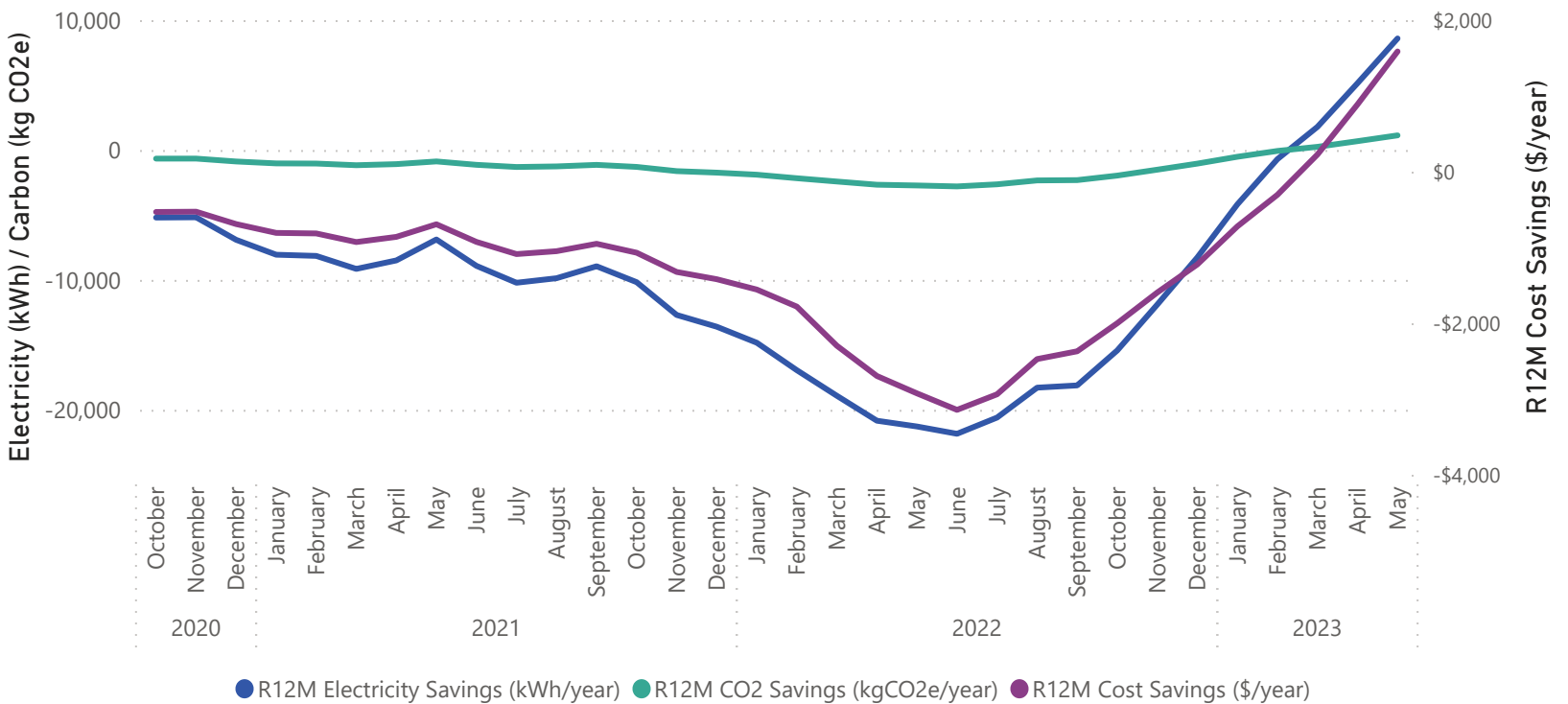
Whakatane District Council

Paul Road Pump Station

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



Paul Rd Pumps Rolling 12 Month Savings

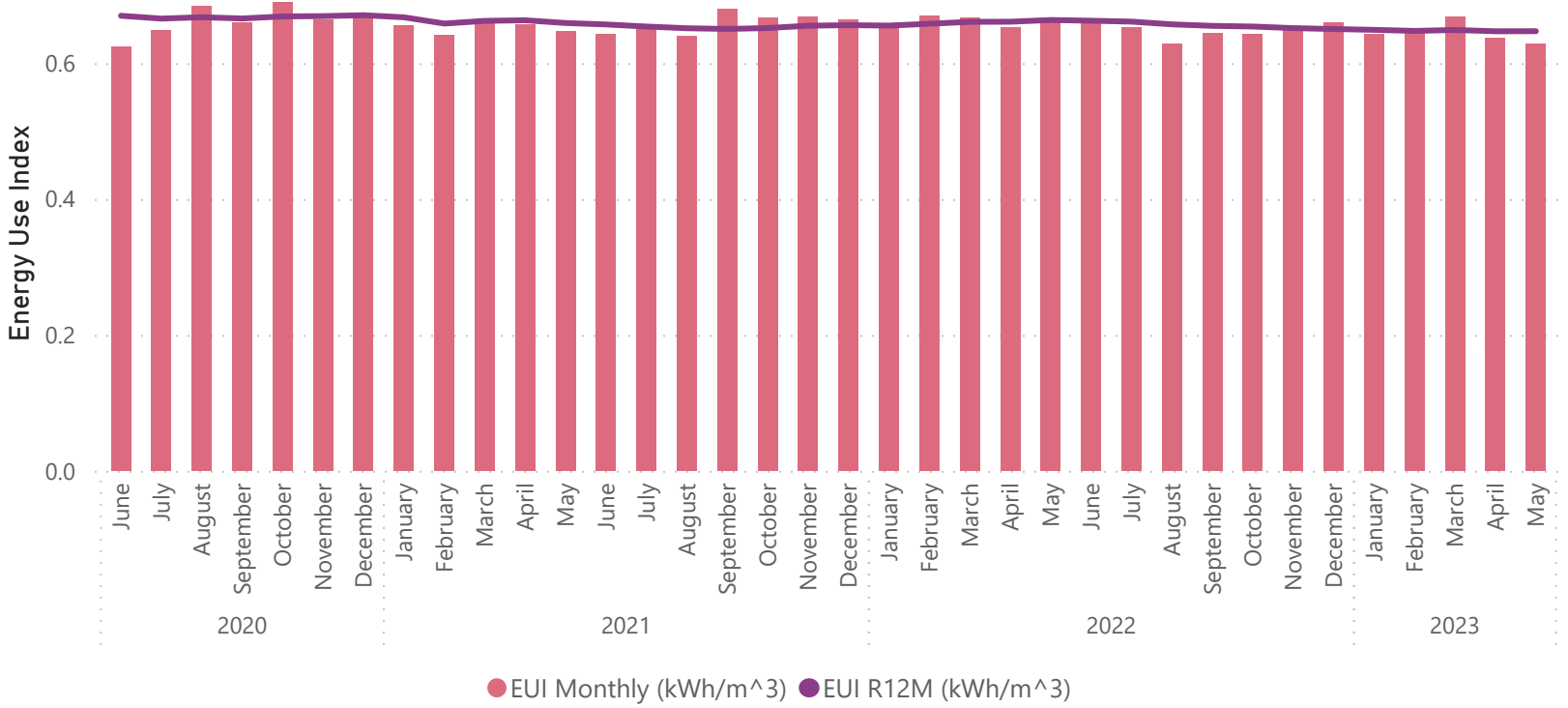


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

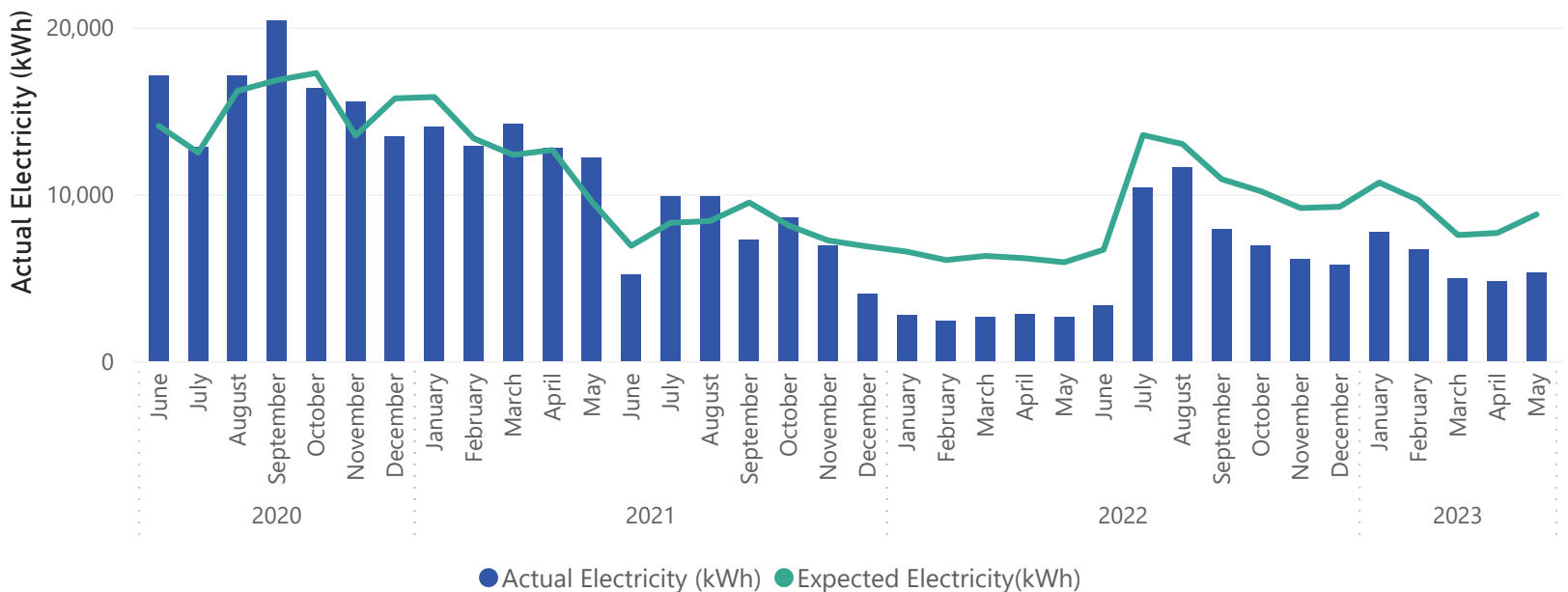
<p>\$751 Monthly Energy Cost Savings</p>	<p>3,491 Elec. Savings (kWh/mo)</p>	<p>40% Elec. Savings (%)</p>	<p>35,626 R12M Electricity Savings (kWh/yr)</p>	<p>457 CO2e Savings (kg/mo)</p>
<p>\$7,685 R12M Energy Cost Savings</p>				<p>4,659 R12M CO2e Savings (kg/yr)</p>

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 40% less electricity than expected. Savings have been greater than 27% each month for the past nine months, which is excellent.

Johnson Rd Pumps Electricity Use Compared to Baseline (kWh)

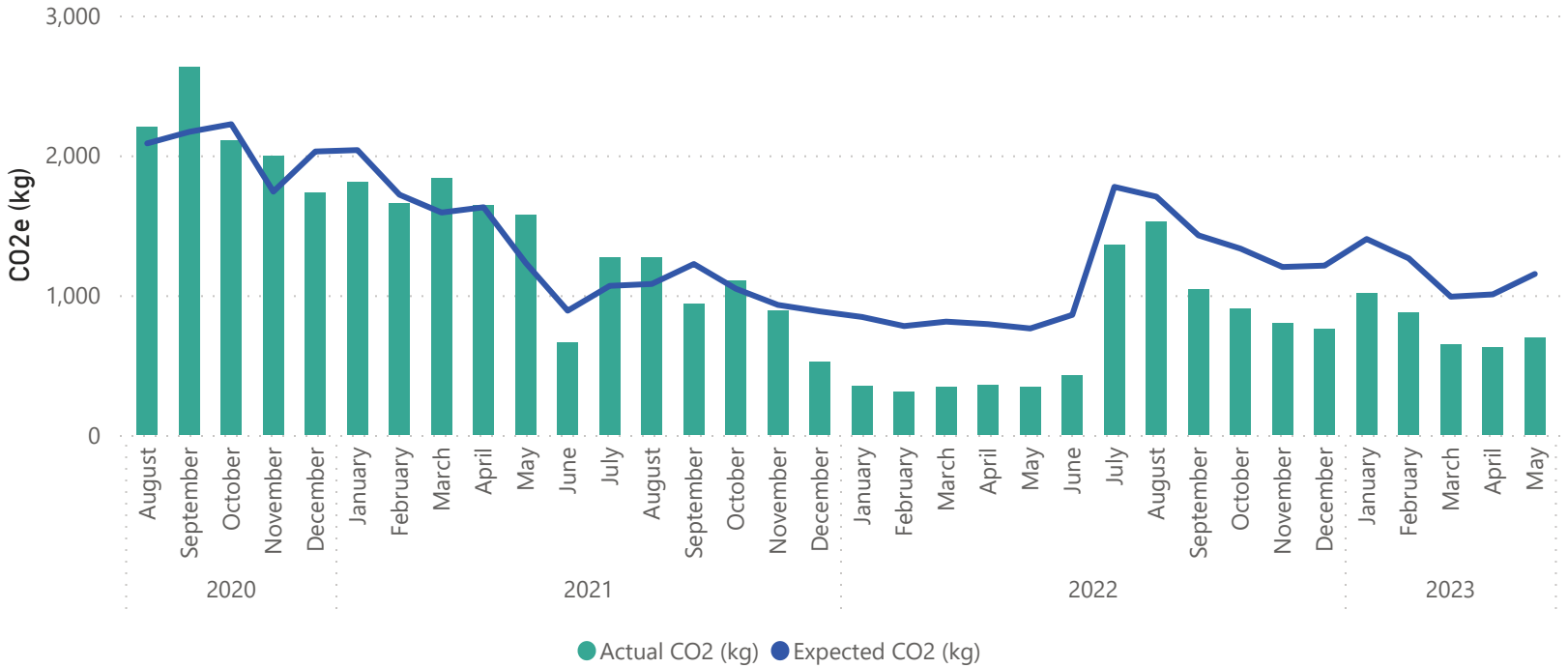


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

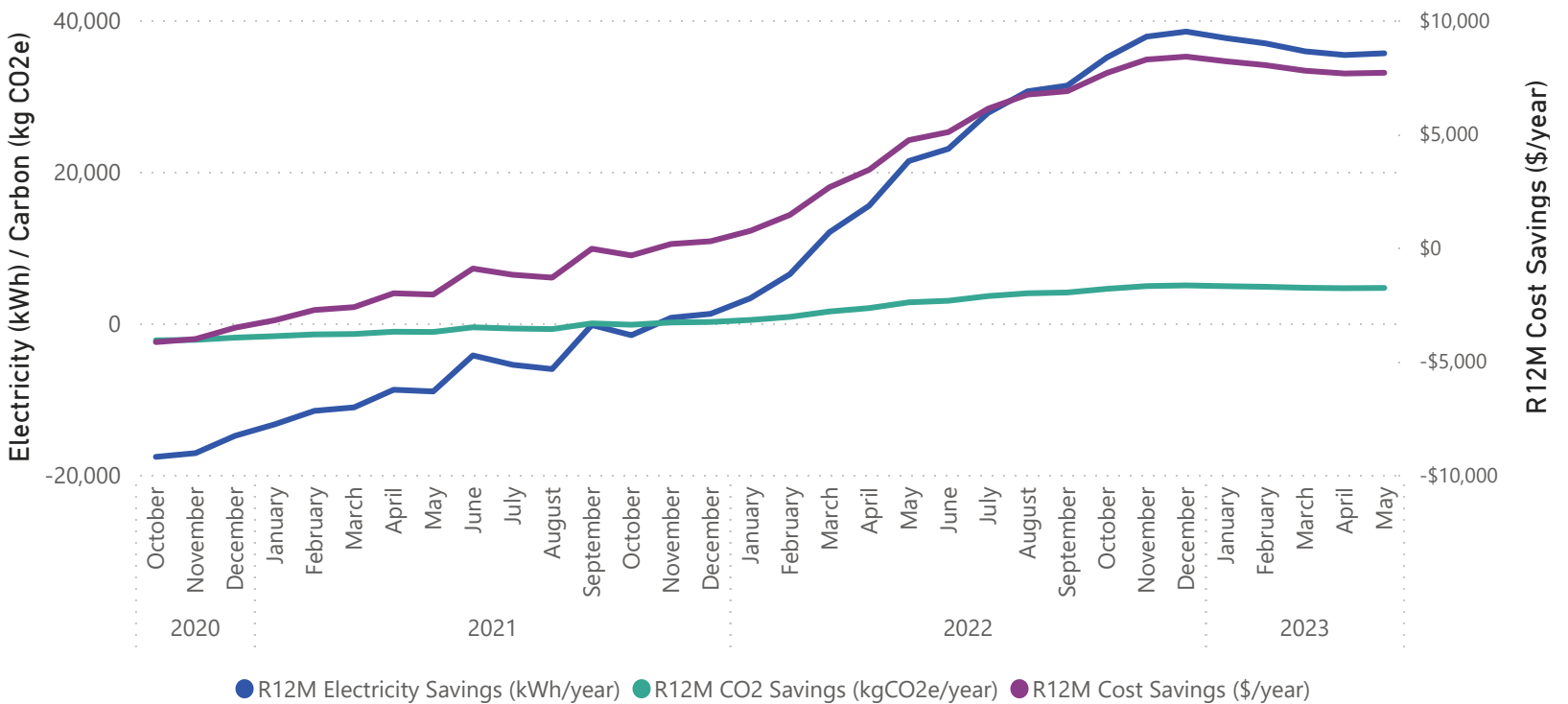
Whakatane District Council

Johnson Road Pump Station

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



Johnson Rd Pumps Rolling 12 Month Savings

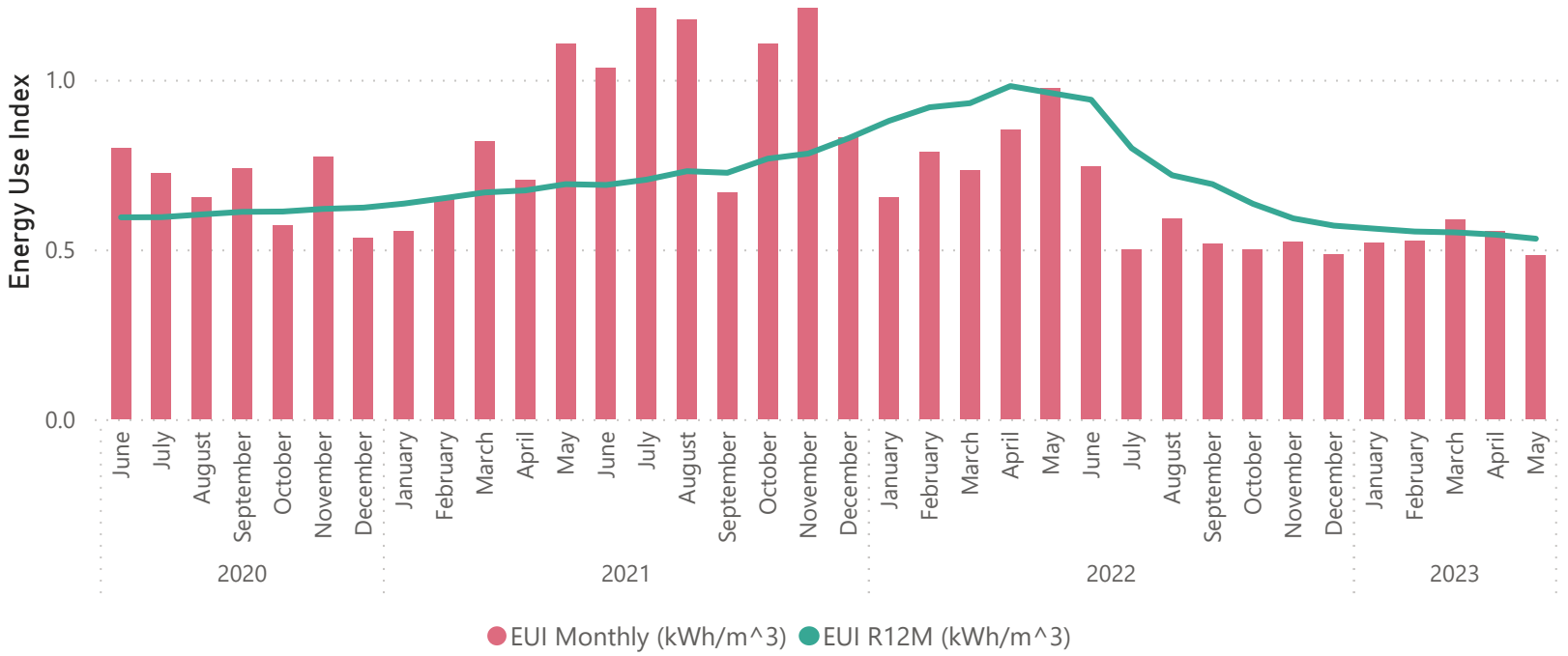


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

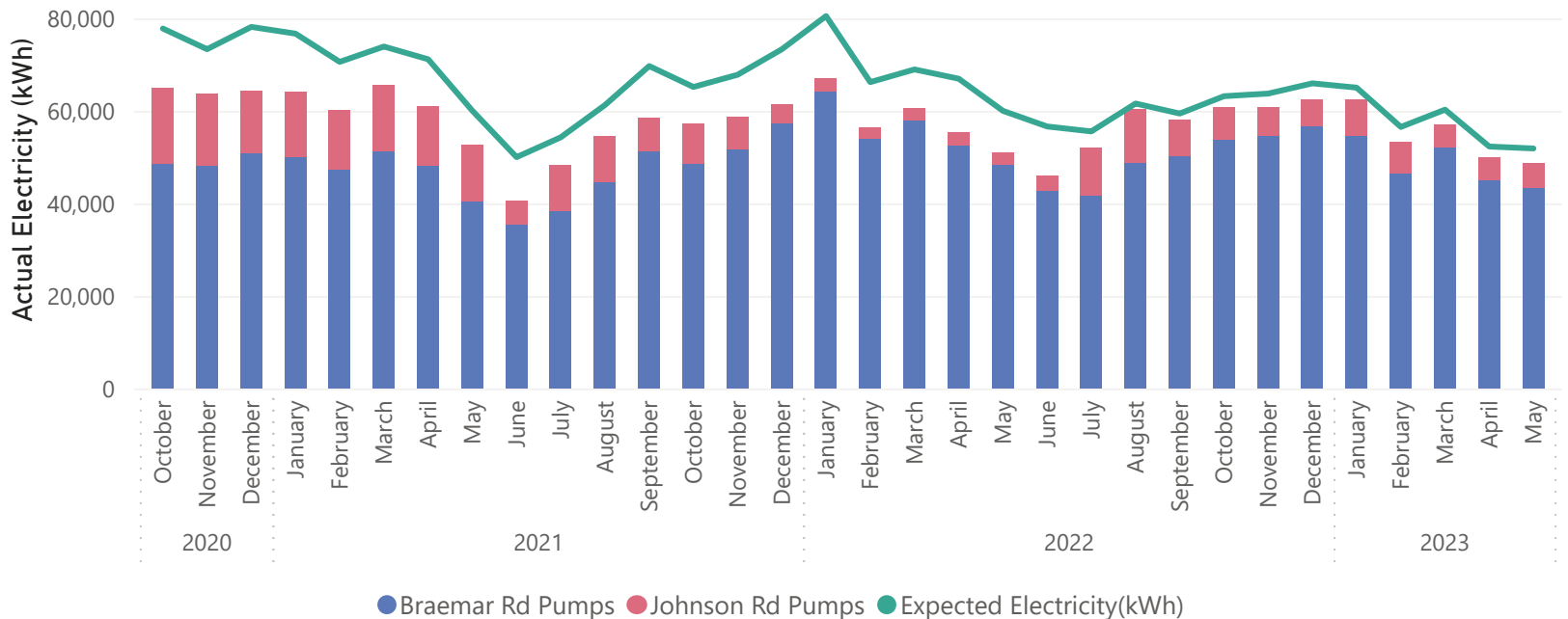
<p>\$706 Monthly Energy Cost Savings</p>	<p>3,246 Elec. Savings (kWh/mo)</p>	<p>6% Elec. Savings (%)</p>	<p>40,101 R12M Electricity Savings (kWh/yr)</p>	<p>425 CO2e Savings (kg/mo)</p>
<p>\$8,855 R12M Energy Cost Savings</p>				<p>5,312 R12M CO2e Savings (kg/yr)</p>

Comments:

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

Johnson Rd achieved savings in May 2023, Braemar Rd pump station's electricity use was marginally more than expected for the month.

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

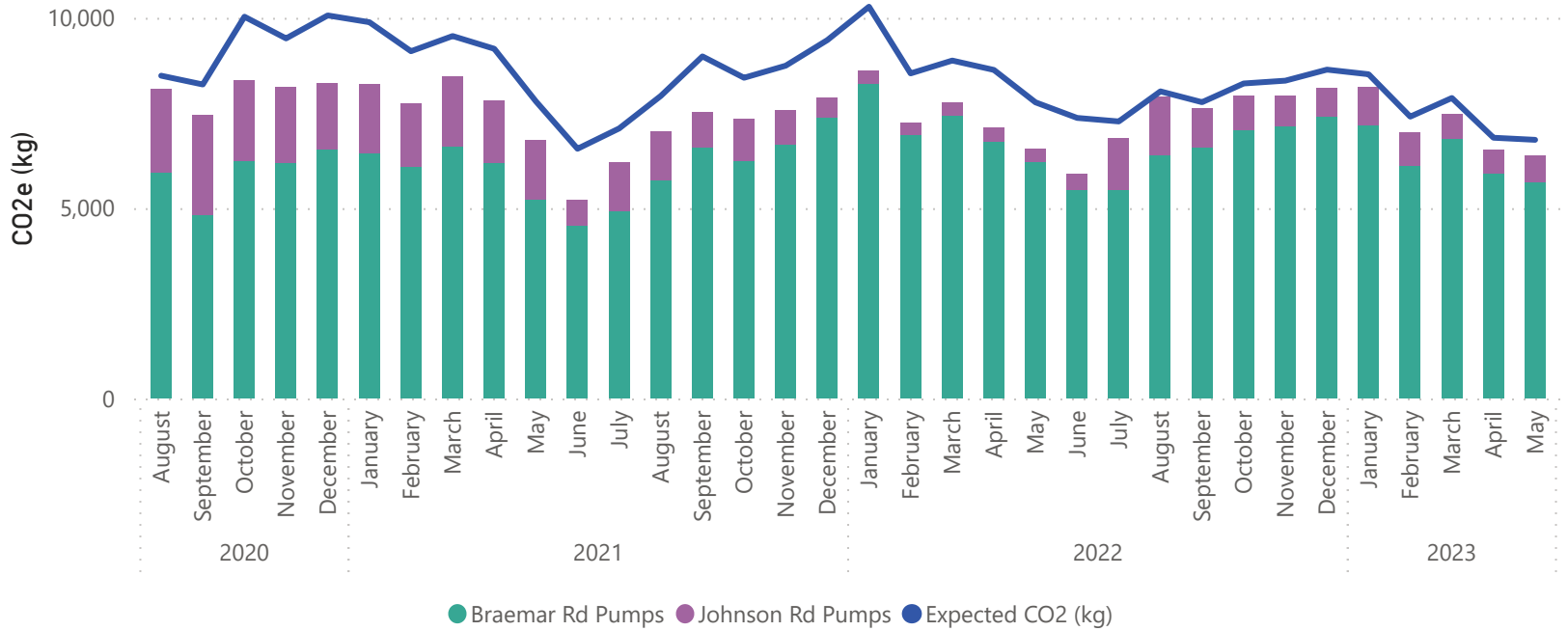


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

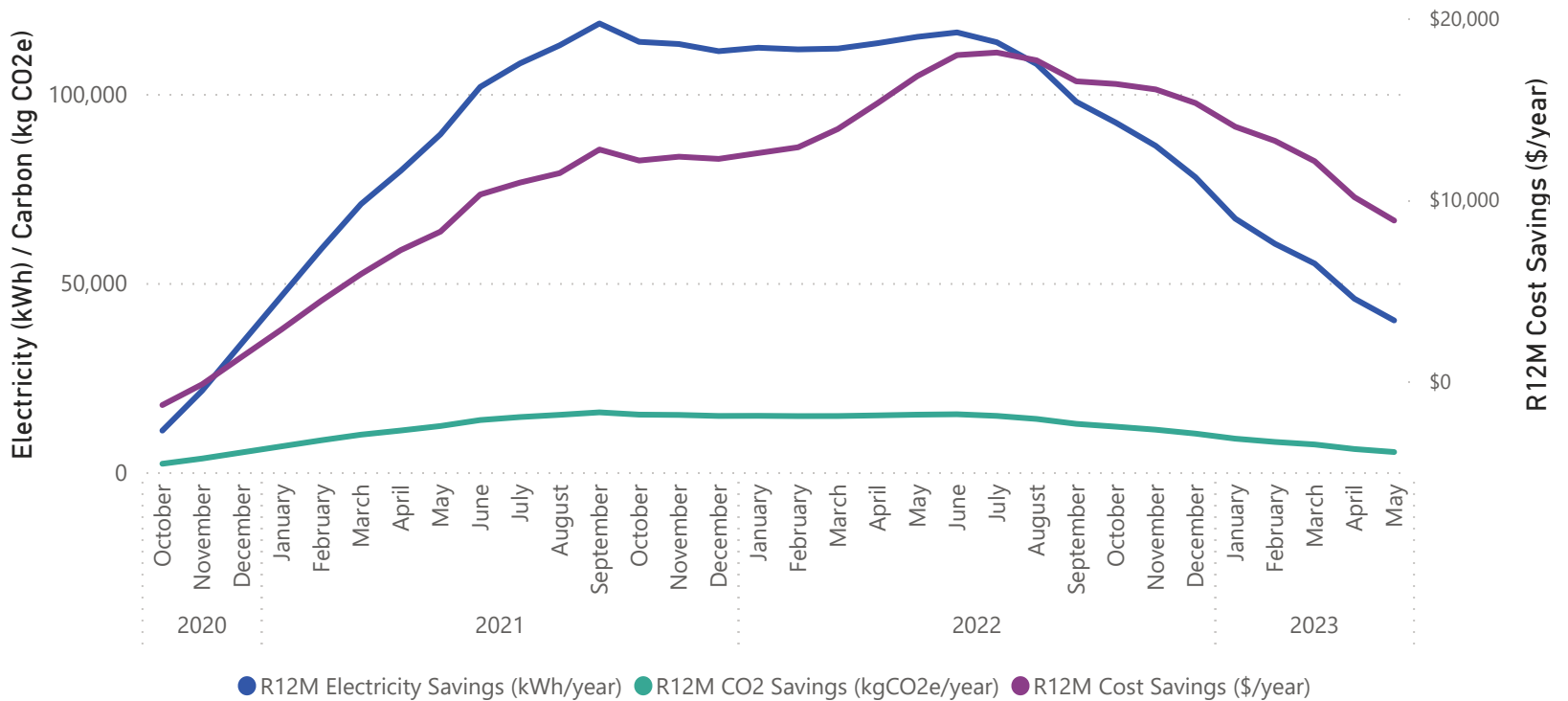
Whakatane District Council

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

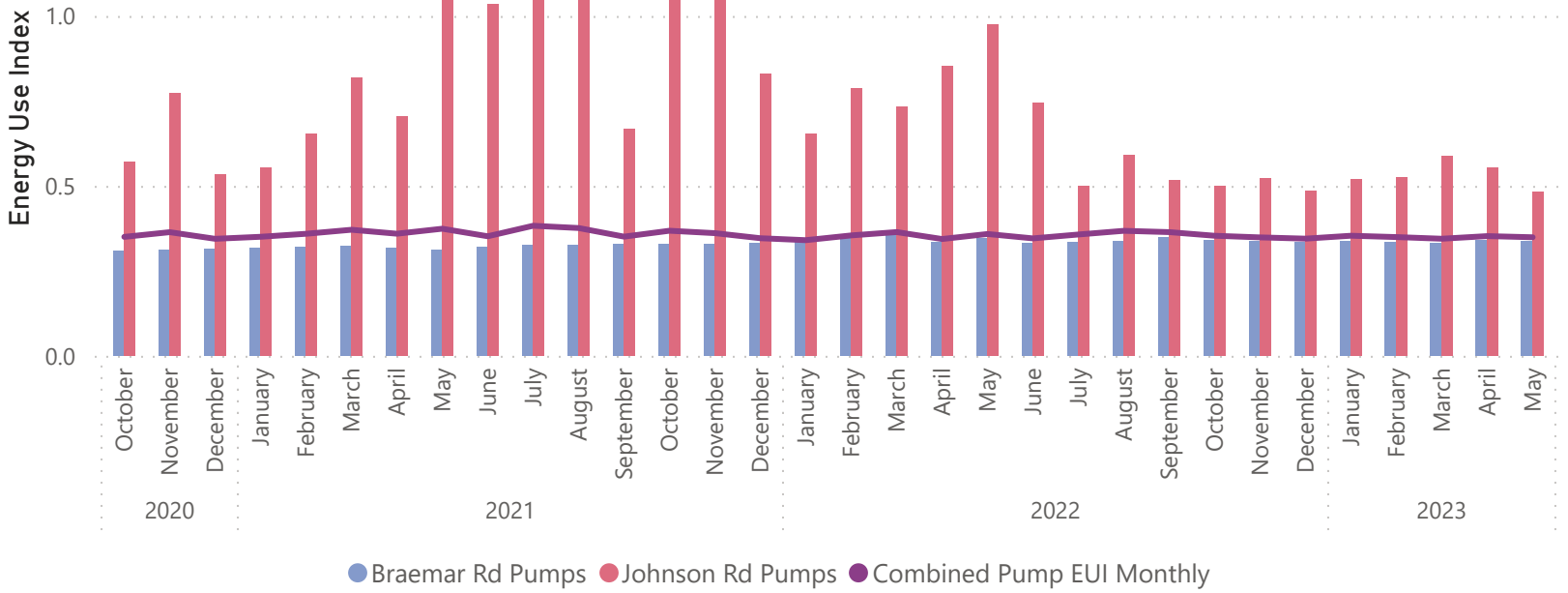


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

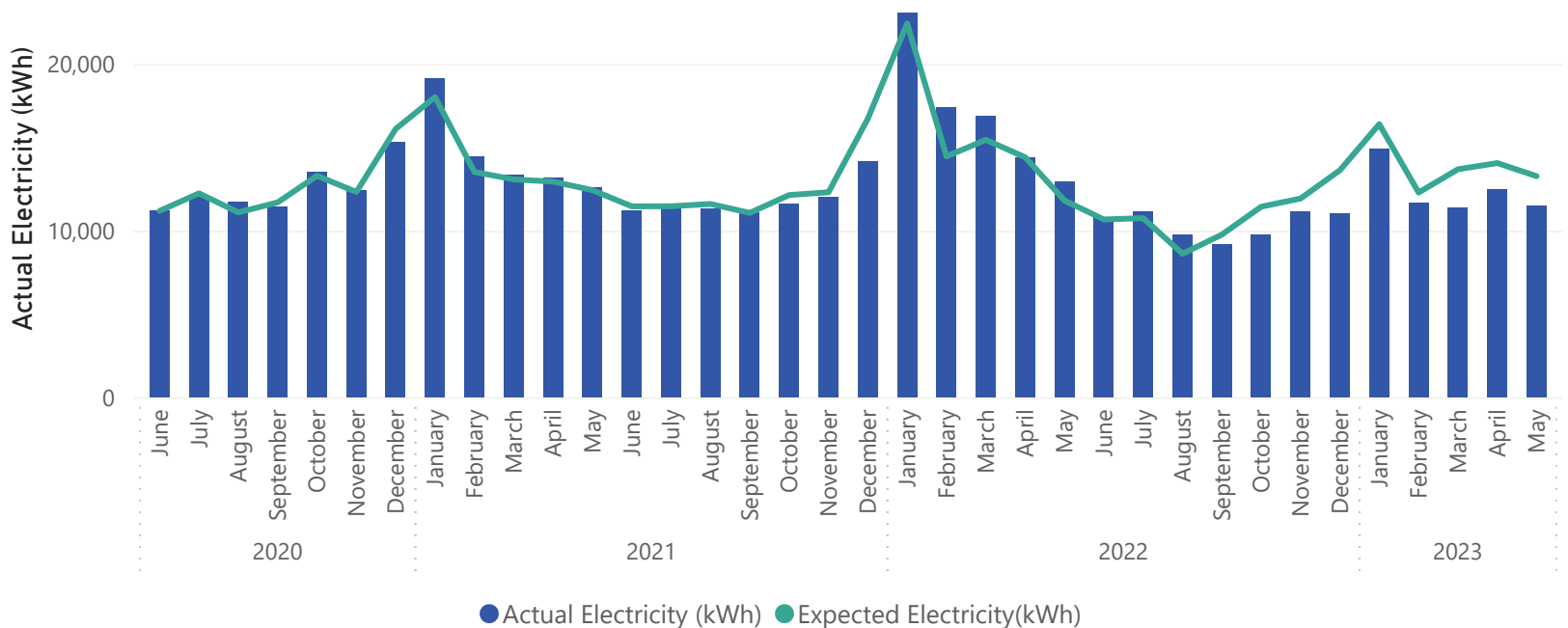
<p>\$313 Monthly Energy Cost Savings</p>	<p>1,775 Elec. Savings (kWh/mo)</p>	<p>13% Elec. Savings (%)</p>	<p>11,831 R12M Electricity Savings (kWh/yr)</p>	<p>233 CO2e Savings (kg/mo)</p>
<p>\$2,086 R12M Energy Cost Savings</p>				<p>1,550 R12M CO2e Savings (kg/yr)</p>

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.

May 2023 is the ninth 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)

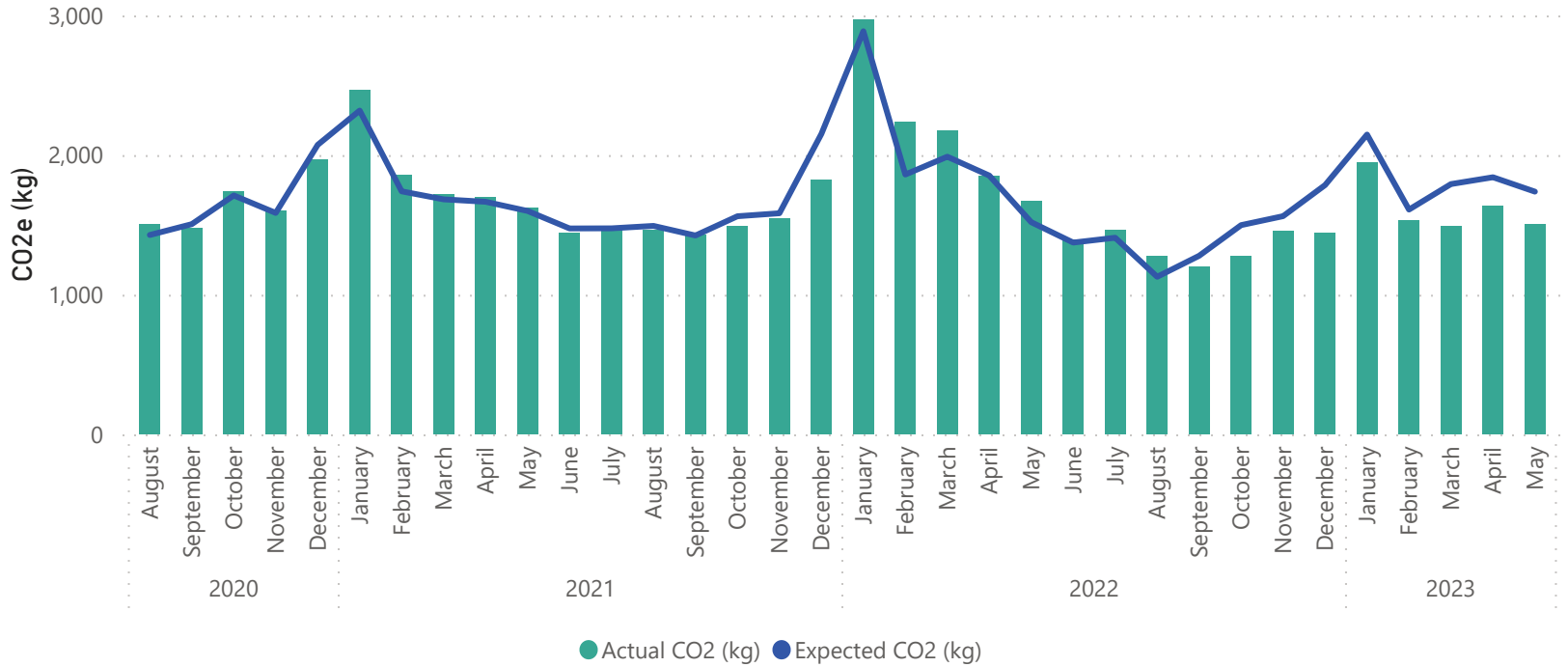


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

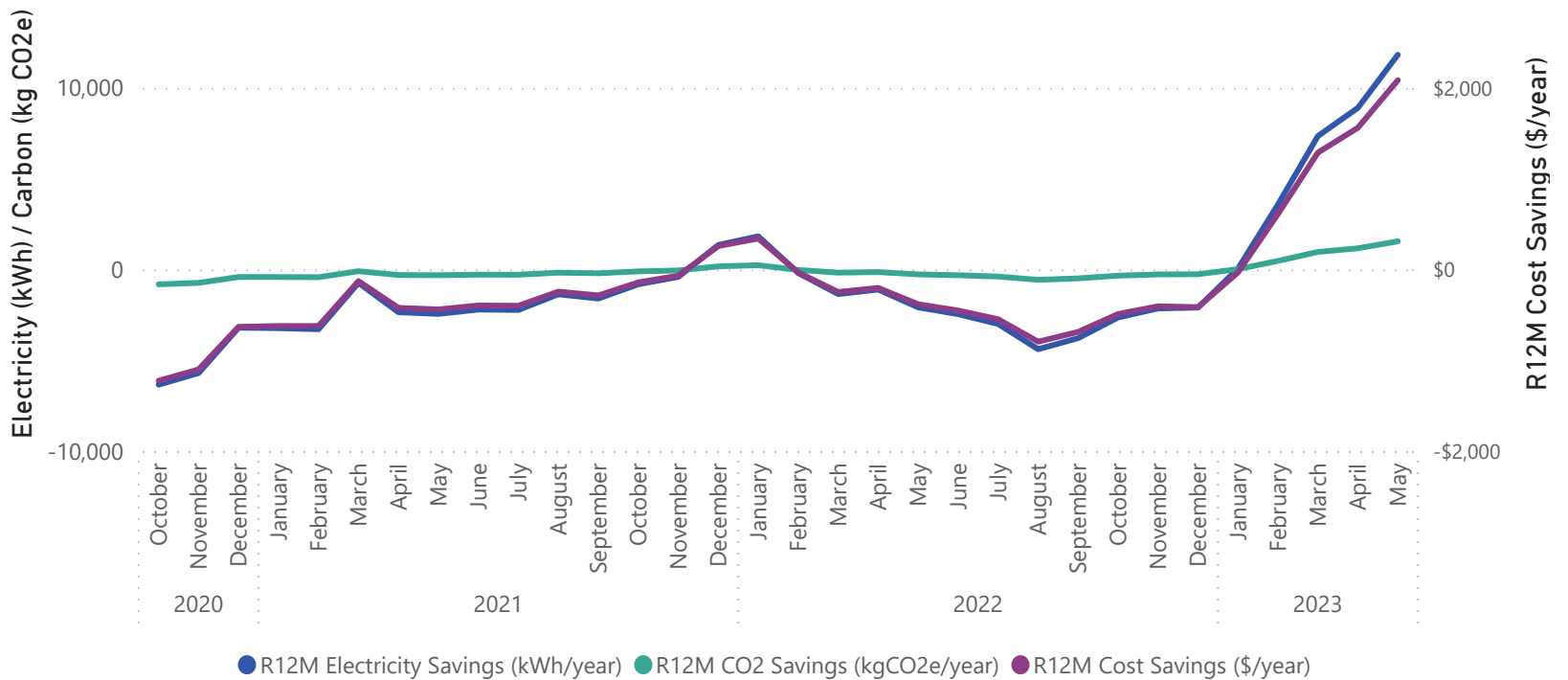
Whakatane District Council

Bridger Glade Pump Station

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



Bridger Glade Pumps Rolling 12 Month Savings

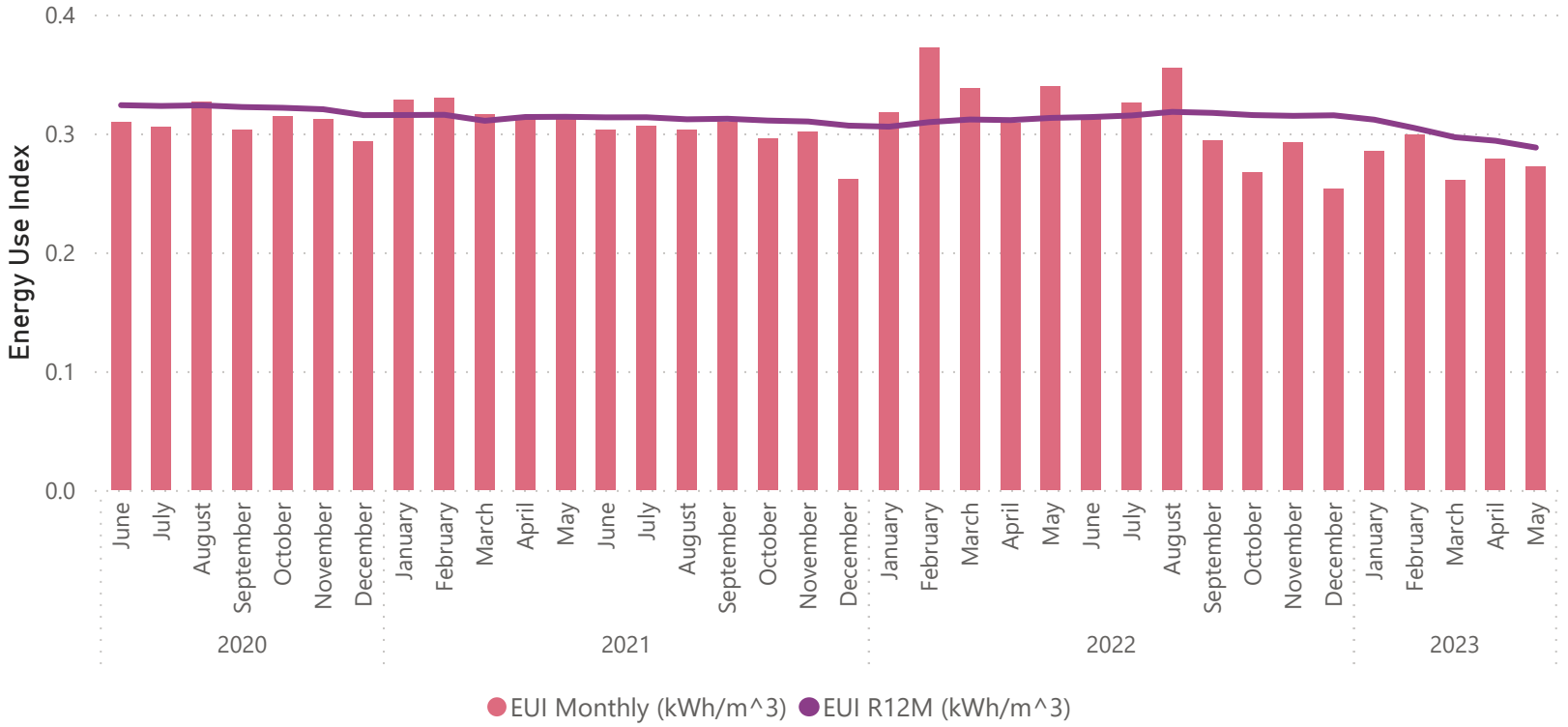


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

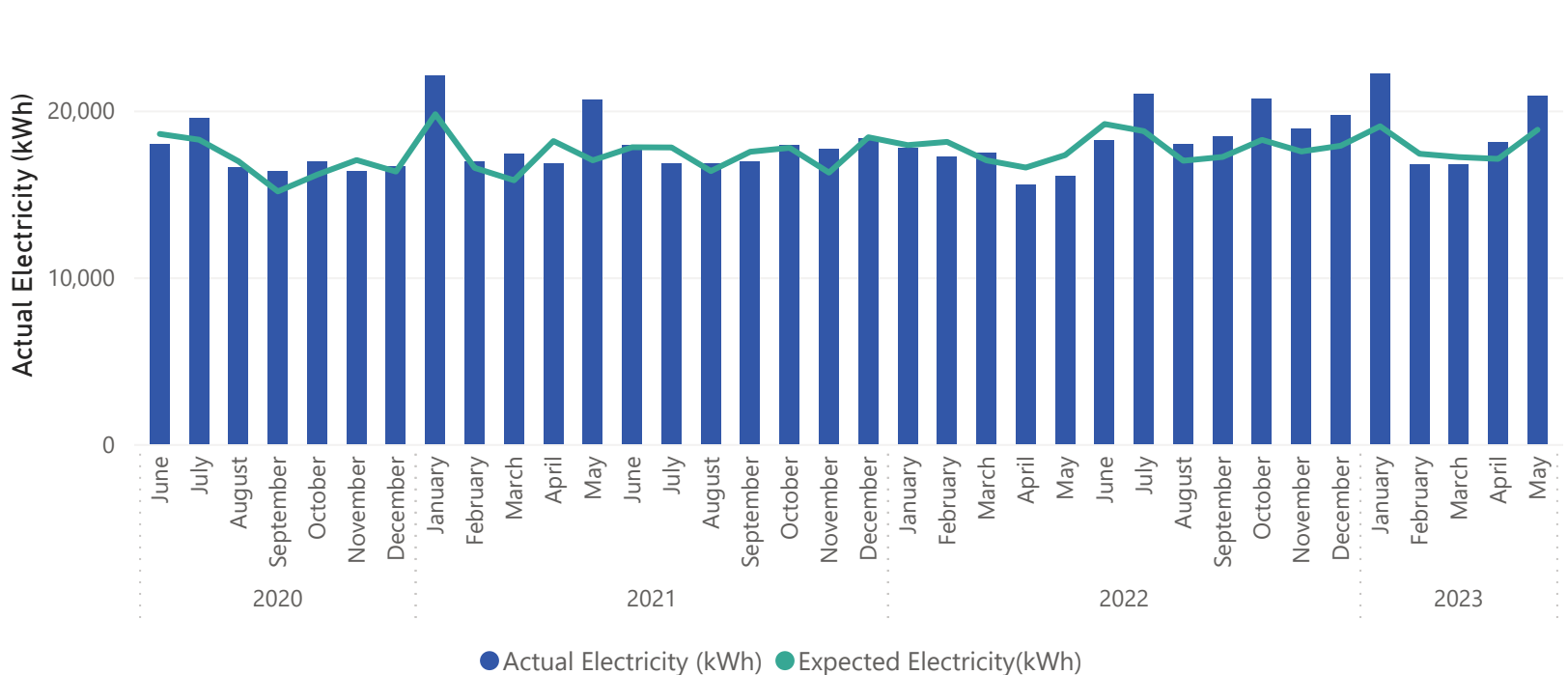
<p>-\$353 Monthly Energy Cost Savings</p>	<p>-2,005 Elec. Savings (kWh/mo)</p>	<p>-11% Elec. Savings (%)</p>	<p>-14,246 R12M Electricity Savings (kWh/yr)</p>	<p>-263 CO2e Savings (kg/mo)</p>
<p>-\$2,504 R12M Energy Cost Savings</p>				<p>-1,868 R12M CO2e Savings (kg/yr)</p>

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 9 of the last 12 months. Rainfall has generally been higher than usual, which may contribute to higher electricity usage. The monthly EUI has decreased in May 2023 compared to recent months.

Ohope Oxidation Ponds Electricity Use Compared to Baseline (kWh)

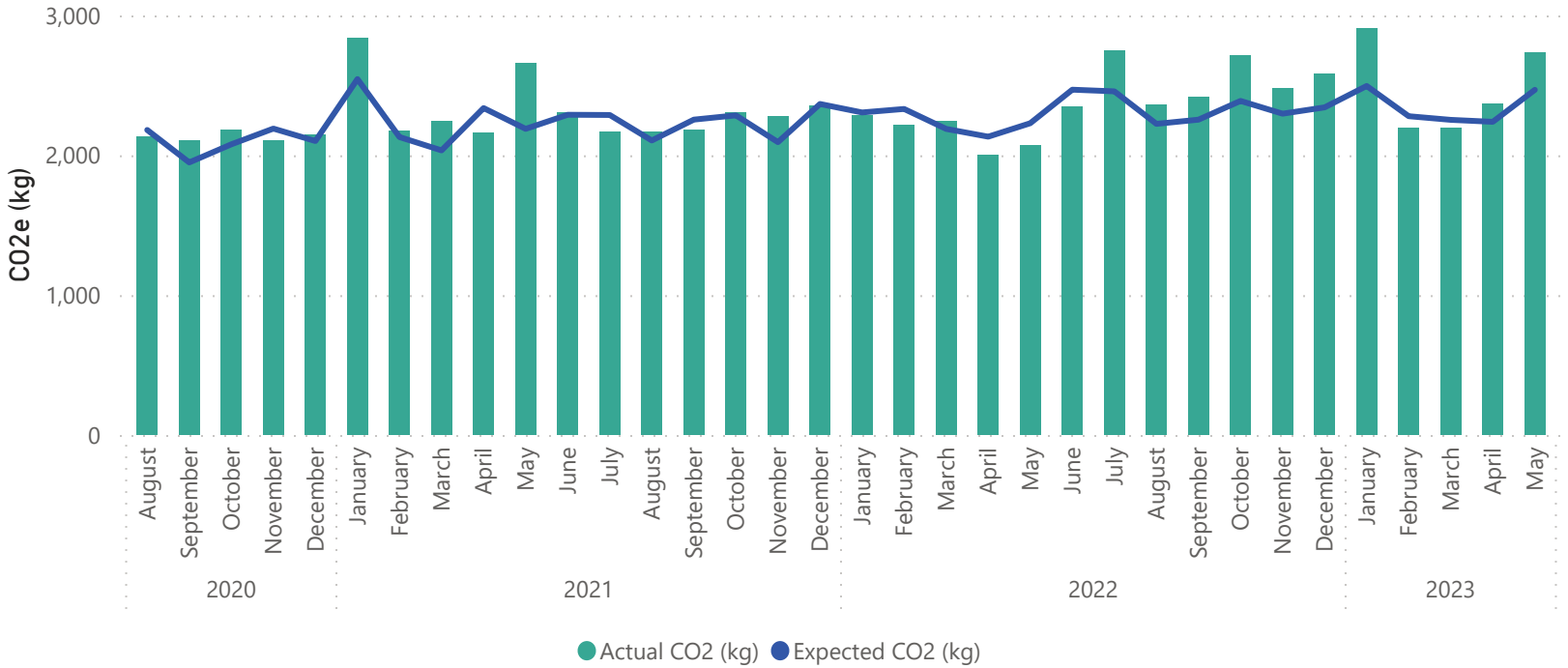


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

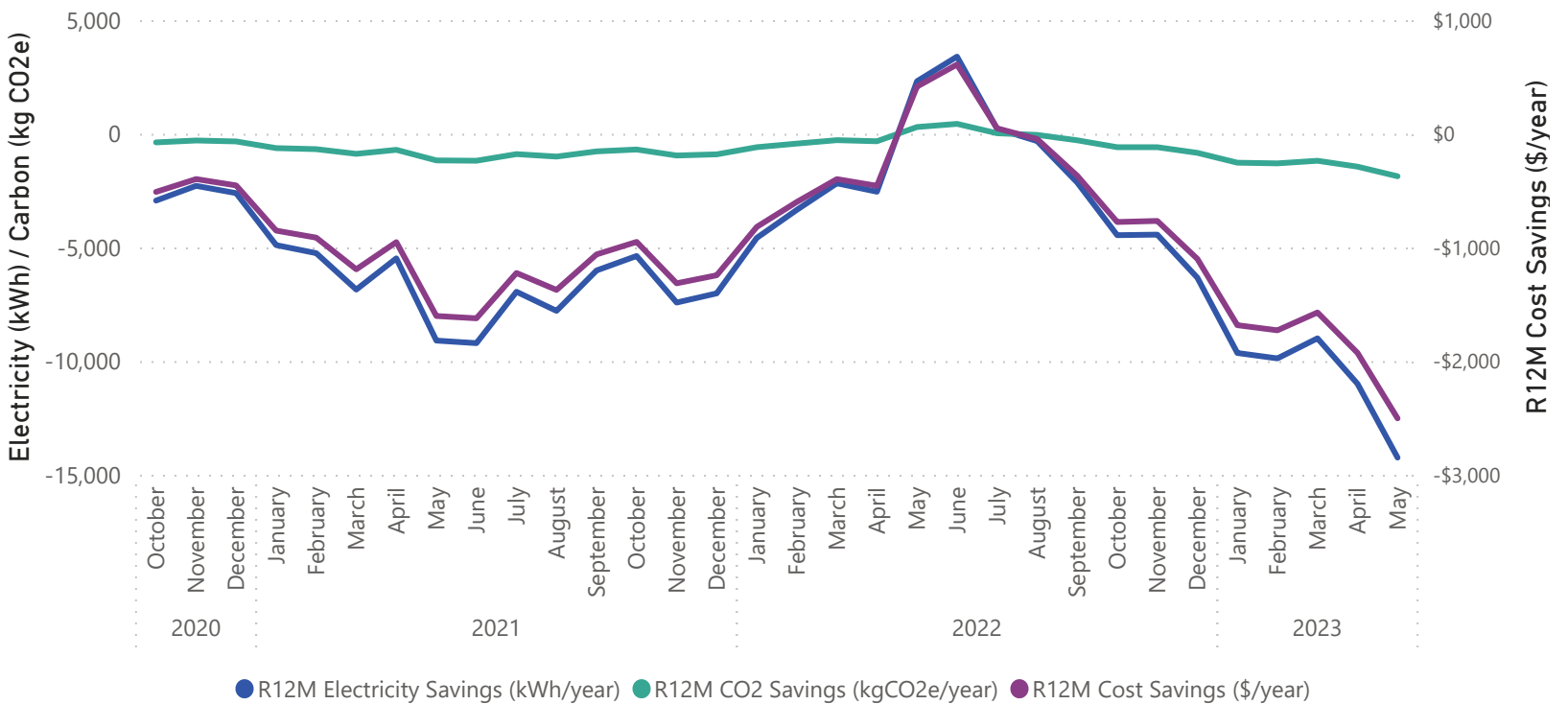
Whakatane District Council

Ohope Oxidation Ponds

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



Ohope Oxidation Ponds Rolling 12 Month Savings

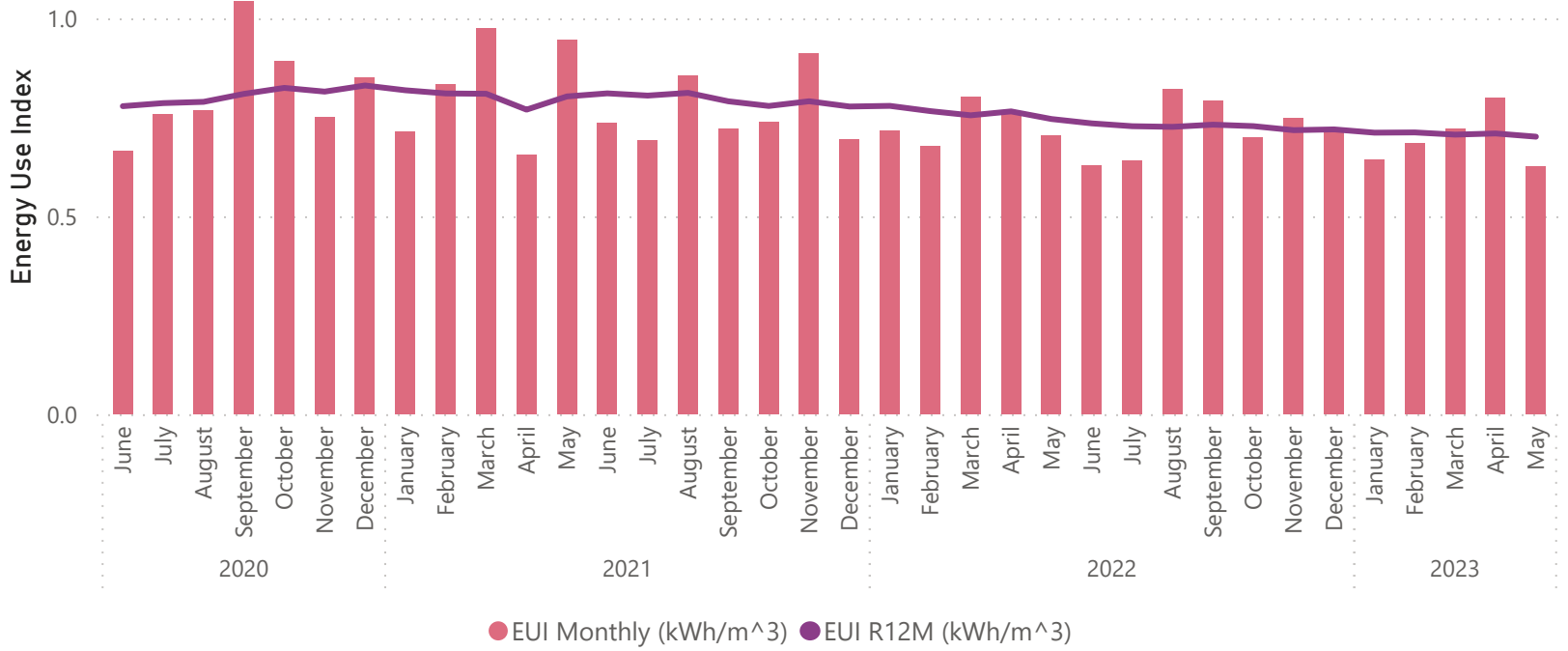


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

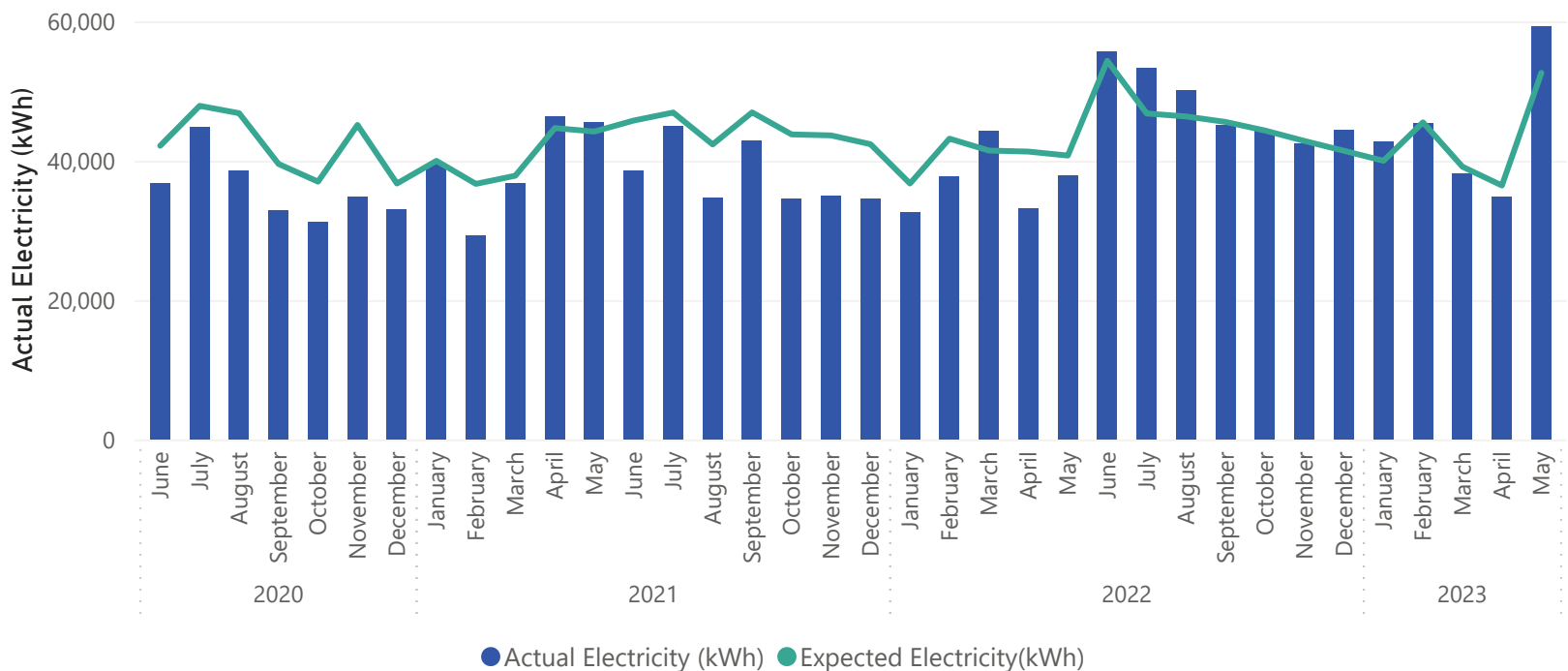
<p>-\$1,177 Monthly Energy Cost Savings</p>	<p>-6,714 Elec. Savings (kWh/mo)</p>	<p>-13% Elec. Savings (%)</p>	<p>-20,437 R12M Electricity Savings (kWh/yr)</p>	<p>-879 CO2e Savings (kg/mo)</p>
<p>-\$3,781 R12M Energy Cost Savings</p>				<p>-2,674 R12M CO2e Savings (kg/yr)</p>

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 used 13% more electricity than expected in May 2023. Electricity use for the NHH account (pumps) increased by 93% compared to average over the past 12 months. May 2023 was a month of high rainfall, approximately 340mm of rain recorded for the month. EUI is trending downwards, which is good.

Whakatane Oxidation Ponds Electricity Use Compared to Baseline (kWh)

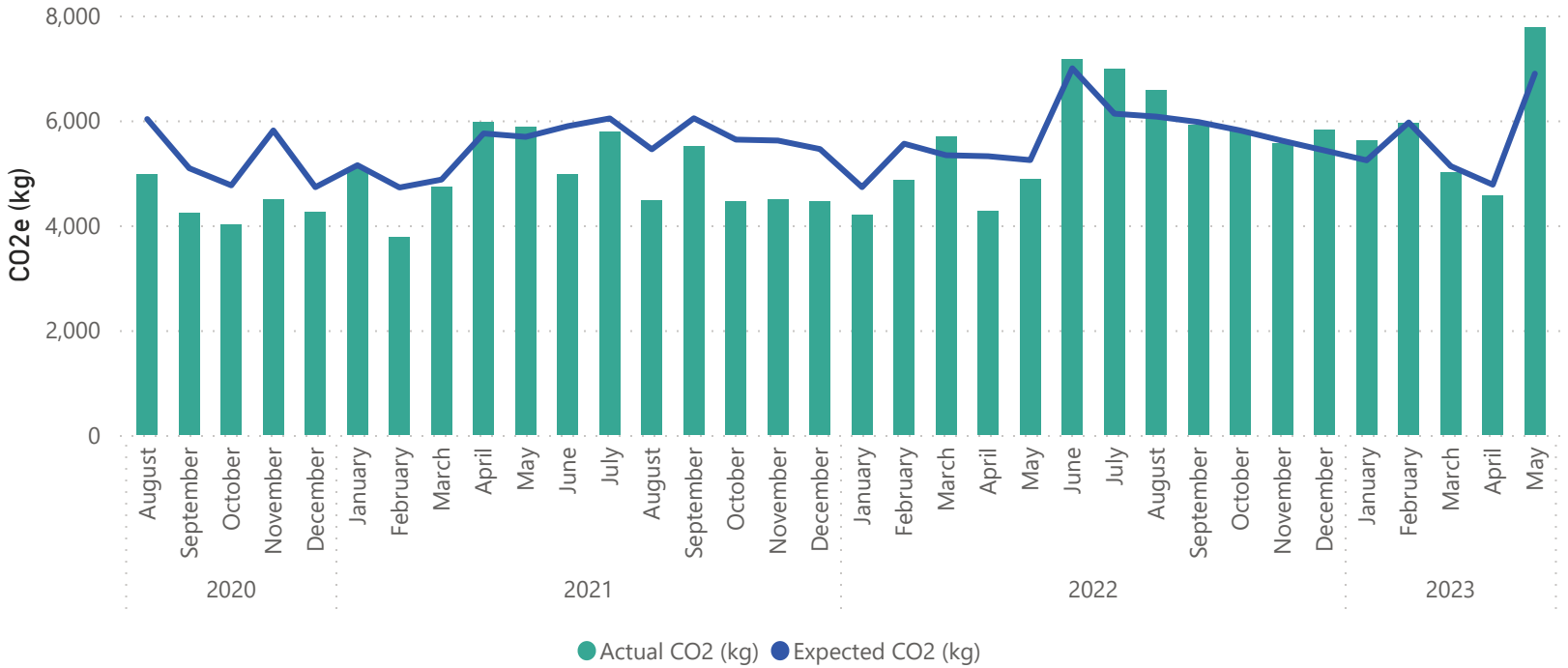


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

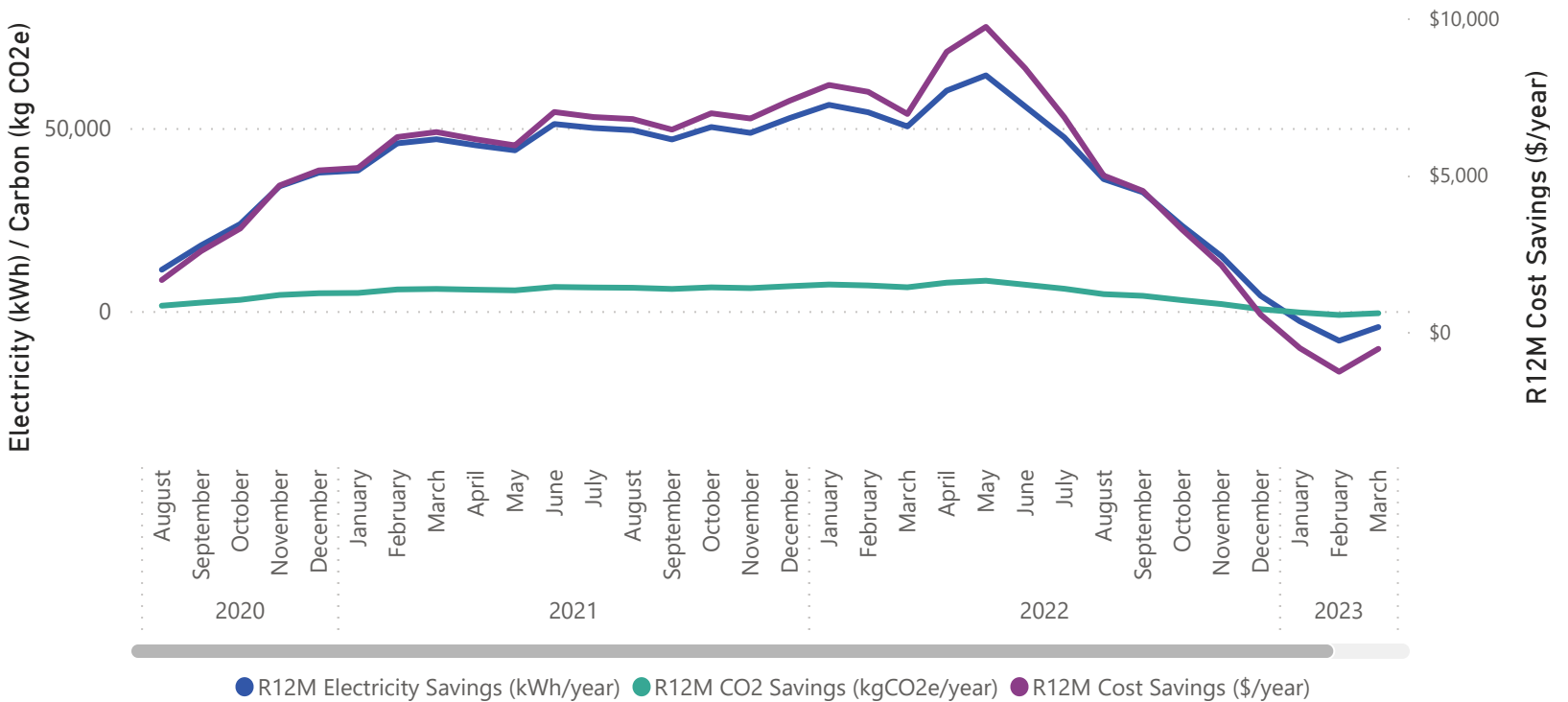
Whakatane District Council

Whakatane Oxidation Ponds

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



Whakatane Oxidation Ponds Rolling 12 Month Savings

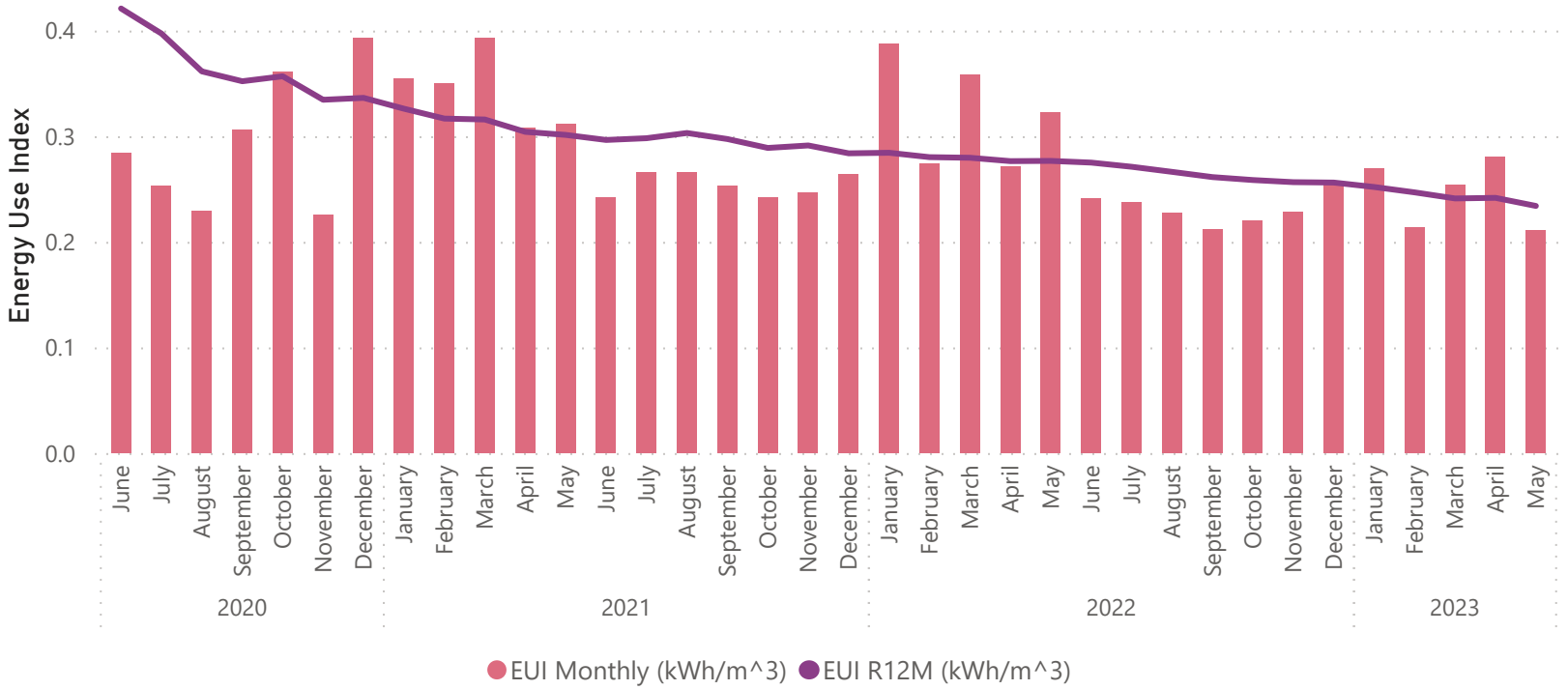


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

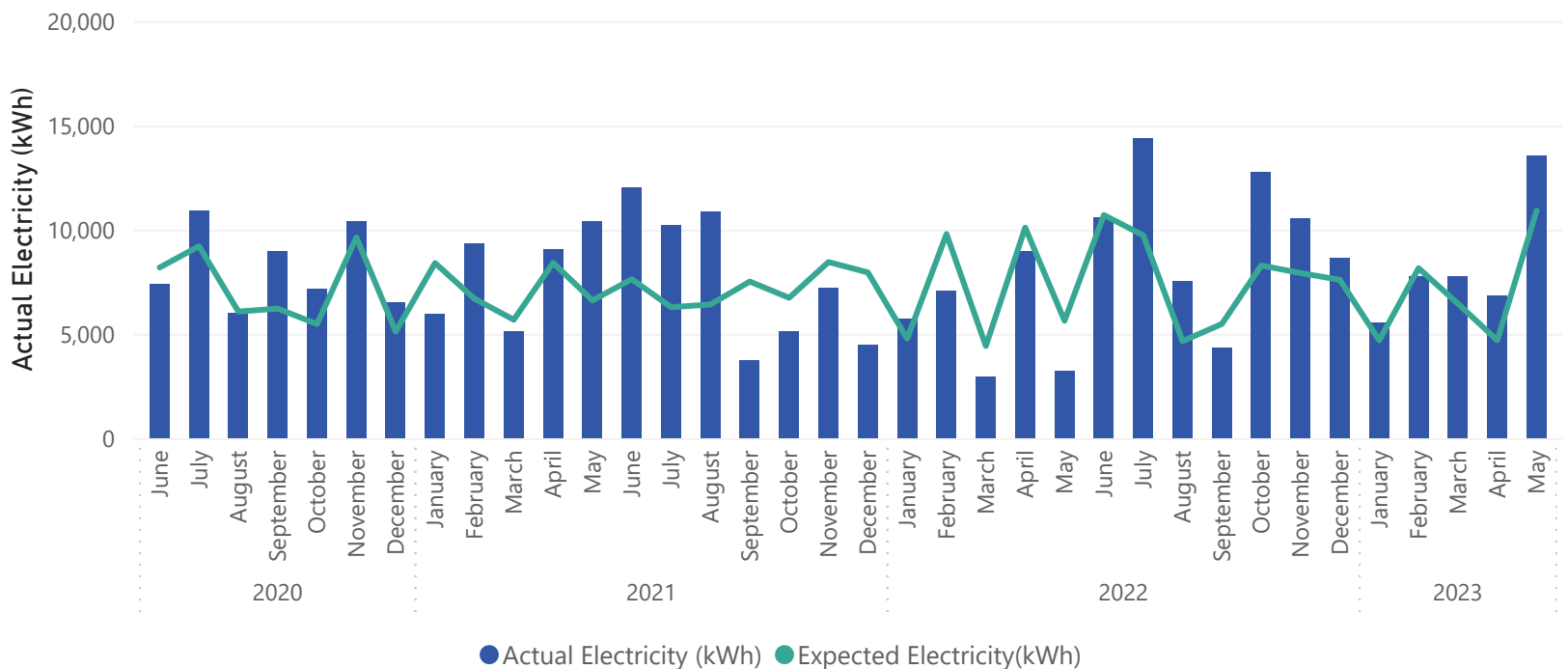
<p>\$61 Monthly Energy Cost Savings</p>	<p>-2,628 Elec. Savings (kWh/mo)</p>	<p>-24% Elec. Savings (%)</p>	<p>-20,923 R12M Electricity Savings (kWh/yr)</p>	<p>-344 CO2e Savings (kg/mo)</p>
<p>\$663 R12M Energy Cost Savings</p>				<p>-2,741 R12M CO2e Savings (kg/yr)</p>

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 24% more electricity than expected this month. May 2023 was a month of high rainfall, approximately 320mm of rain coincided within the billing period.

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

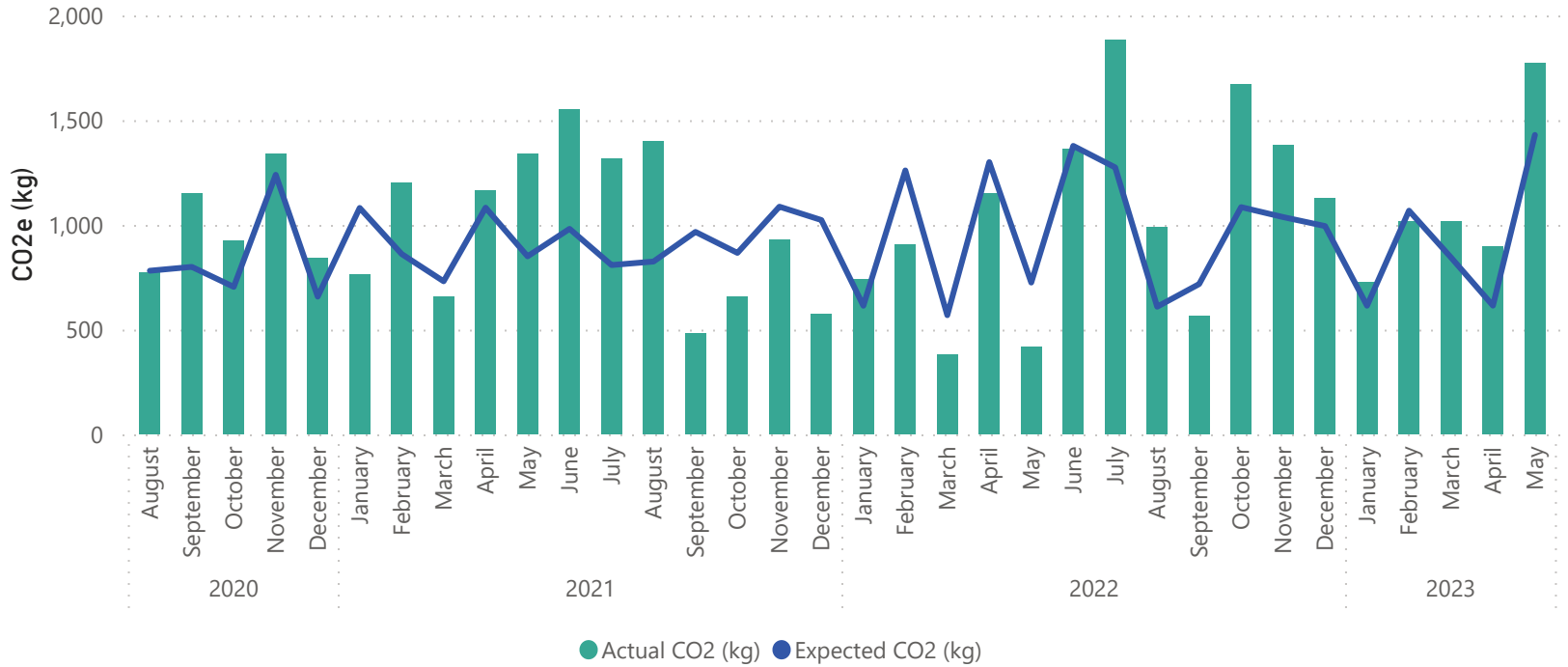


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

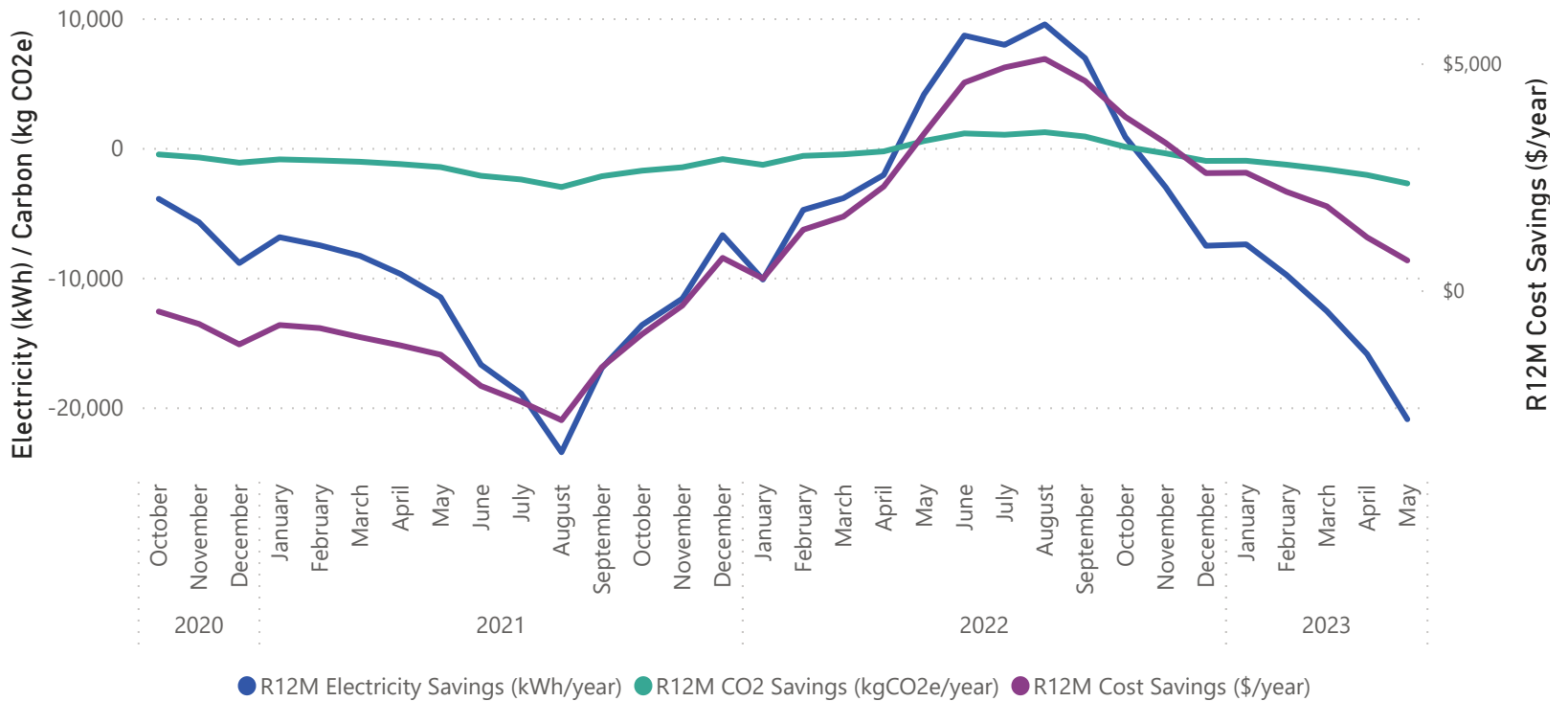
Whakatane District Council

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

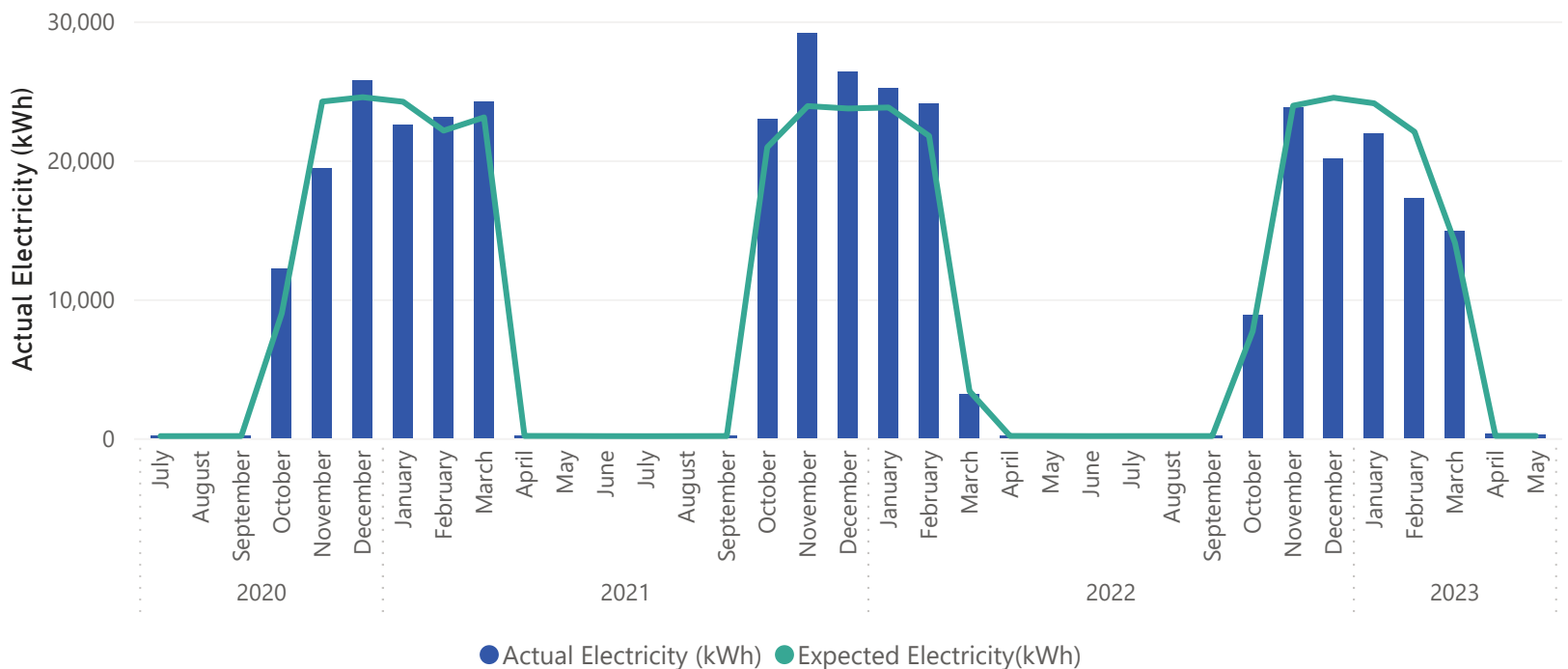
<p>-\$17 Monthly Energy Cost Savings</p>	<p>-88 Elec. Savings (kWh/mo)</p>	<p>-55% Elec. Savings (%)</p>	<p>9,402 R12M Electricity Savings (kWh/yr)</p>	<p>-11 CO2e Savings (kg/mo)</p>
<p>\$1,637 R12M Energy Cost Savings</p>				<p>1,232 R12M CO2e Savings (kg/yr)</p>

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 are now closed for the season and are using a few kWh per day.

Murupara Pools Electricity Use Compared to Baseline (kWh)

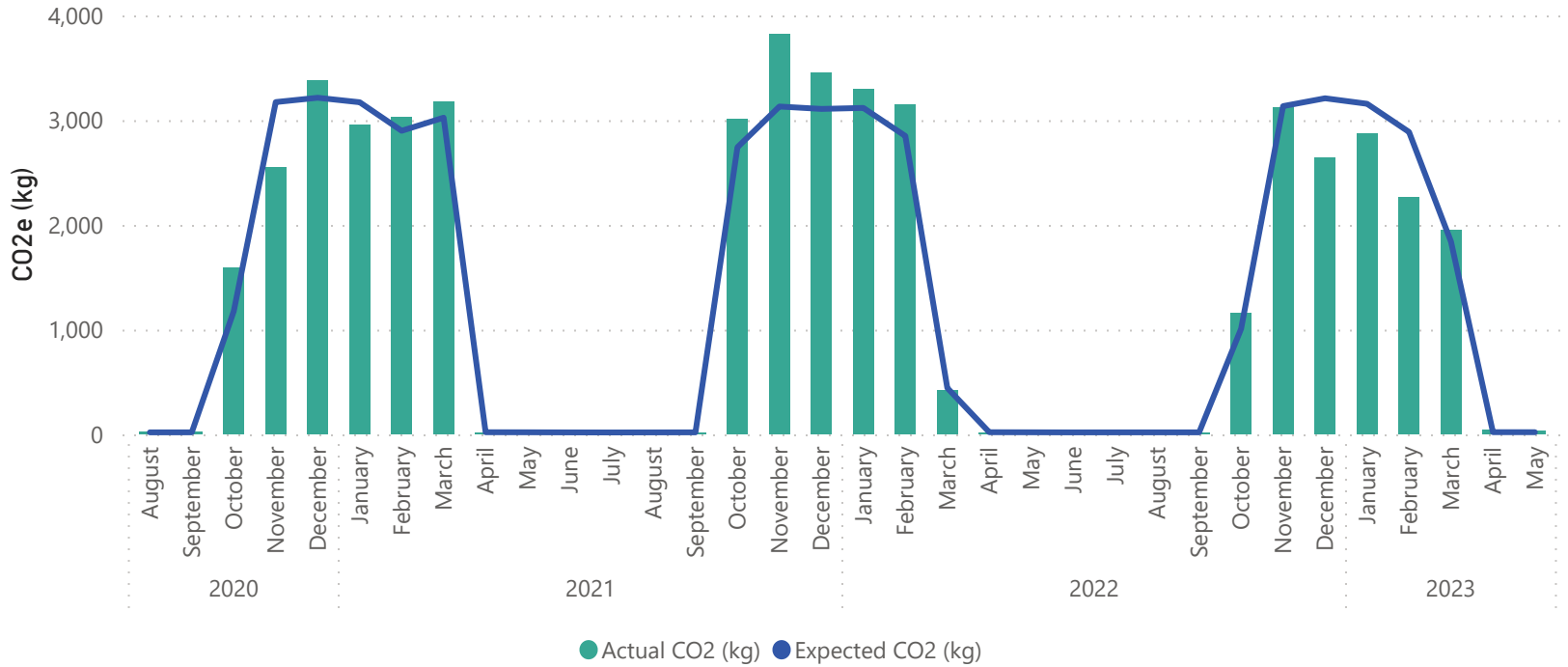


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

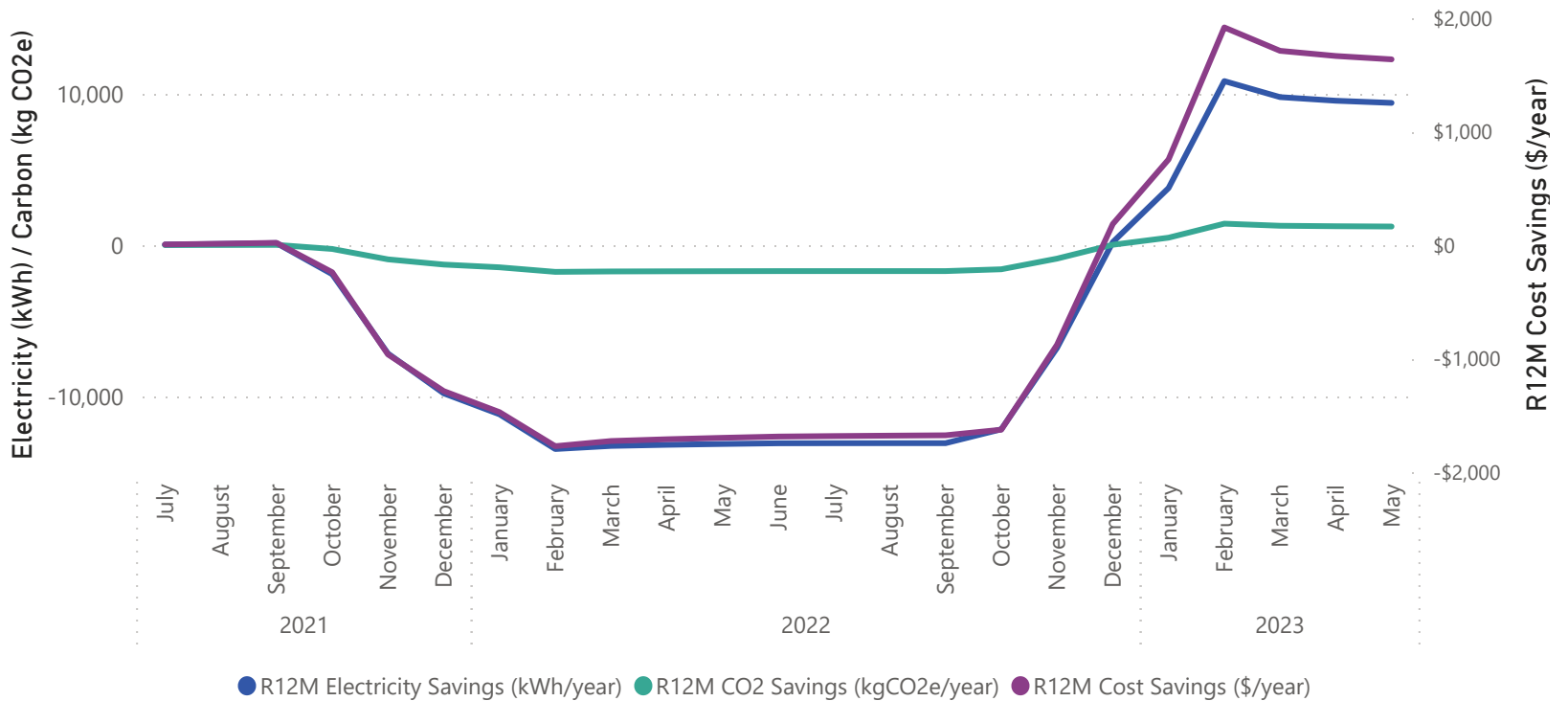
Whakatane District Council

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.**