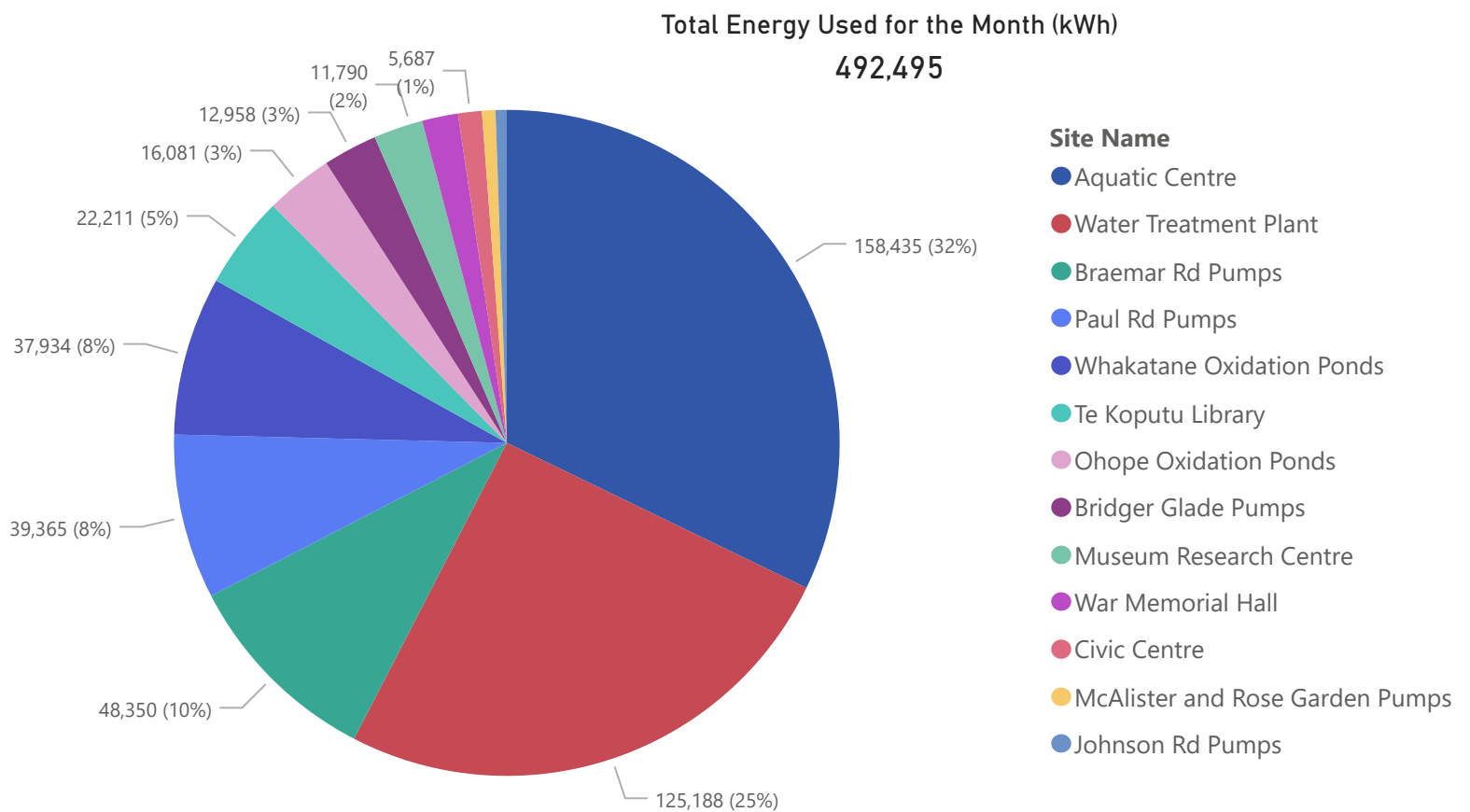


Whakatane District Council

Summary

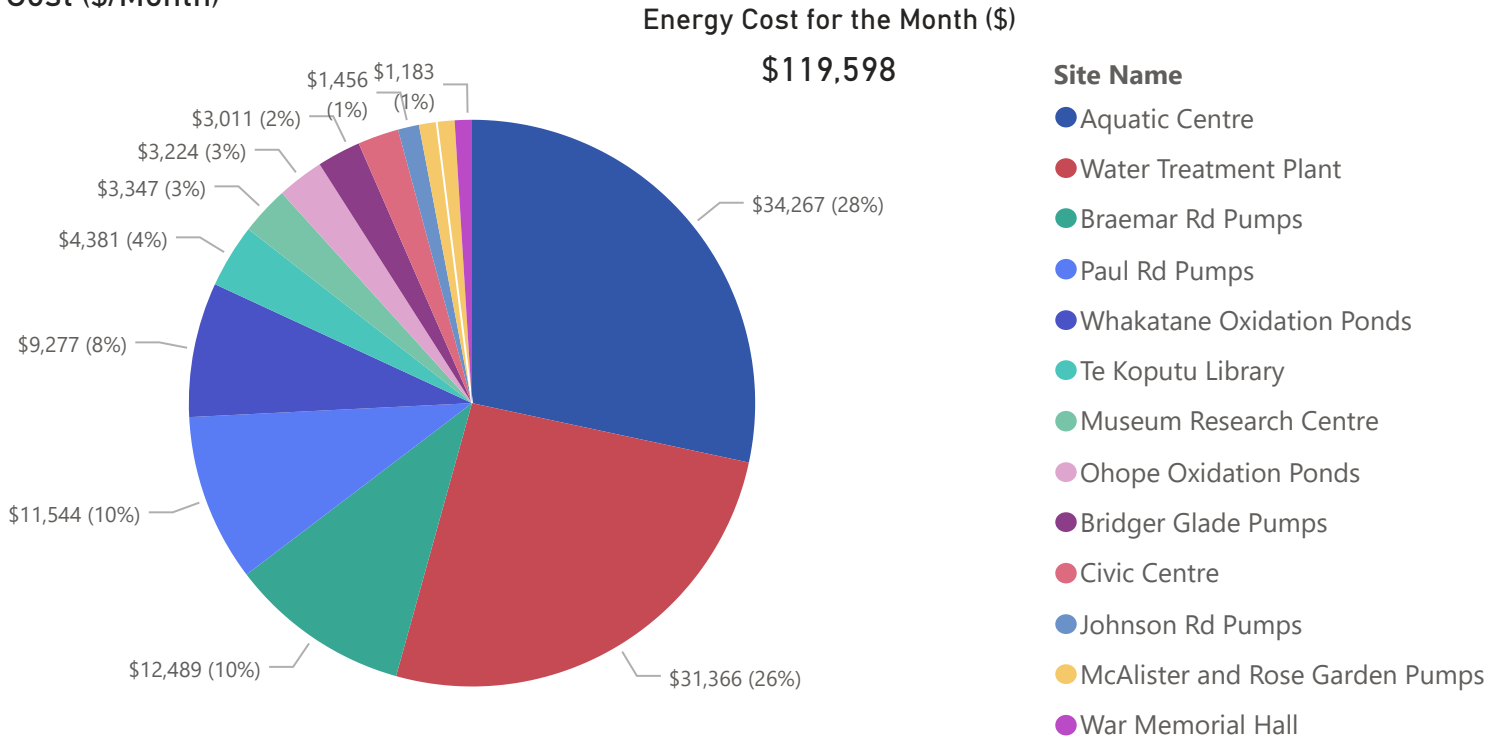
<p>\$21,312</p> <p>Monthly Energy Cost Savings</p>	<p>15,063</p> <p>Elec. Savings (kWh/mo)</p>	<p>3%</p> <p>Elec. Savings (%)</p>	<p>302,123</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>50,821</p> <p>CO2e Savings (kg/mo)</p>
<p>\$150,047</p> <p>R12M Energy Cost Savings</p>	<p>225,118</p> <p>Gas. Savings (kWh/mo)</p>	<p>86%</p> <p>Gas. Savings (%)</p>	<p>1,460,981</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>356,092</p> <p>R12M CO2e Savings (kg/yr)</p>

Total Energy (kWh/Month)

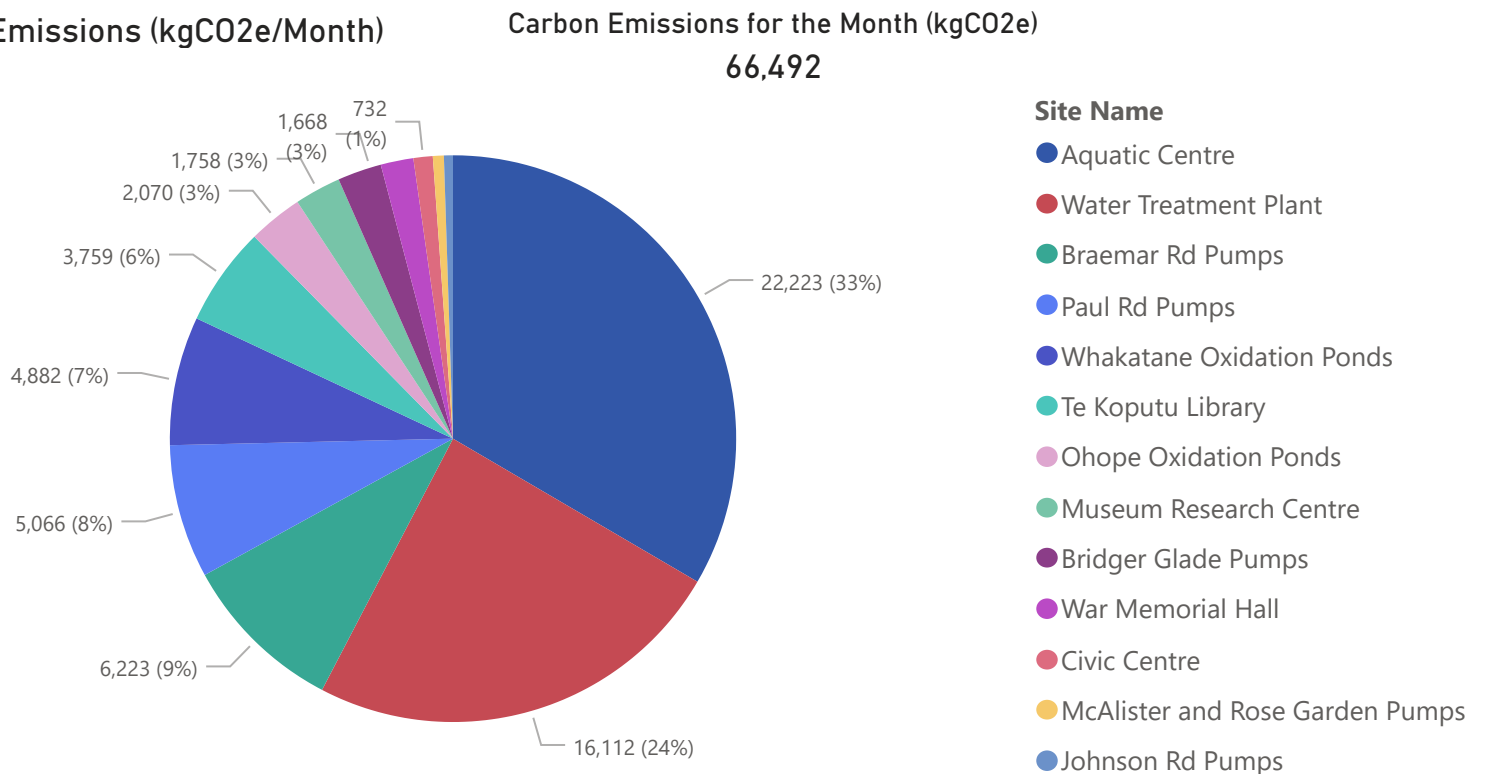


Whakatane District Council Summary

Energy Cost (\$/Month)

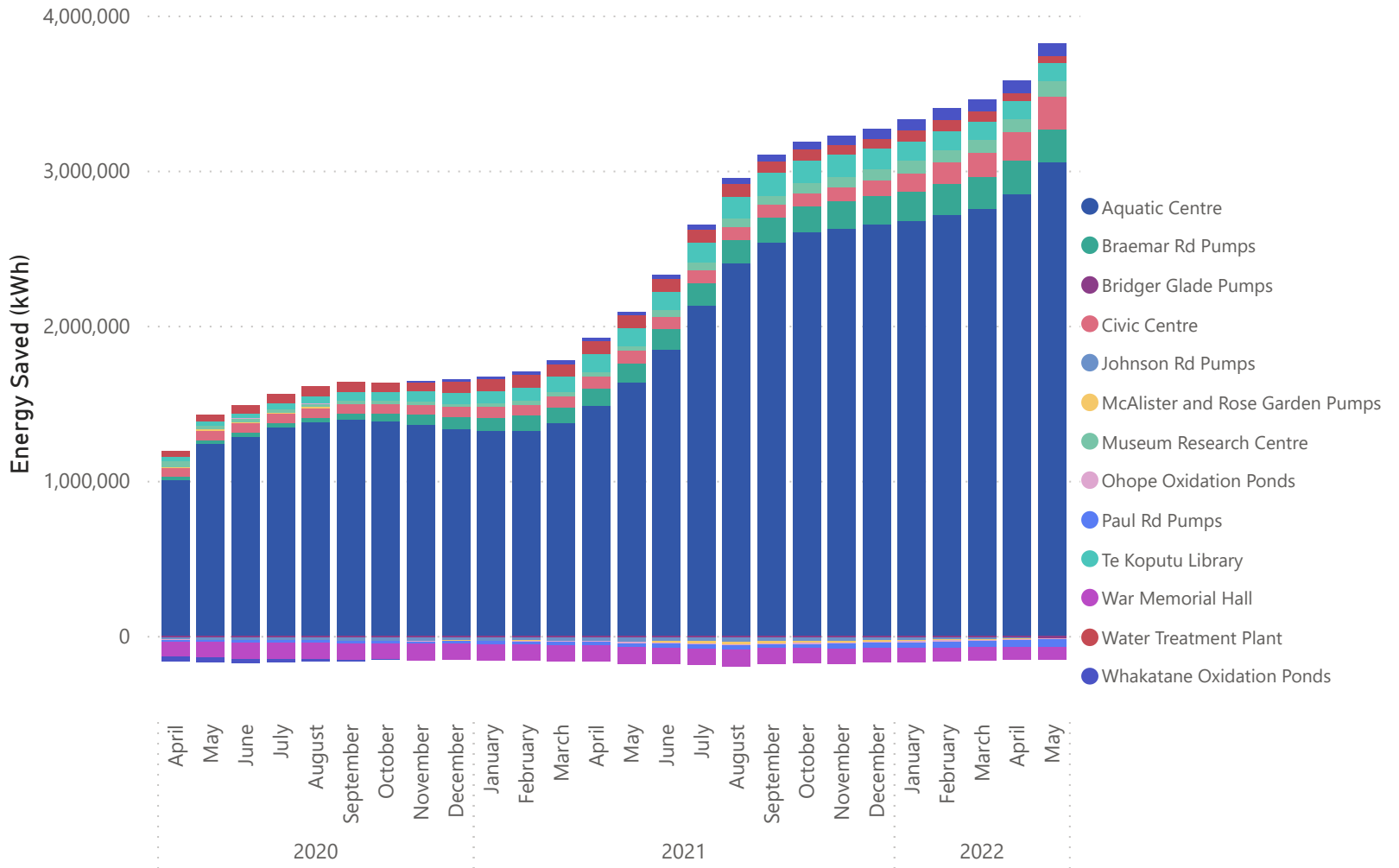


Carbon Emissions (kgCO2e/Month)



Whakatane District Council Summary

Cumulative Energy Savings (kWh)

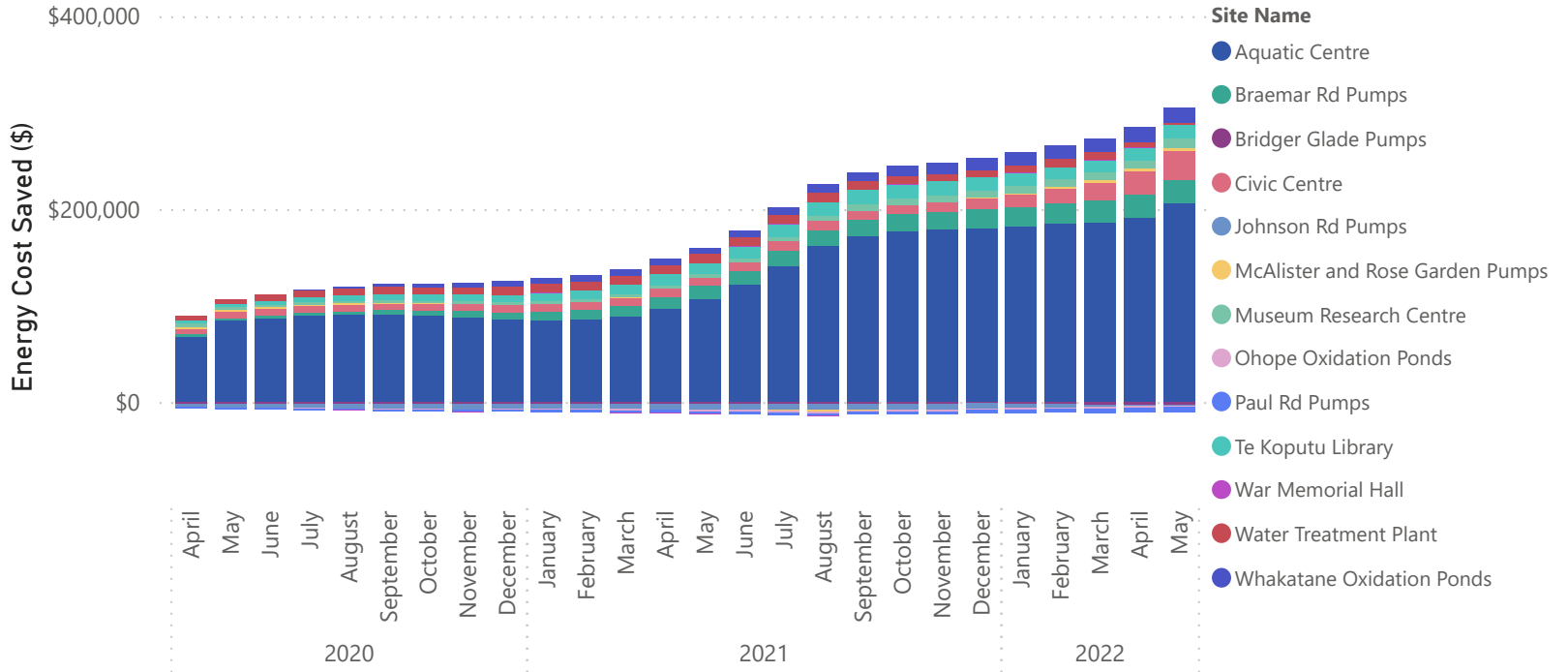


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

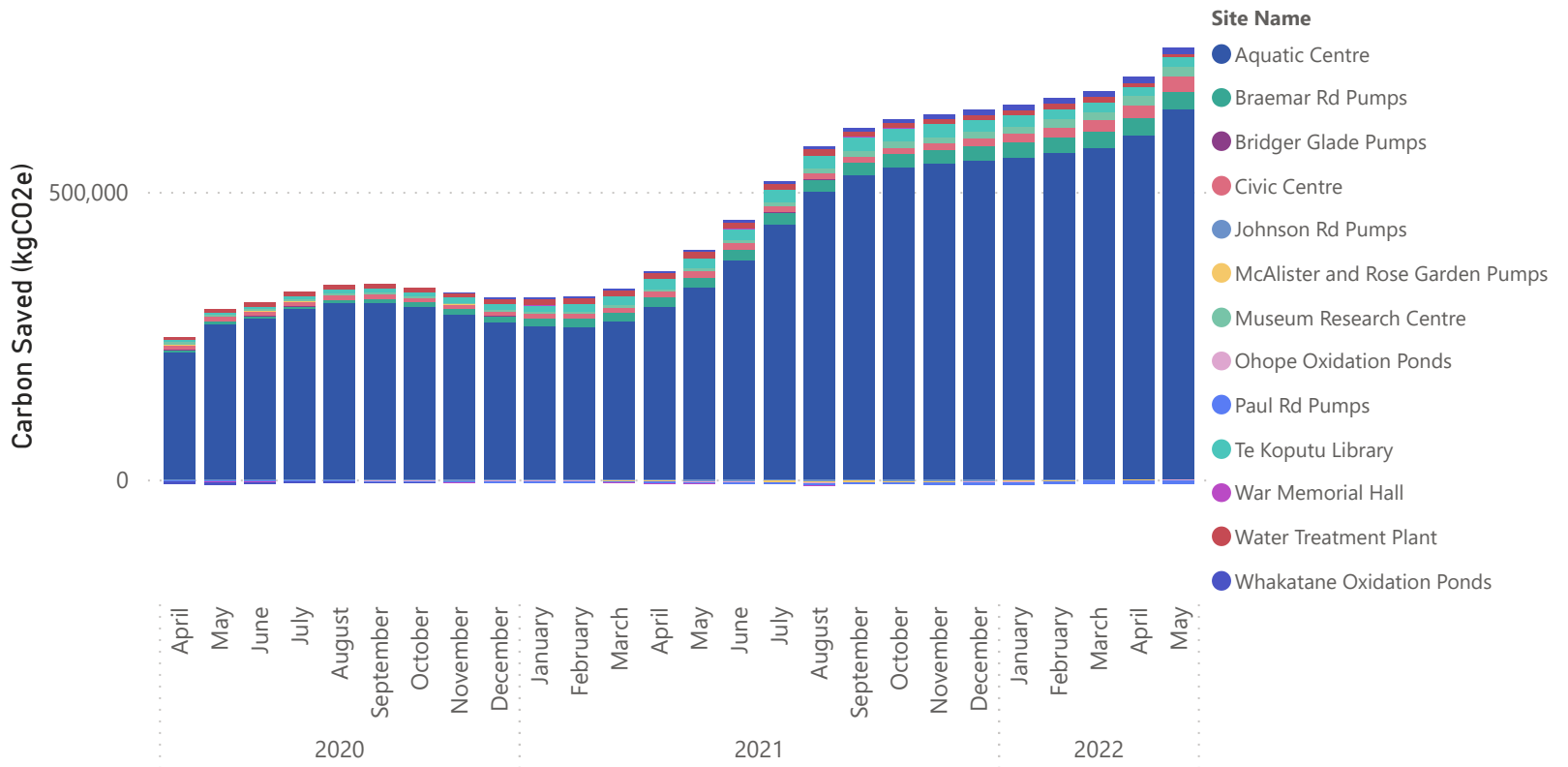
Whakatane District Council

Summary

Cumulative Energy Cost Savings (\$)



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

Whakatane District Council

Civic Centre

<p>\$5,979 Monthly Energy Cost Savings</p>	<p>29,481 Elec. Savings (kWh/mo)</p>	<p>84% Elec. Savings (%)</p>	<p>131,414 R12M Electricity Savings (kWh/yr)</p>	<p>3,752 CO2e Savings (kg/mo)</p>
<p>\$20,972 R12M Energy Cost Savings</p>				<p>16,504 R12M CO2e Savings (kg/yr)</p>

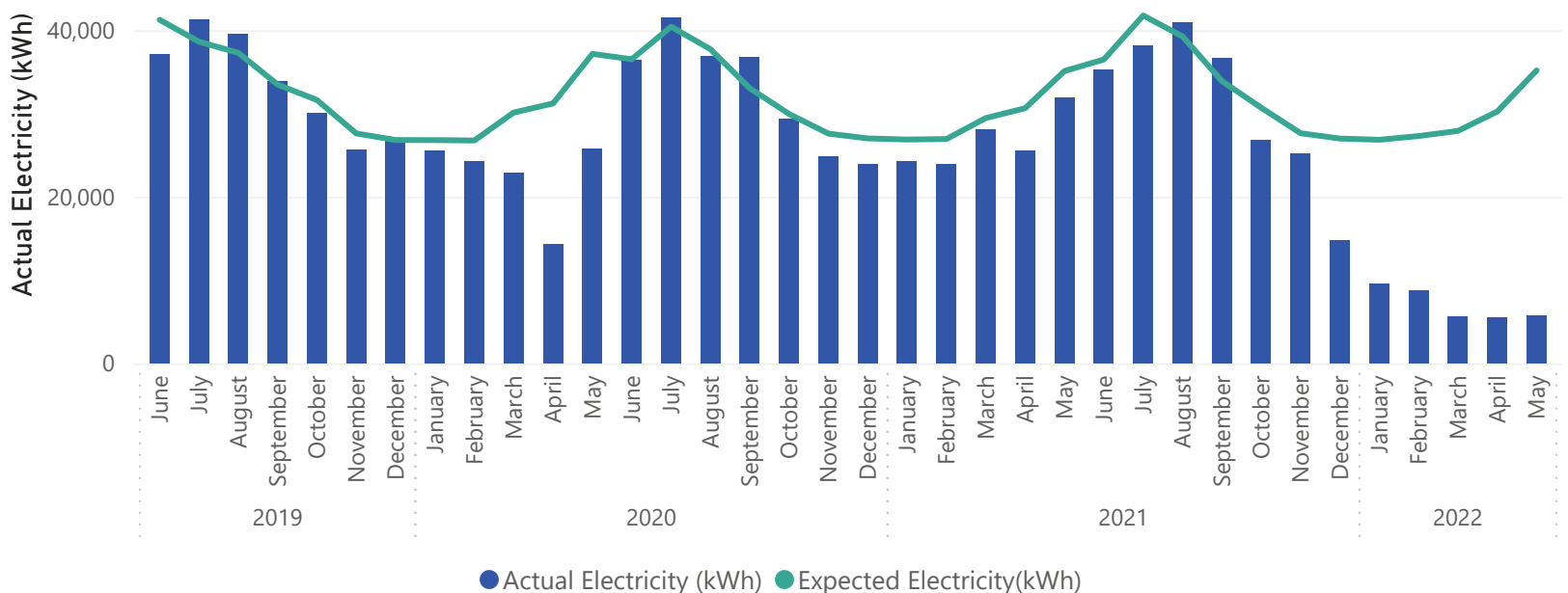
Comments:

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

Electricity savings continue to be more than usual for 2022, the Civic Centre renovation has displaced many office workers, which has decreased electricity demand. The Civic Centre has not yet been billed for May 2022. Monthly usage is estimated based on recent months and will be updated when an invoice for May 2022 is released for the Civic Centre.

Marginal cost of electricity for the Civic Centre has approximately doubled due to new contract rates, compared to the same time last year.

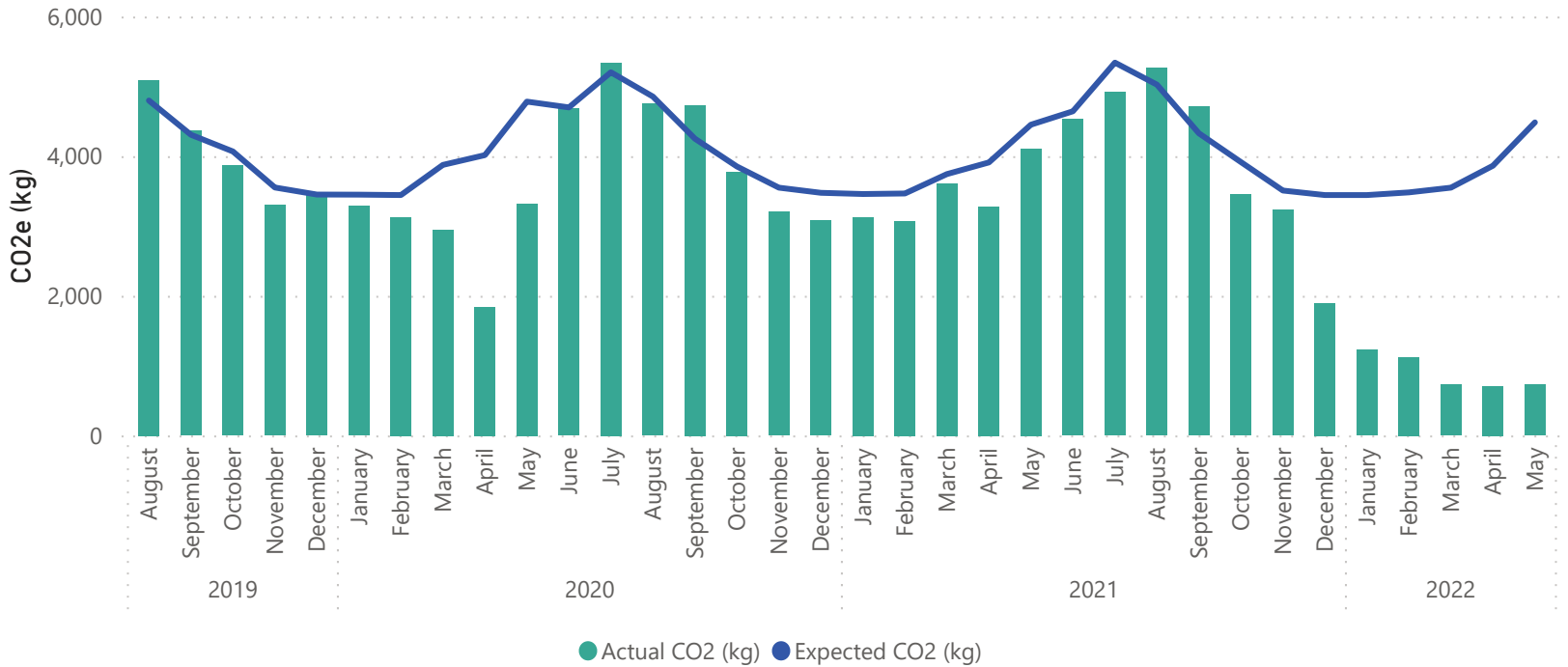
Civic Centre Electricity Use Compared to Baseline (kWh)



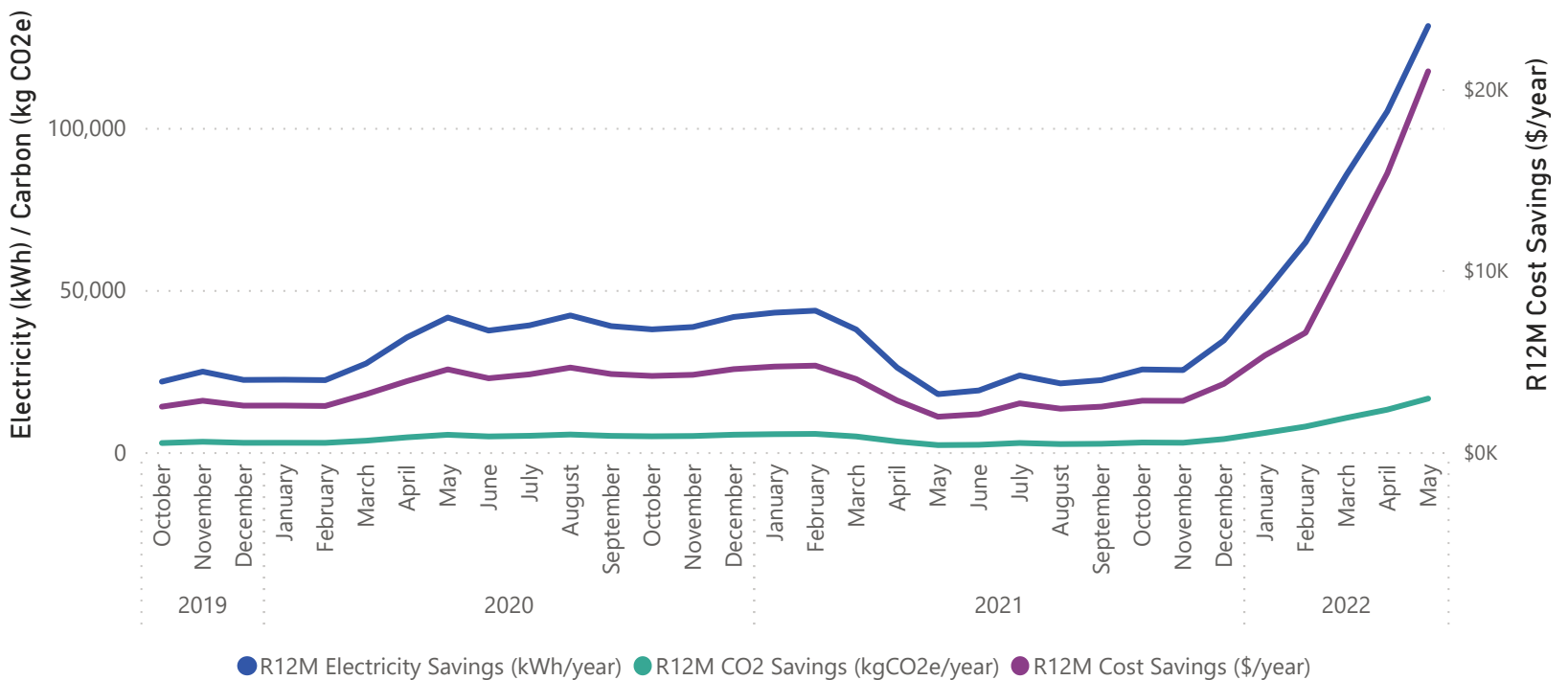
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

Whakatane District Council Civic Centre

Civic Centre Carbon Emissions Compared to Baseline (kg CO2e)



Civic Centre Rolling 12 Month Savings

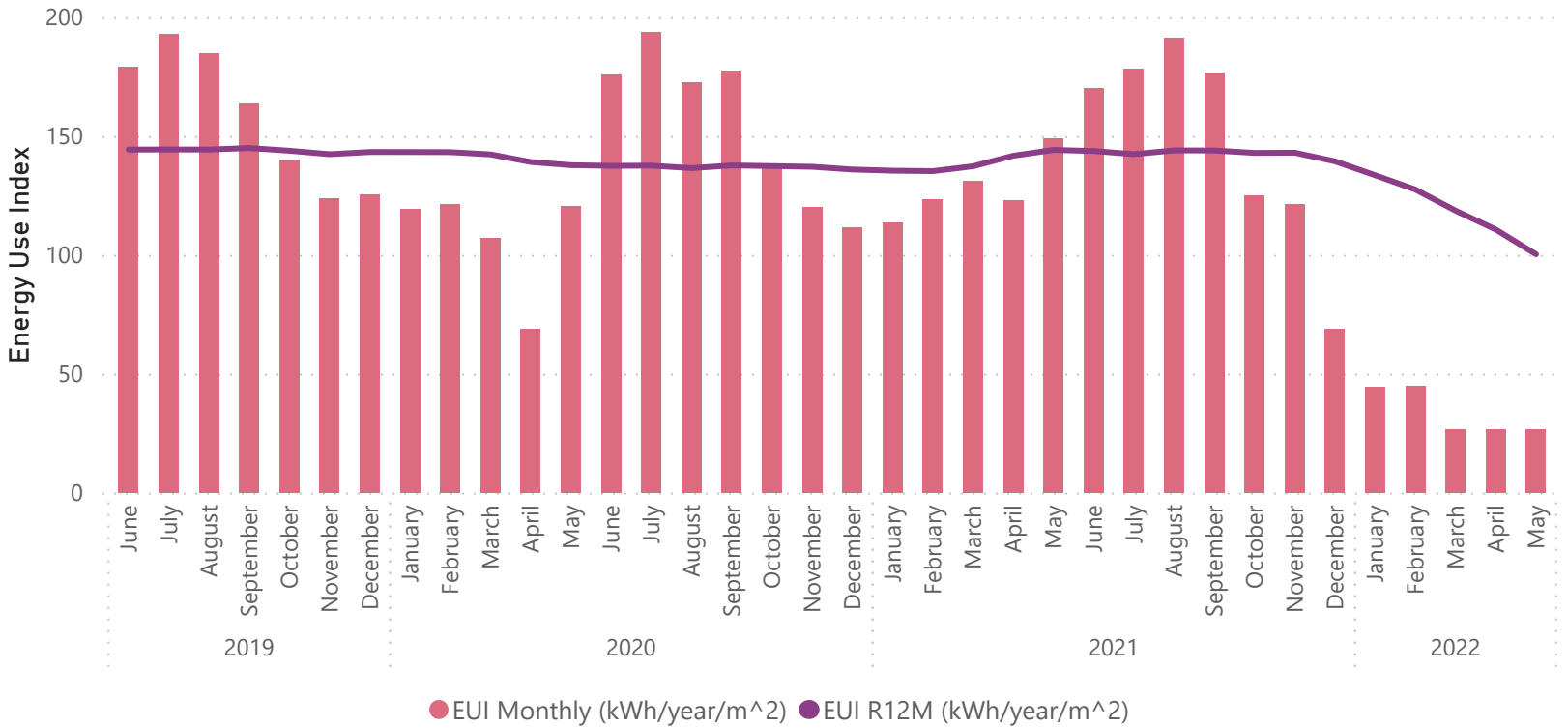


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

Aquatic Centre

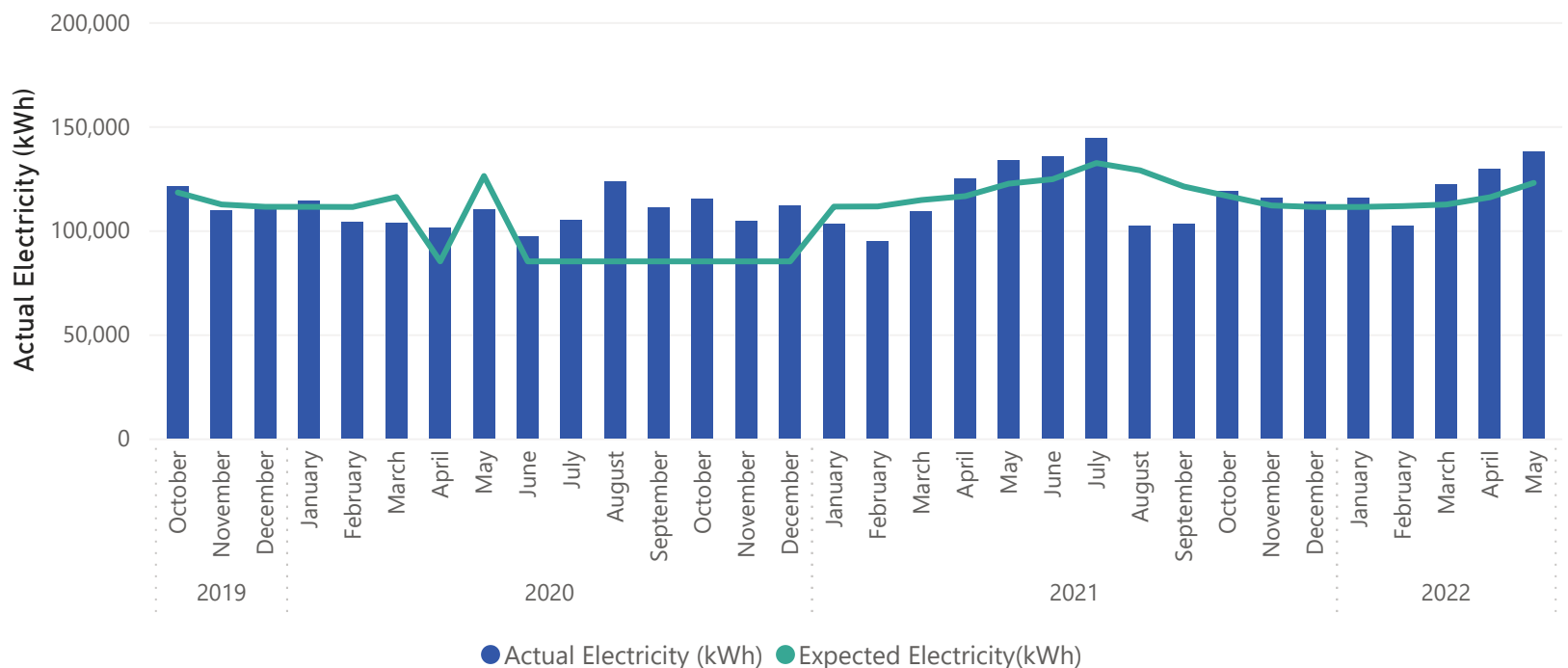
<p>\$14,514</p> <p>Monthly Energy Cost Savings</p>	<p>-14,905</p> <p>Elec. Savings (kWh/mo)</p>	<p>-12%</p> <p>Elec. Savings (%)</p>	<p>-19,732</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>45,458</p> <p>CO2e Savings (kg/mo)</p>
<p>\$98,976</p> <p>R12M Energy Cost Savings</p>	<p>218,364</p> <p>Gas. Savings (kWh/mo)</p>	<p>91%</p> <p>Gas. Savings (%)</p>	<p>1,440,979</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>310,276</p> <p>R12M CO2e Savings (kg/yr)</p>

Comments:

The outdoor pool is now open year-round and uses a baseline that reflects this change. Electricity use above baseline reflects that the pool is now preferentially using electric heat pumps to heat the pool instead of natural gas, which reduces natural gas use but increases electricity consumption. Electricity use has increased from February 2022, lower ambient temperatures increase the amount of heating required.

Natural gas savings are still excellent, achieving 91% for the month of May 2022. Marginal cost of electricity for the Aquatic Centre has nearly doubled compared to this time last year, due to new contract rates.

Aquatic Centre Electricity Use Compared to Baseline (kWh)

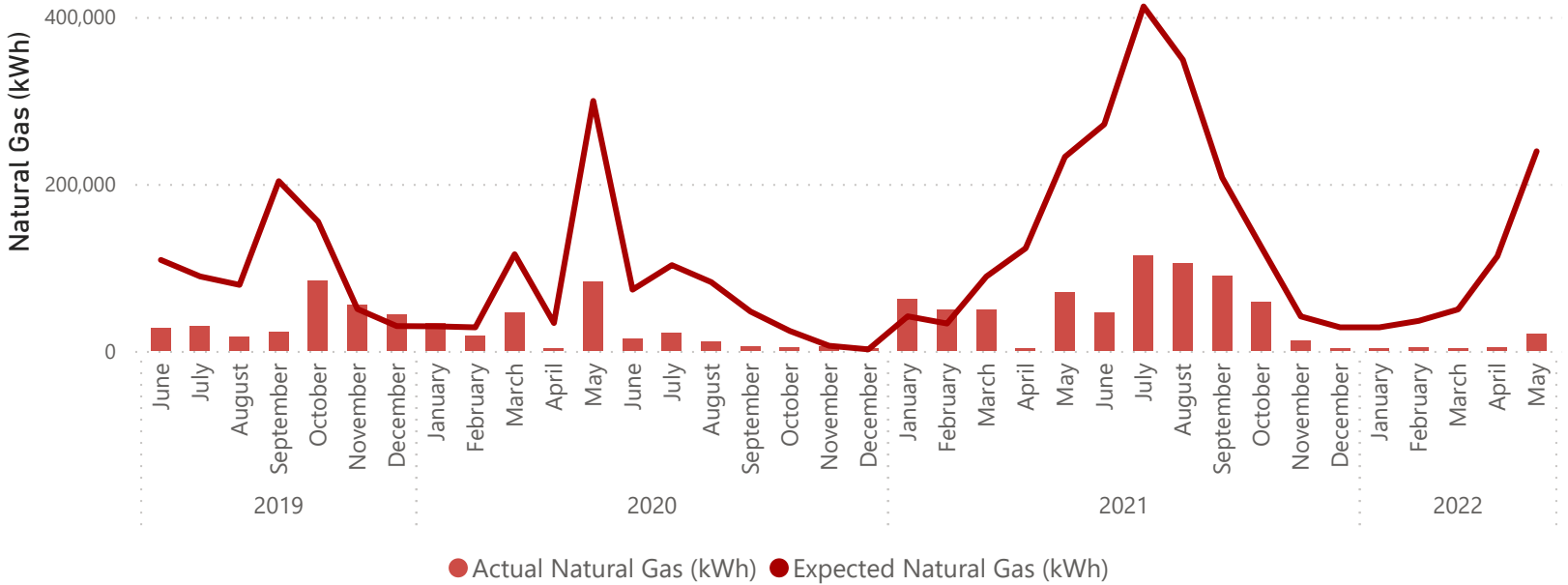


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

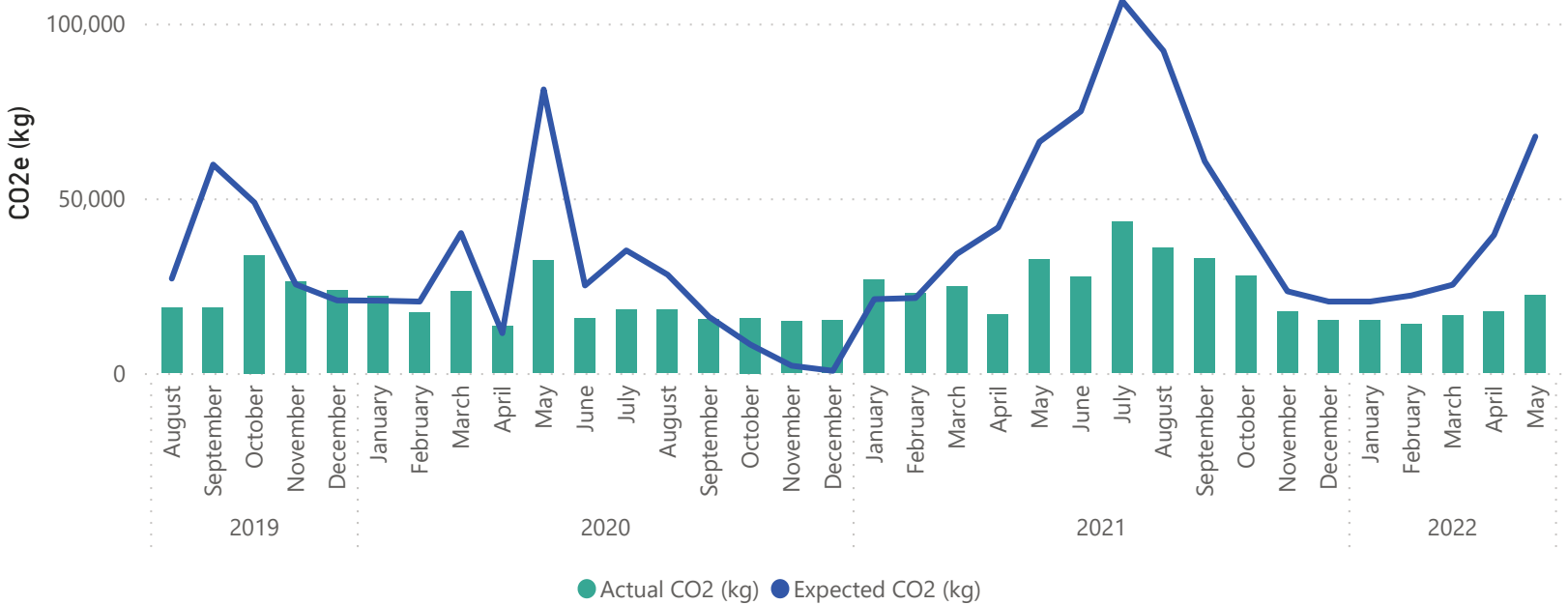
Whakatane District Council

Aquatic Centre

Aquatic Centre Natural Gas Compared to Baseline (kWh)



Aquatic Centre Carbon Emissions Compared to Baseline (kg CO2e)

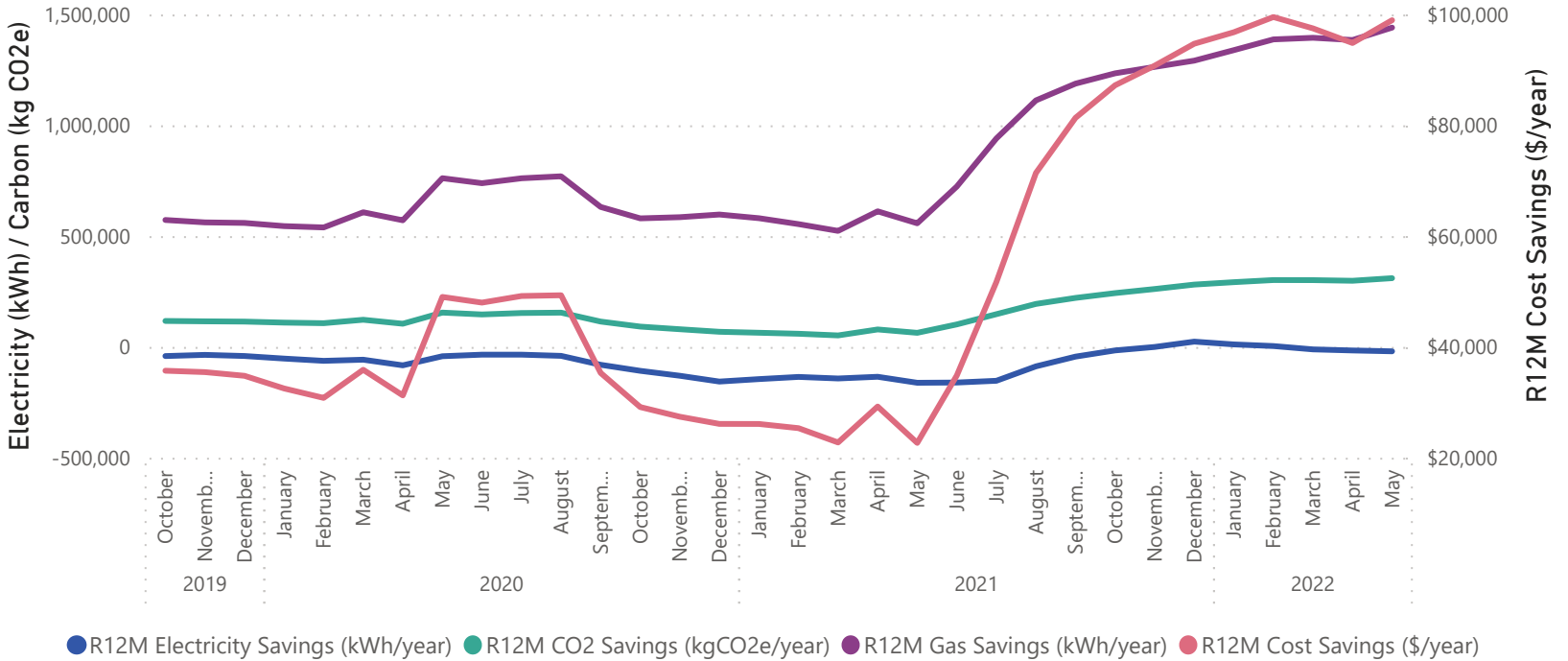


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

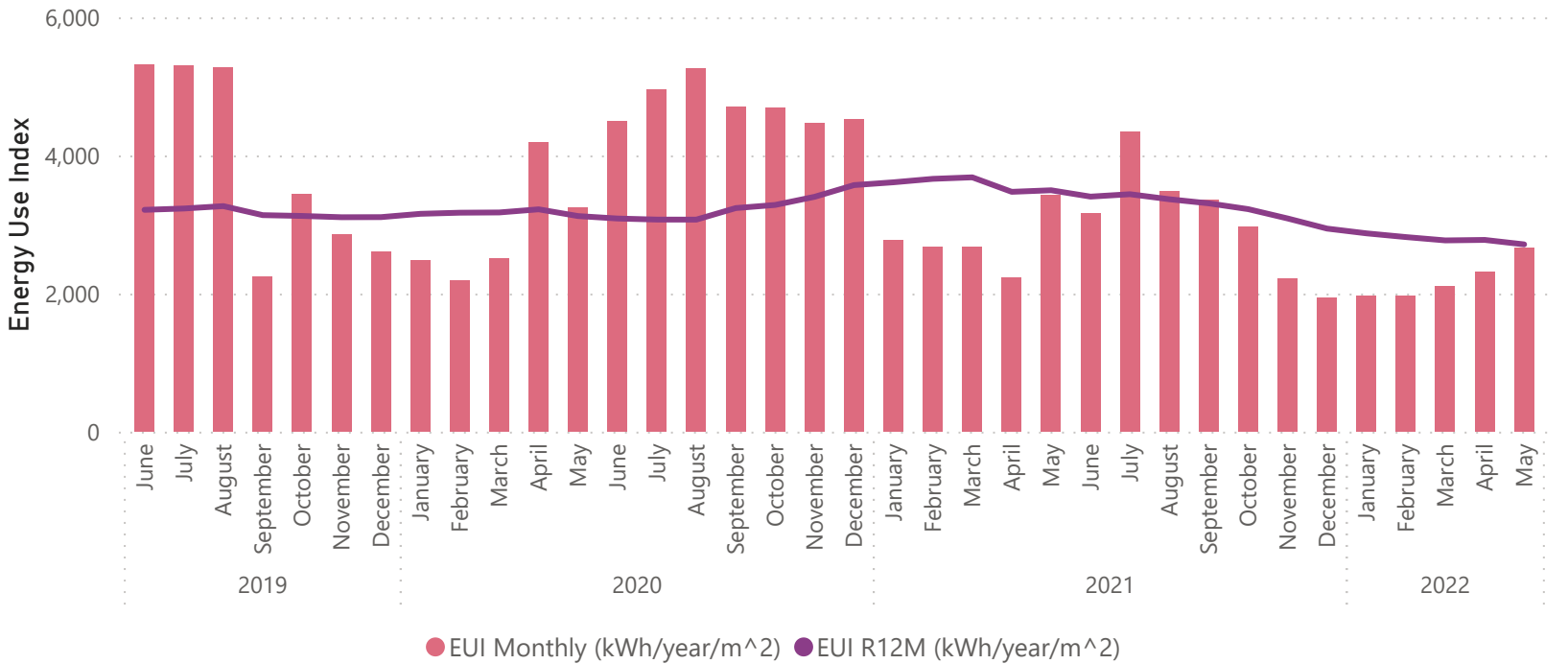
Whakatane District Council

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

Whakatane District Council

Te Koputu Library

<p>\$962 Monthly Energy Cost Savings</p>	<p>3,698 Elec. Savings (kWh/mo)</p>	<p>24% Elec. Savings (%)</p>	<p>29,838 R12M Electricity Savings (kWh/yr)</p>	<p>786 CO2e Savings (kg/mo)</p>
<p>\$2,428 R12M Energy Cost Savings</p>	<p>1,411 Gas. Savings (kWh/mo)</p>	<p>12% Gas. Savings (%)</p>	<p>-24,861 R12M Gas Savings (kWh/yr)</p>	<p>-1,497 R12M CO2e Savings (kg/yr)</p>

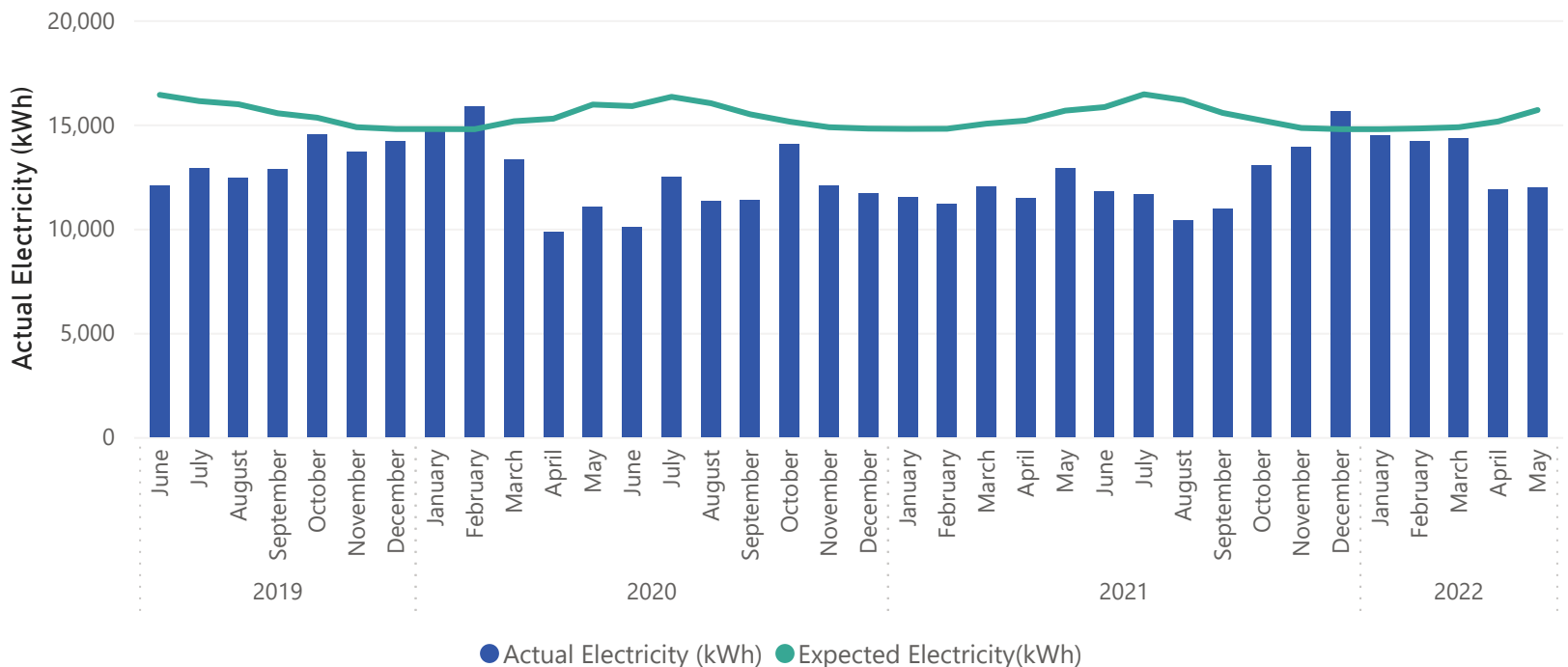
Comments:

Gas use in April and May 2022 has decreased compared to March 2022, even though April and May 2022 were cooler months on average.

Dehumidification loads are significant as electricity is required for cooling and gas is required for re-heat. Control of relative humidity has improved, however further investigation is needed to understand if this is optimised or if the cooling and heating coils are fighting each other excessively.

Marginal cost of electricity for the Library has roughly doubled compared to this time last year, due to new contract rates.

Te Koputu Library Electricity Use Compared to Baseline (kWh)

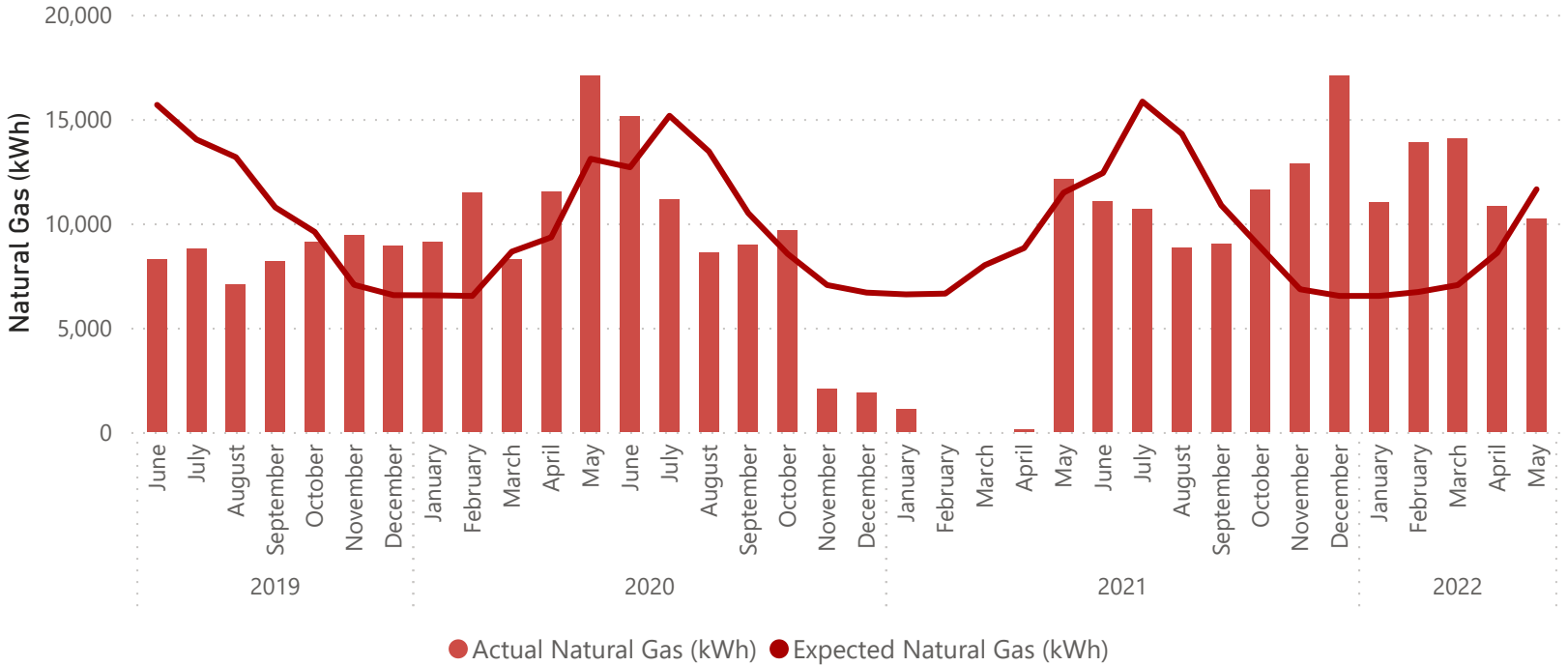


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

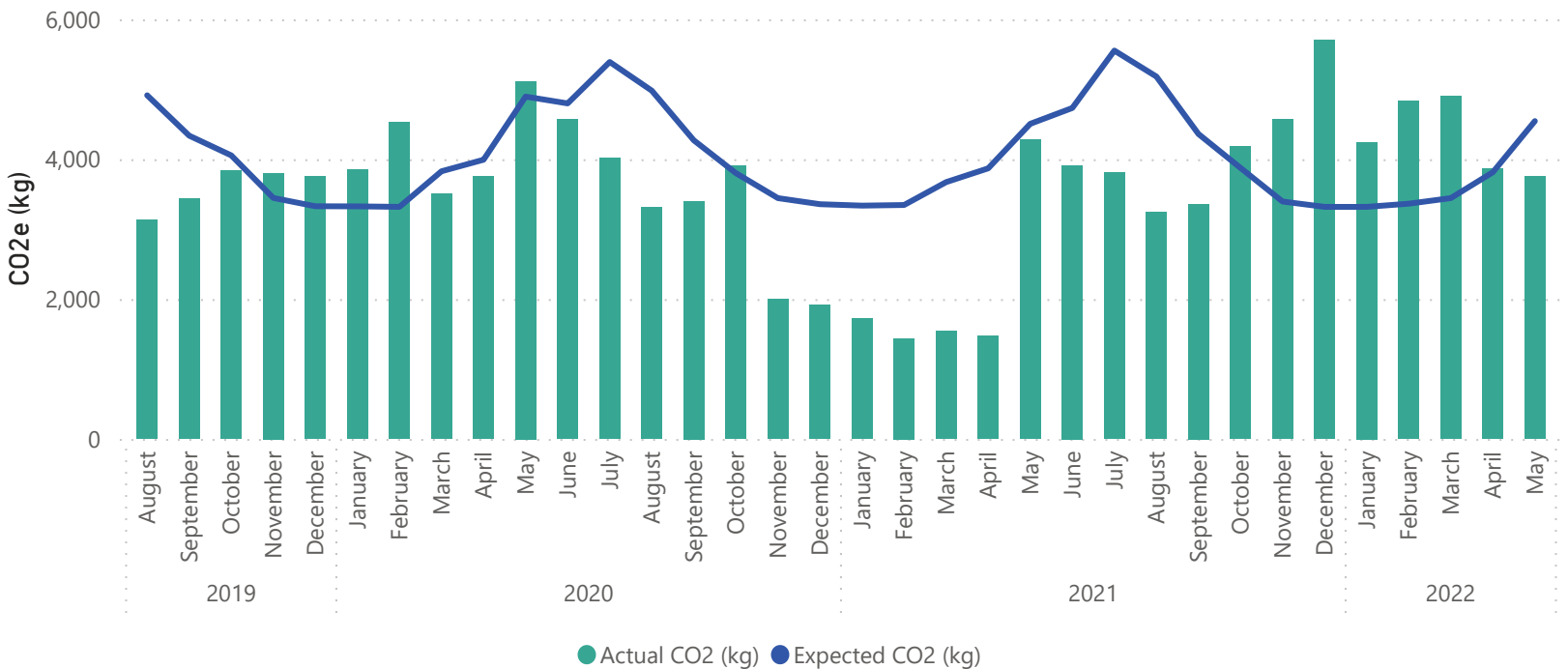
Whakatane District Council

Te Koputu Library

Te Koputu Library Natural Gas Compared to Baseline (kWh)



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

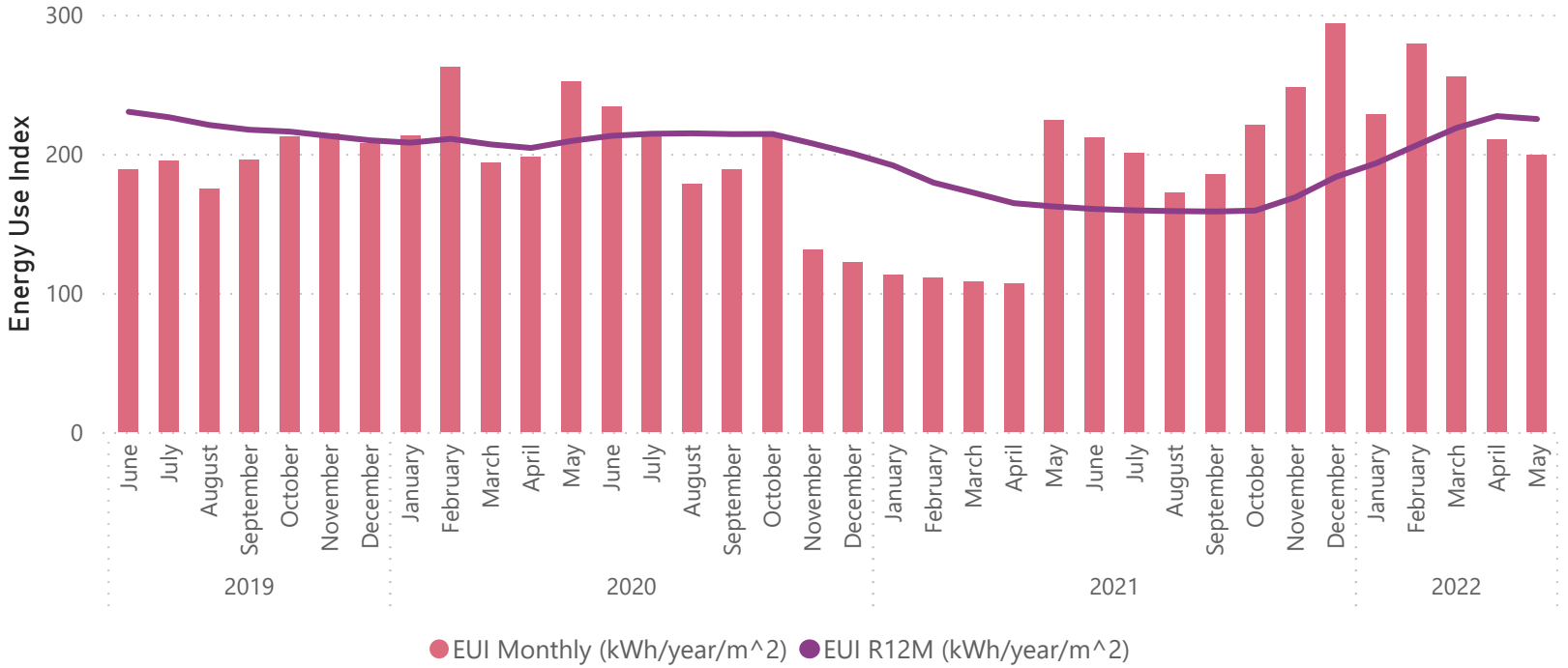


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

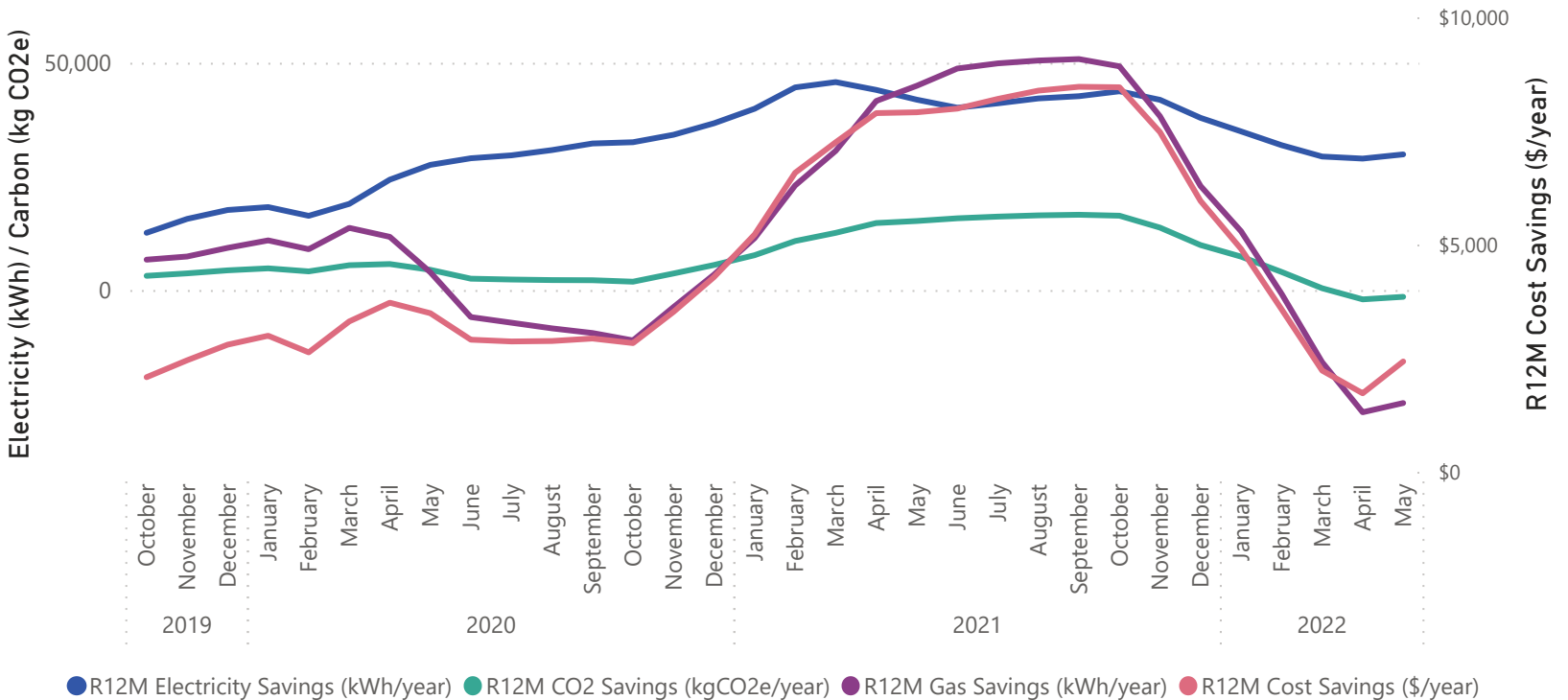
Whakatane District Council

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

Whakatane District Council

Museum and Research Centre

<p>\$864</p> <p>Monthly Energy Cost Savings</p>	<p>2,347</p> <p>Elec. Savings (kWh/mo)</p>	<p>21%</p> <p>Elec. Savings (%)</p>	<p>20,639</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>1,157</p> <p>CO2e Savings (kg/mo)</p>
<p>\$5,649</p> <p>R12M Energy Cost Savings</p>	<p>3,943</p> <p>Gas. Savings (kWh/mo)</p>	<p>59%</p> <p>Gas. Savings (%)</p>	<p>41,501</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>11,654</p> <p>R12M CO2e Savings (kg/yr)</p>

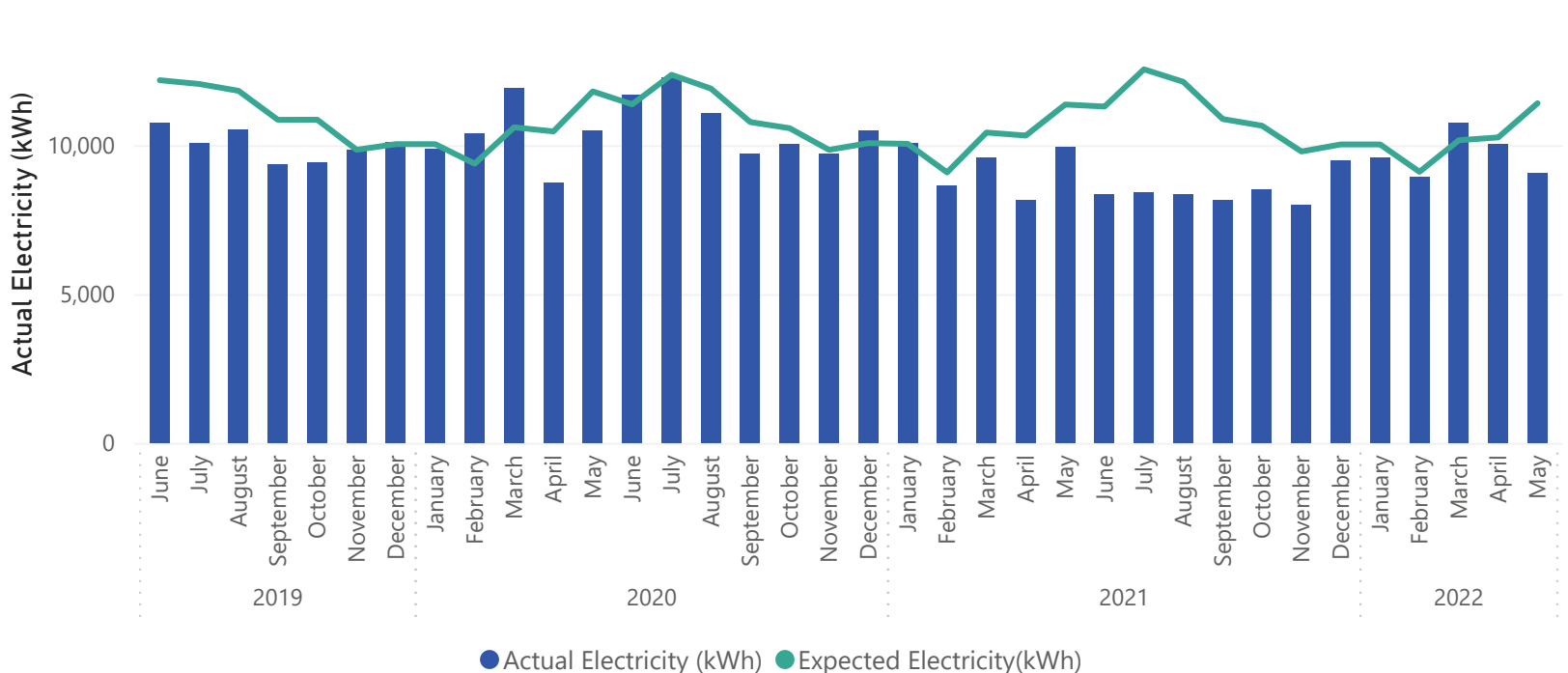
Comments:

The rolling 12 month EUI has dropped consistently since April 2021 for the Museum and Research Centre, which is good. Electricity use was less than expected in May 2022 and council staff are occupying the building as the Civic Centre is being re-developed. Natural gas use has been well below baseline for the last 12 months.

Marginal cost of electricity for the Museum and Research Centre has doubled compared to this time last year, due to new contract rates.

Rolling 12 month savings have reached a new record; with 62,000 kWh in energy savings, 11,600 kg CO2e, and \$5,600 saved annually.

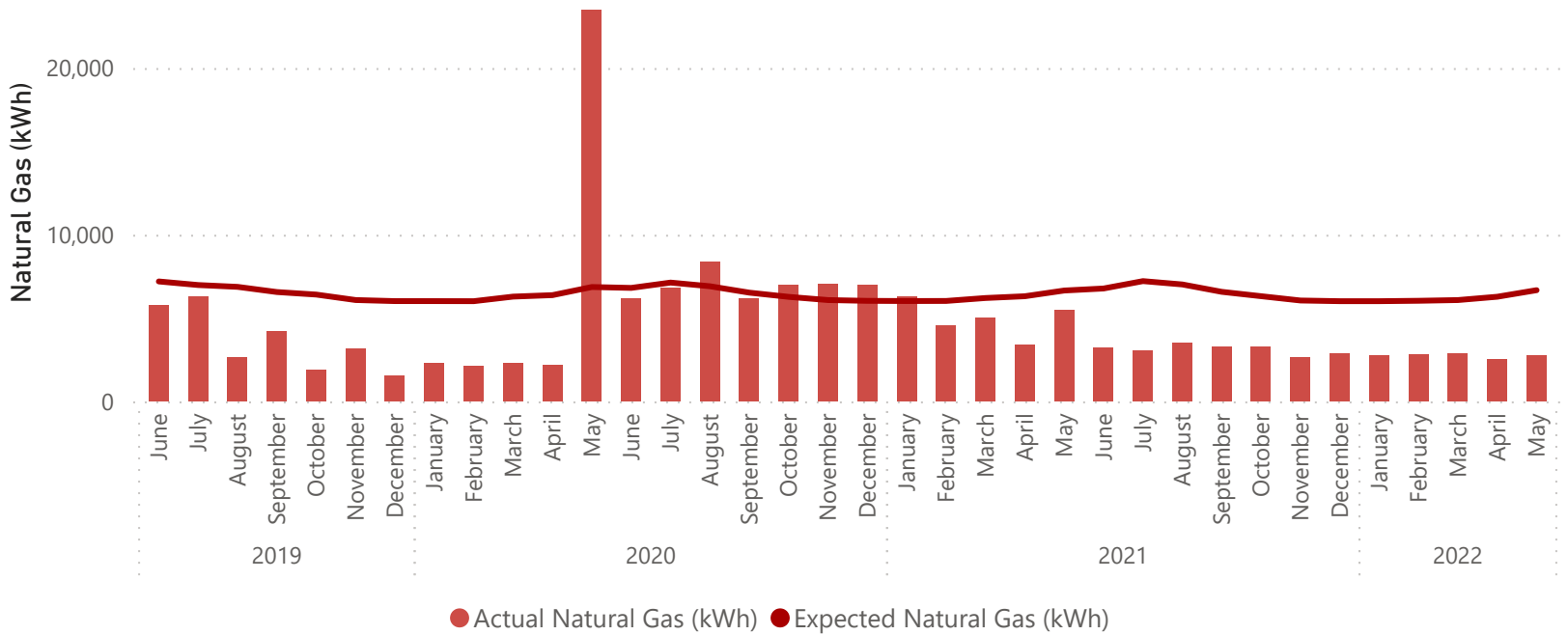
Museum Research Centre Electricity Use Compared to Baseline (kWh)



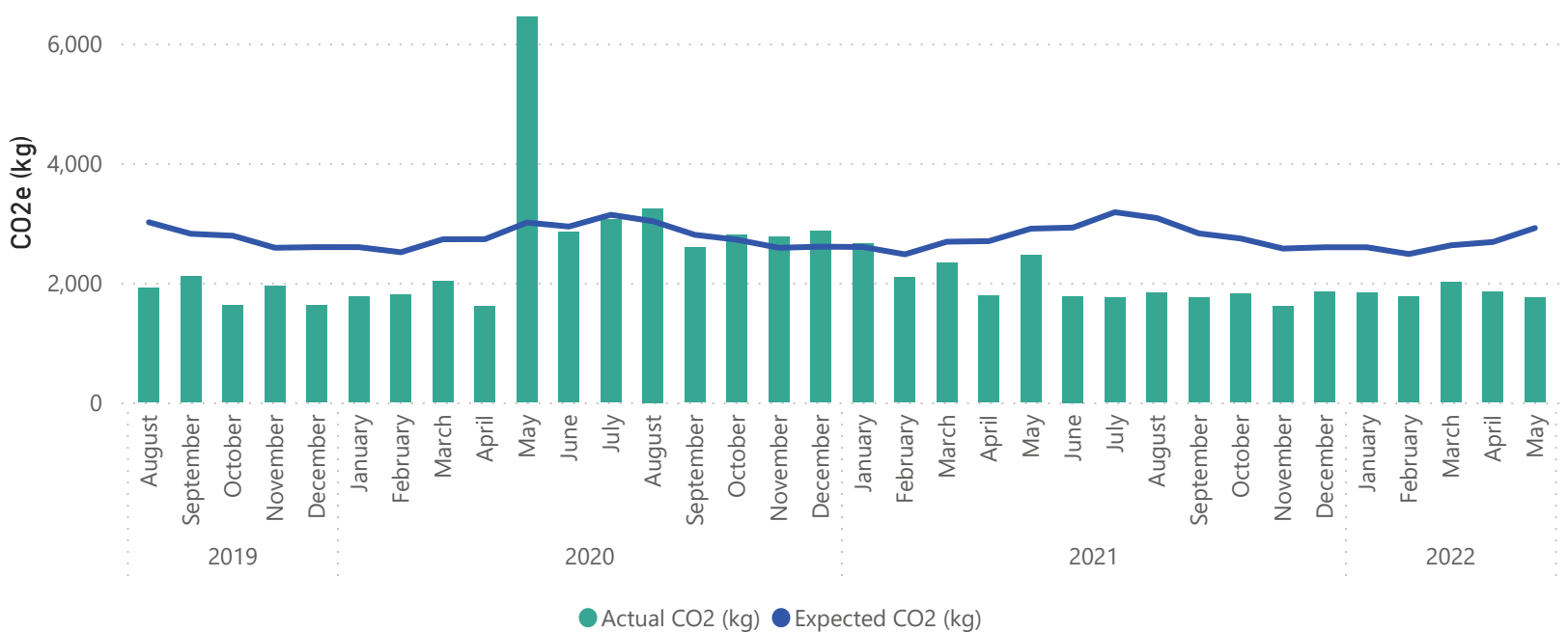
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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)

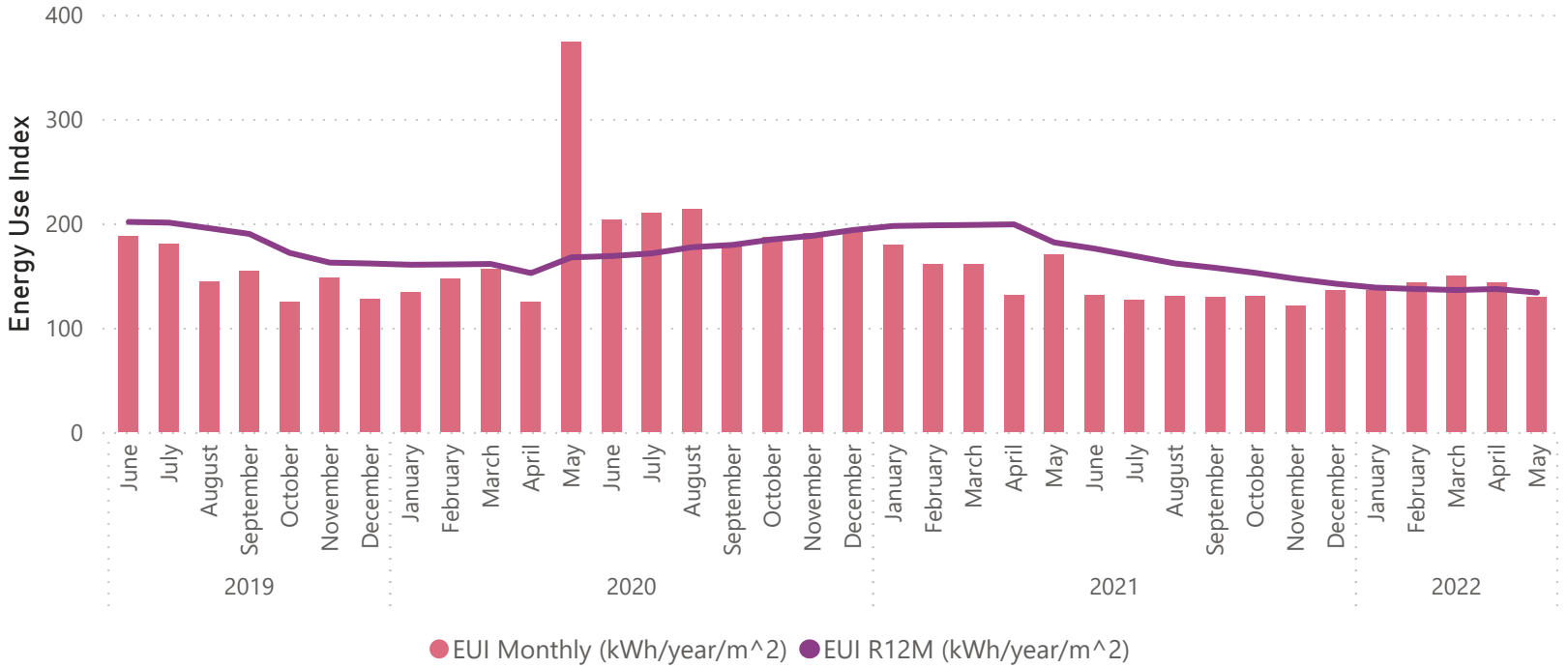


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

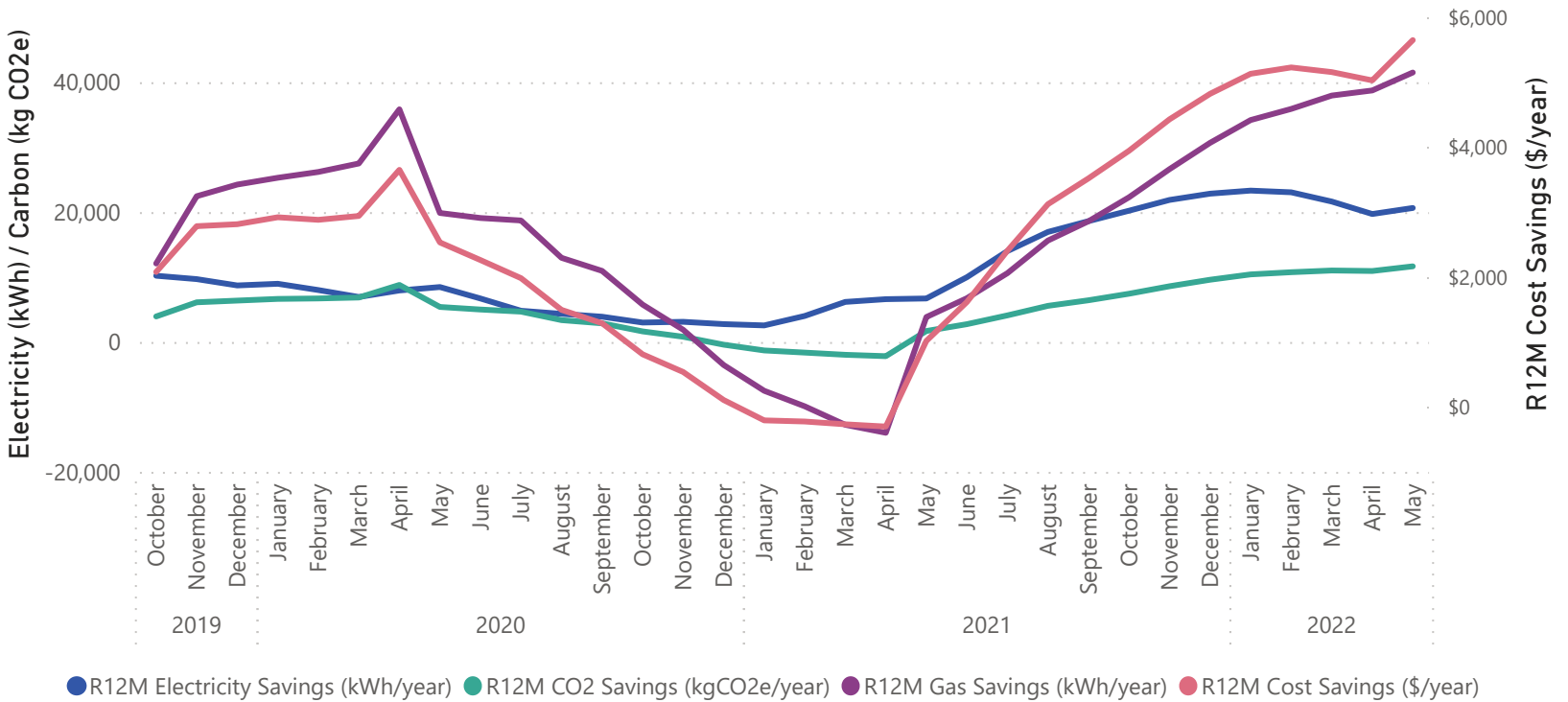
Whakatane District Council

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

Whakatane District Council

War Memorial Hall

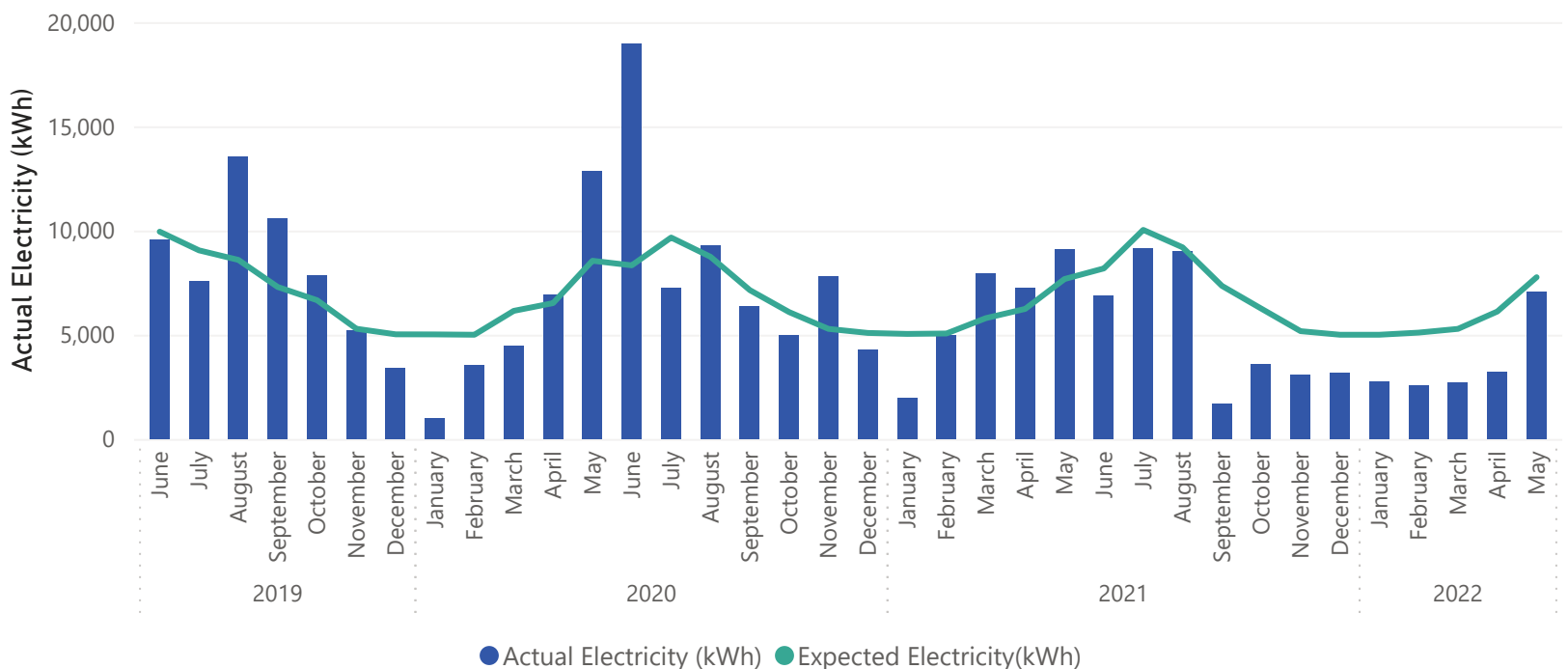
<p>\$271 Monthly Energy Cost Savings</p>	<p>675 Elec. Savings (kWh/mo)</p>	<p>9% Elec. Savings (%)</p>	<p>25,516 R12M Electricity Savings (kWh/yr)</p>	<p>390 CO2e Savings (kg/mo)</p>
<p>\$3,647 R12M Energy Cost Savings</p>	<p>1,400 Gas. Savings (kWh/mo)</p>	<p>48% Gas. Savings (%)</p>	<p>3,362 R12M Gas Savings (kWh/yr)</p>	<p>4,013 R12M CO2e Savings (kg/yr)</p>

Comments:

A baseline was created for War Memorial Hall that adjusts for ambient temperature. The baseline period is July 2020 to June 2021. The War Memorial Hall uses more electricity and gas in winter months. The War Memorial Hall is on a NHH account, some months' usage may be estimated by the retailer and captured by a subsequent meter reading. Manual meter readings can improve accuracy of electricity and gas usage.

A new trend emerged from October 2021 as the relative amount of savings achieved at the War Memorial Hall has increased compared previous years. This may be due to a reduced level of occupancy as a result of Covid-19. Demand for electricity in May 2022 has increased significantly compared to April 2022, however, 9% savings are still being achieved at the War Memorial Hall for the month of May. Compared to May 2021, 22% less electricity was used in May 2022.

War Memorial Hall Electricity Use Compared to Baseline (kWh)

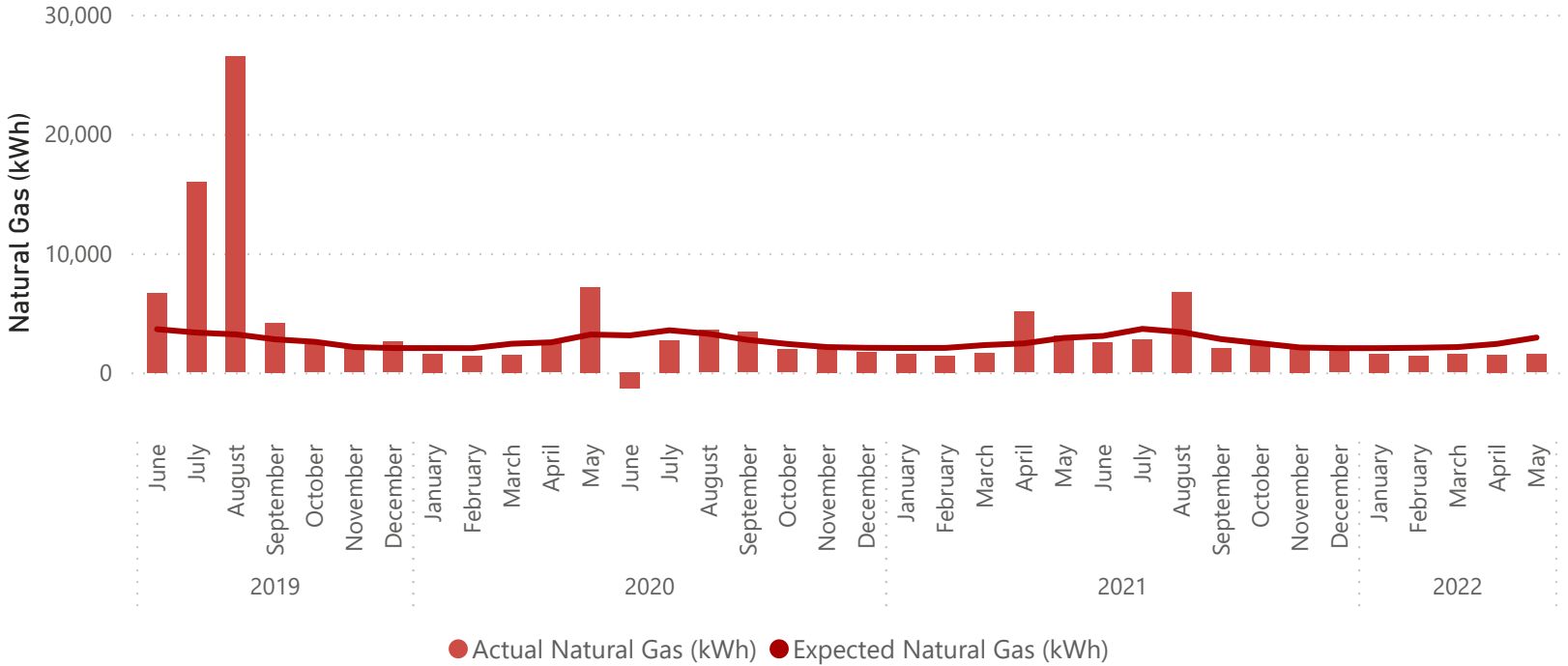


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

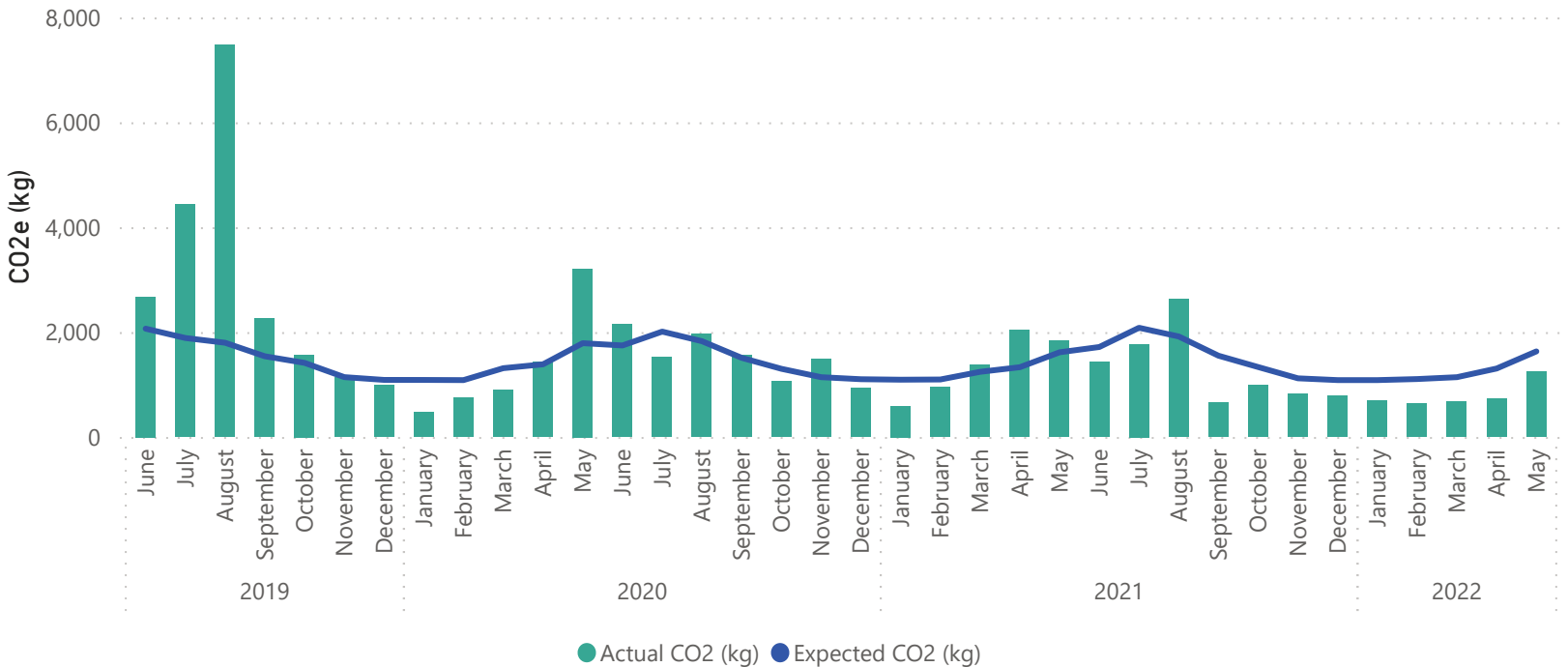
Whakatane District Council

War Memorial Hall

War Memorial Hall Natural Gas Compared to Baseline (kWh)



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

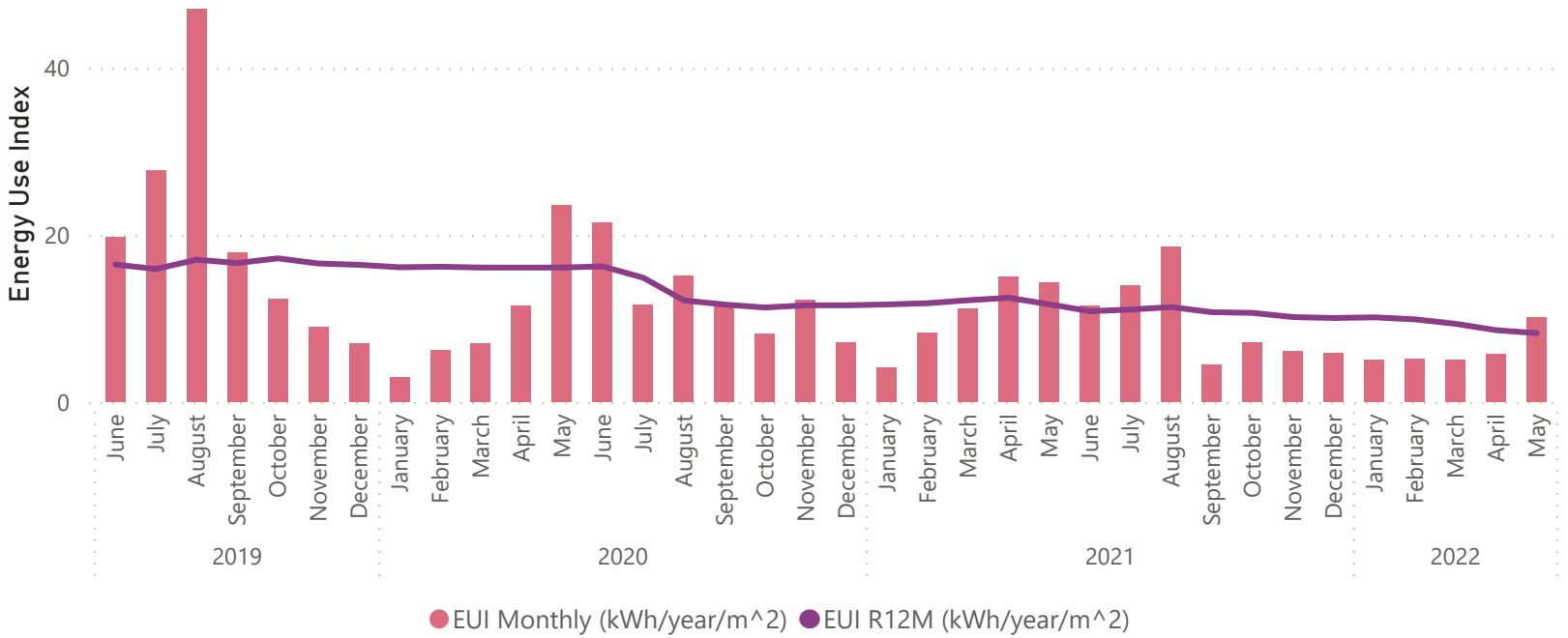


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

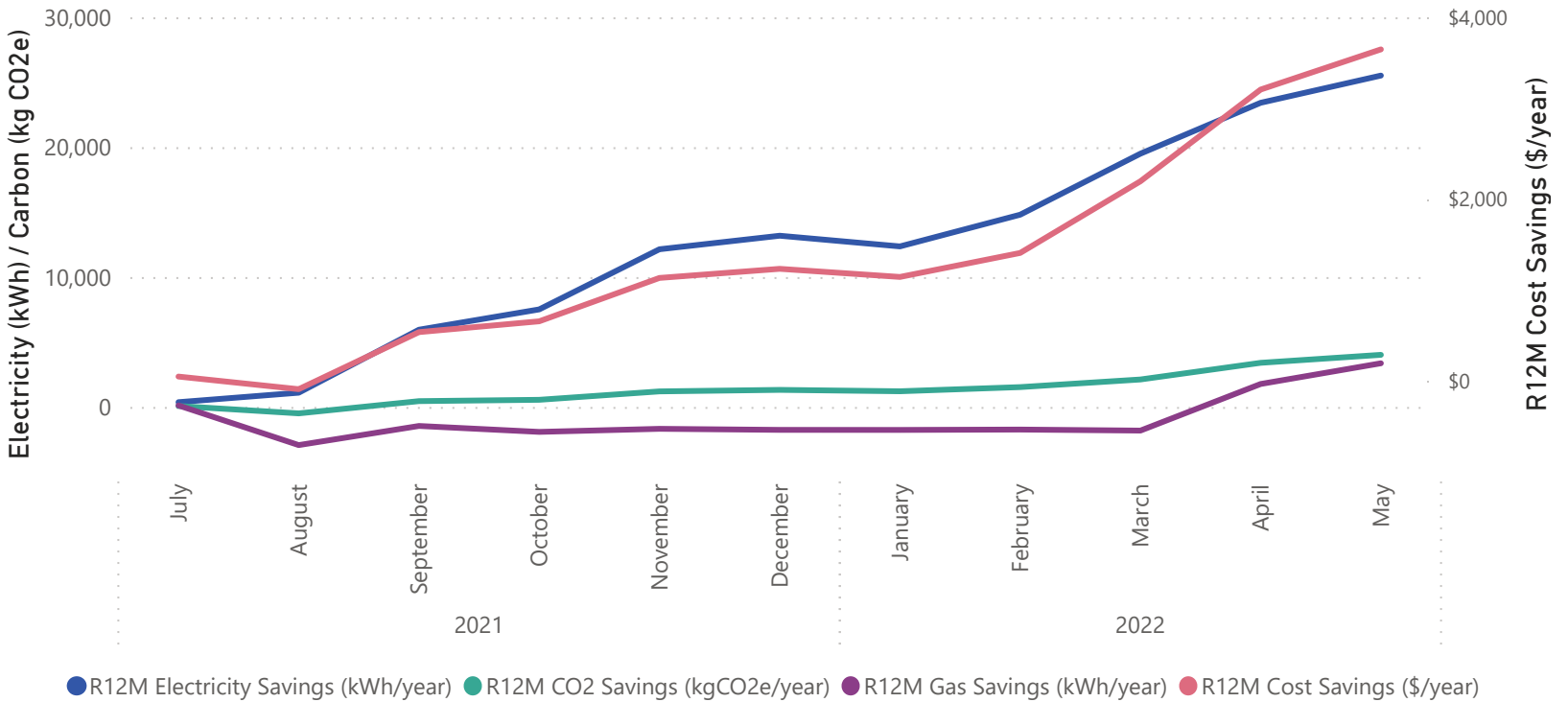
Whakatane District Council

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

Whakatane District Council

Water Treatment Plant

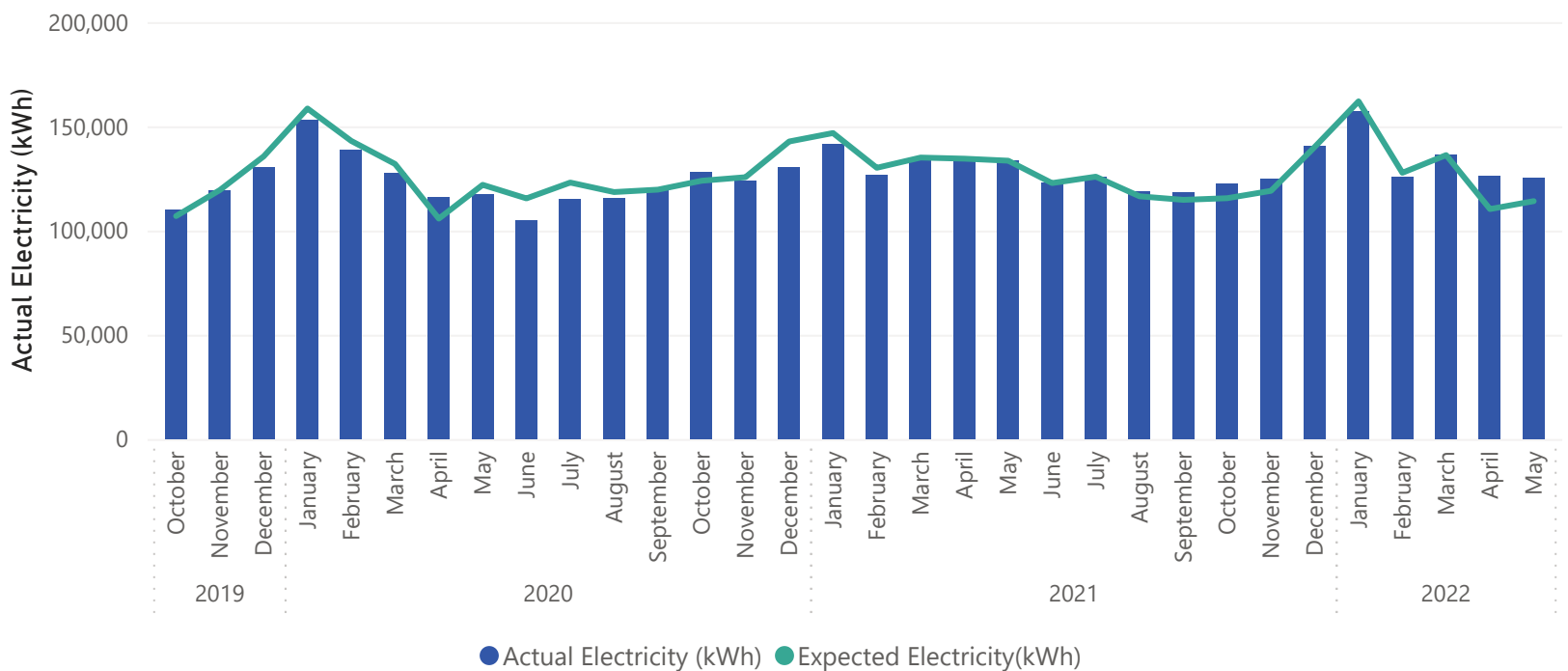
<p>-\$2,413 Monthly Energy Cost Savings</p>	<p>-11,075 Elec. Savings (kWh/mo)</p>	<p>-10% Elec. Savings (%)</p>	<p>-40,211 R12M Electricity Savings (kWh/yr)</p>	<p>-1,425 CO2e Savings (kg/mo)</p>
<p>-\$7,034 R12M Energy Cost Savings</p>				<p>-5,175 R12M CO2e Savings (kg/yr)</p>

Comments:

Electricity use was more than expected and the EUI is 8% higher than it has been for the past year. Historically, months with lower demand have higher EUIs, such as April 2020, April 2022, and May 2022.

Marginal cost of electricity for the WTP has doubled compared to this time last year, due to new contract rates.

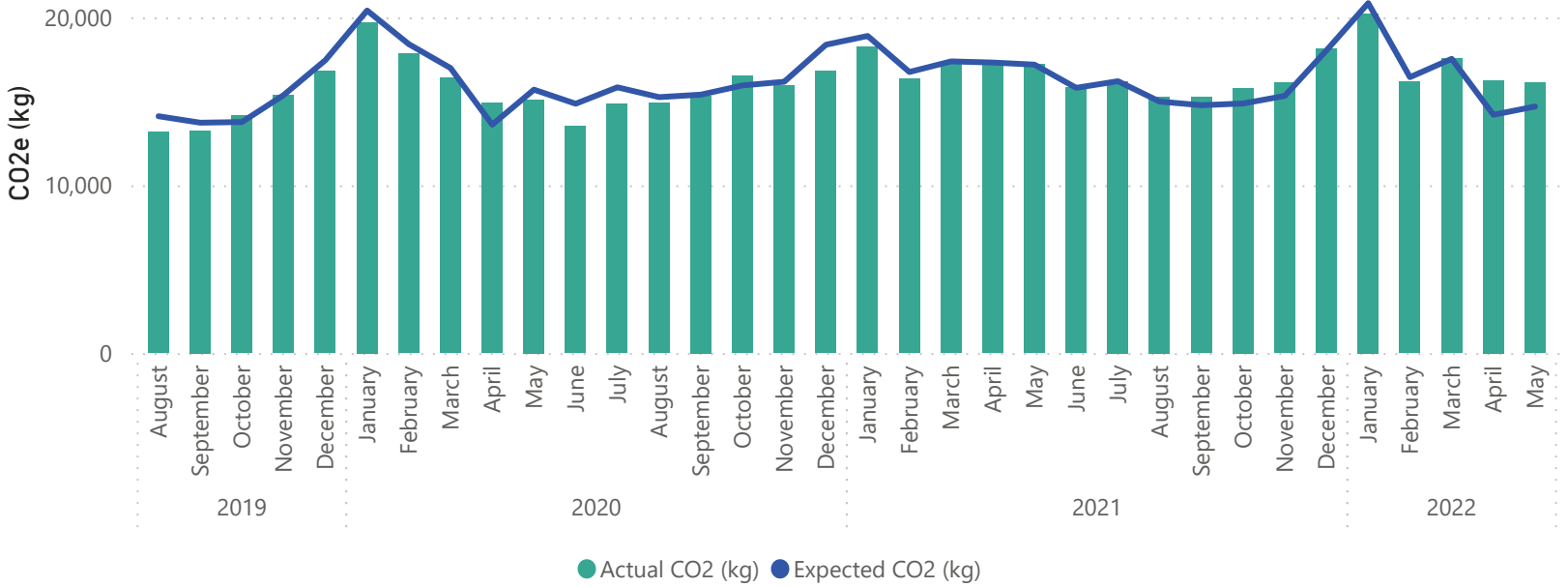
Water Treatment Plant Electricity Use Compared to Baseline (kWh)



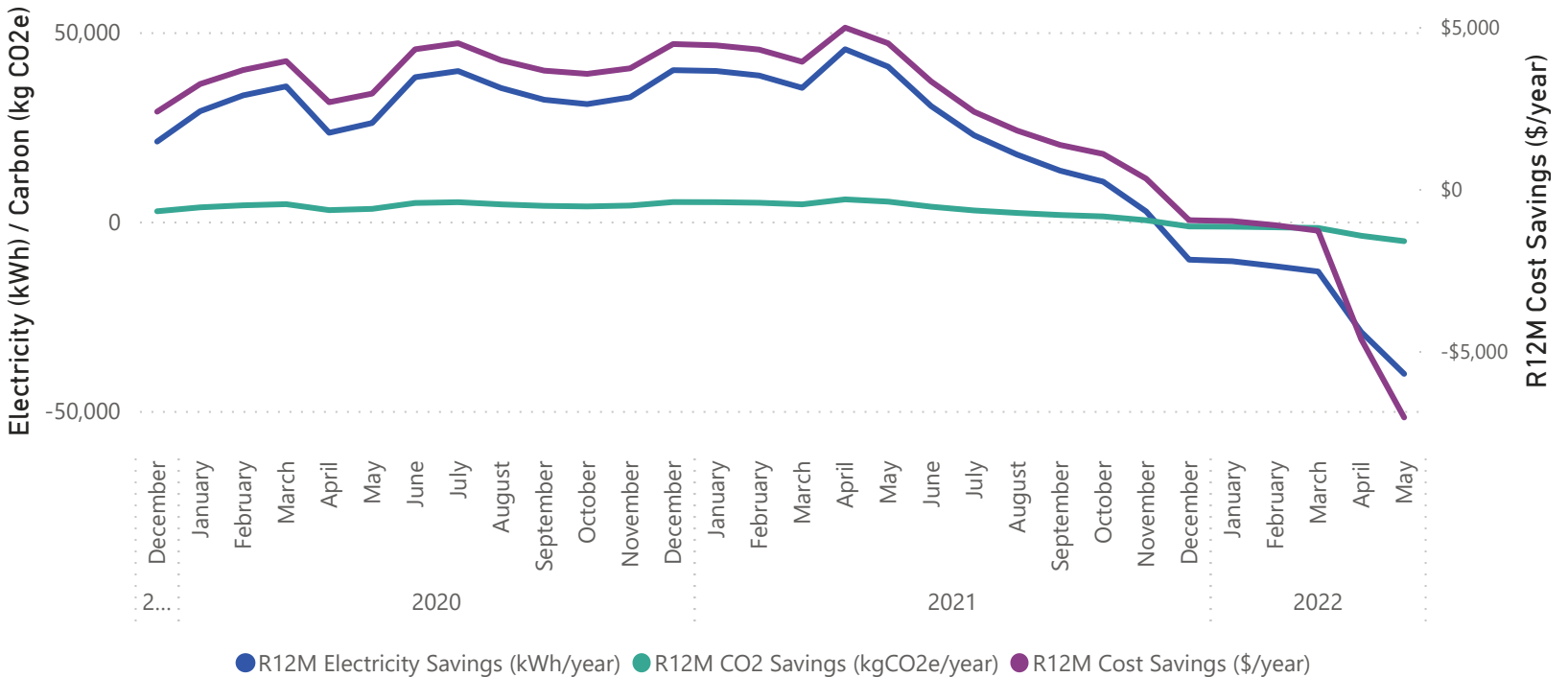
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

Whakatane District Council Water Treatment Plant

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



Water Treatment Plant Rolling 12 Month Savings

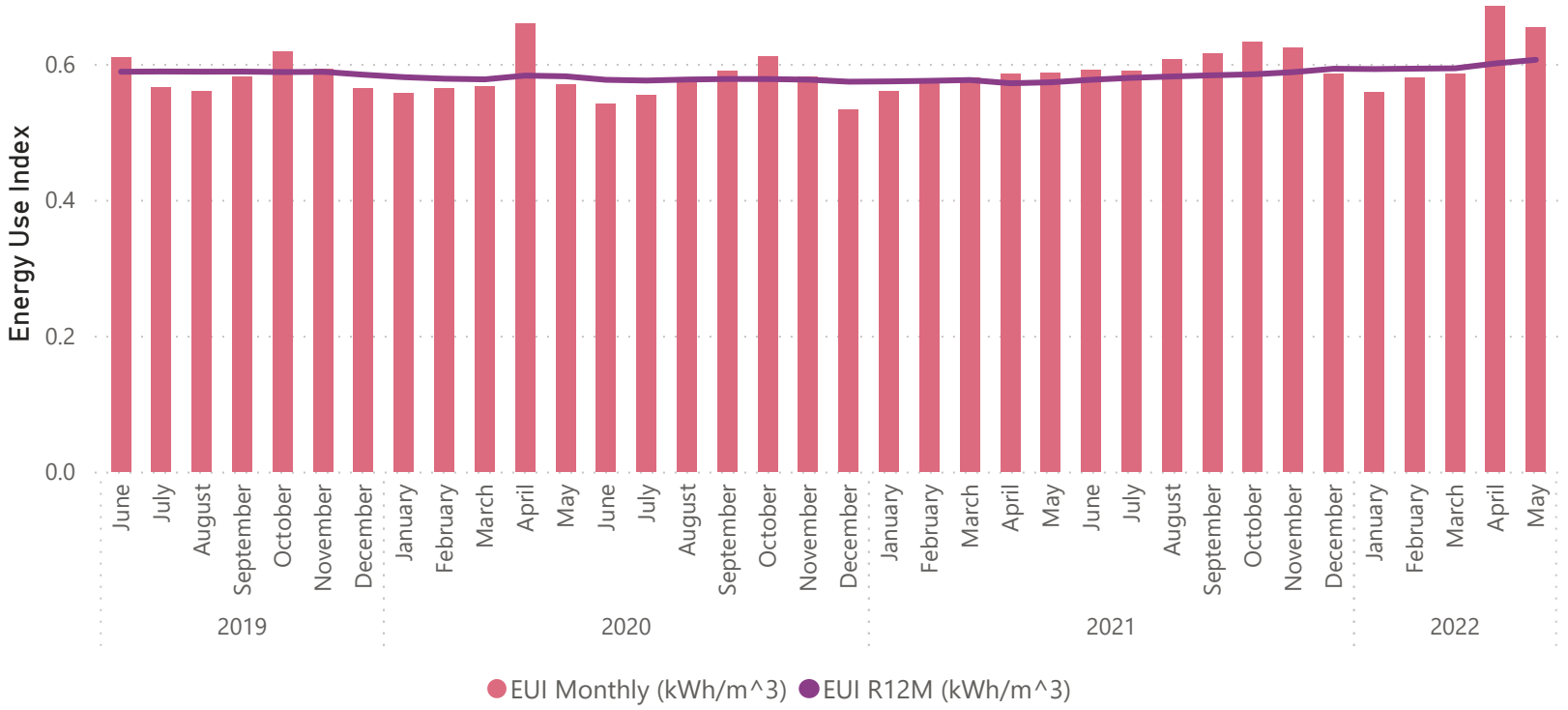


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

Braemar Road Pump Station

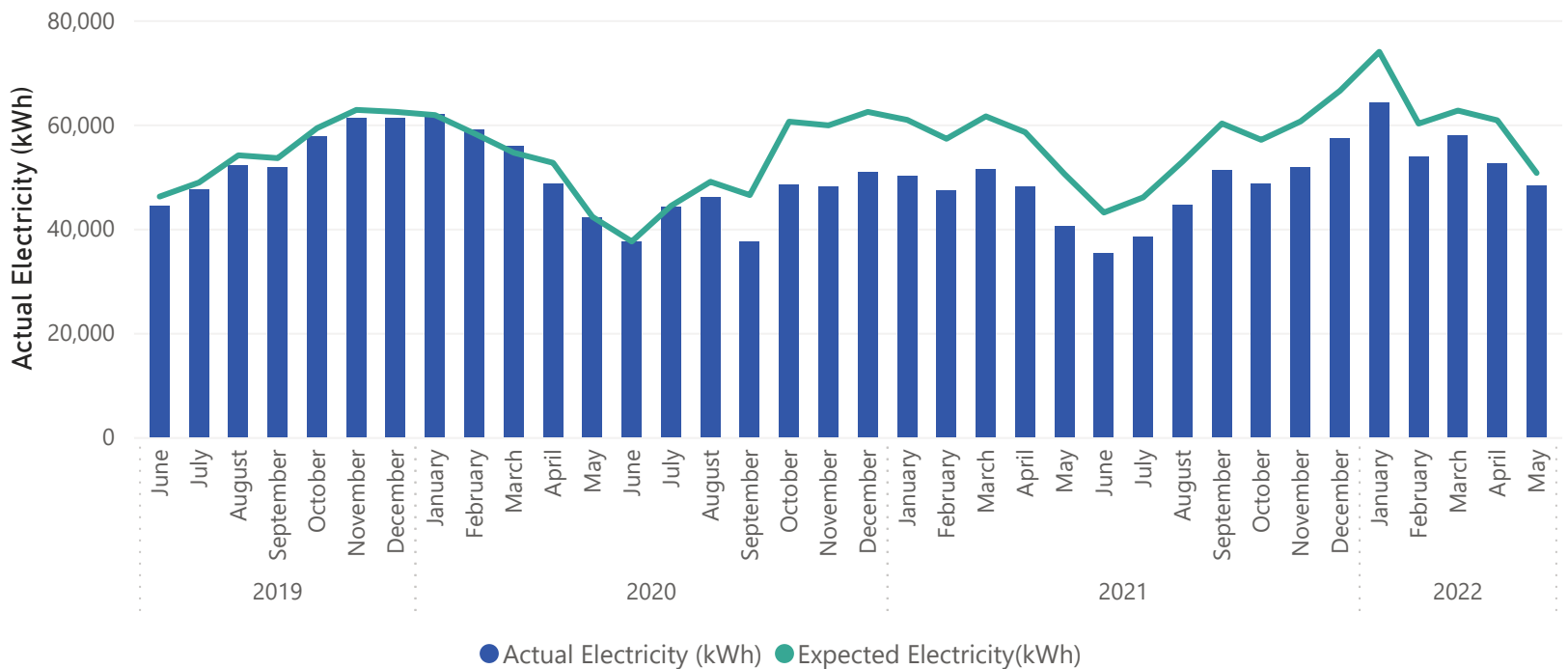
<p>\$516 Monthly Energy Cost Savings</p>	<p>2,325 Elec. Savings (kWh/mo)</p>	<p>5% Elec. Savings (%)</p>	<p>90,254 R12M Electricity Savings (kWh/yr)</p>	<p>378 CO2e Savings (kg/mo)</p>
<p>\$11,334 R12M Energy Cost Savings</p>				<p>12,015 R12M CO2e Savings (kg/yr)</p>

Comments:

Continued savings from high efficiency pumps and motors, installed September 2020. The EUI has increased compared to March 2022, even though April 2022 was month that achieved a lower EUI. The EUI is the highest that it has been since the installation of the high efficiency pumps and motors in Sept 2020. An increasing EUI may indicate that the pumps and motors could benefit from maintenance to return their performance closer to what it was when the pumps were first installed.

Marginal cost of electricity for Braemar Road Pump Station has approximately doubled compared to this time last year, due to new contract rates.

Braemar Rd Pumps Electricity Use Compared to Baseline (kWh)

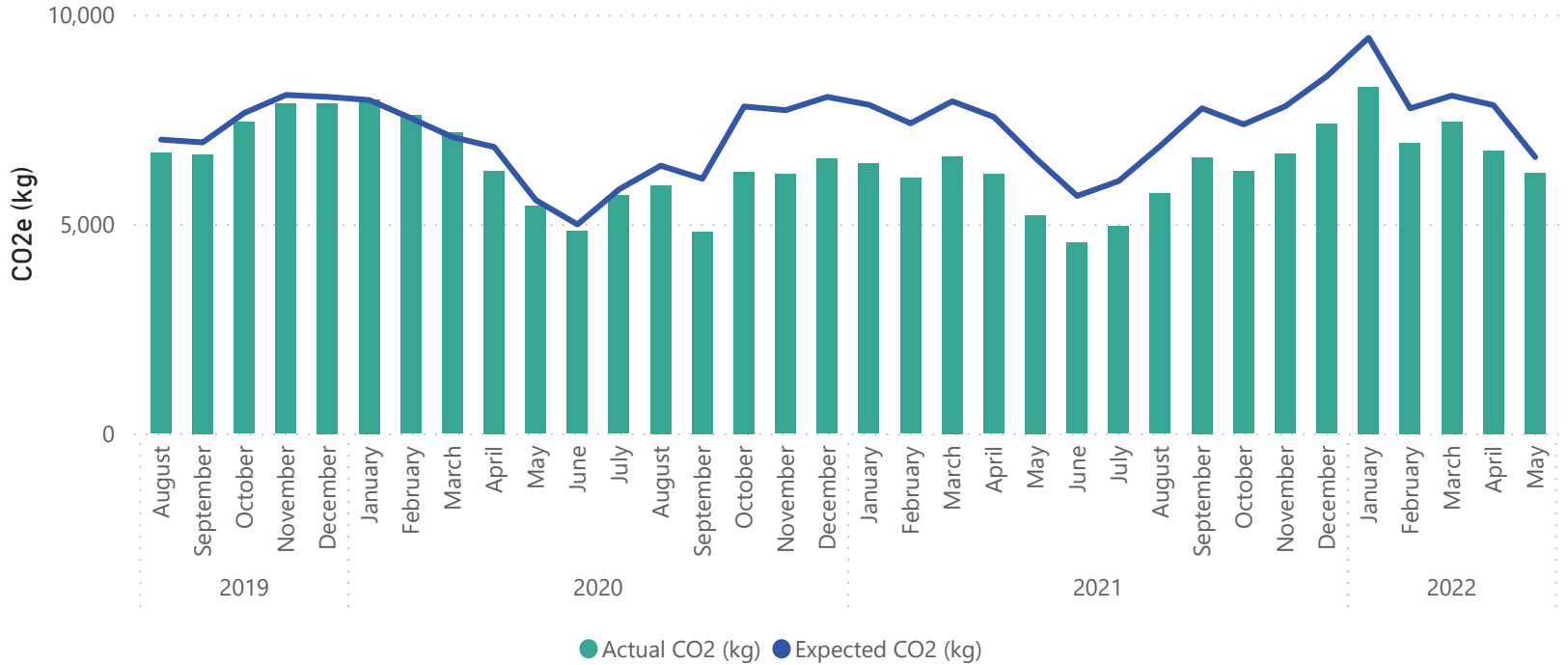


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

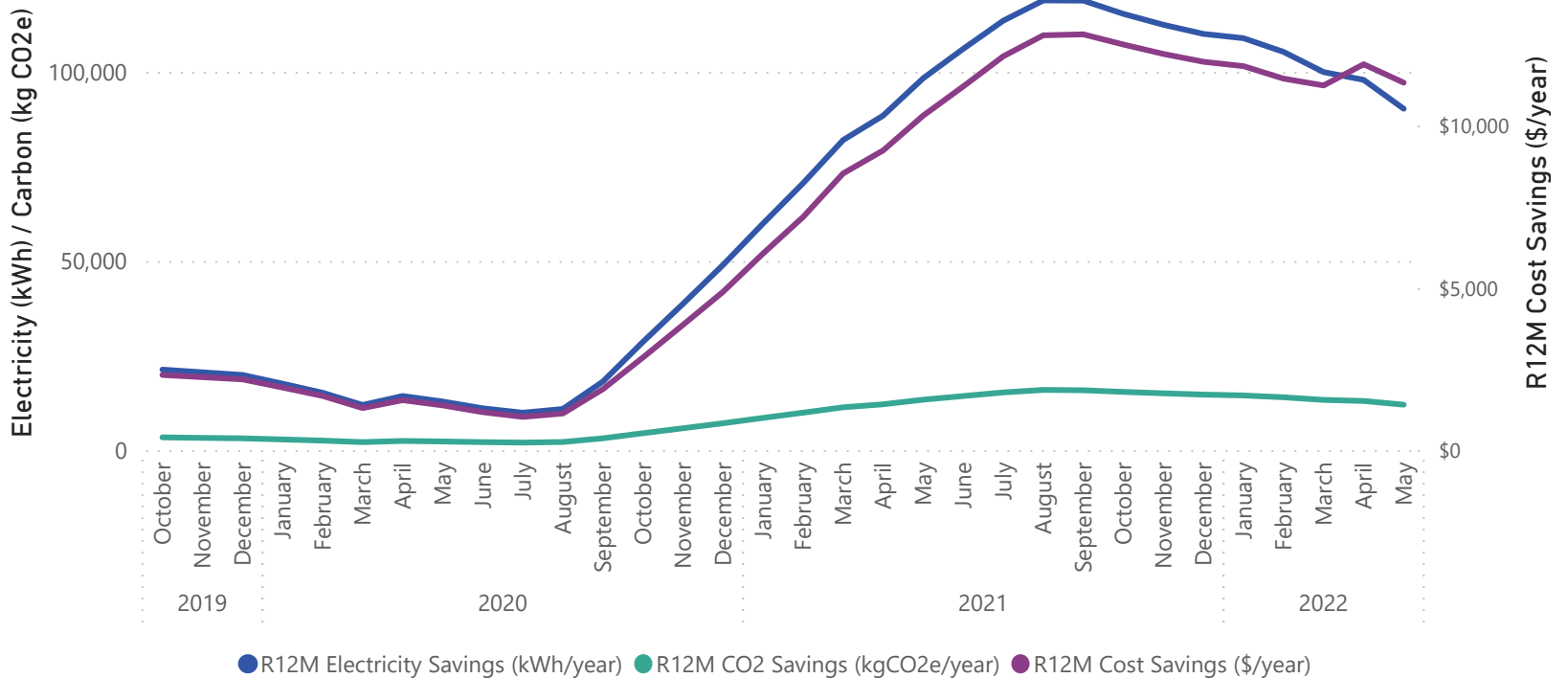
Whakatane District Council

Braemar Road Pump Station

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



Braemar Rd Pumps Rolling 12 Month Savings

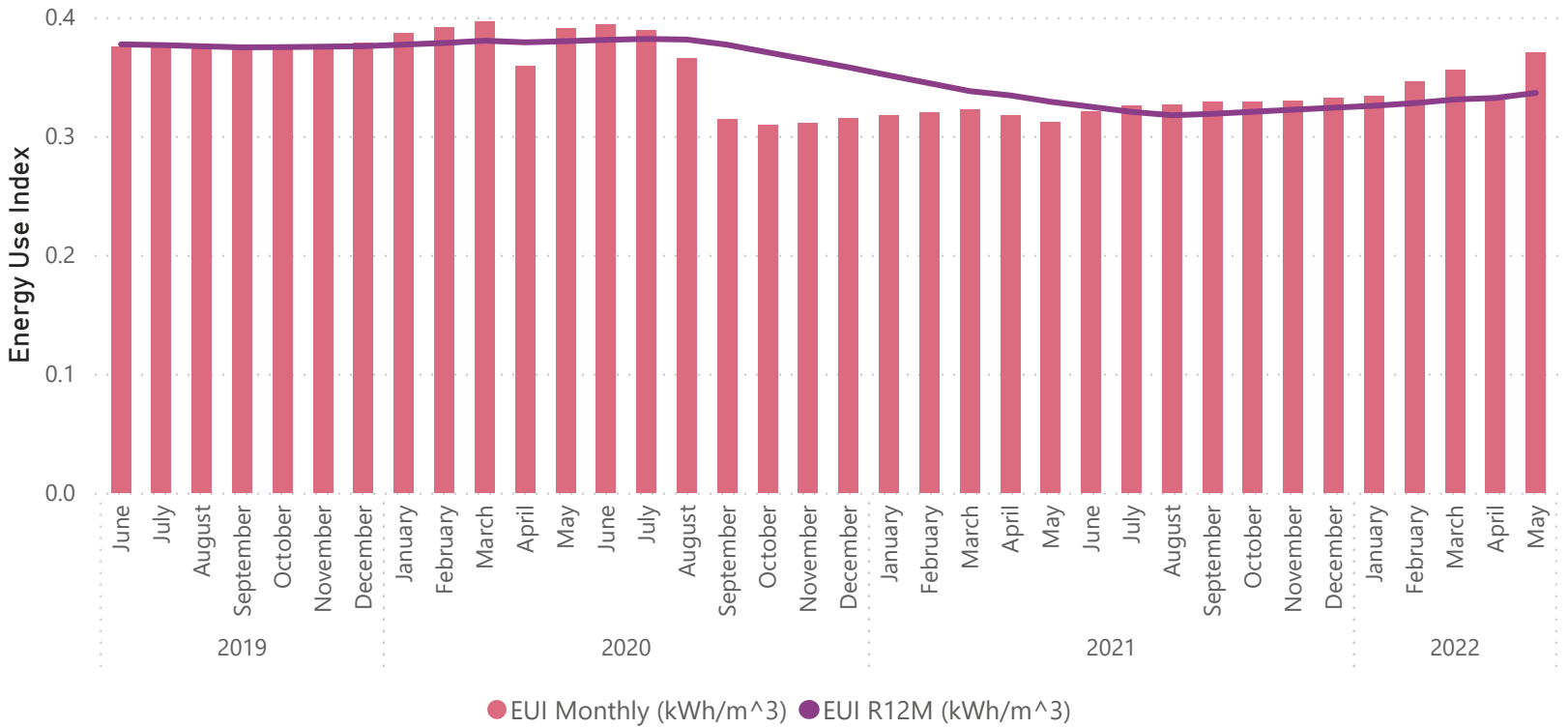


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

Paul Road Pump Station

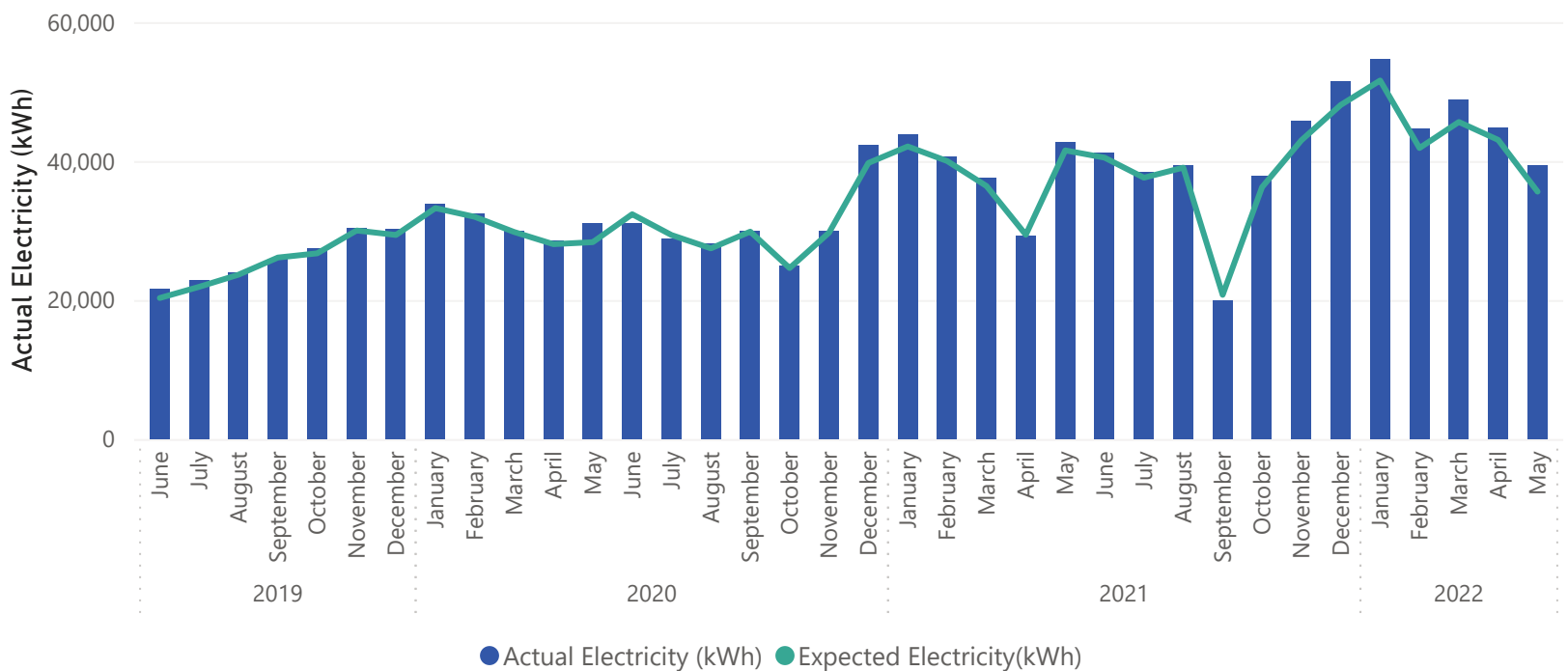
<p>-\$840 Monthly Energy Cost Savings</p>	<p>-3,769 Elec. Savings (kWh/mo)</p>	<p>-11% Elec. Savings (%)</p>	<p>-23,465 R12M Electricity Savings (kWh/yr)</p>	<p>-484 CO2e Savings (kg/mo)</p>
<p>-\$3,412 R12M Energy Cost Savings</p>				<p>-3,009 R12M CO2e Savings (kg/yr)</p>

Comments:

A general trend can be observed that months of high demand typically use more electricity than expected. This may indicate that the pump is operating outside its optimum efficiency range. The EUI in May 2022 has increased by 8% compared to April 2022, the pumps are using 8% more electricity for each cubic meter of water pumped compared to last month.

Marginal cost of electricity for Paul Road Pump Station has approximately doubled compared to this time last year, due to new contract rates.

Paul Rd Pumps Electricity Use Compared to Baseline (kWh)

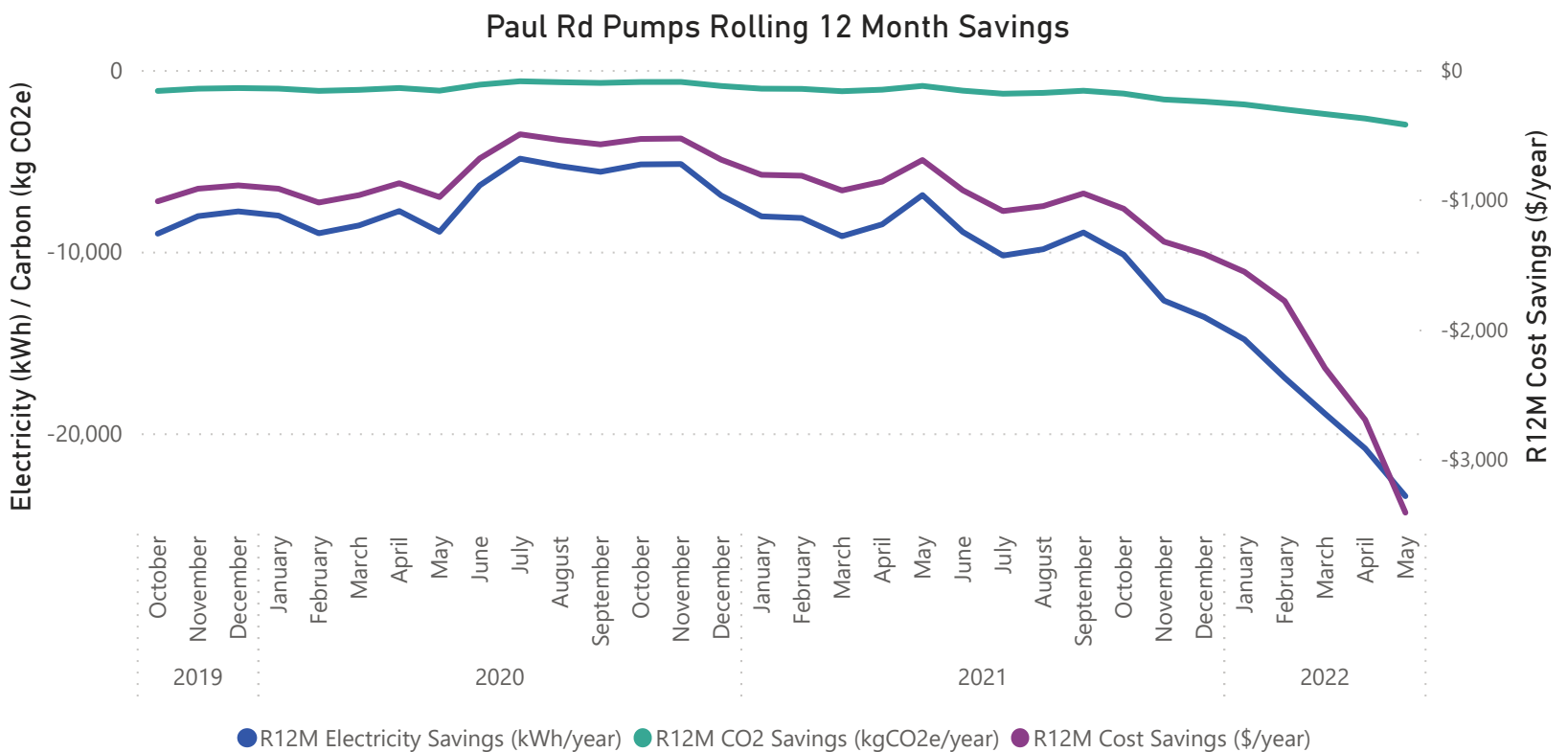
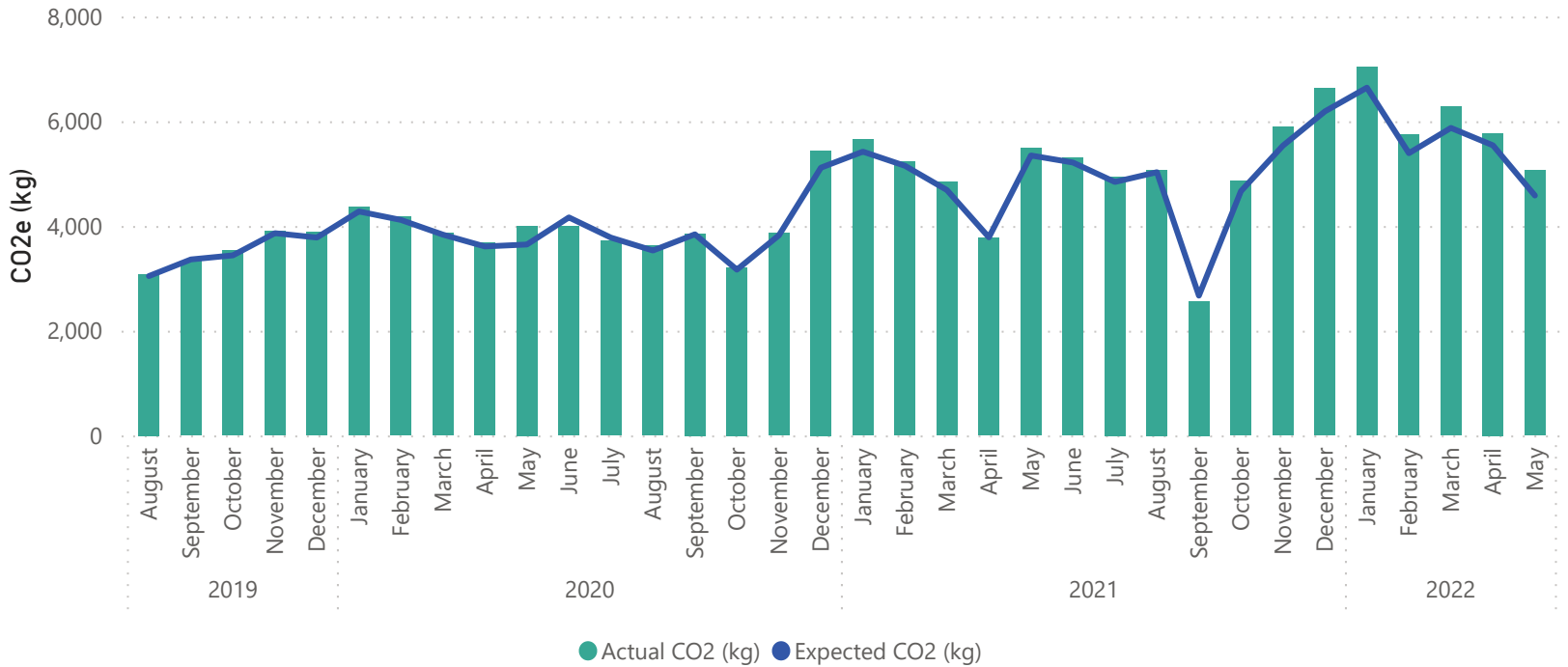


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

Whakatane District Council

Paul Road Pump Station

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

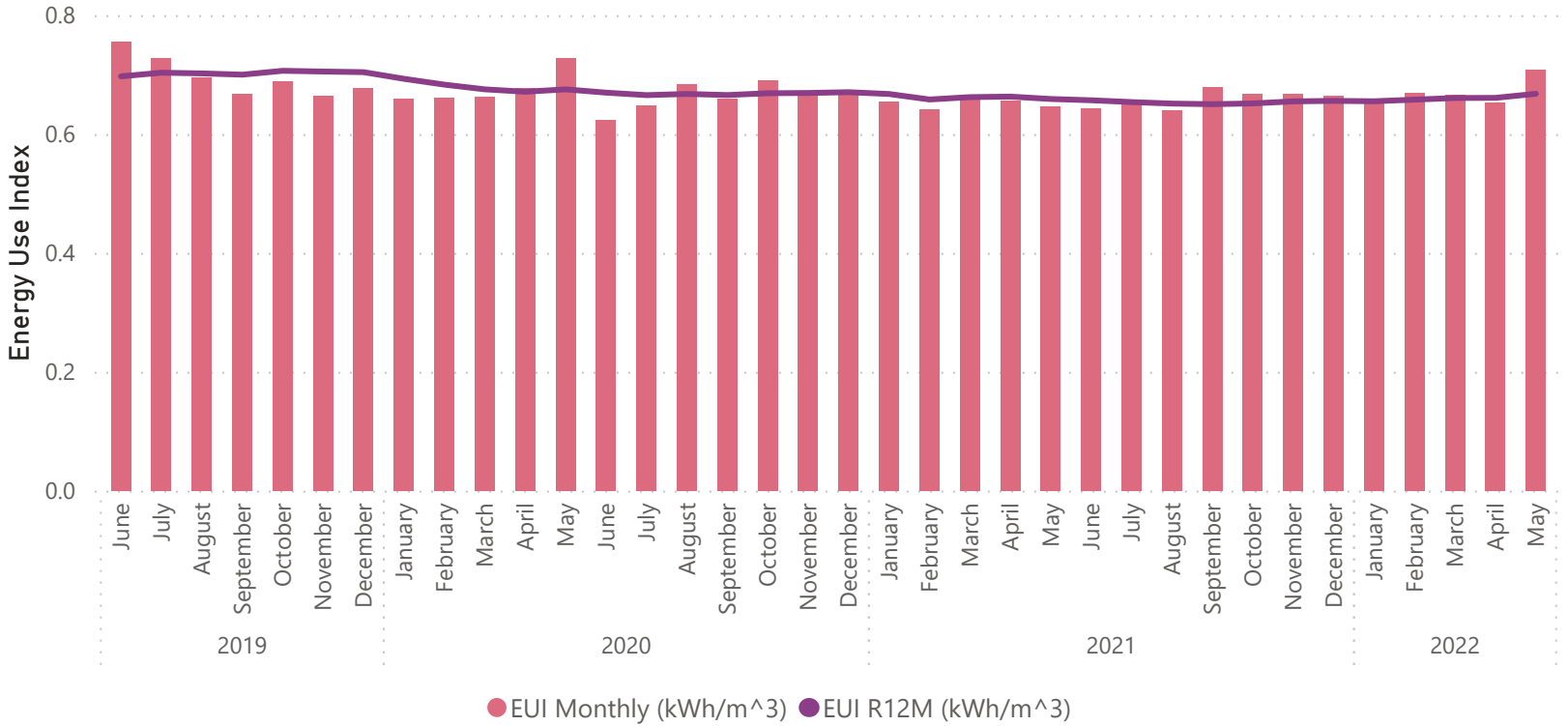


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

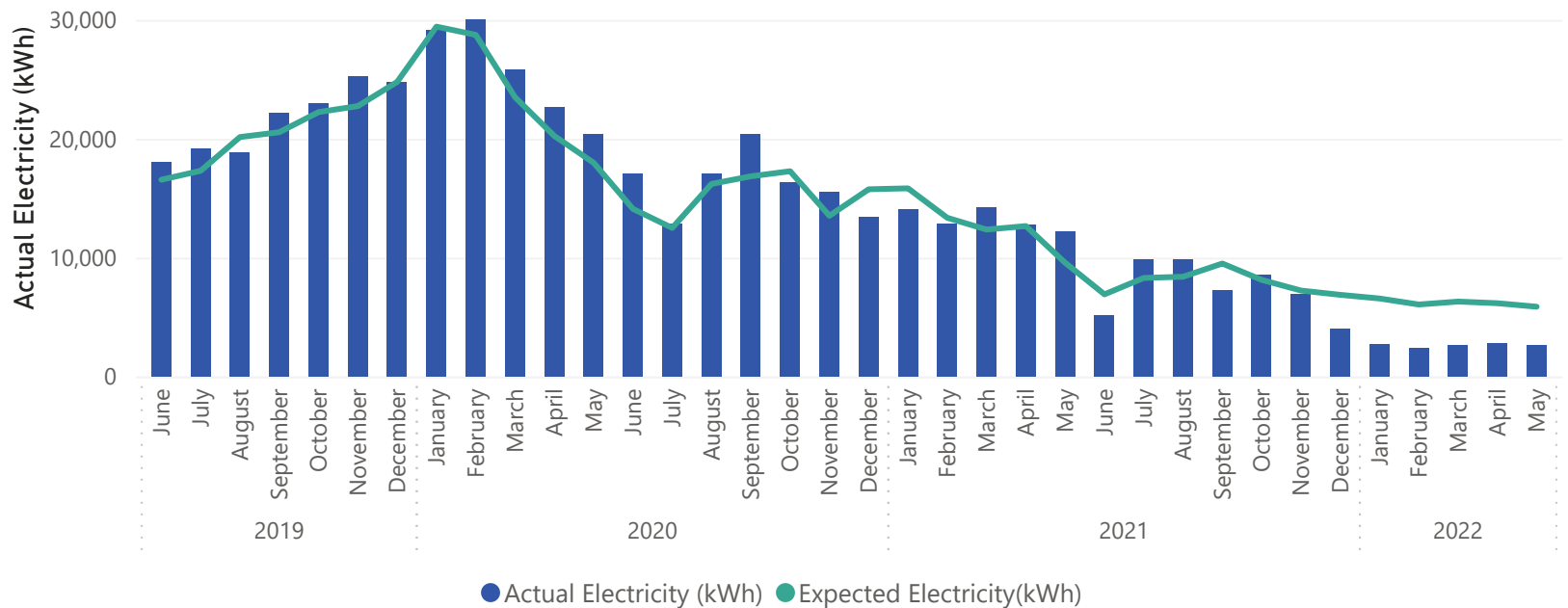
Johnson Road Pump Station

<p>\$707 Monthly Energy Cost Savings</p>	<p>3,209 Elec. Savings (kWh/mo)</p>	<p>55% Elec. Savings (%)</p>	<p>21,352 R12M Electricity Savings (kWh/yr)</p>	<p>413 CO2e Savings (kg/mo)</p>
<p>\$4,708 R12M Energy Cost Savings</p>				<p>2,750 R12M CO2e Savings (kg/yr)</p>

Comments:

The pumps at Johnson Rd have been used less than previous years. The rolling 12-month EUI for Johnson Road Pump Station has increased over the past year as demand decreases. This is expected as the pump station has a non-zero baseload.

Johnson Rd Pumps Electricity Use Compared to Baseline (kWh)

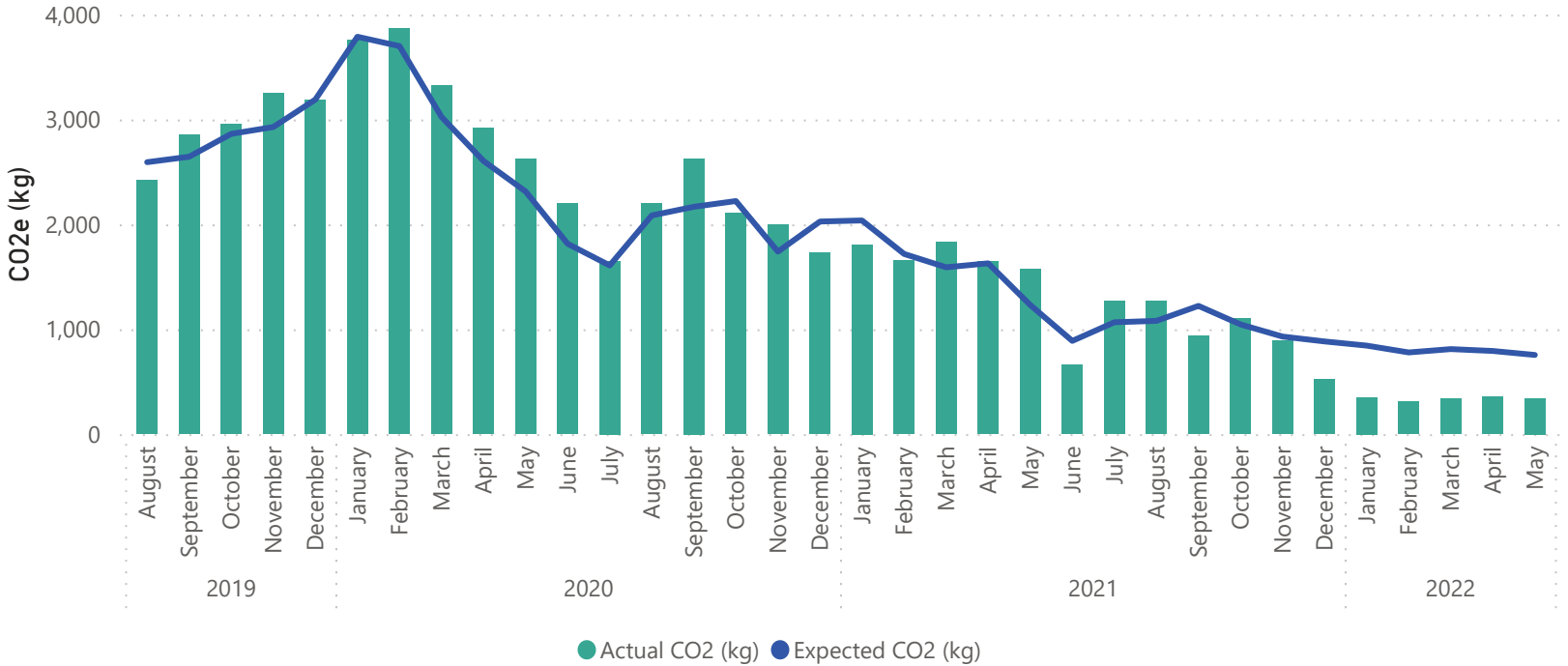


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

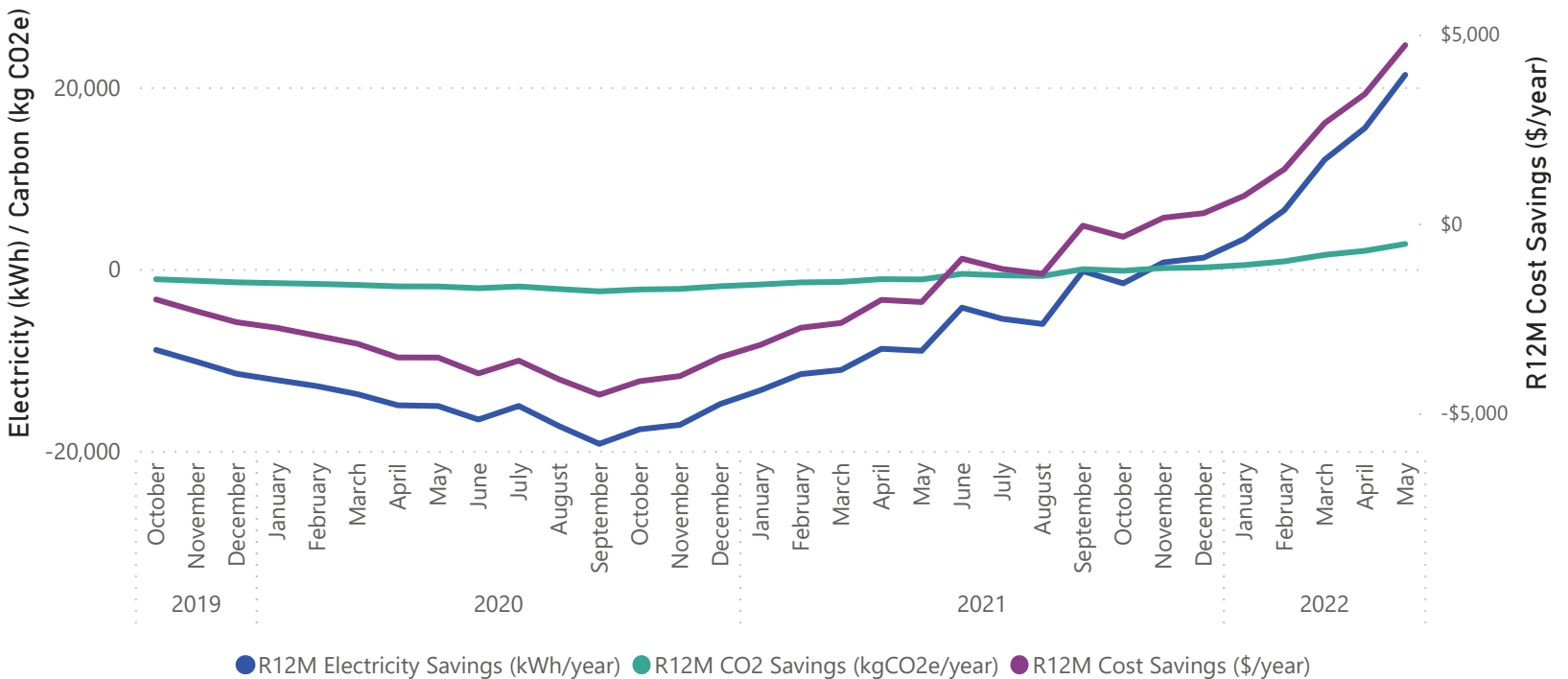
Whakatane District Council

Johnson Road Pump Station

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



Johnson Rd Pumps Rolling 12 Month Savings

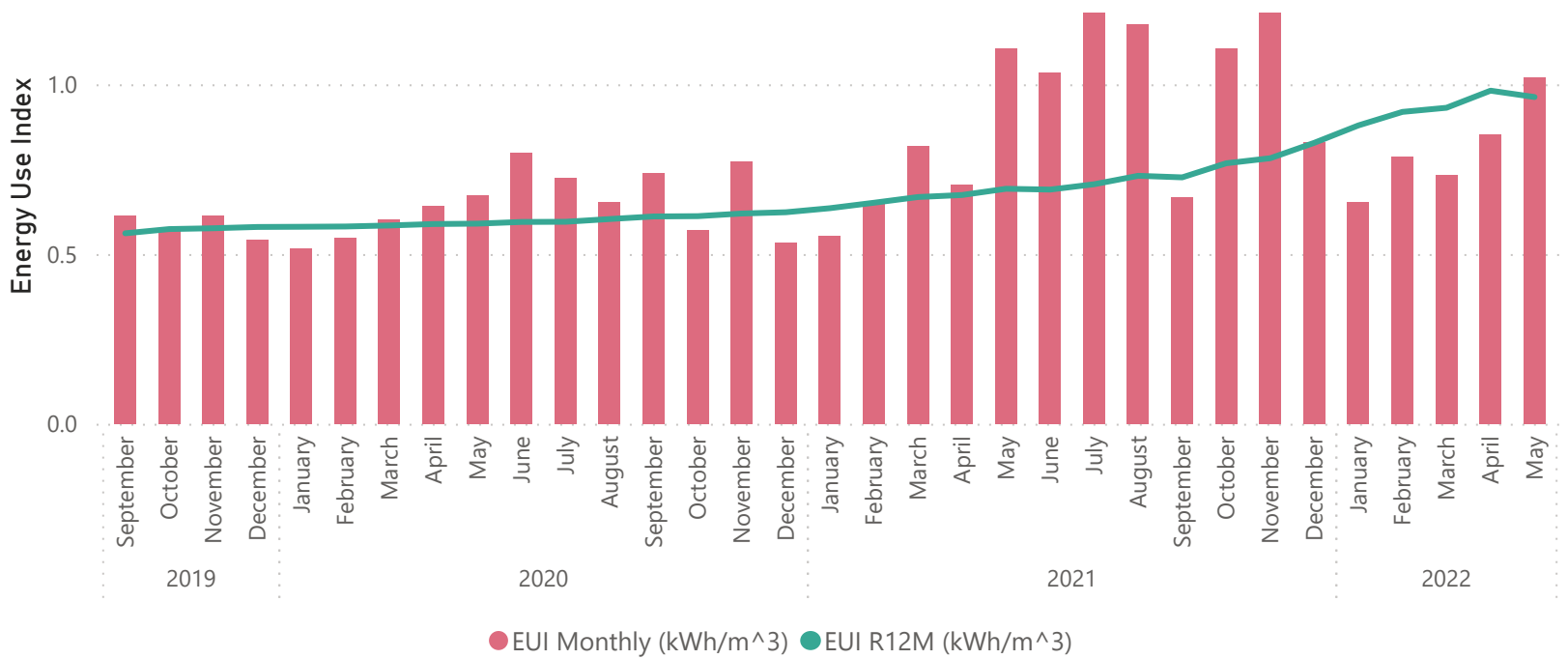


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

Johnson and Braemar Rd Pump Stations

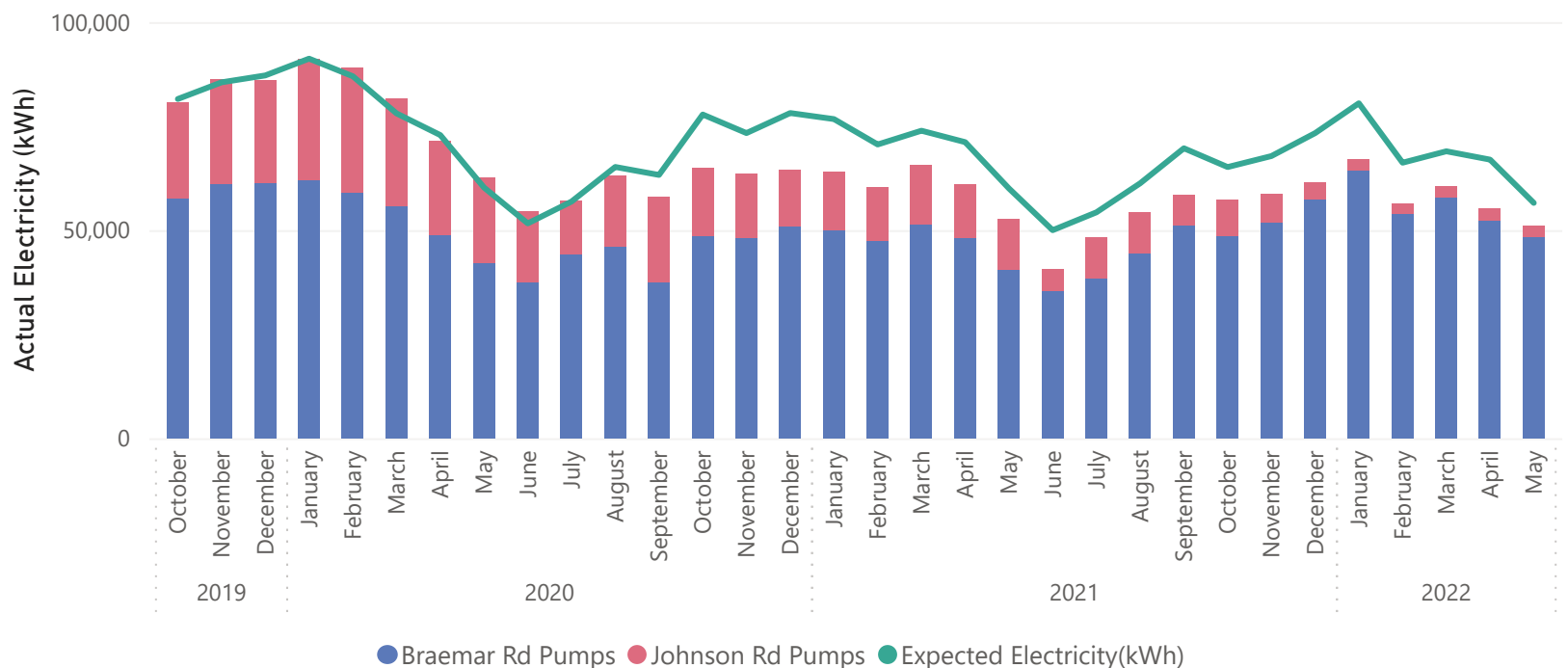
<p>\$1,224 Monthly Energy Cost Savings</p>	<p>5,534 Elec. Savings (kWh/mo)</p>	<p>10% Elec. Savings (%)</p>	<p>111,606 R12M Electricity Savings (kWh/yr)</p>	<p>791 CO2e Savings (kg/mo)</p>
<p>\$16,042 R12M Energy Cost Savings</p>				<p>14,765 R12M CO2e Savings (kg/yr)</p>

Comments:

It is clear from the combined monitoring how the new, more efficient pumps (installed September 2020) at Braemar Road greatly contribute to the collective savings. On an EUI basis, even before the more efficient pumps were installed, Braemar Road was pumping water more efficiently than Johnson Rd.

Johnson Rd and Braemar Rd pump stations both achieved savings independently from one another. When viewed as a network of pumps, savings achieved over the past year are consistent, although savings are gradually decreasing over the past six months.

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

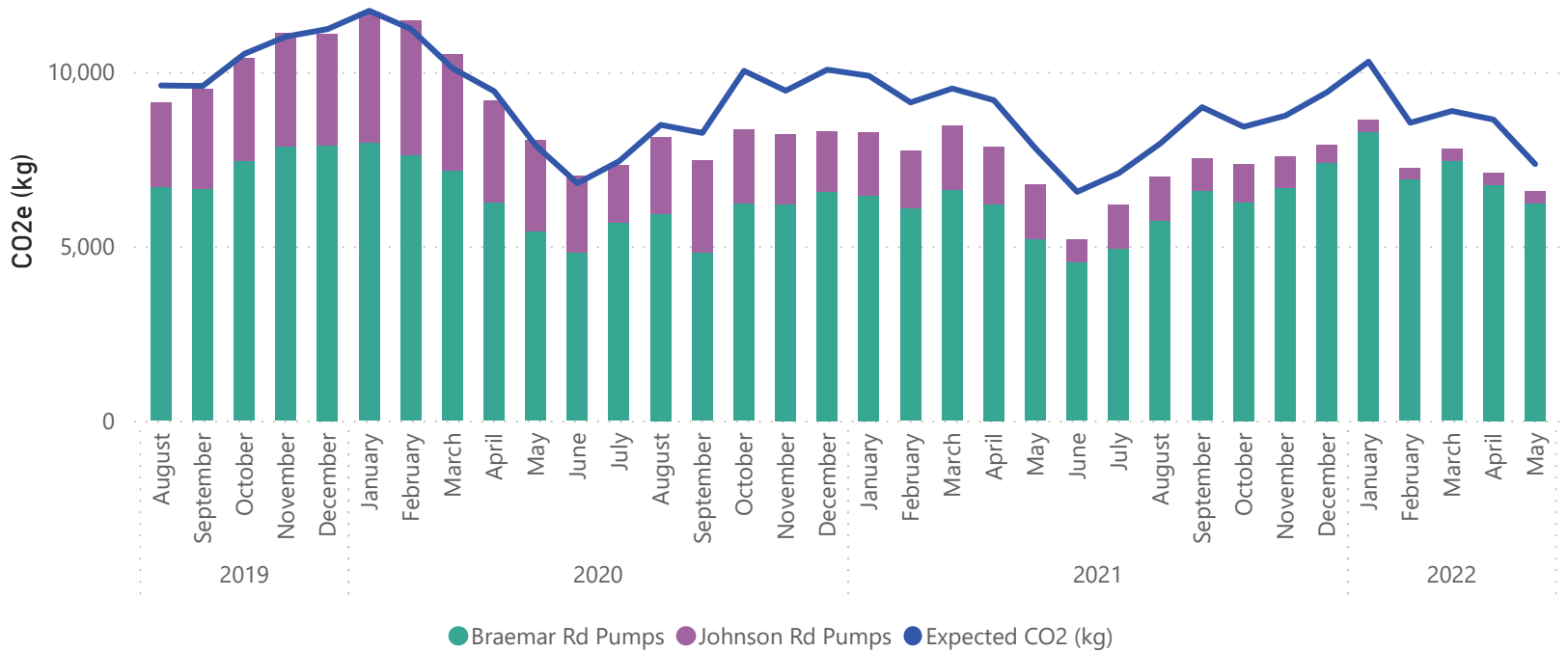


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

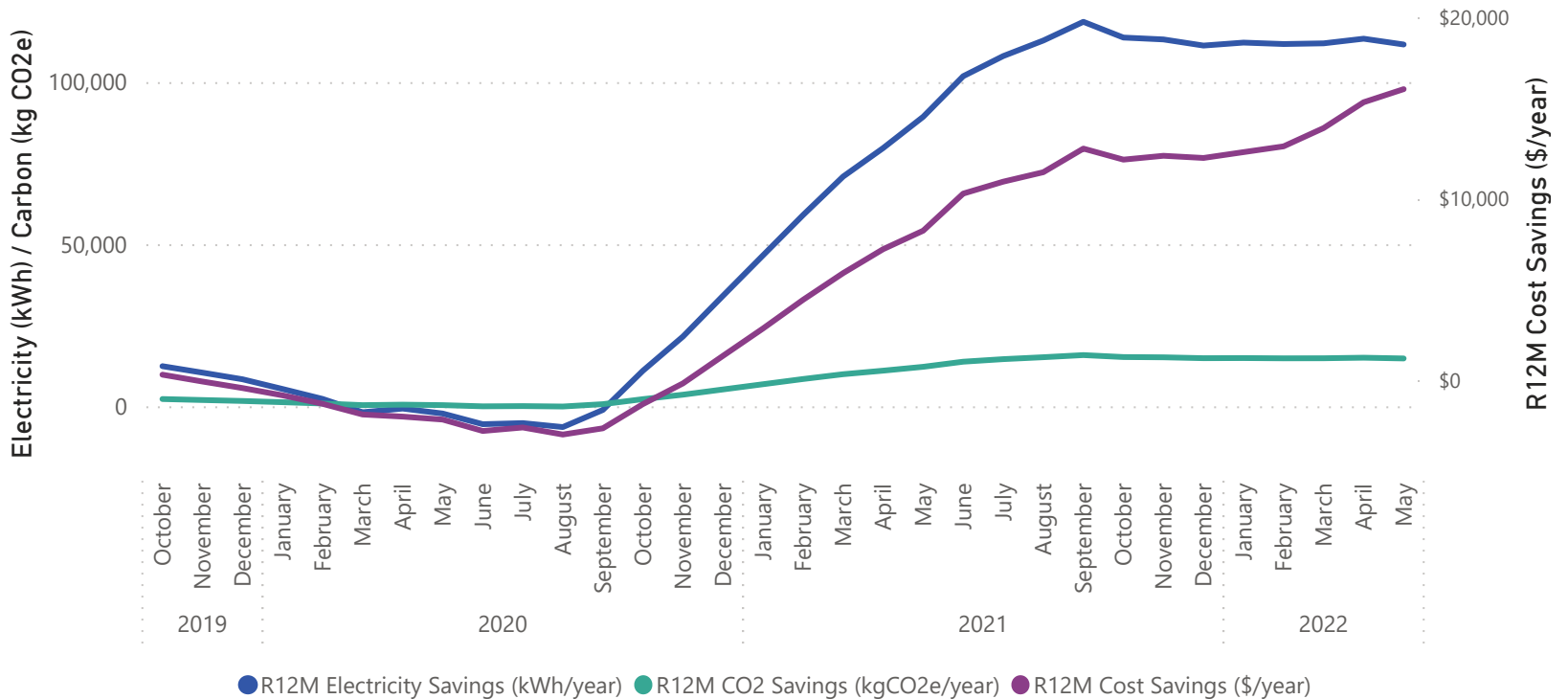
Whakatane District Council

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

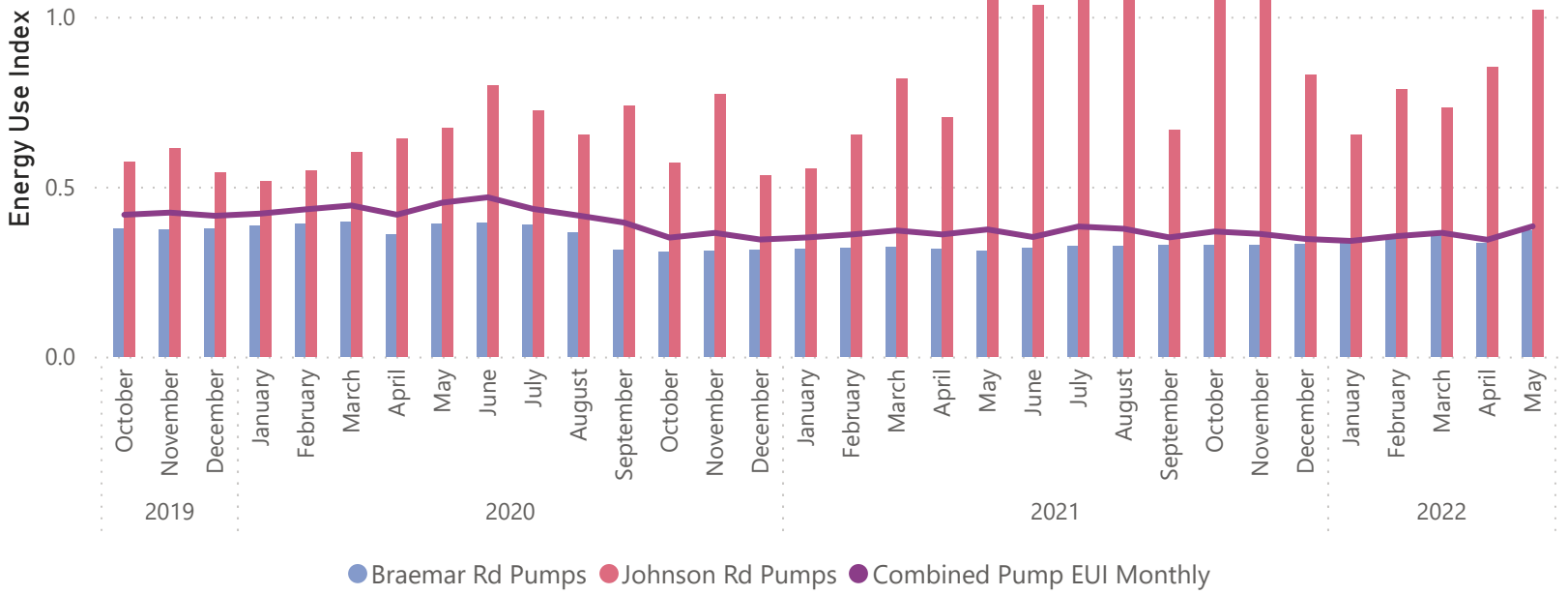


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

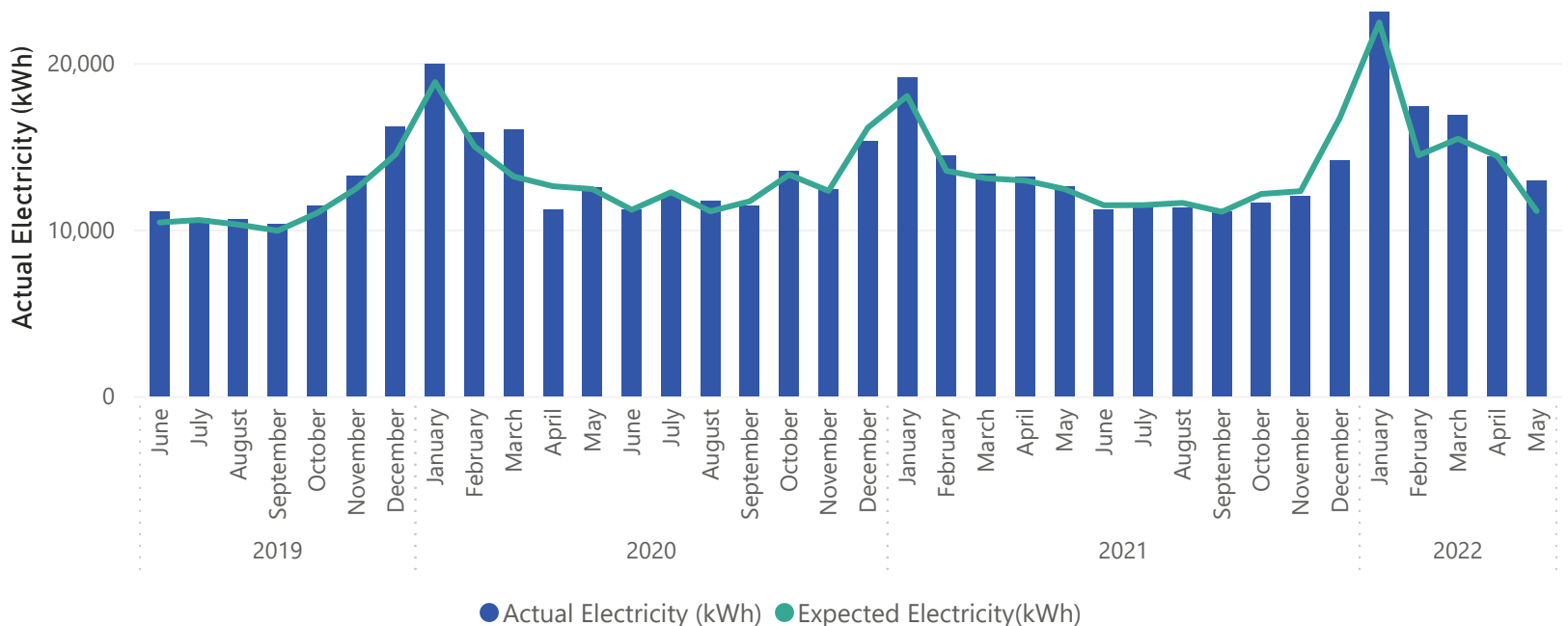
Bridger Glade Pump Station

<p>-\$340 Monthly Energy Cost Savings</p>	<p>-1,850 Elec. Savings (kWh/mo)</p>	<p>-17% Elec. Savings (%)</p>	<p>-2,783 R12M Electricity Savings (kWh/yr)</p>	<p>-238 CO2e Savings (kg/mo)</p>
<p>-\$511 R12M Energy Cost Savings</p>				<p>-358 R12M CO2e Savings (kg/yr)</p>

Comments:

Electricity demand in May 2022 has reduced further from peak demand in January 2022. Months of high demand have typically used more electricity than expected. This may indicate that during periods of high demand the pump station is operating outside of its best efficiency point.

Bridger Glade Pumps Electricity Use Compared to Baseline (kWh)

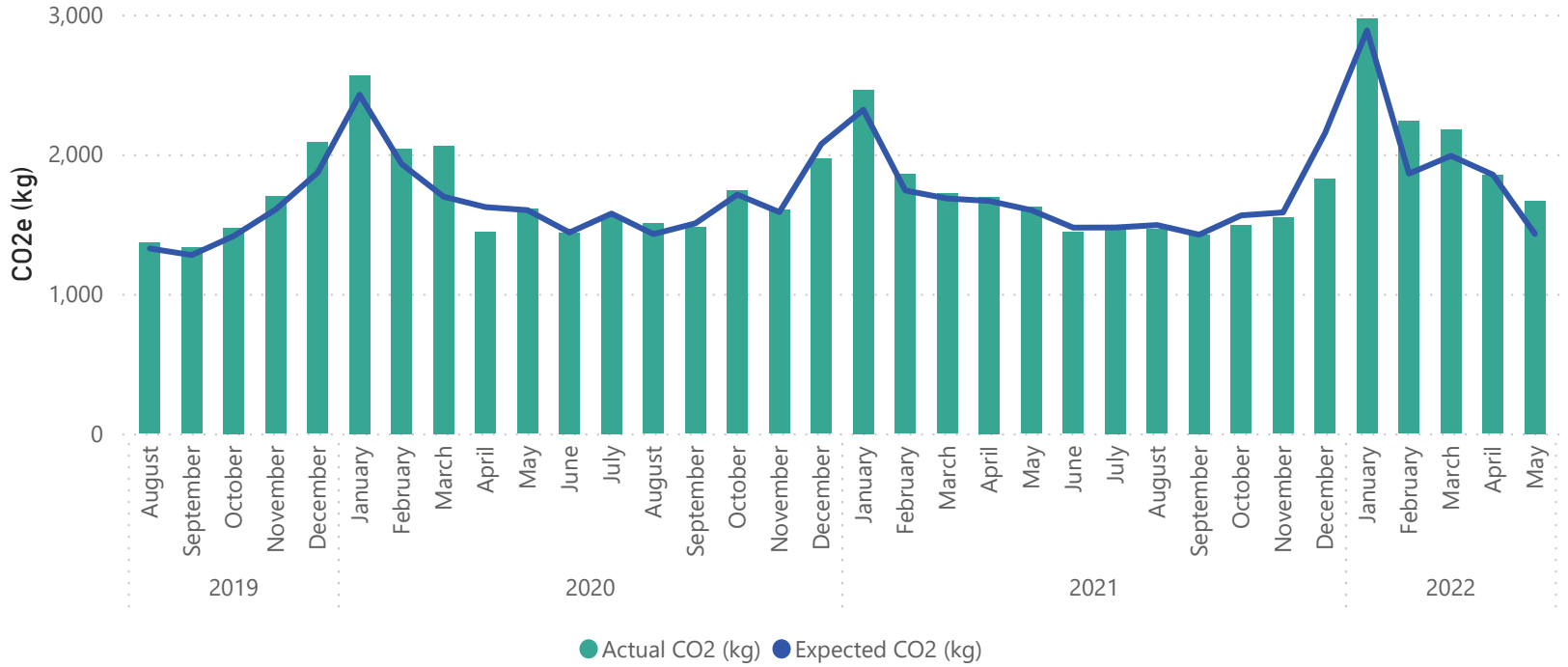


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

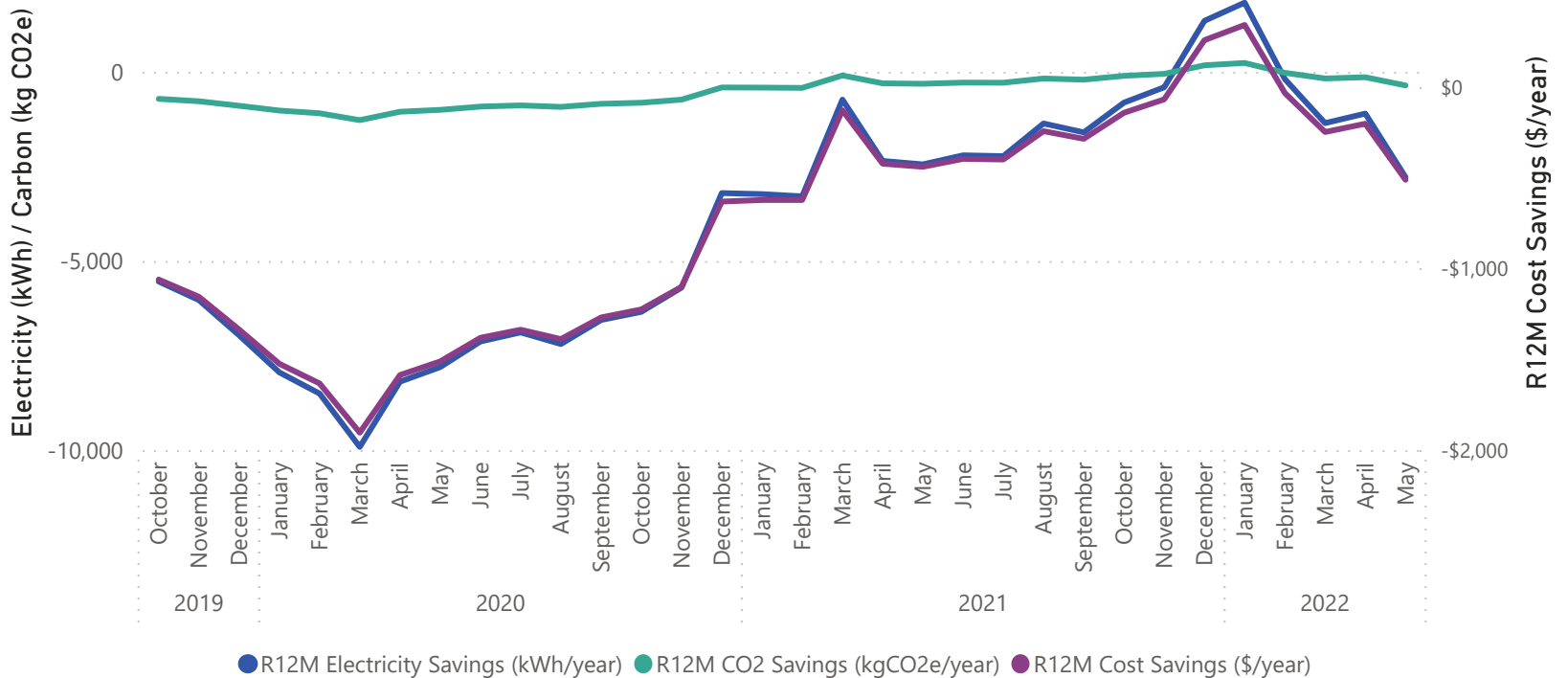
Whakatane District Council

Bridger Glade Pump Station

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



Bridger Glade Pumps Rolling 12 Month Savings

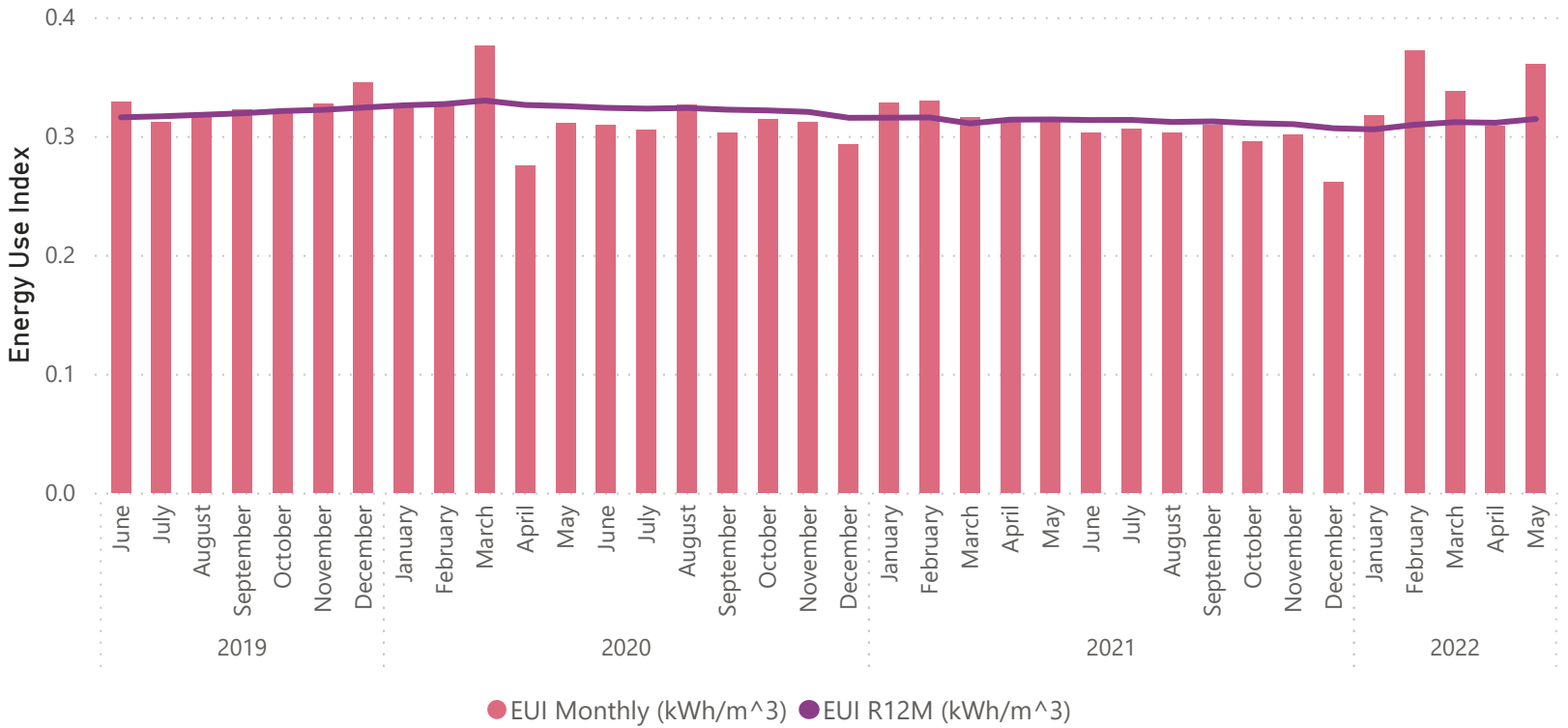


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

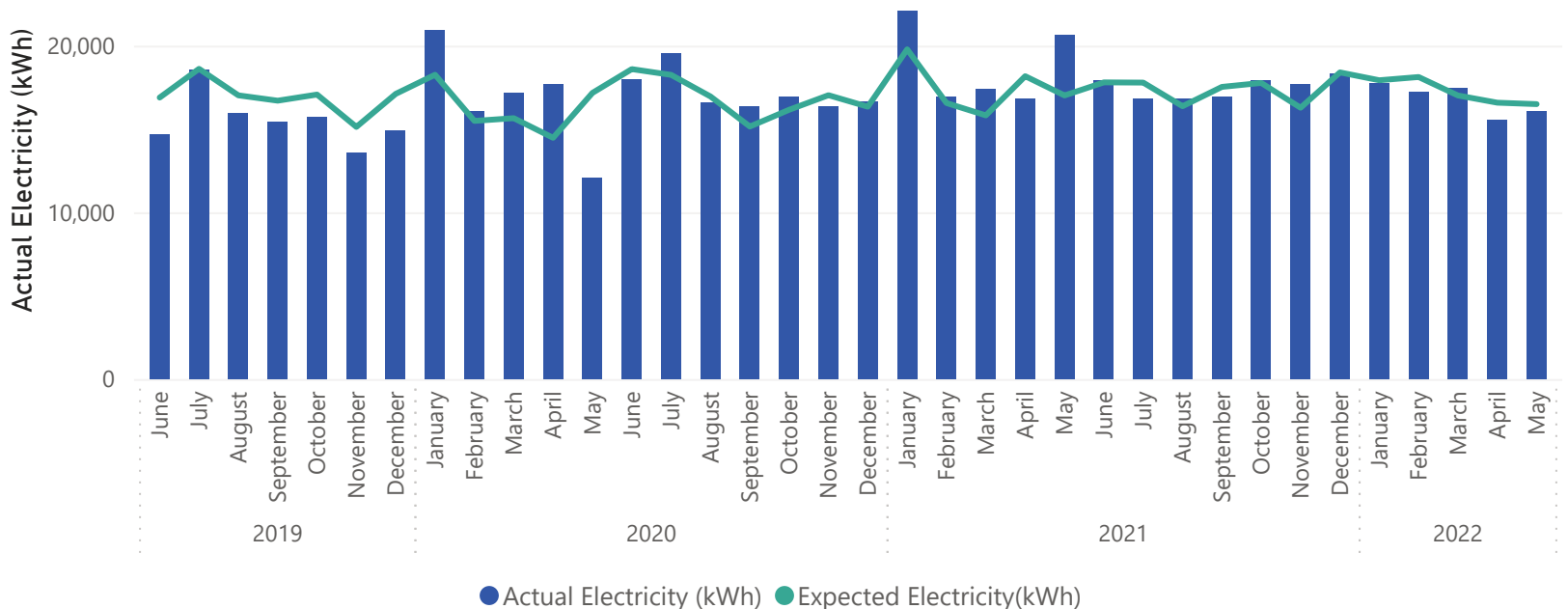
Ohope Oxidation Ponds

<p>\$73 Monthly Energy Cost Savings</p>	<p>408 Elec. Savings (kWh/mo)</p>	<p>2% Elec. Savings (%)</p>	<p>1,478 R12M Electricity Savings (kWh/yr)</p>	<p>53 CO2e Savings (kg/mo)</p>
<p>\$265 R12M Energy Cost Savings</p>				<p>190 R12M CO2e Savings (kg/yr)</p>

Comments:

Ohope oxidation pond electricity use was less than baseline in May 2022. The monthly EUI (kWh/m³) was marginally higher than the average over the past 12 months.

Ohope Oxidation Ponds Electricity Use Compared to Baseline (kWh)

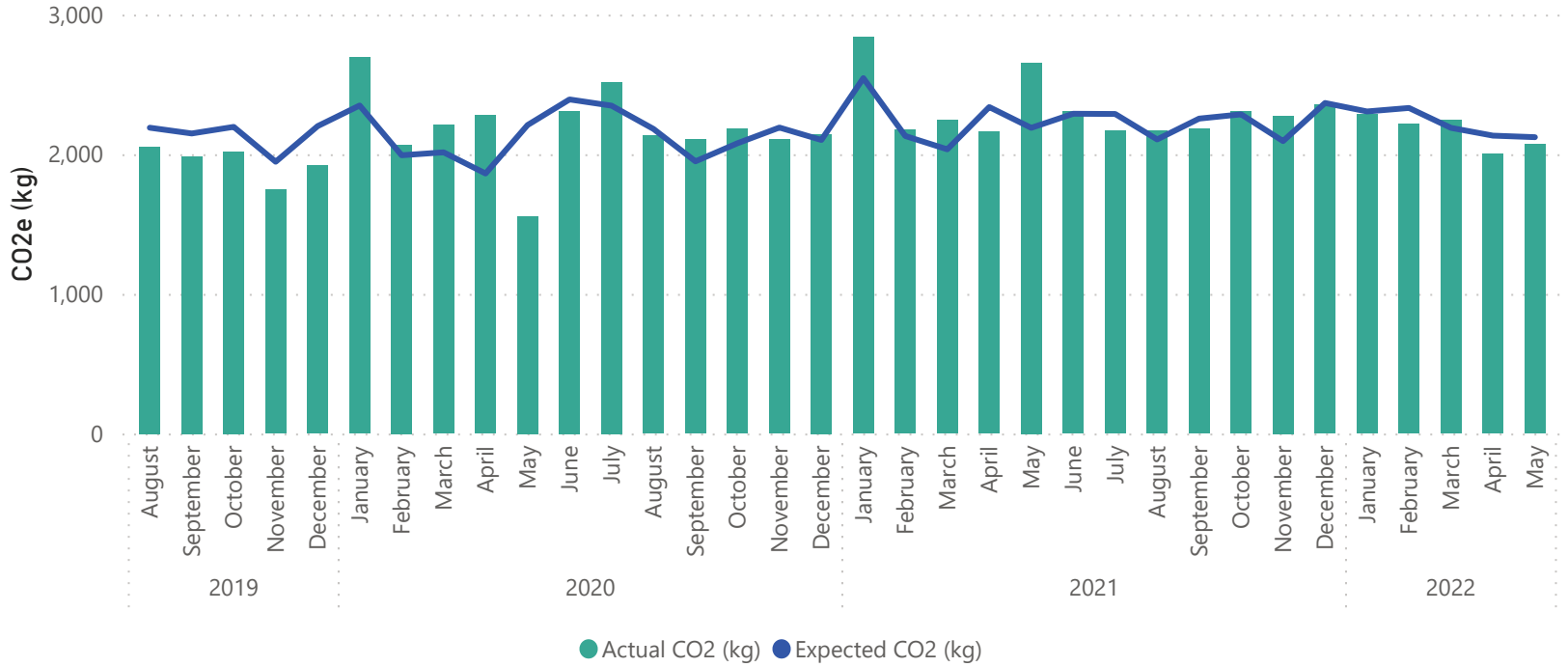


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

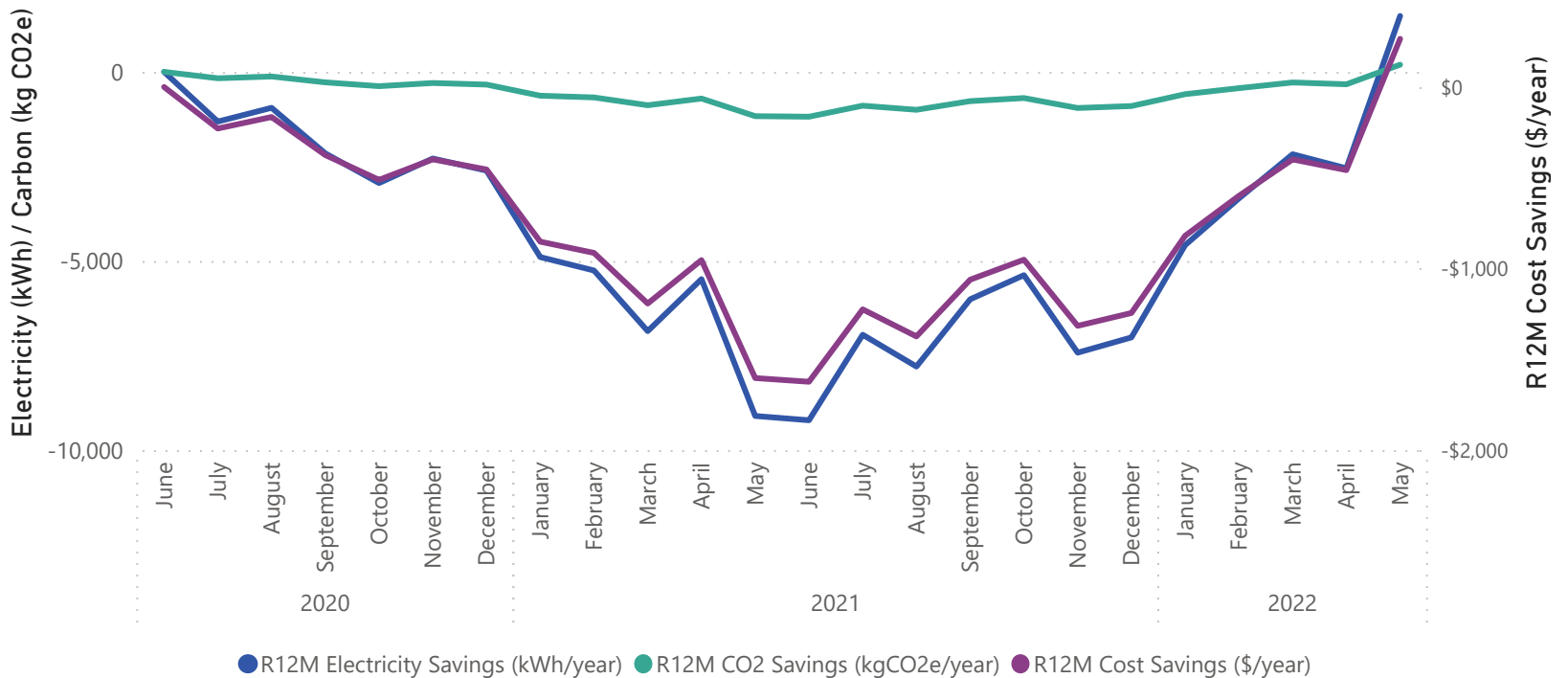
Whakatane District Council

Ohope Oxidation Ponds

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



Ohope Oxidation Ponds Rolling 12 Month Savings

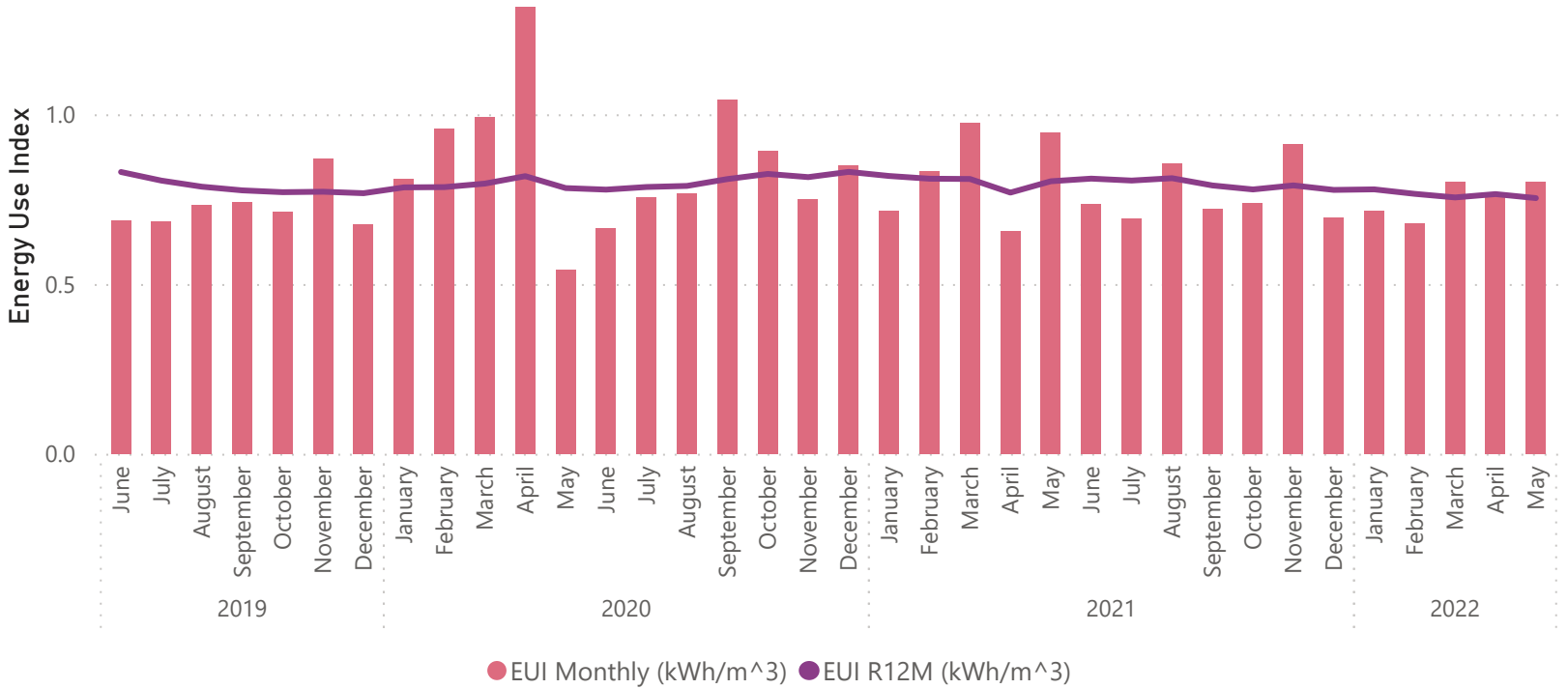


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

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

Whakatane District Council

Whakatane Oxidation Ponds

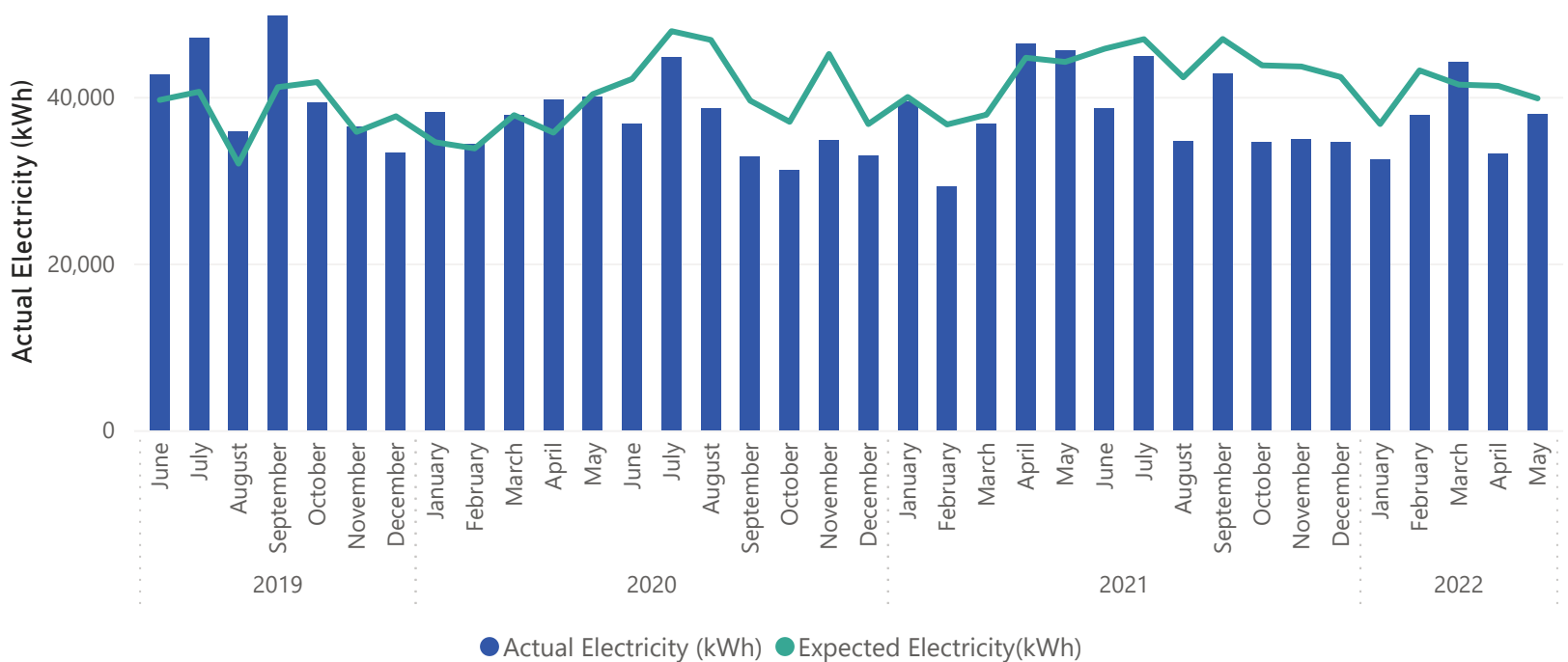
<p>\$402 Monthly Energy Cost Savings</p>	<p>1,869 Elec. Savings (kWh/mo)</p>	<p>5% Elec. Savings (%)</p>	<p>63,455 R12M Electricity Savings (kWh/yr)</p>	<p>241 CO2e Savings (kg/mo)</p>
<p>\$9,524 R12M Energy Cost Savings</p>				<p>8,167 R12M CO2e Savings (kg/yr)</p>

Comments:

The Whakatane Oxidation Ponds have two ICPs, the aerators are set up as a time of use (TOU) account (supplied by Mercury), and the pumps are non-TOU (supplied by Genesis). The variability in electricity is largely attributed to the NHH account. Aerators are supplied by the TOU account and generally run for similar amounts of time each month.

Demand in May 2022 is less than baseline and the rolling 12 month EUI has been decreasing, which is good.

Whakatane Oxidation Ponds Electricity Use Compared to Baseline (kWh)

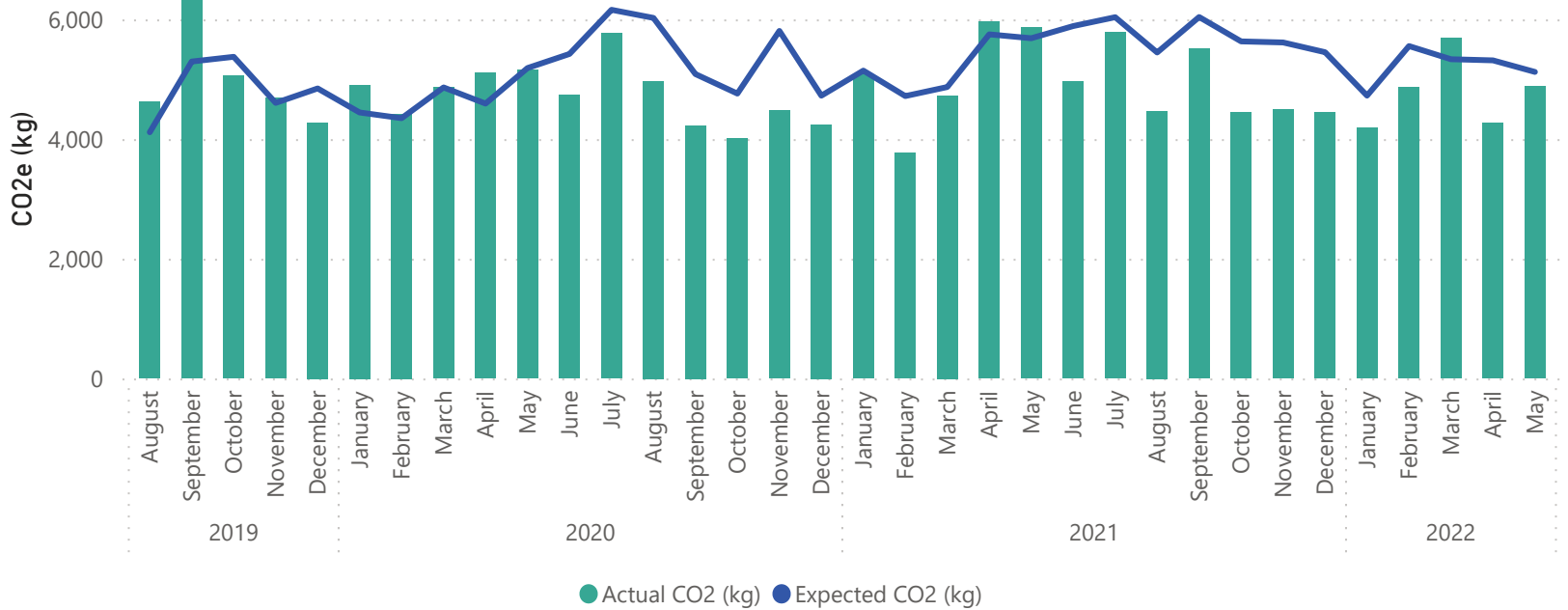


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

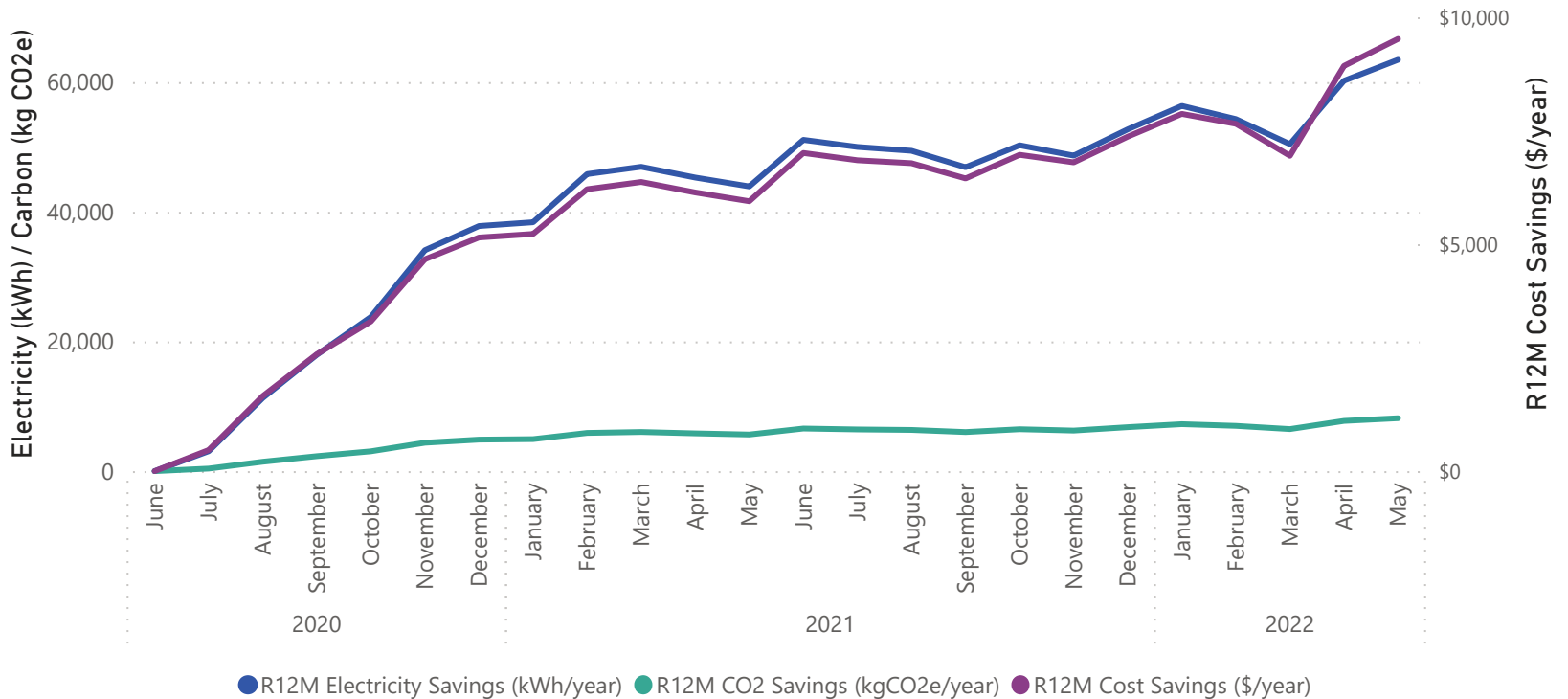
Whakatane District Council

Whakatane Oxidation Ponds

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



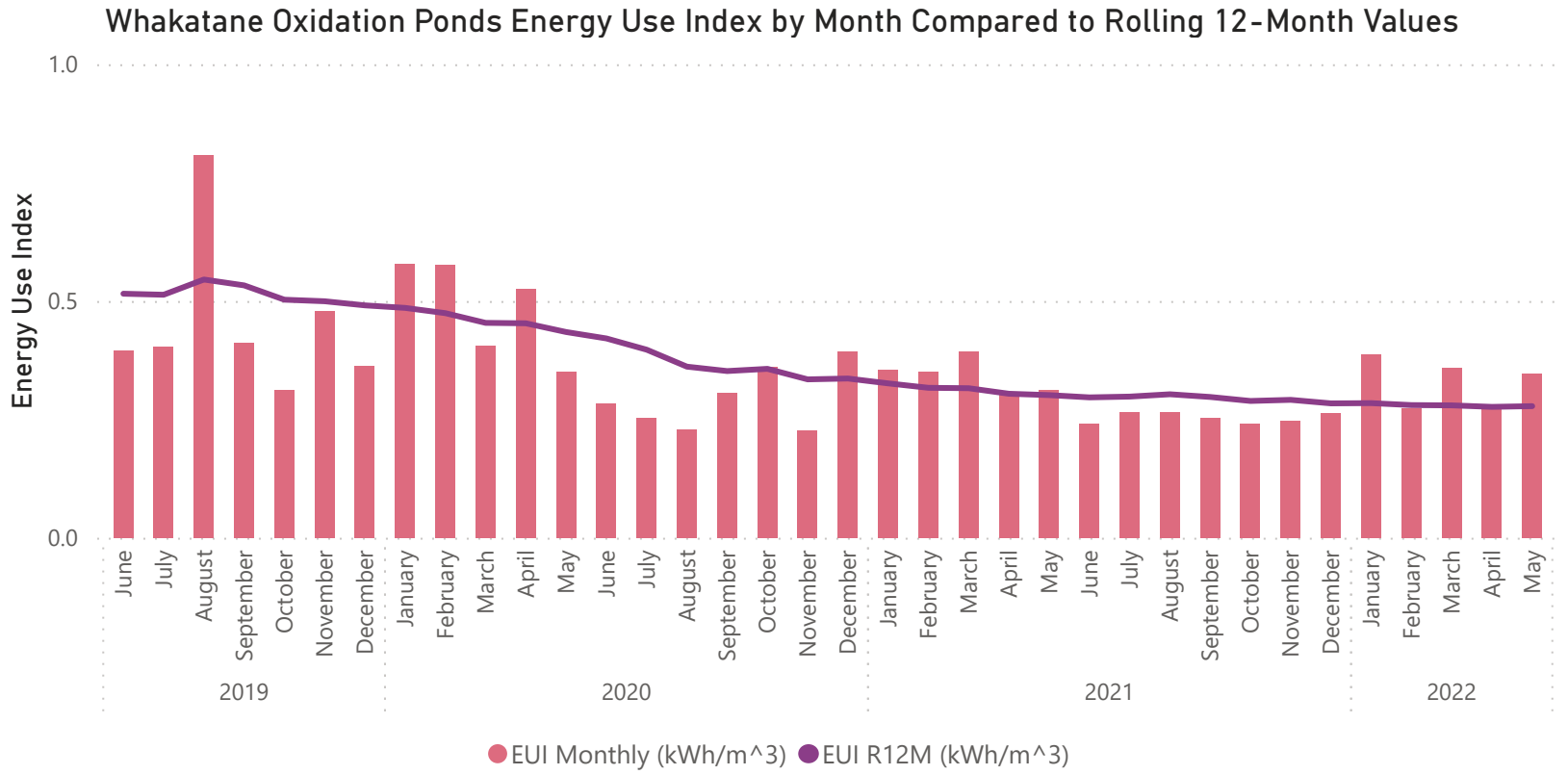
Whakatane Oxidation Ponds Rolling 12 Month Savings



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

Whakatane District Council

Whakatane Oxidation Ponds



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

Whakatane District Council

McAlister Street and Rose Garden Pump Stations

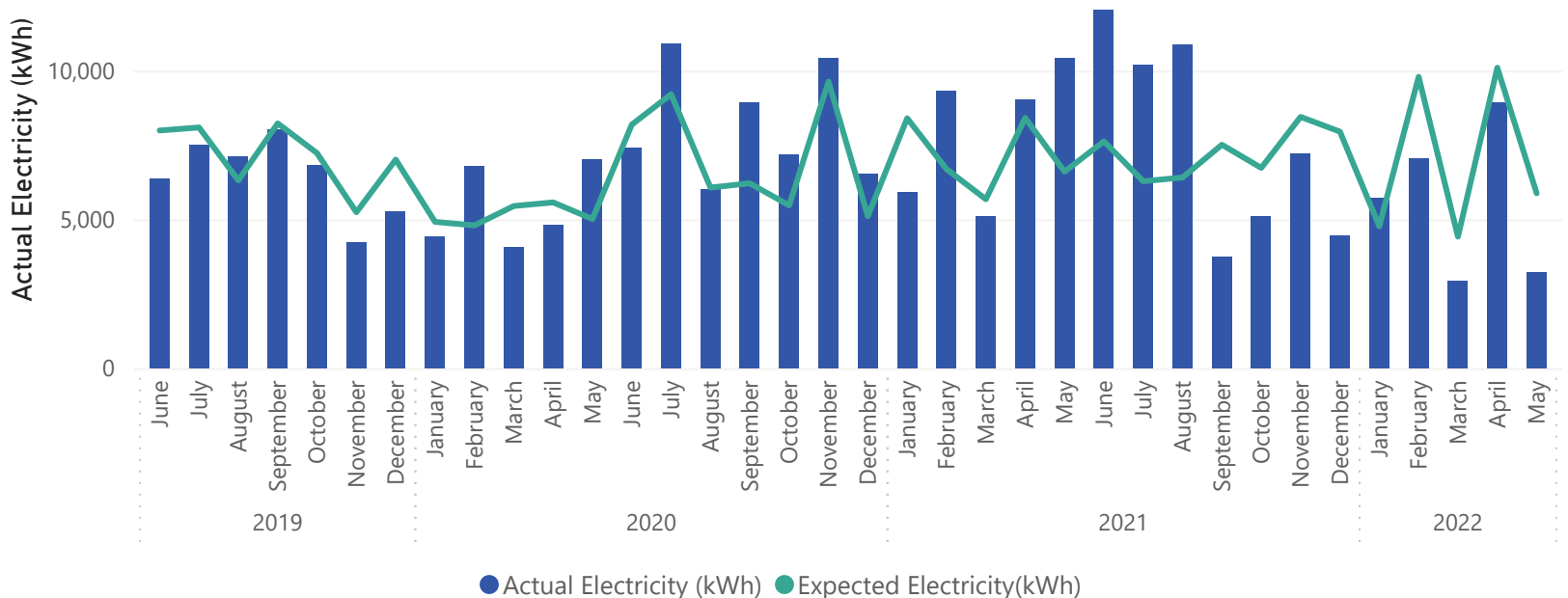
<p>\$616 Monthly Energy Cost Savings</p>	<p>2,649 Elec. Savings (kWh/mo)</p>	<p>45% Elec. Savings (%)</p>	<p>4,369 R12M Electricity Savings (kWh/yr)</p>	<p>341 CO2e Savings (kg/mo)</p>
<p>\$3,499 R12M Energy Cost Savings</p>				<p>562 R12M CO2e Savings (kg/yr)</p>

Comments:

A baseline for McAlister St and Rose Garden Pumps was created that 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 Jan 2019 to Dec 2020.

About one third of the rainfall in May 2022 aligns with the billing periods for the month of May. Rainfall later in May will be captured by the subsequent invoices and monitoring. The pump stations used significantly less electricity than expected for the month.

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

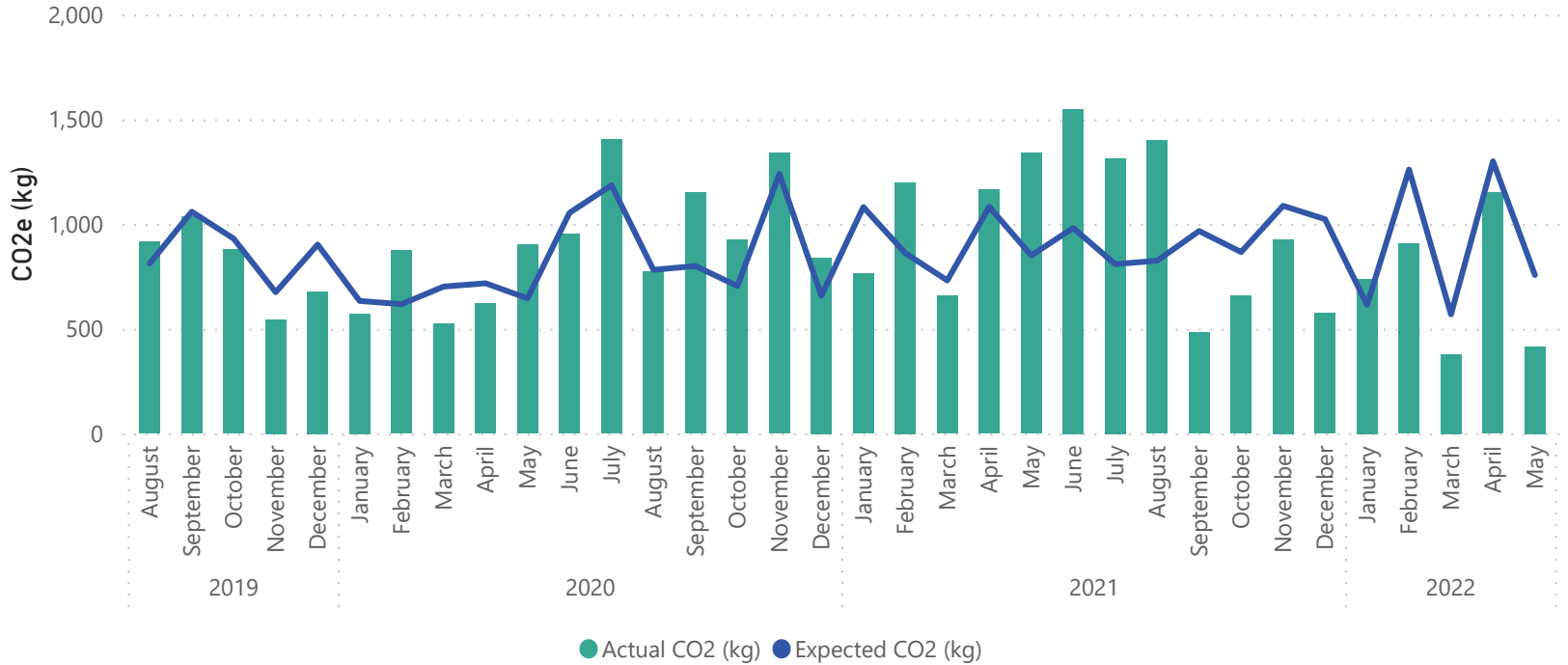


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time

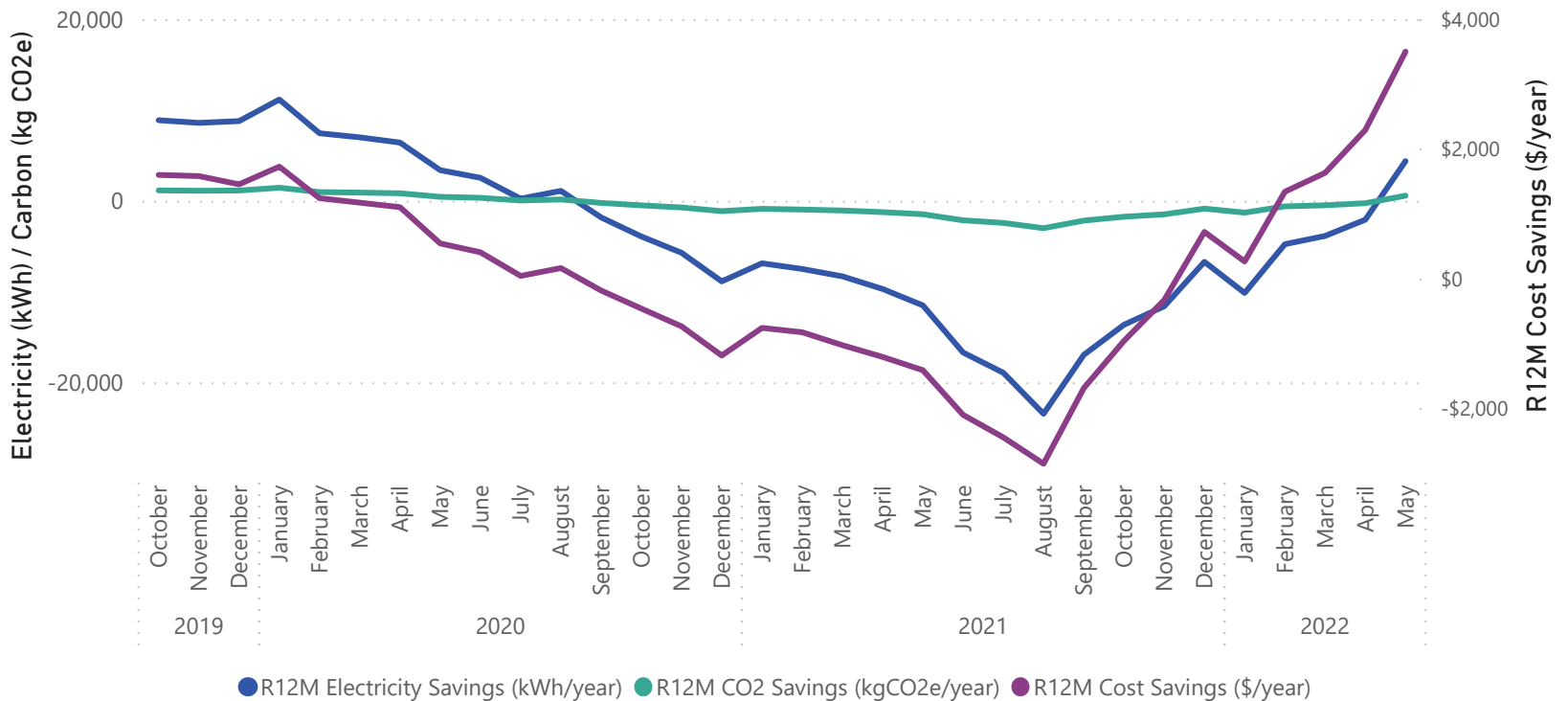
Whakatane District Council

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