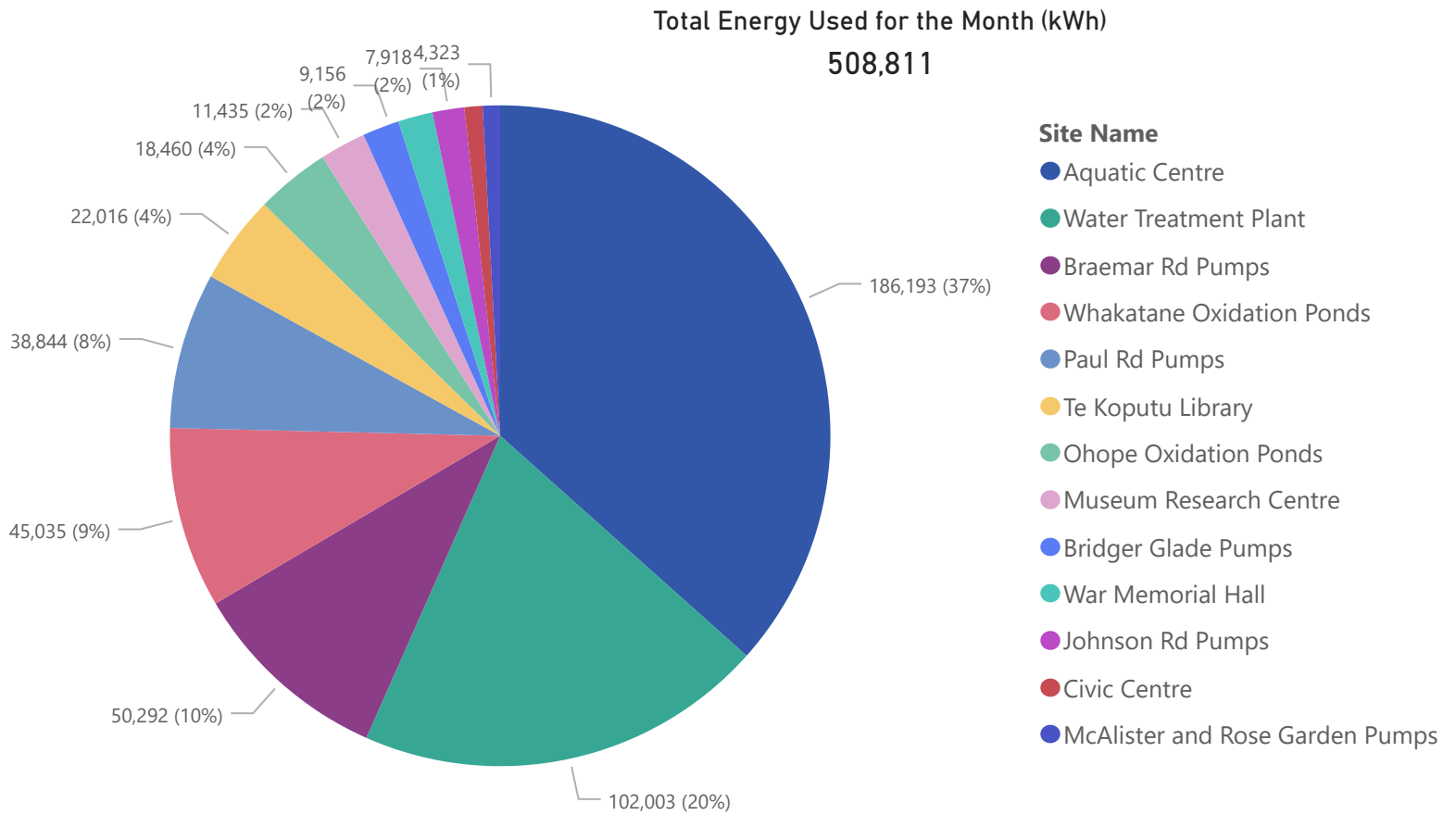


Whakatane District Council

Summary

<p>\$7,594</p> <p>Monthly Energy Cost Savings</p>	<p>39,107</p> <p>Elec. Savings (kWh/mo)</p>	<p>8%</p> <p>Elec. Savings (%)</p>	<p>343,517</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>3,306</p> <p>CO2e Savings (kg/mo)</p>
<p>\$117,304</p> <p>R12M Energy Cost Savings</p>	<p>-8,776</p> <p>Gas. Savings (kWh/mo)</p>	<p>-15%</p> <p>Gas. Savings (%)</p>	<p>740,612</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>205,590</p> <p>R12M CO2e Savings (kg/yr)</p>

Total Energy (kWh/Month)

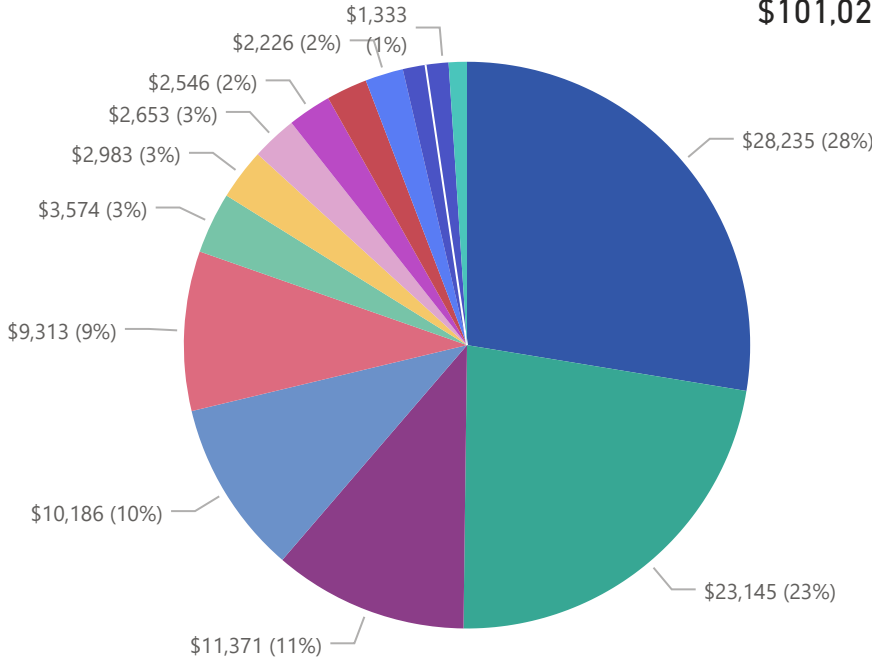


Whakatane District Council Summary

Energy Cost (\$/Month)

Energy Cost for the Month (\$)

\$101,021



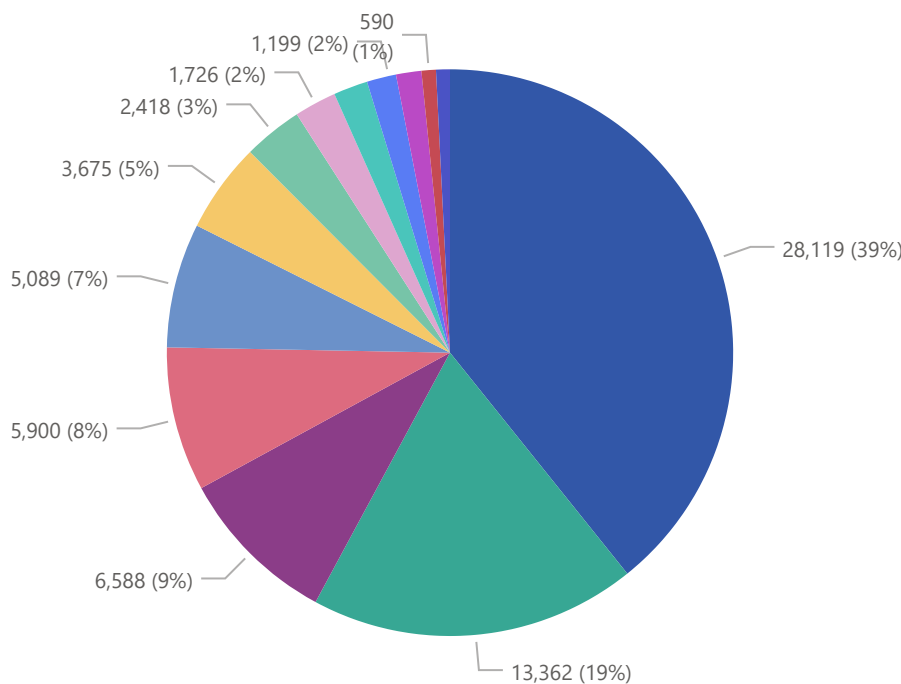
Site Name

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

Carbon Emissions (kgCO2e/Month)

Carbon Emissions for the Month (kgCO2e)

71,674

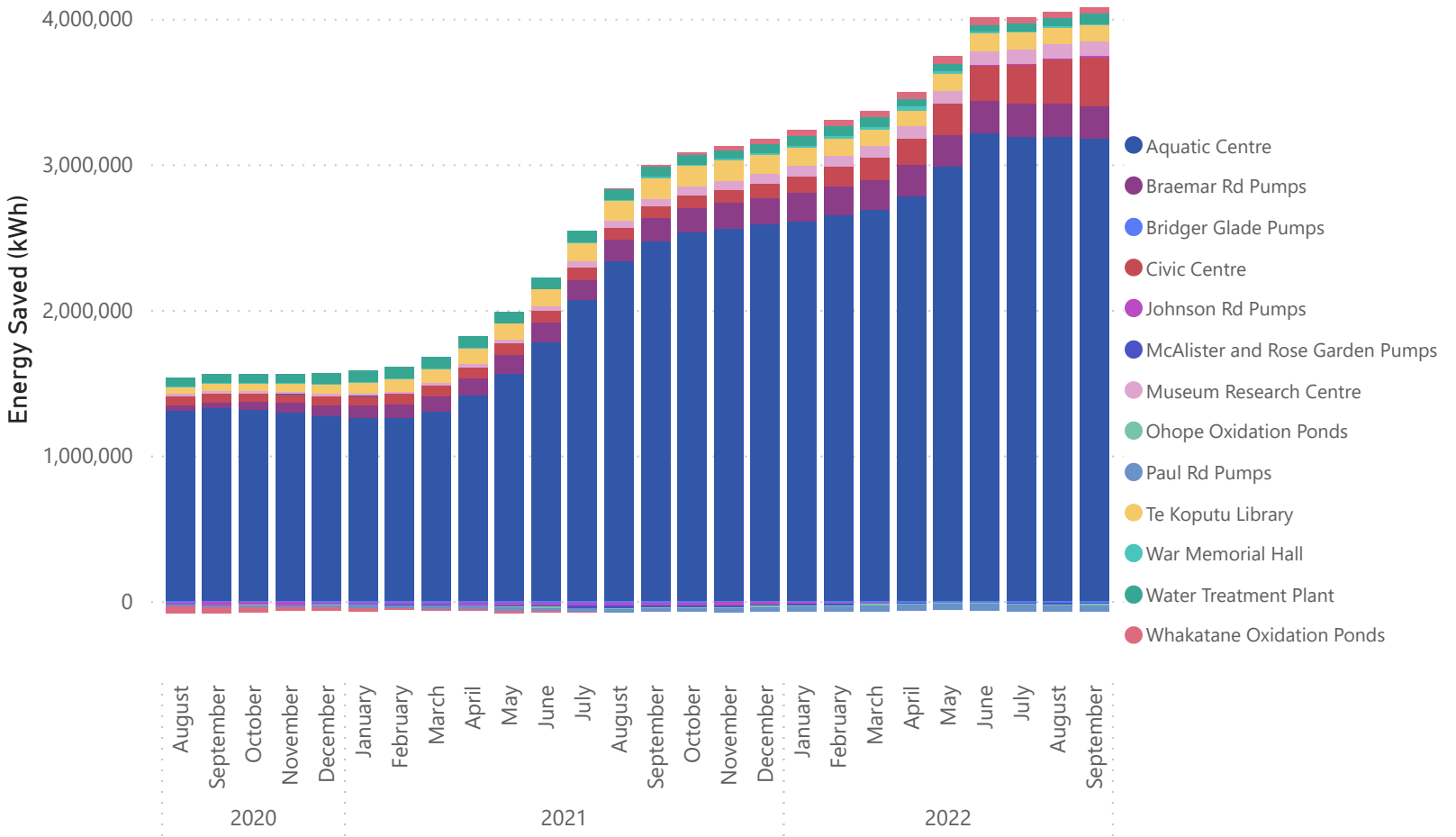


Site Name

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

Whakatane District Council Summary

Cumulative Energy Savings (kWh)



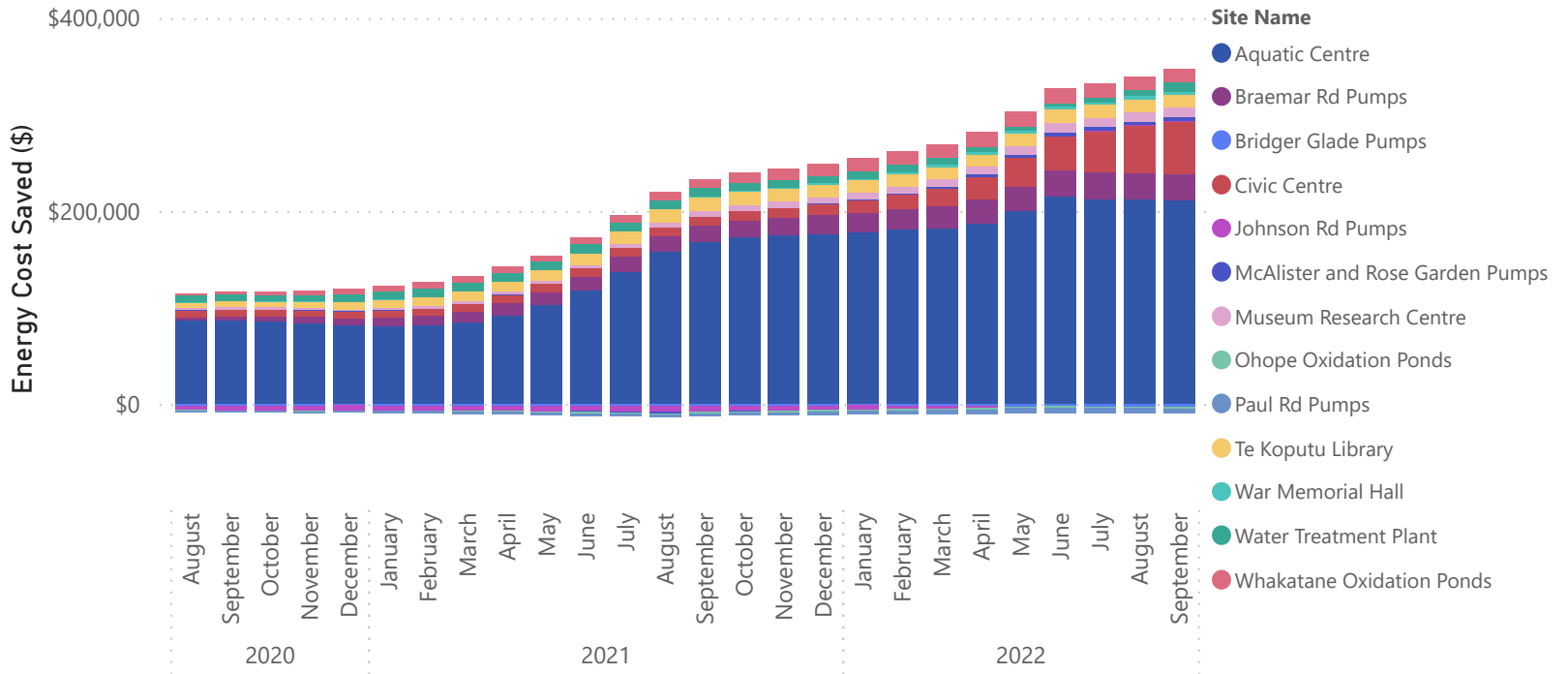
Note, cumulative savings are calculated starting July 2018

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

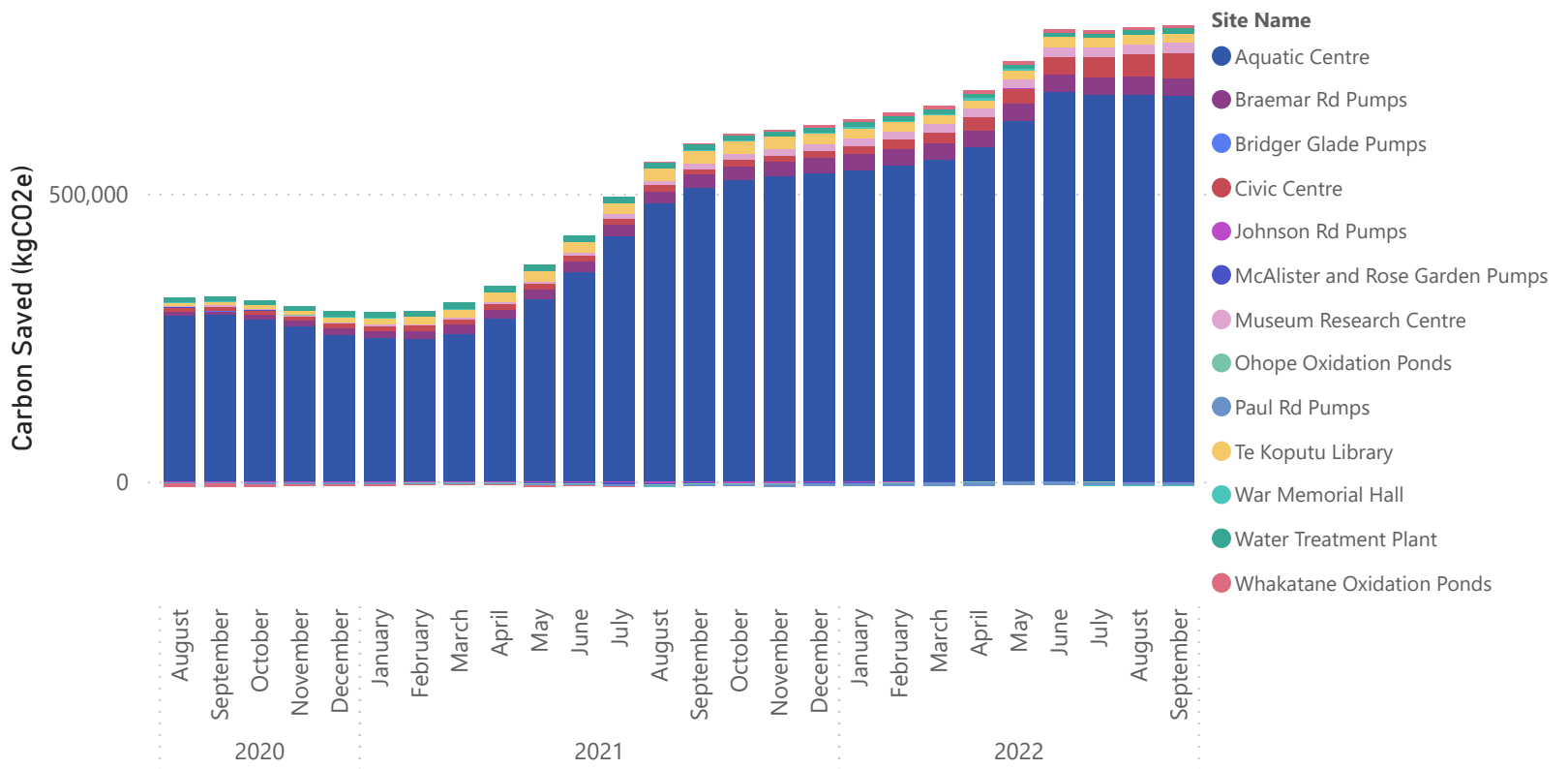
Summary

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>\$5,238 Monthly Energy Cost Savings</p>	<p>27,790 Elec. Savings (kWh/mo)</p>	<p>86% Elec. Savings (%)</p>	<p>251,450 R12M Electricity Savings (kWh/yr)</p>	<p>3,641 CO2e Savings (kg/mo)</p>
<p>\$45,950 R12M Energy Cost Savings</p>				<p>32,294 R12M CO2e Savings (kg/yr)</p>

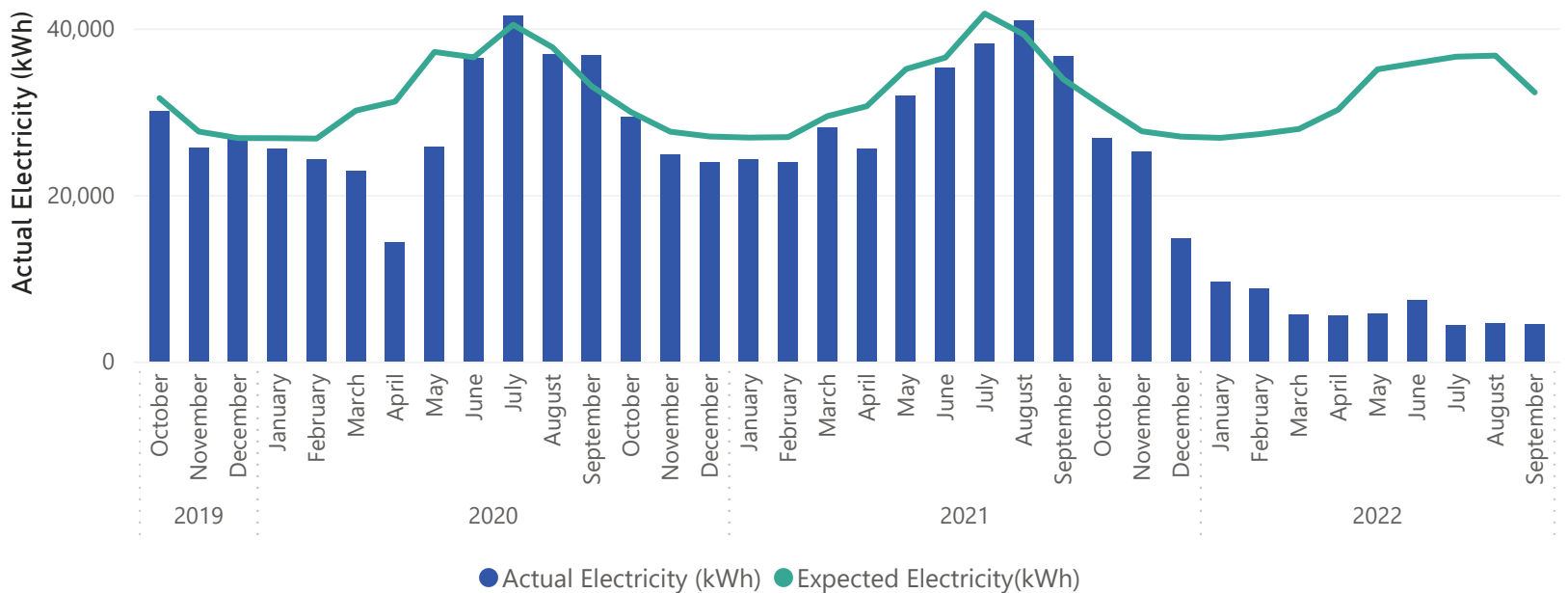
Comments:

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 2022, 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.

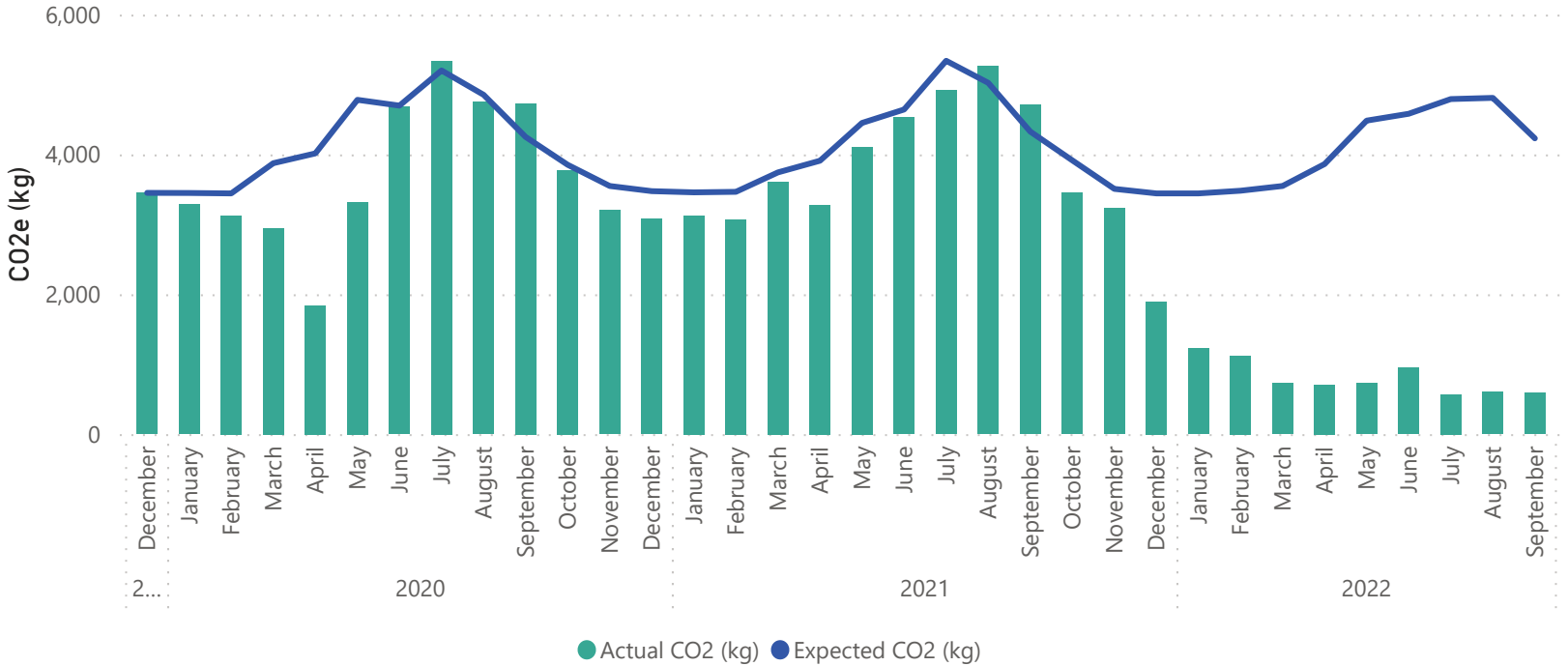
Civic Centre Electricity Use Compared to Baseline (kWh)



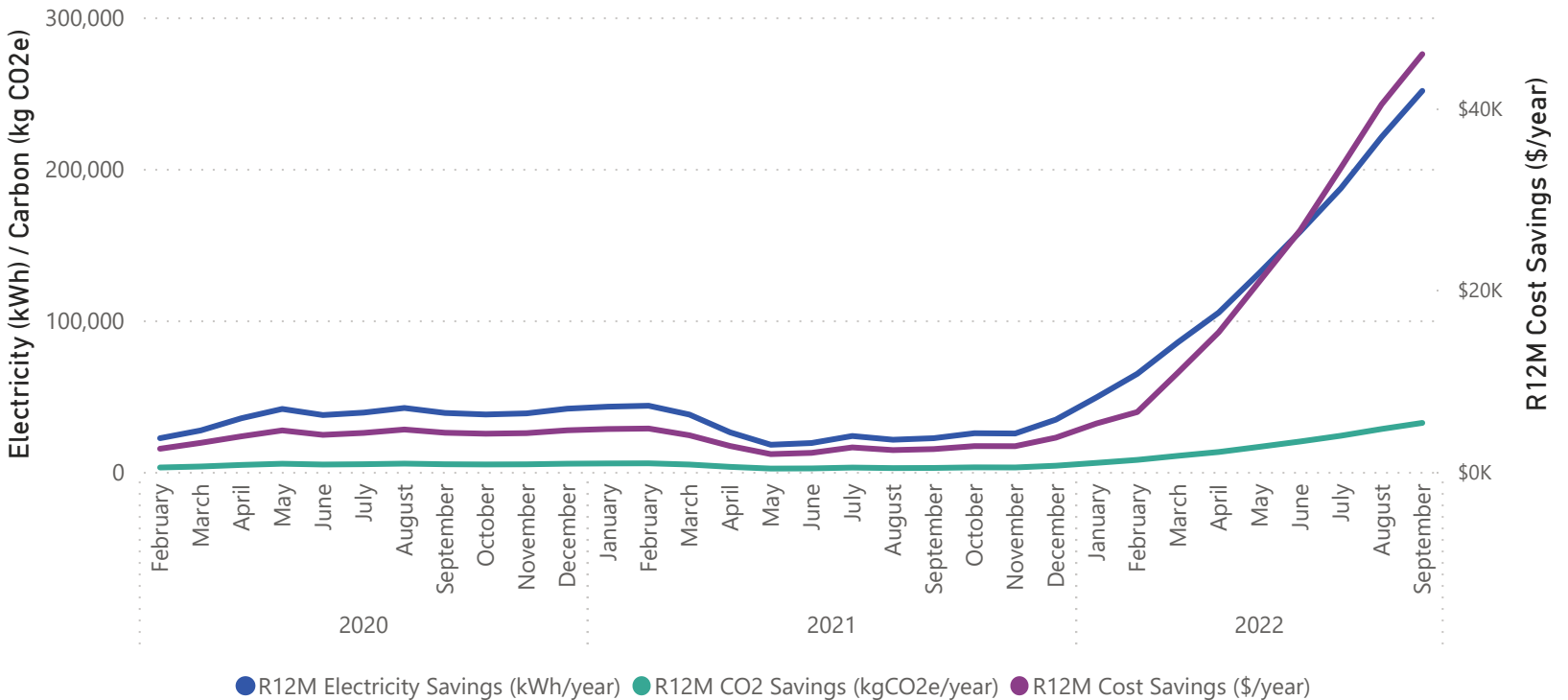
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

Whakatane District Council Civic Centre

Civic Centre Carbon Emissions Compared to Baseline (kg CO2e)



Civic Centre Rolling 12 Month Savings

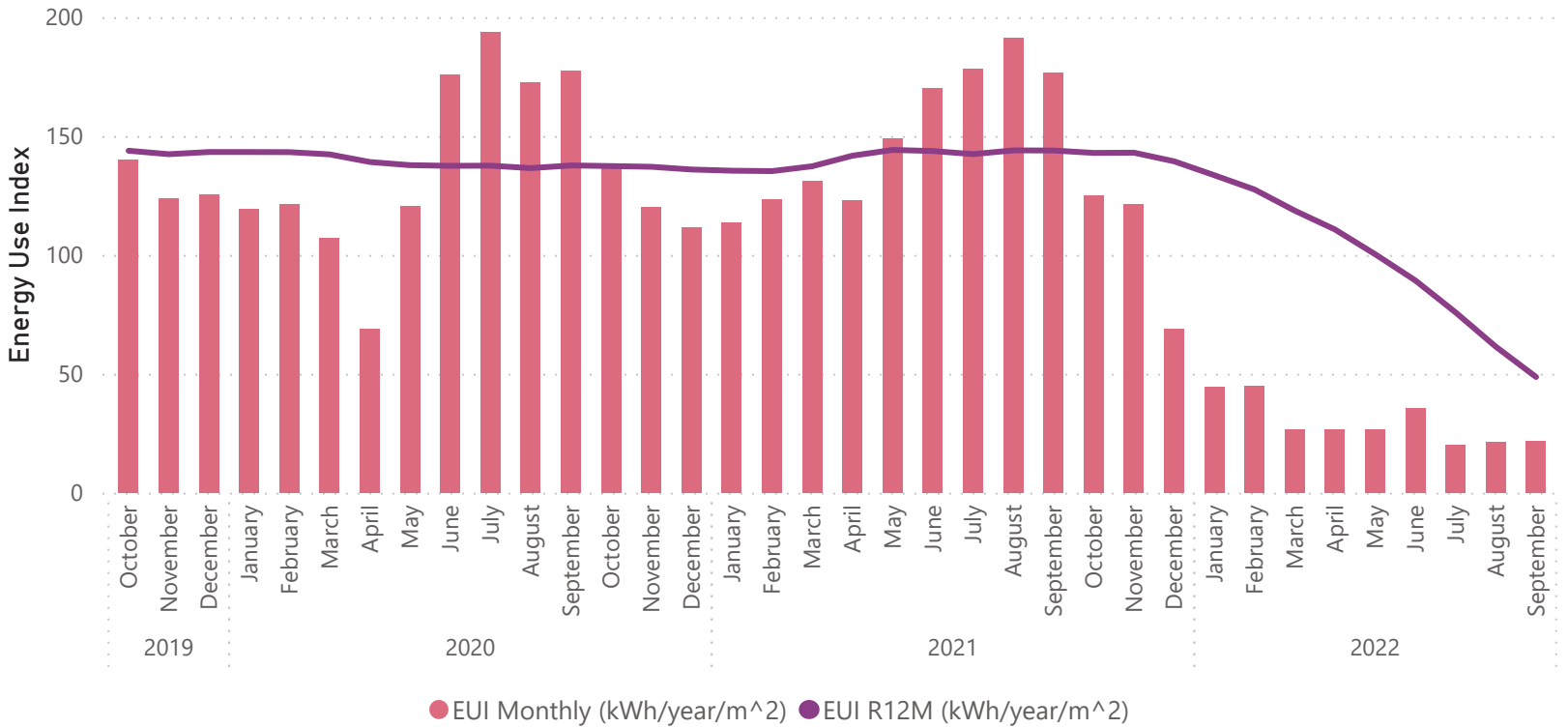


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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>-\$1,393</p> <p>Monthly Energy Cost Savings</p>	<p>-7,296 -6% -69,230</p> <p>Elec. Savings (kWh/mo) Elec. Savings (%) R12M Electricity Savings (kWh/yr)</p>			<p>-2,510</p> <p>CO2e Savings (kg/mo)</p>
<p>\$42,388</p> <p>R12M Energy Cost Savings</p>	<p>-7,510 -18% 772,940</p> <p>Gas. Savings (kWh/mo) Gas. Savings (%) R12M Gas Savings (kWh/yr)</p>			<p>159,133</p> <p>R12M CO2e Savings (kg/yr)</p>

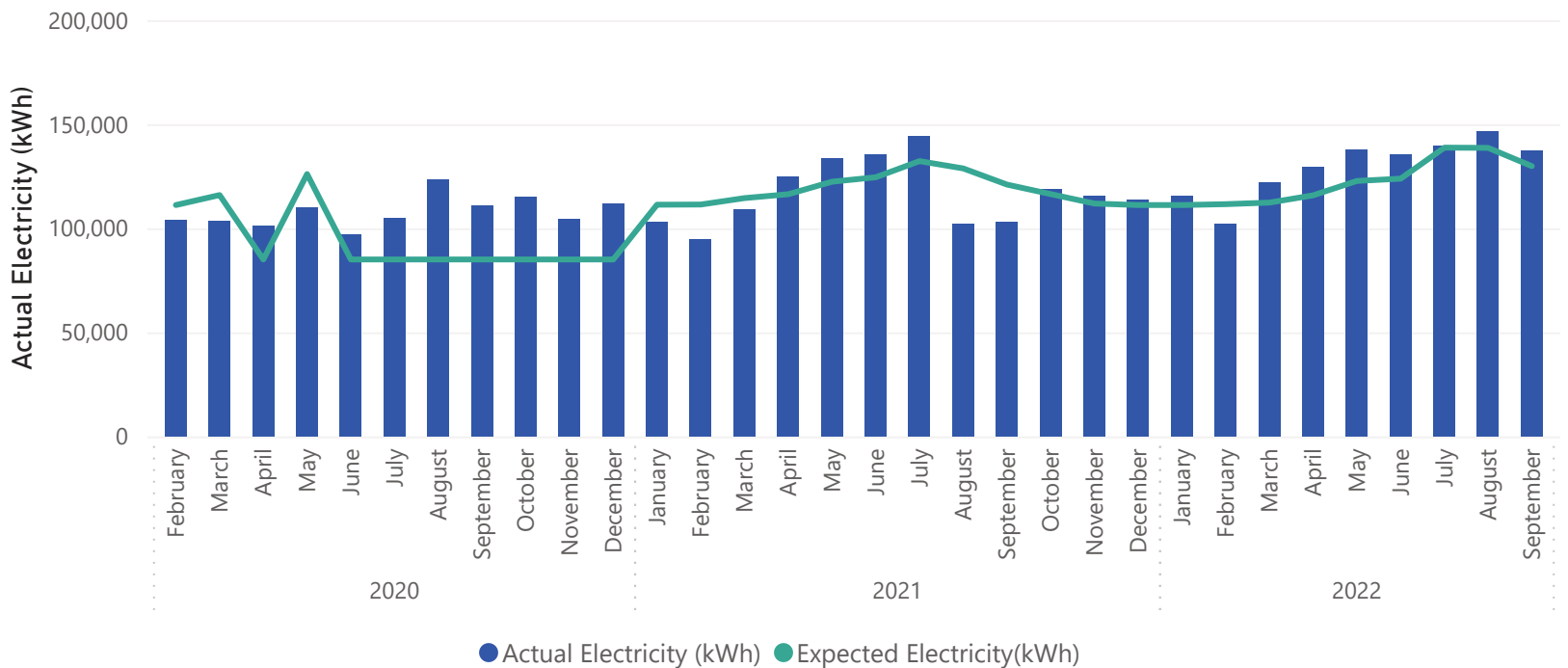
Comments:

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.

Both electricity and natural gas use were higher than expected in September 2022. Daily gas use was higher on 21 September than any other days in September. Water use was also high on 21 September. The EUI has been higher for the last three months, compared to the 12 month average, primarily due to increased gas use.

Rolling 12 month savings are decreasing, and will continue to decrease as a result from savings being measured against the new baseline. Savings can be increased by implementing new energy saving initiatives.

Aquatic Centre Electricity Use Compared to Baseline (kWh)

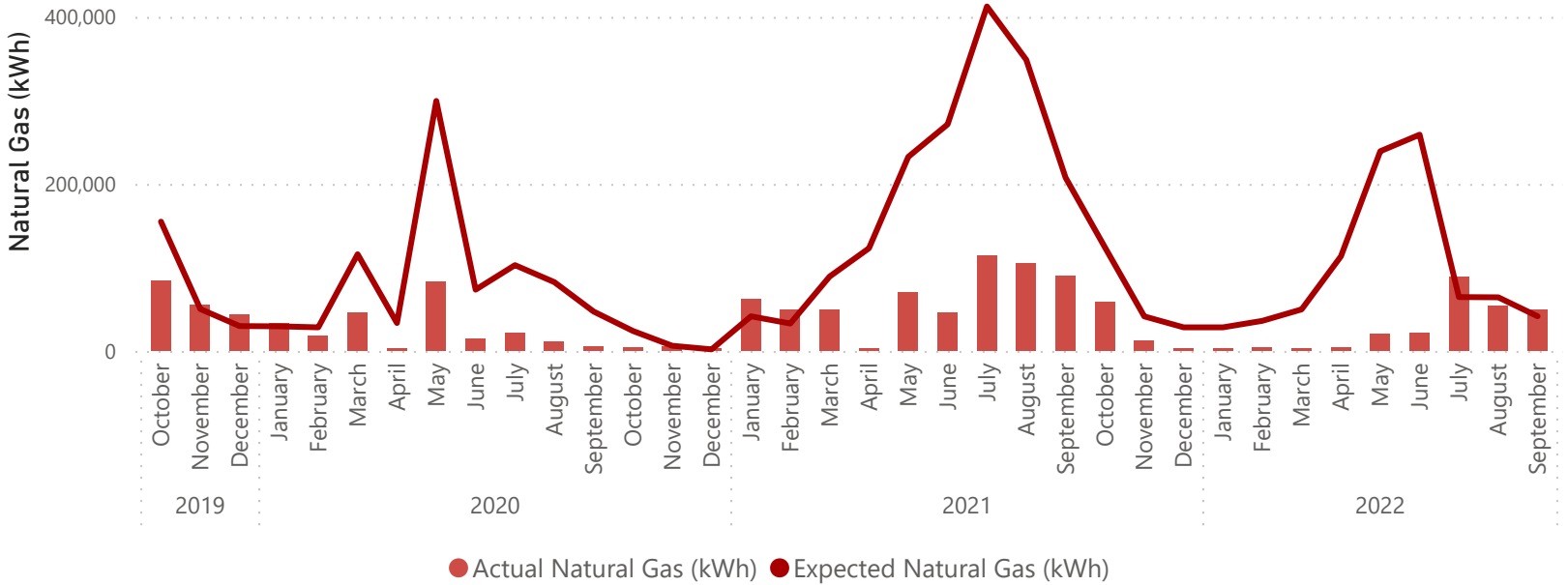


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

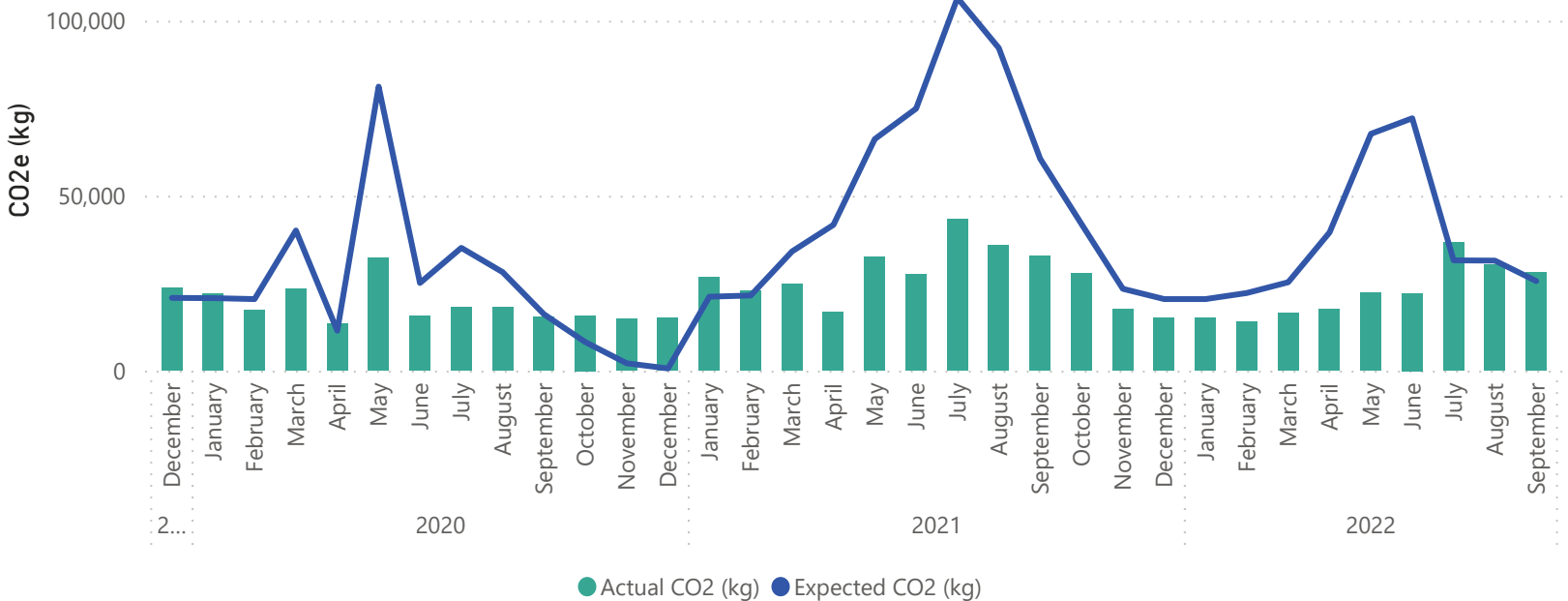
Whakatane District Council

Aquatic Centre

Aquatic Centre Natural Gas Compared to Baseline (kWh)



Aquatic Centre Carbon Emissions Compared to Baseline (kg CO2e)

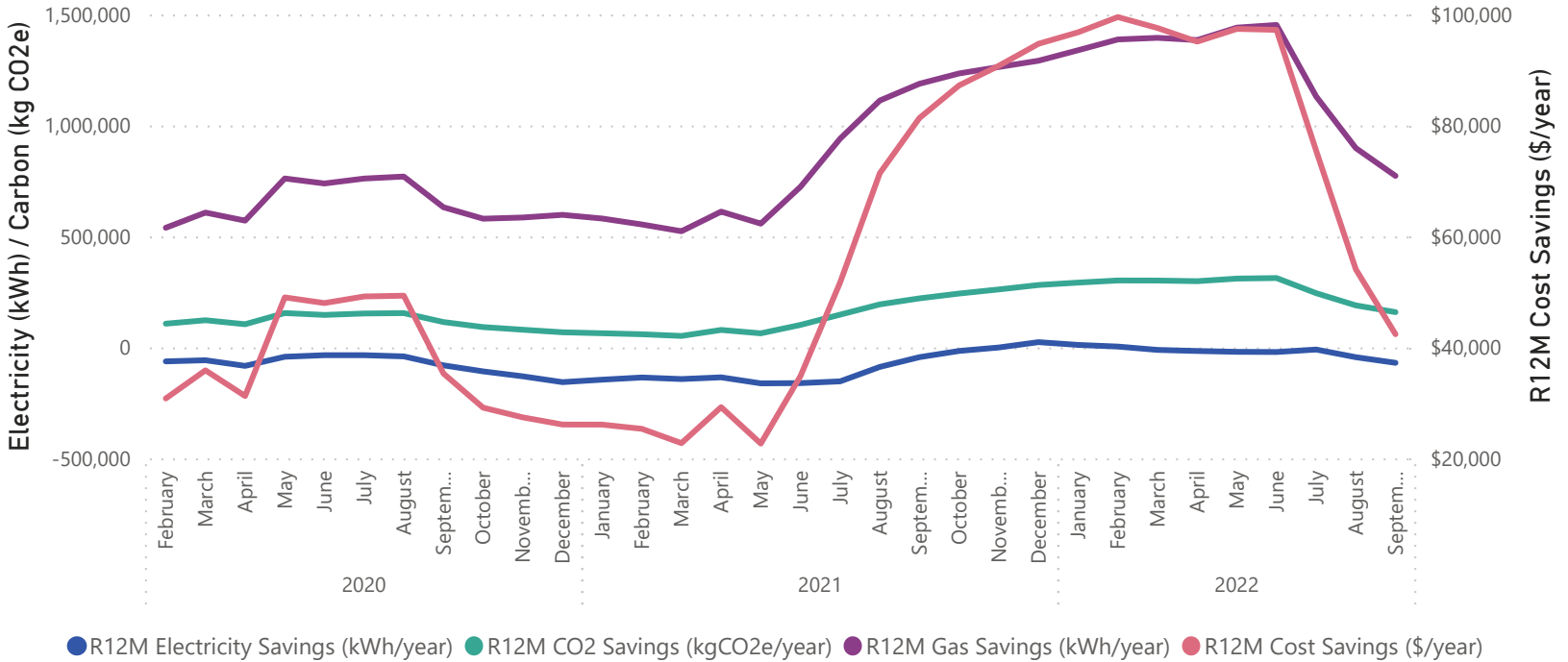


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

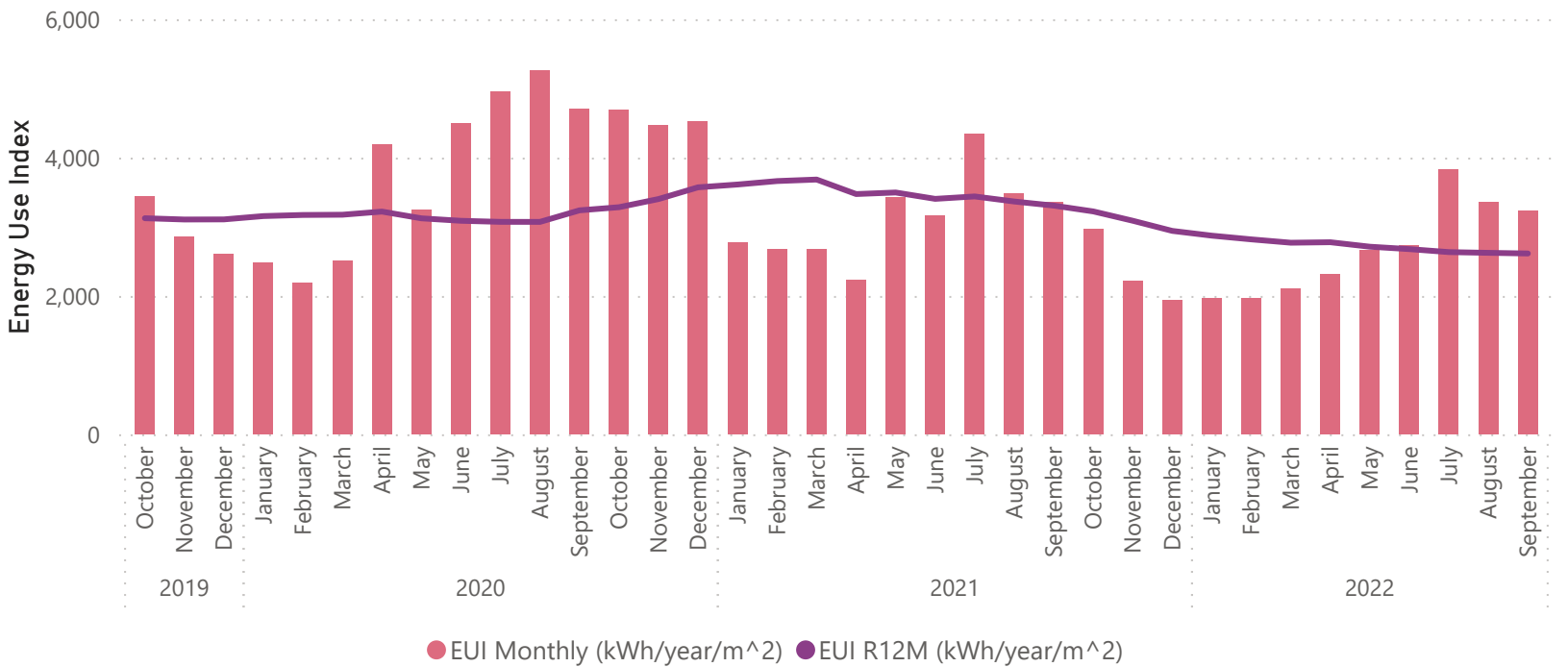
Whakatane District Council

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

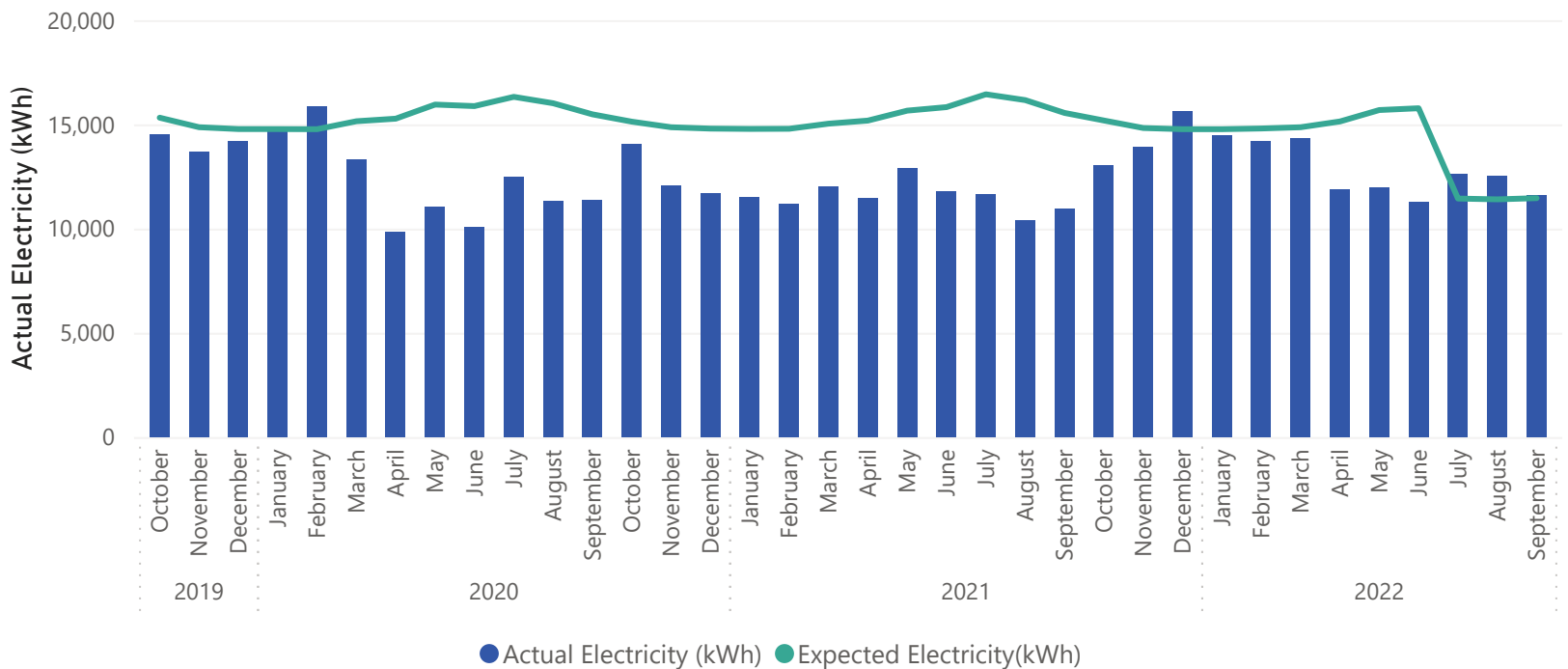
<p>-\$29 Monthly Energy Cost Savings</p>	<p>-146 Elec. Savings (kWh/mo)</p>	<p>-1% Elec. Savings (%)</p>	<p>12,666 R12M Electricity Savings (kWh/yr)</p>	<p>-104 CO2e Savings (kg/mo)</p>
<p>-\$708 R12M Energy Cost Savings</p>	<p>-409 Gas. Savings (kWh/mo)</p>	<p>-4% Gas. Savings (%)</p>	<p>-44,070 R12M Gas Savings (kWh/yr)</p>	<p>-7,814 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 gas use have reduced compared to August 2022, even though the month was a similar temperature on average.

Te Koputu Library Electricity Use Compared to Baseline (kWh)

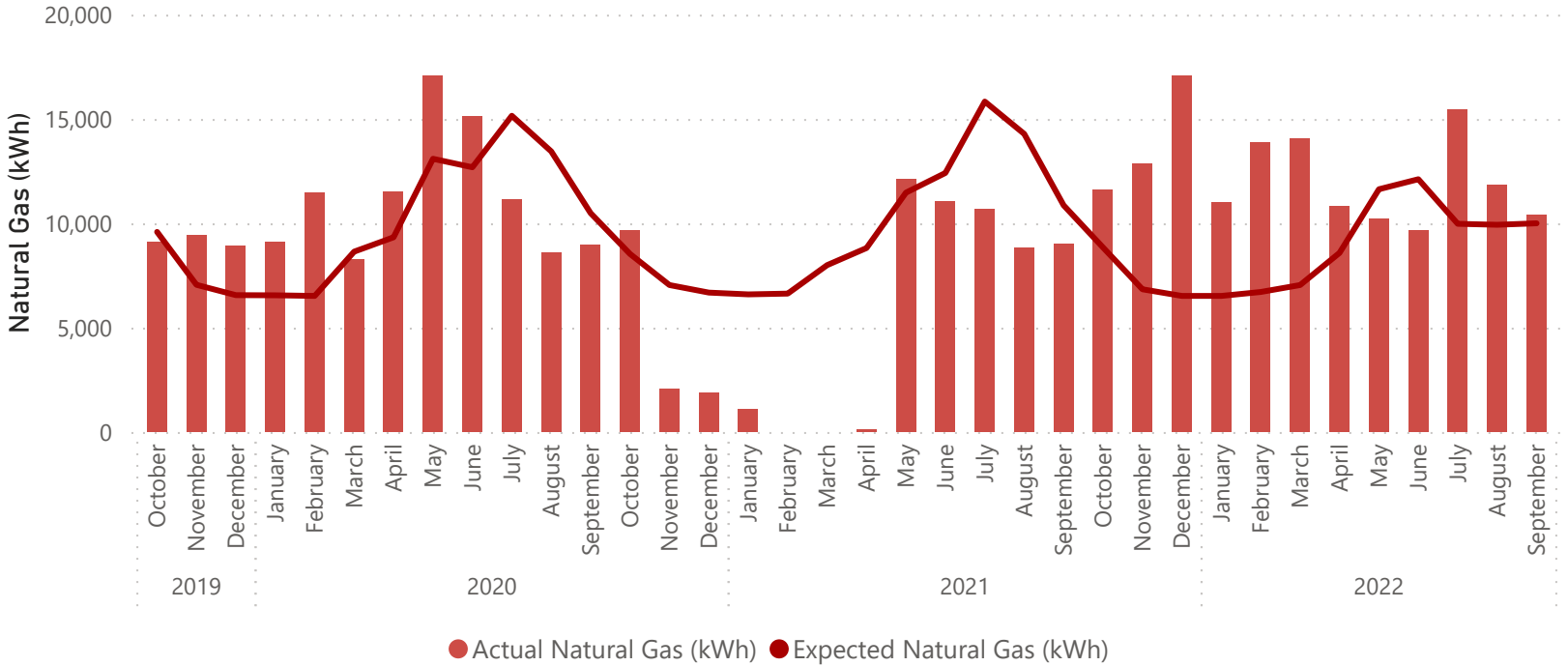


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

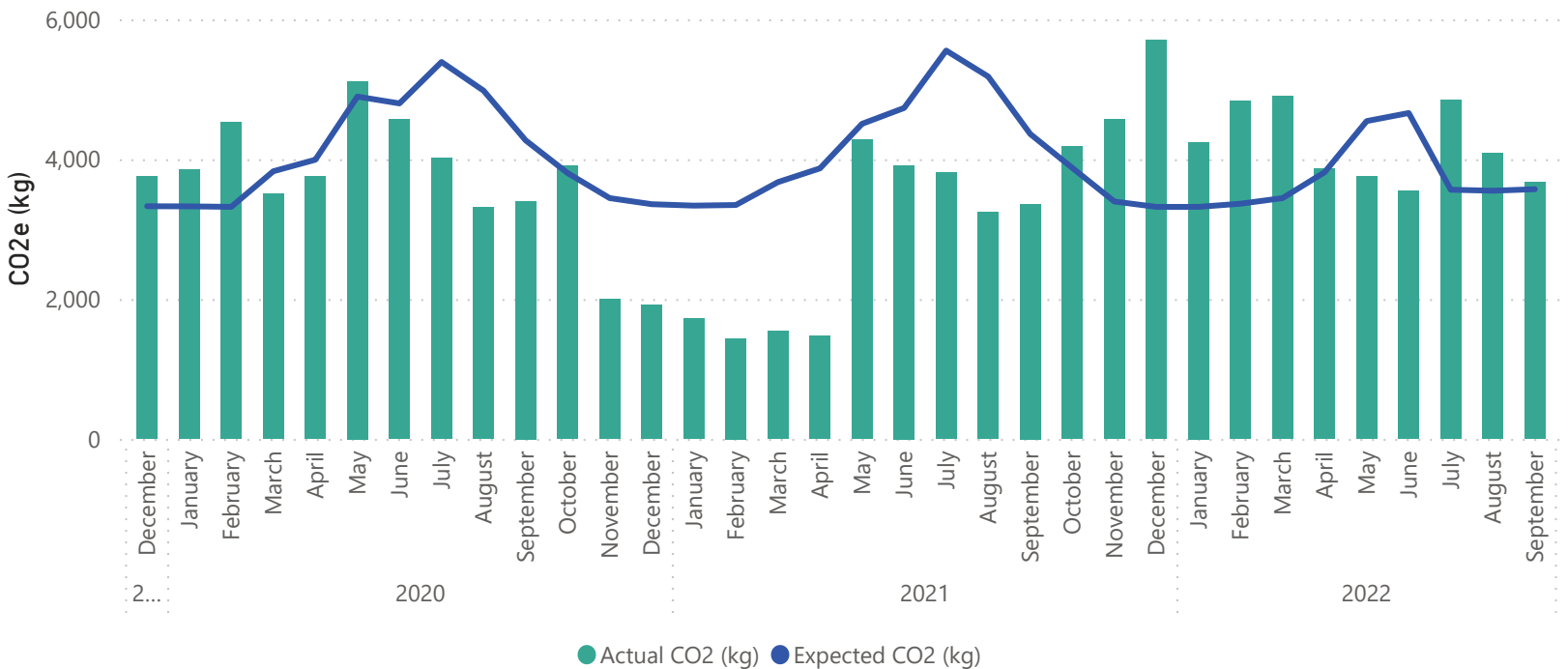
Whakatane District Council

Te Koputu Library

Te Koputu Library Natural Gas Compared to Baseline (kWh)



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

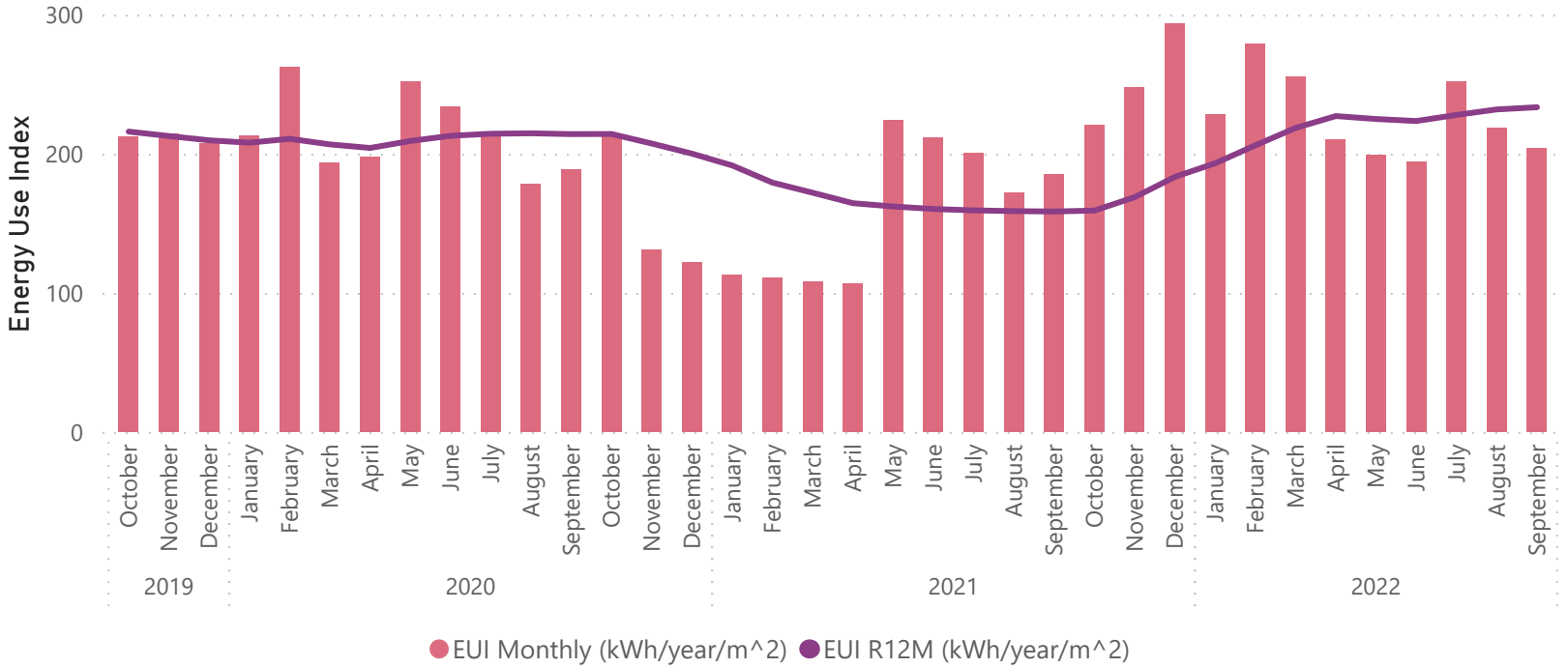


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

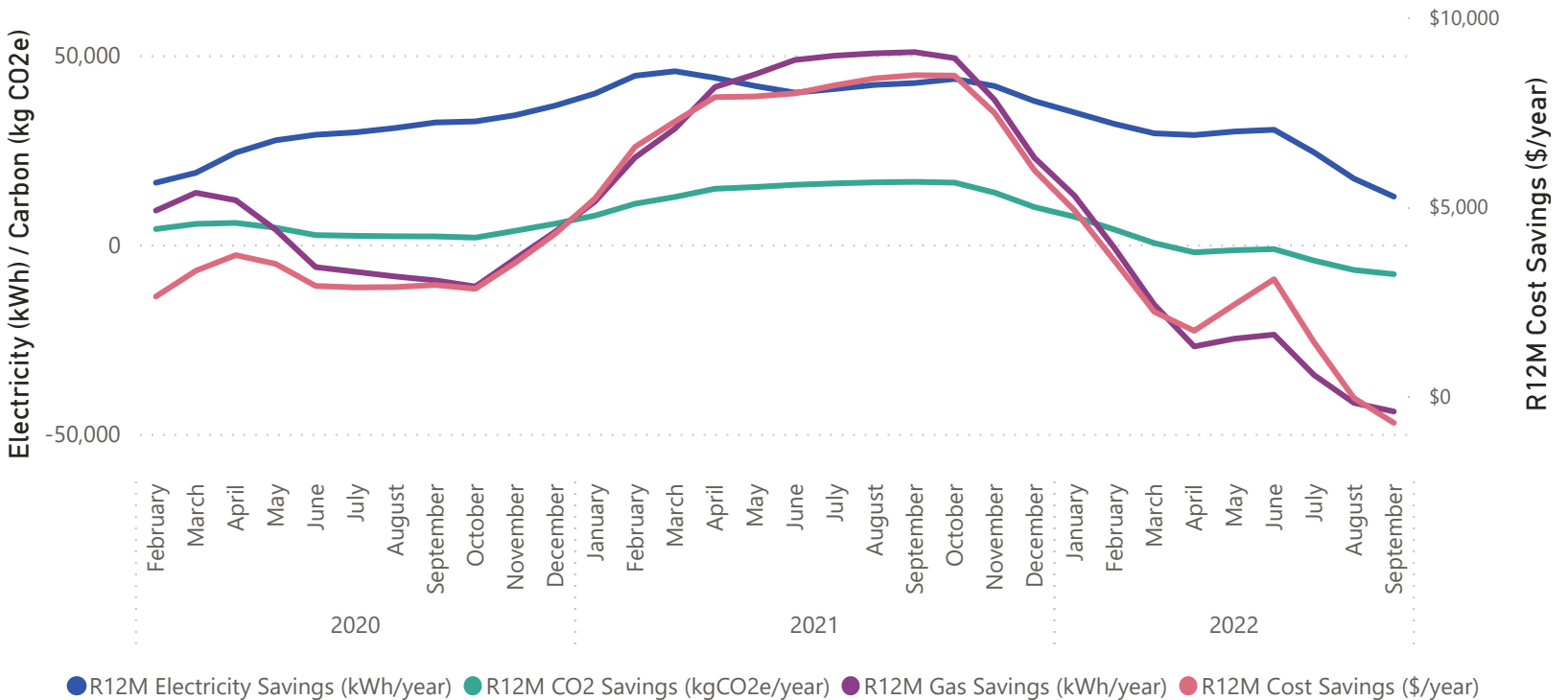
Whakatane District Council

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

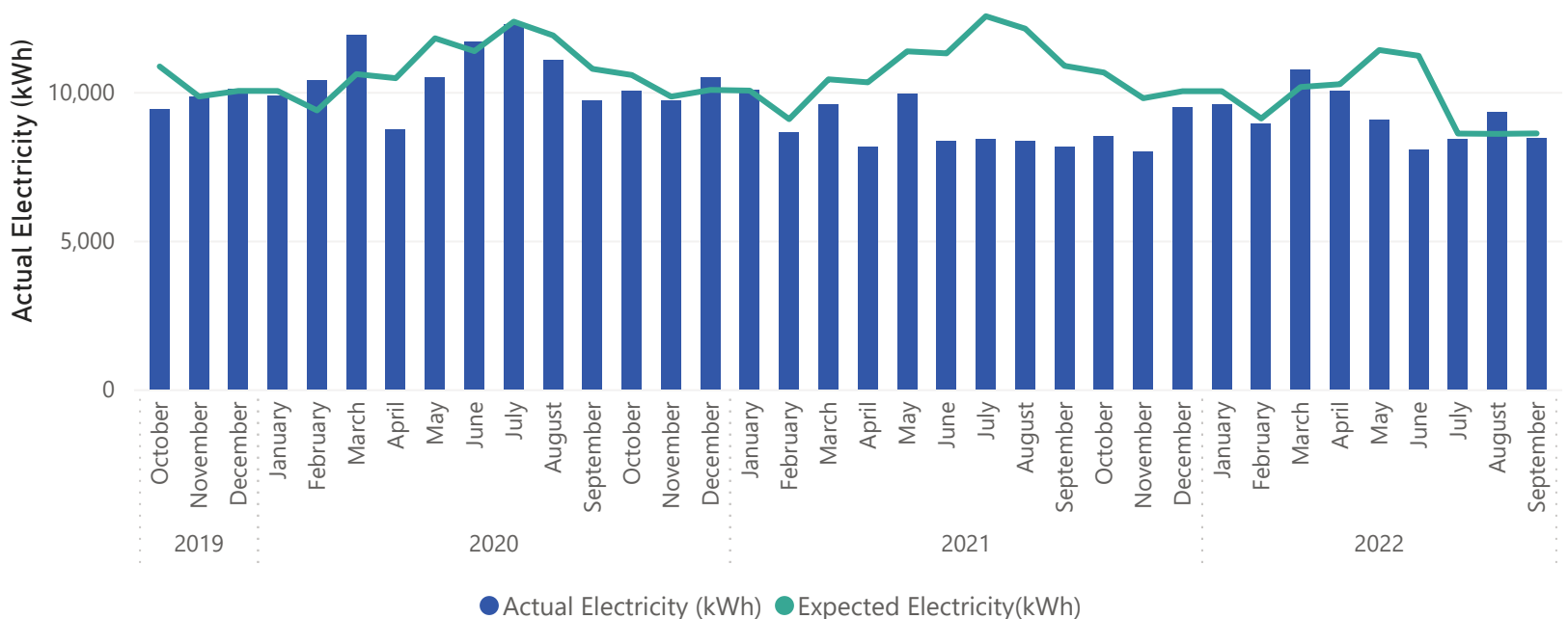
<p>\$32</p> <p>Monthly Energy Cost Savings</p>	<p>161</p> <p>Elec. Savings (kWh/mo)</p>	<p>2%</p> <p>Elec. Savings (%)</p>	<p>9,828</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>13</p> <p>CO2e Savings (kg/mo)</p>
<p>\$3,939</p> <p>R12M Energy Cost Savings</p>	<p>-40</p> <p>Gas. Savings (kWh/mo)</p>	<p>-1%</p> <p>Gas. Savings (%)</p>	<p>31,393</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>8,067</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.

Electricity use was slightly less than expected and natural gas was marginally more than expected. Expected electricity has been relatively flat for the past three months, the number of cooling degree days each month have been similar.

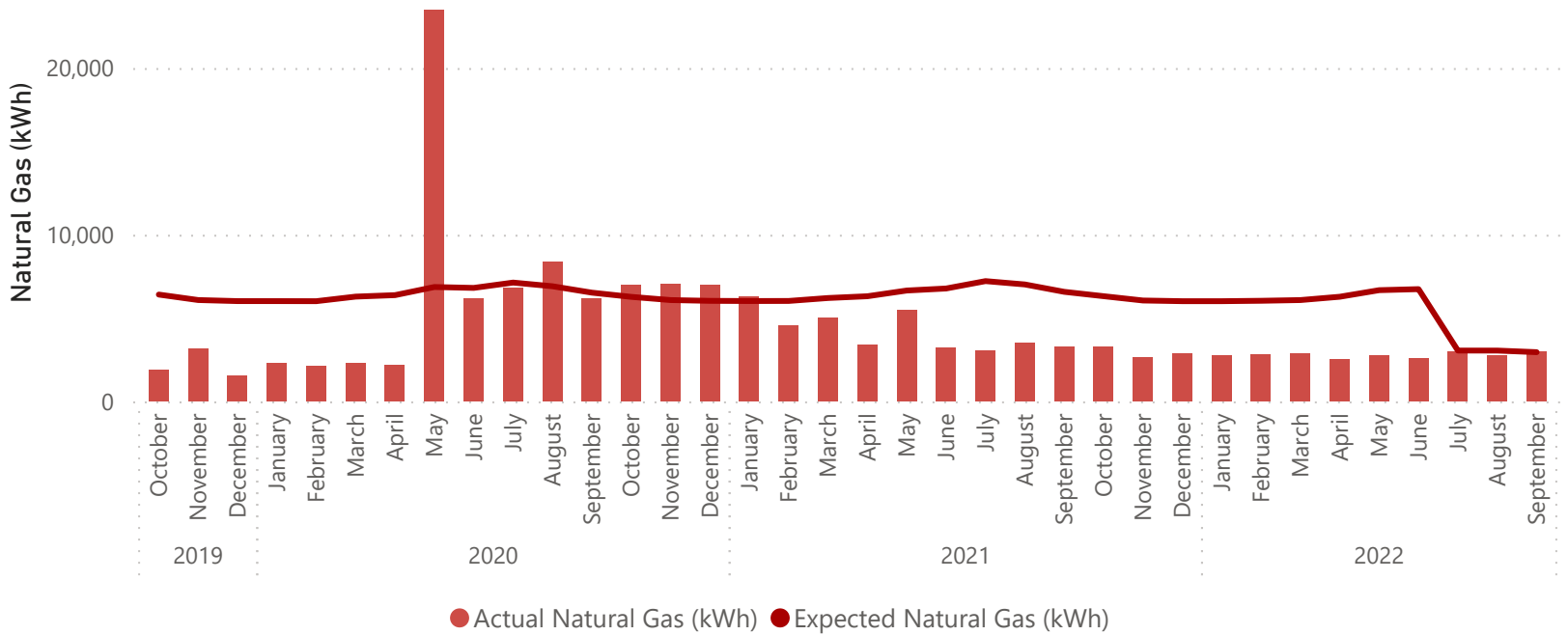
Museum Research Centre Electricity Use Compared to Baseline (kWh)



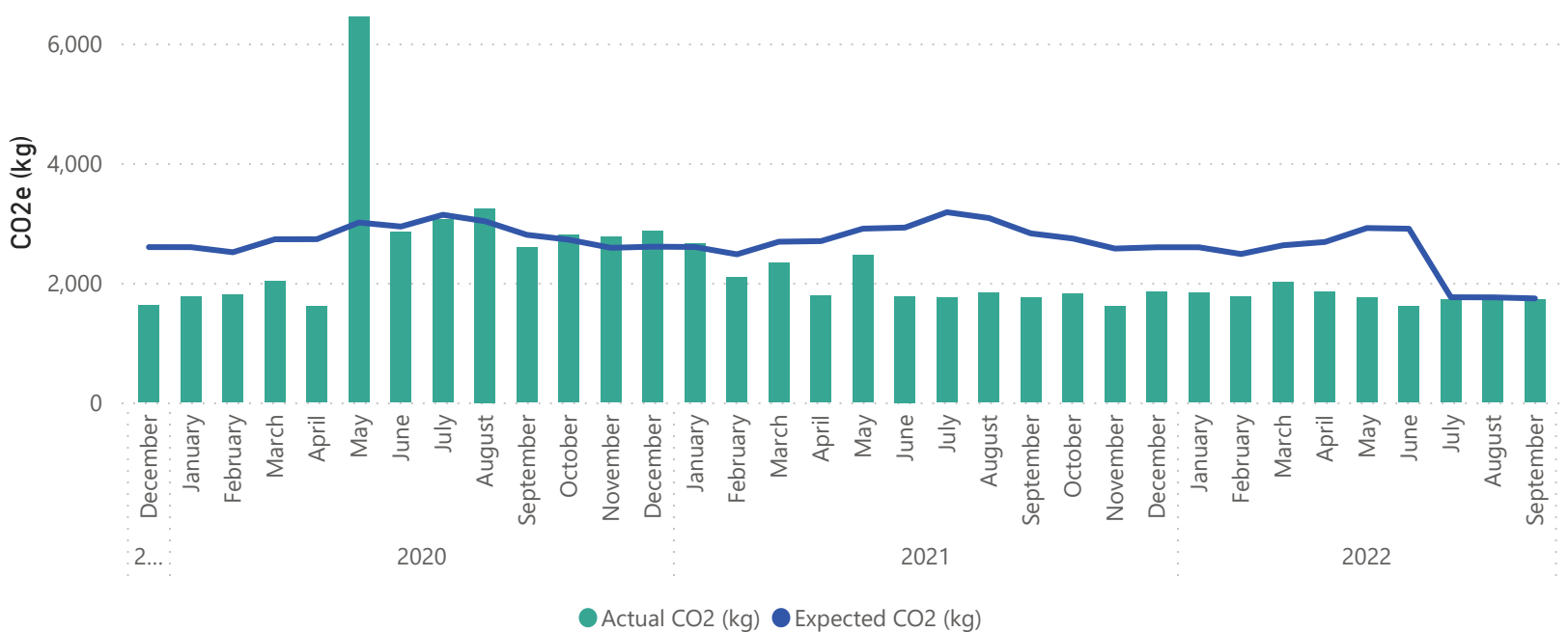
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

Whakatane District Council Museum and Research Centre

Museum Research Centre Natural Gas Compared to Baseline (kWh)



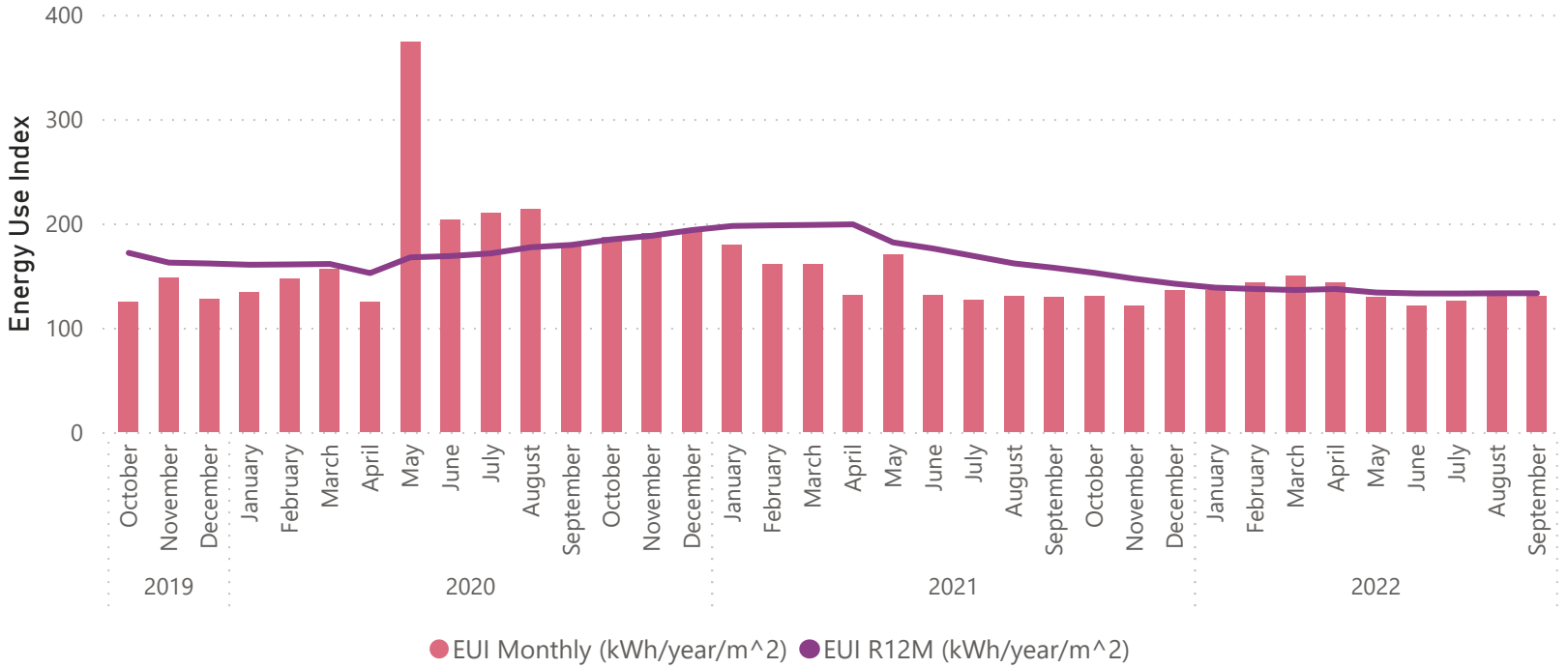
Museum Research Centre Carbon Emissions Compared to Baseline (kg CO2e)



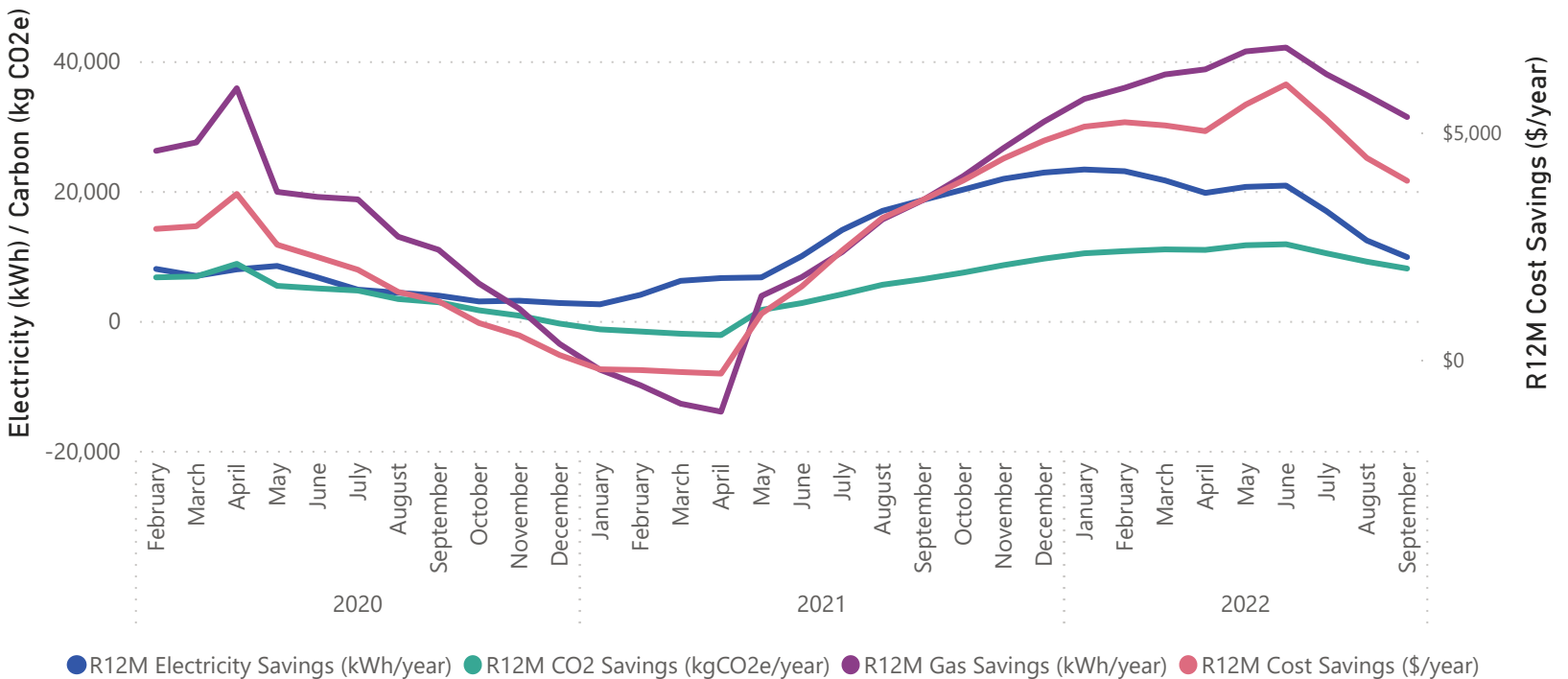
Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

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>\$447</p> <p>Monthly Energy Cost Savings</p>	<p>2,269</p> <p>Elec. Savings (kWh/mo)</p>	<p>31%</p> <p>Elec. Savings (%)</p>	<p>24,533</p> <p>R12M Electricity Savings (kWh/yr)</p>	<p>128</p> <p>CO2e Savings (kg/mo)</p>
<p>\$2,621</p> <p>R12M Energy Cost Savings</p>	<p>-818</p> <p>Gas. Savings (kWh/mo)</p>	<p>-29%</p> <p>Gas. Savings (%)</p>	<p>-19,651</p> <p>R12M Gas Savings (kWh/yr)</p>	<p>-988</p> <p>R12M CO2e Savings (kg/yr)</p>

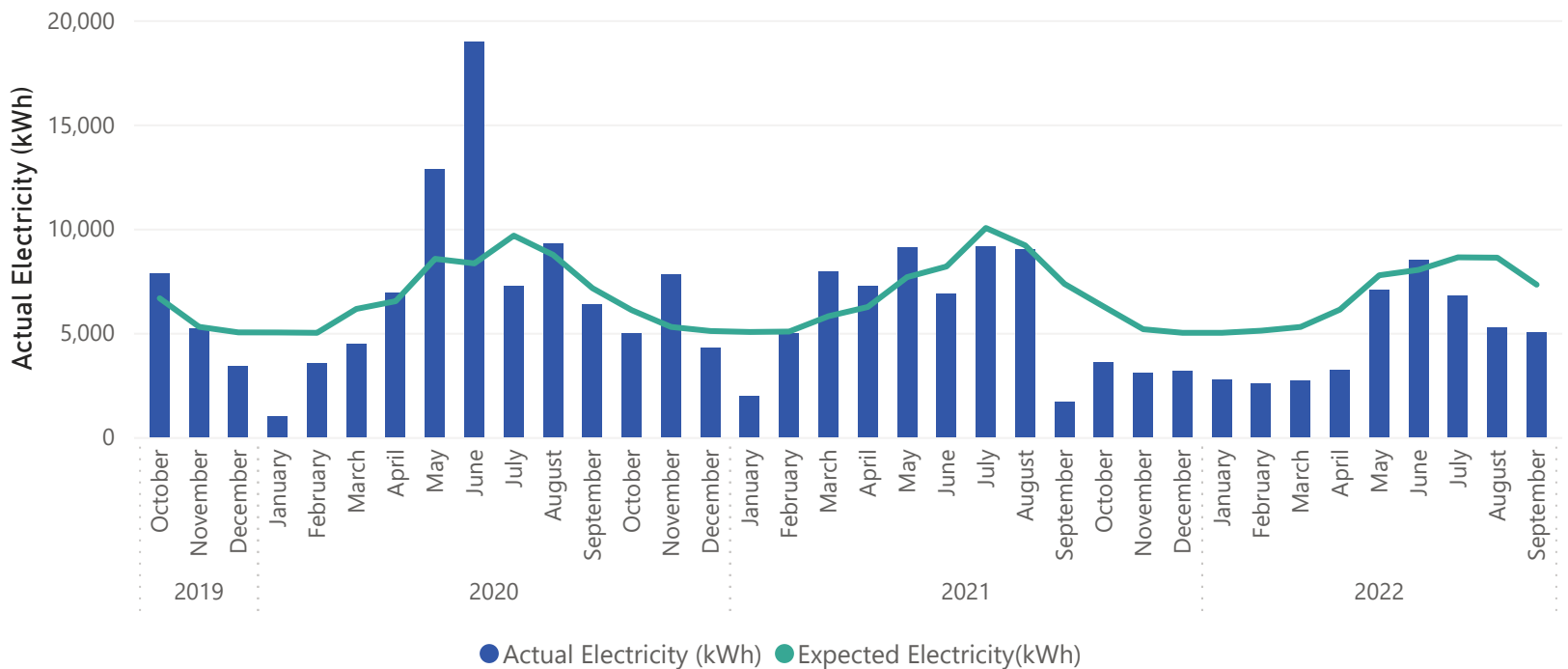
Comments:

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.

Natural gas use has been more than expected from May to September 2022. Overall, total energy use by the facility is less than baseline and a carbon savings has been achieved for the month.

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. It is recommended that manual meter readings are taken, which would improve accuracy of electricity and gas usage.

War Memorial Hall Electricity Use Compared to Baseline (kWh)

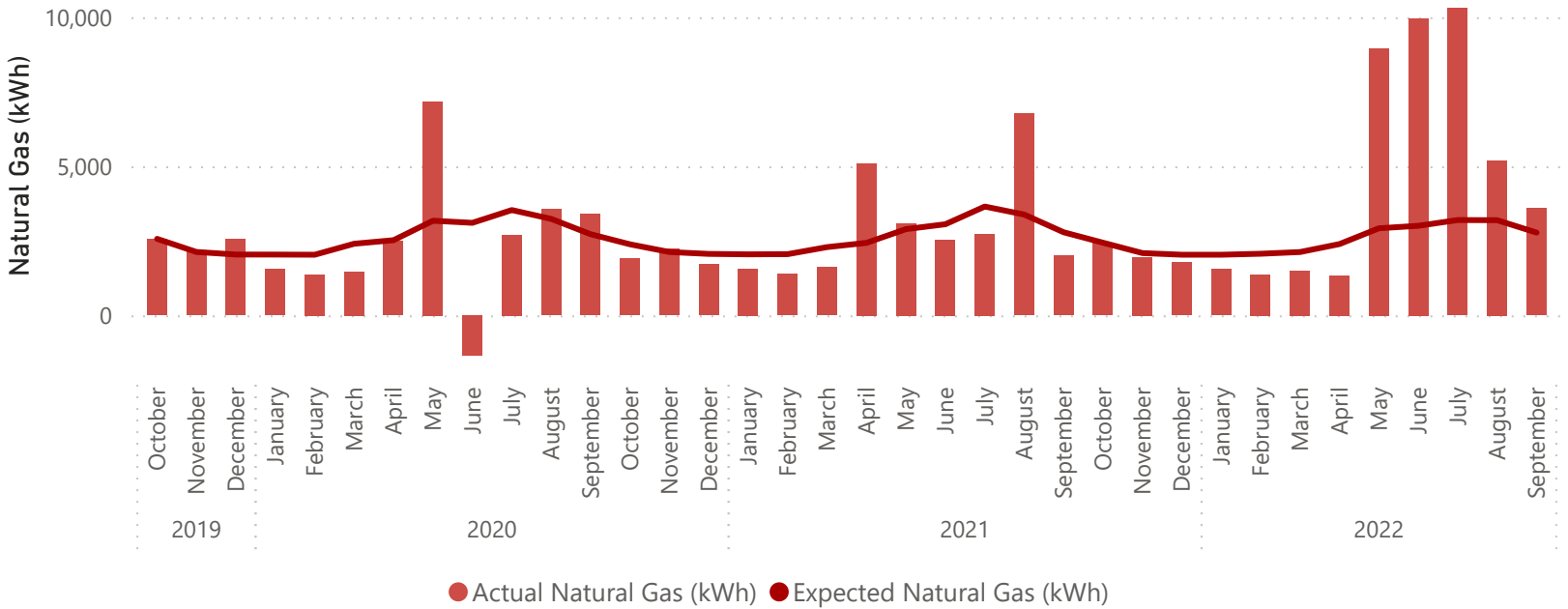


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

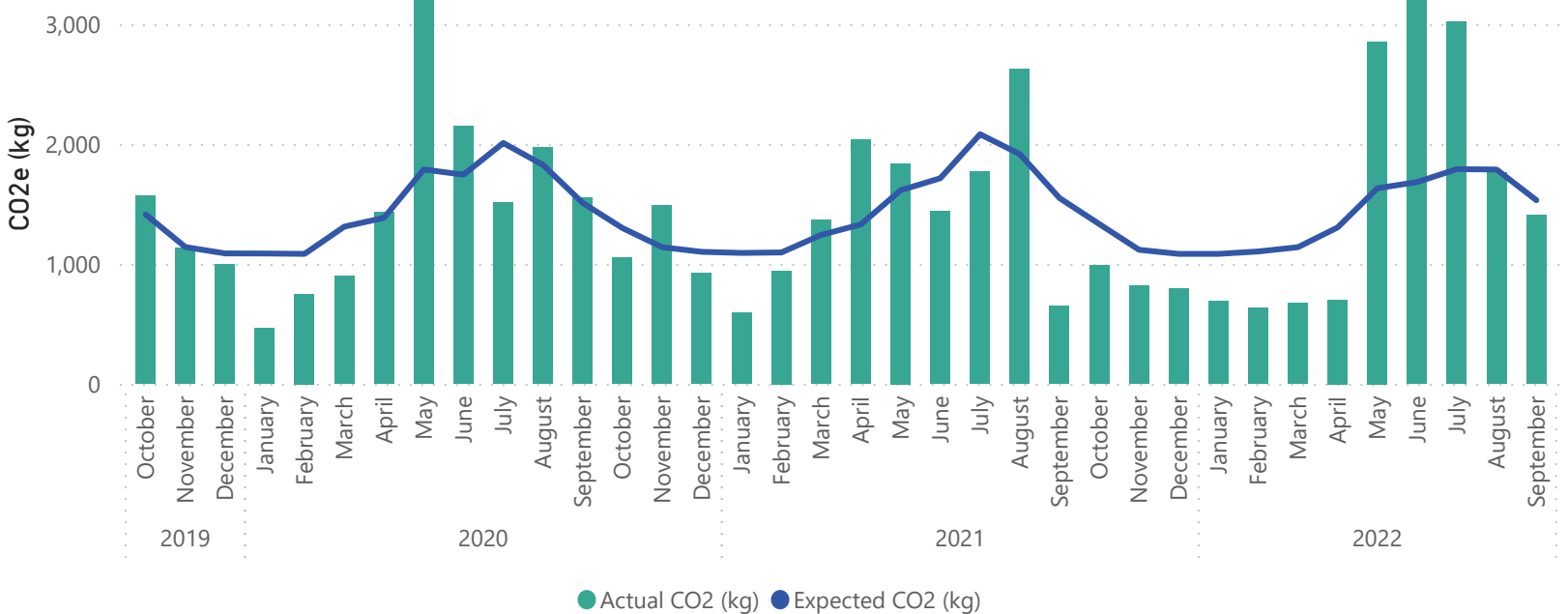
Whakatane District Council

War Memorial Hall

War Memorial Hall Natural Gas Compared to Baseline (kWh)



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

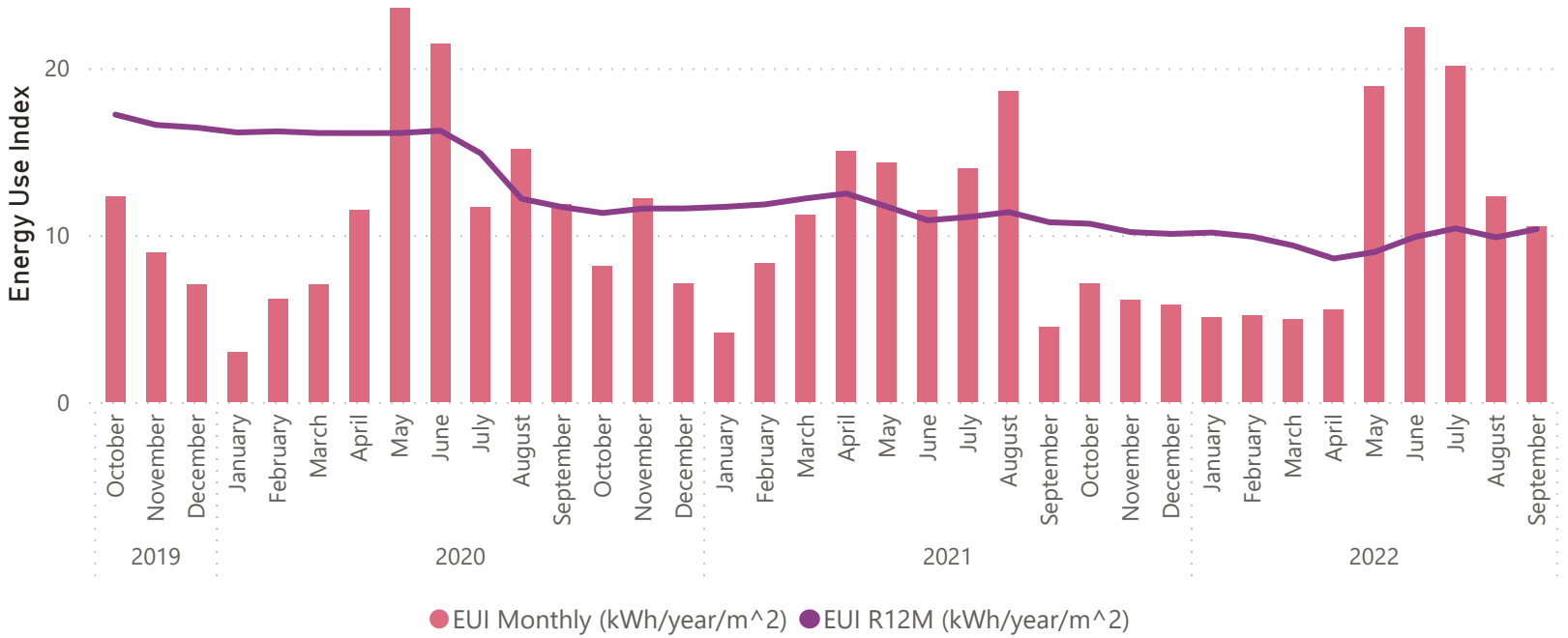


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

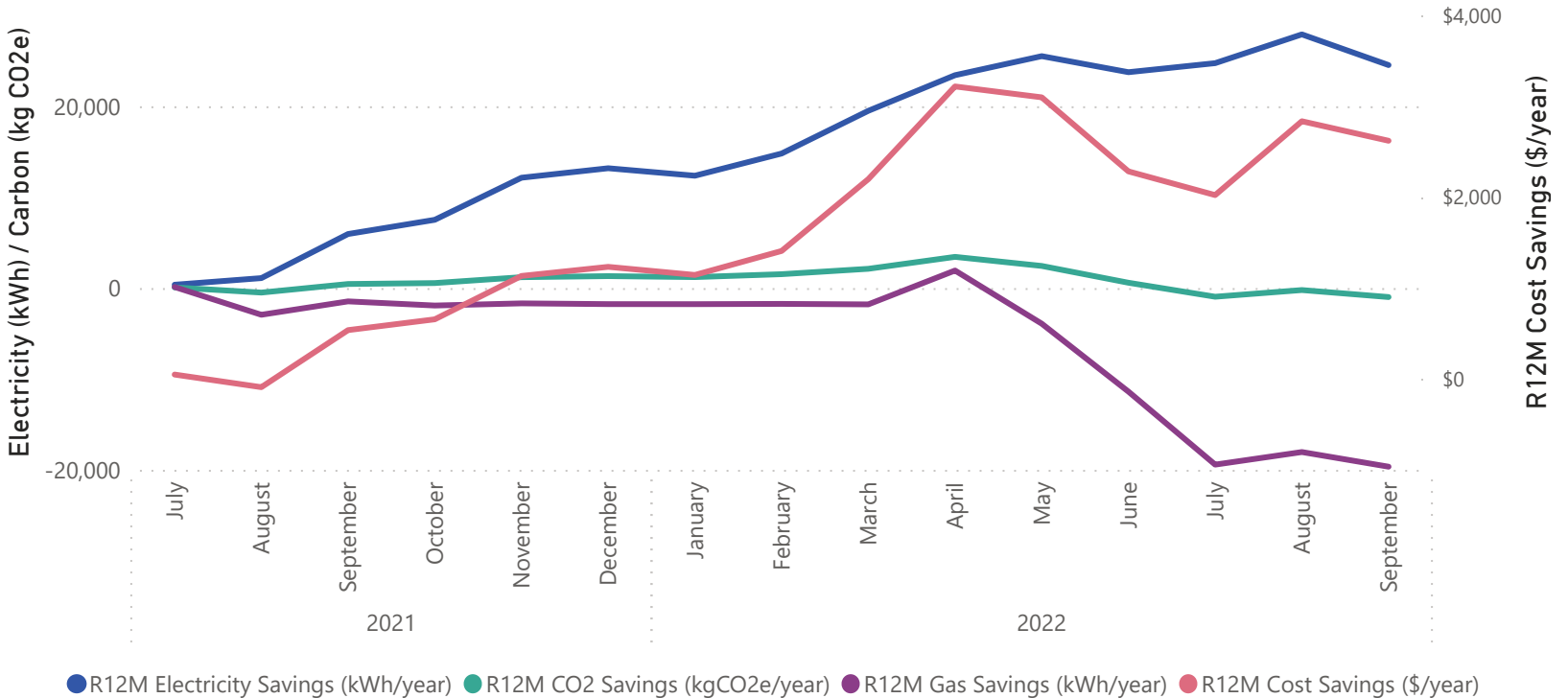
Whakatane District Council

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

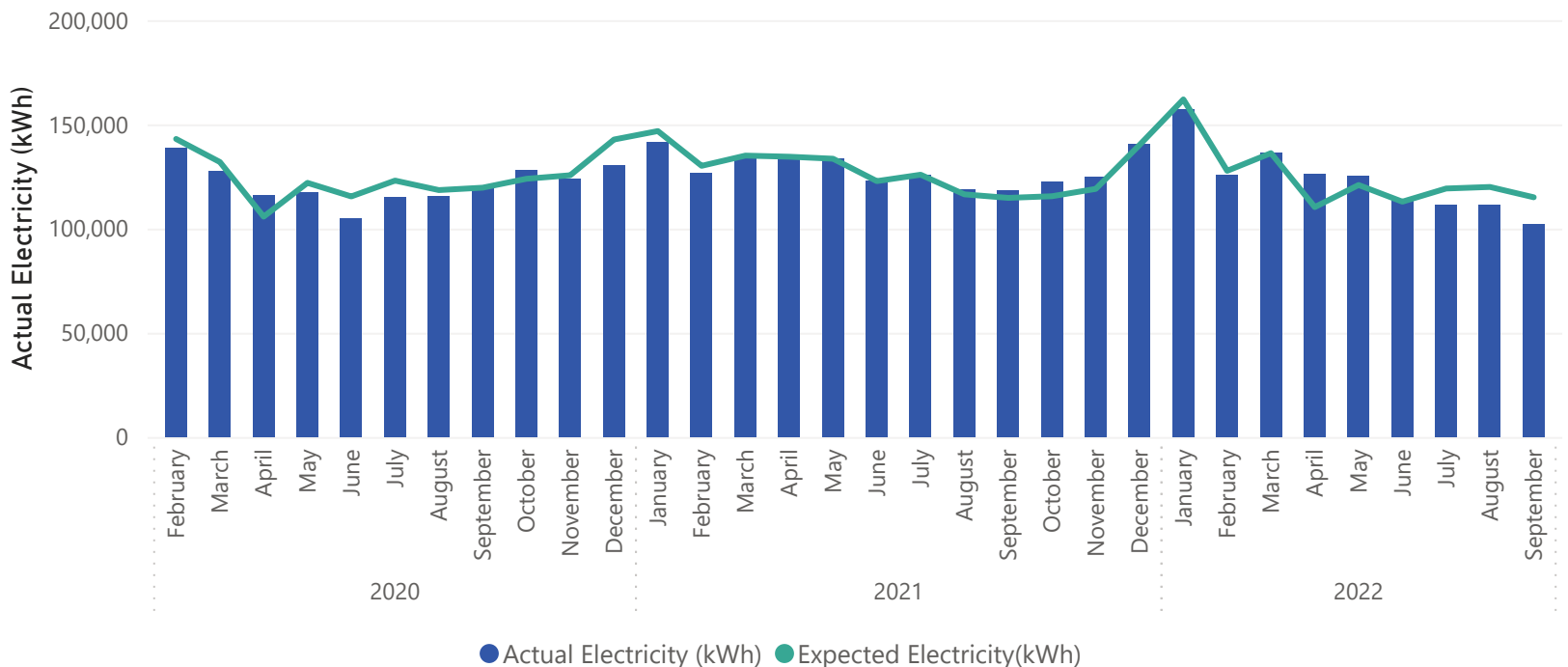
<p>\$2,446 Monthly Energy Cost Savings</p>	<p>13,006 Elec. Savings (kWh/mo)</p>	<p>11% Elec. Savings (%)</p>	<p>960 R12M Electricity Savings (kWh/yr)</p>	<p>1,704 CO2e Savings (kg/mo)</p>
<p>\$897 R12M Energy Cost Savings</p>				<p>191 R12M CO2e Savings (kg/yr)</p>

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.

A 11% savings has been achieved at the WTP this month. The monthly volume of water treated in September 2022 is the lowest it has been since April 2020. The monthly EUI is less than the average over the last 12 months and Rolling 12-month savings are increasing, which is good.

Water Treatment Plant Electricity Use Compared to Baseline (kWh)

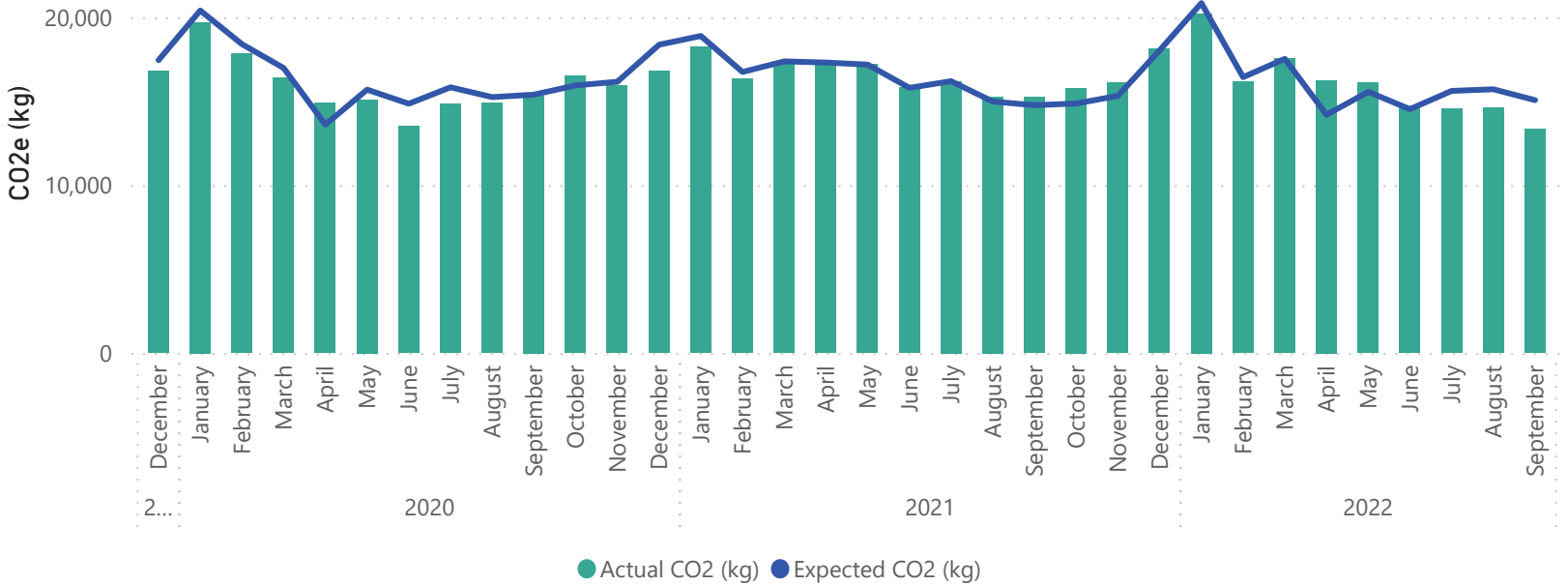


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

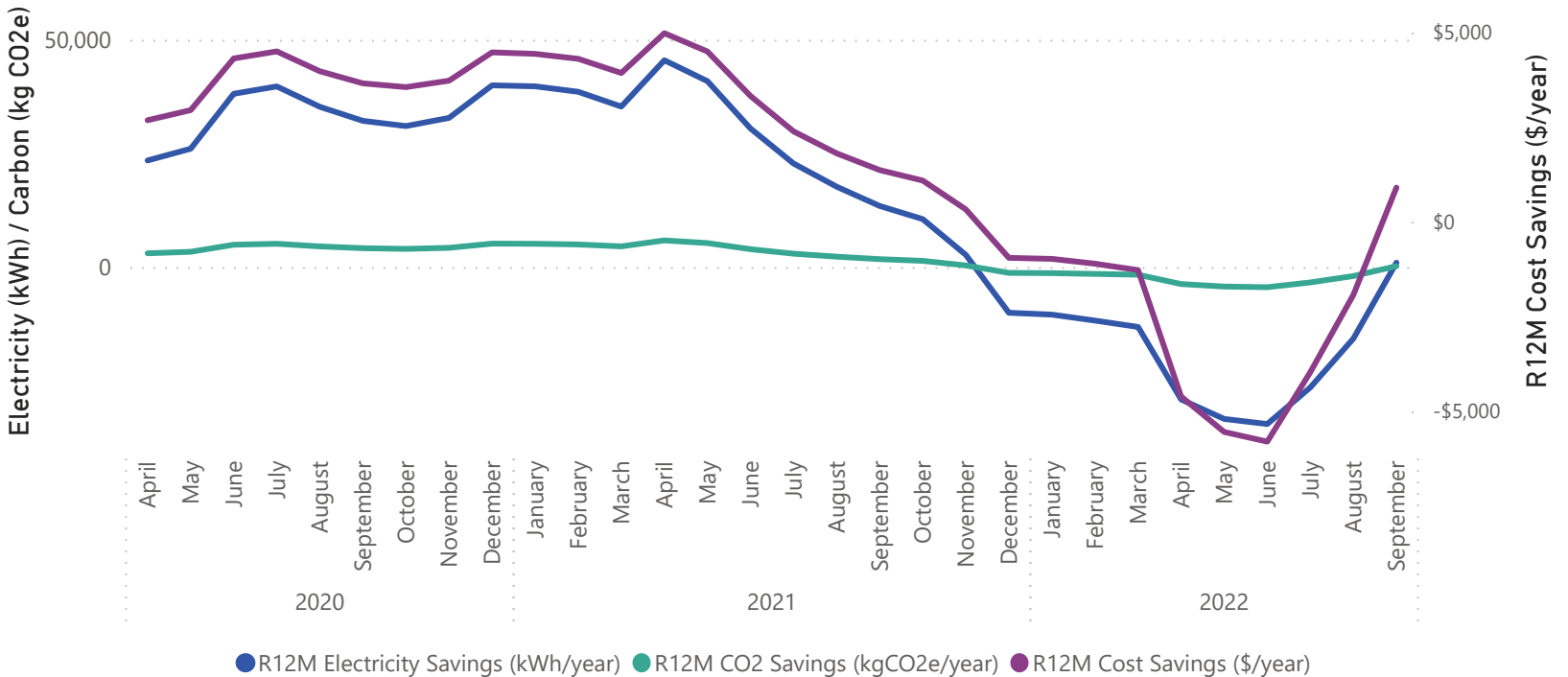
Whakatane District Council

Water Treatment Plant

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



Water Treatment Plant Rolling 12 Month Savings

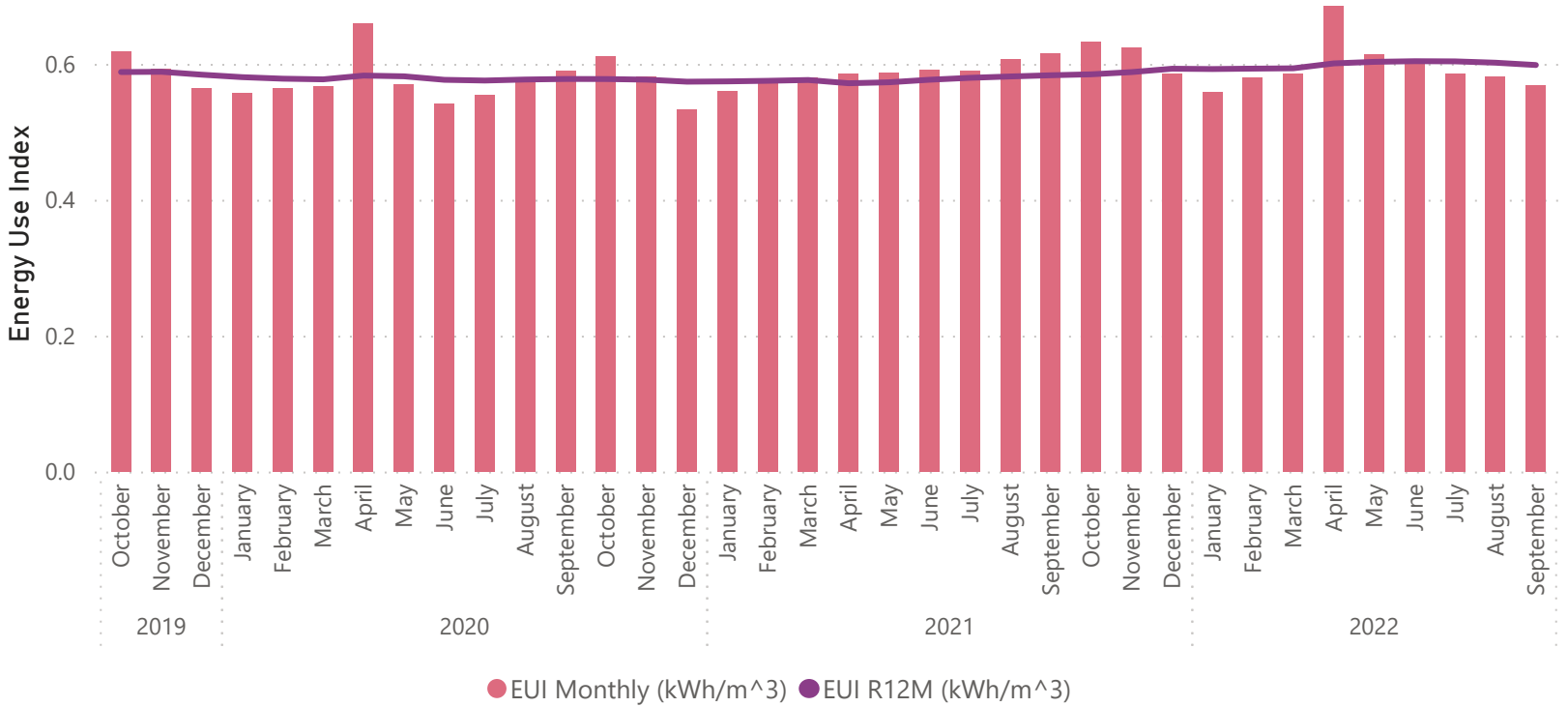


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

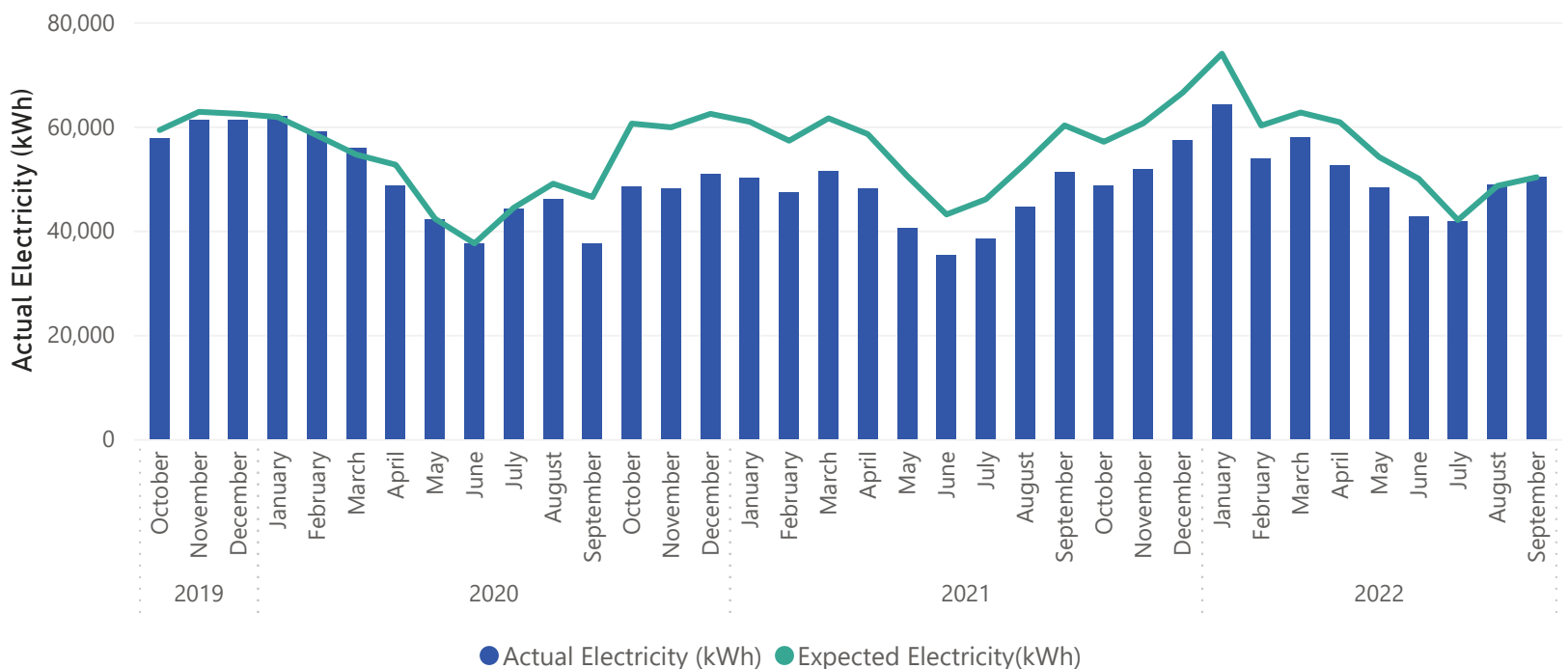
<p>-\$12 Monthly Energy Cost Savings</p>	<p>-65 Elec. Savings (kWh/mo)</p>	<p>-0% Elec. Savings (%)</p>	<p>68,259 R12M Electricity Savings (kWh/yr)</p>	<p>-8 CO2e Savings (kg/mo)</p>
<p>\$9,977 R12M Energy Cost Savings</p>				<p>8,928 R12M CO2e Savings (kg/yr)</p>

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.

Braemar Rd Pumps Electricity Use Compared to Baseline (kWh)

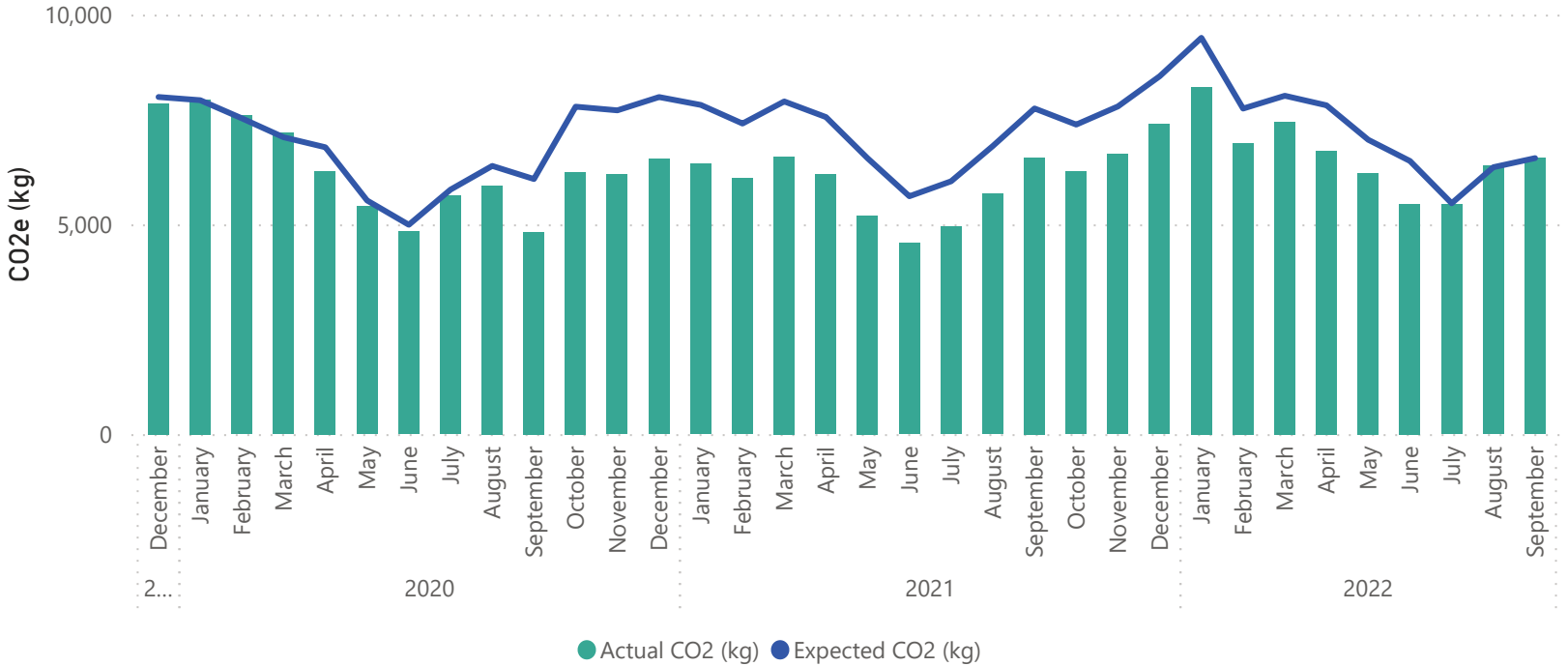


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

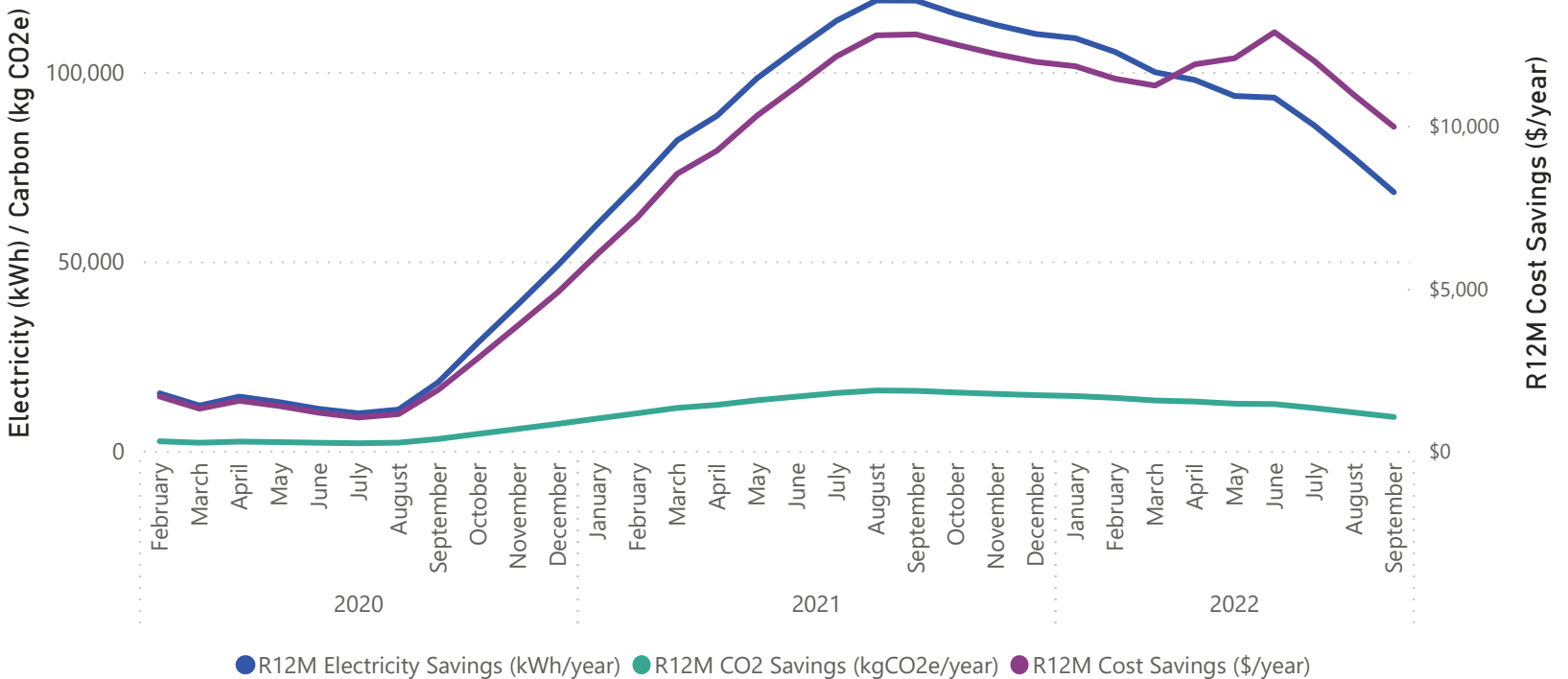
Whakatane District Council

Braemar Road Pump Station

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



Braemar Rd Pumps Rolling 12 Month Savings

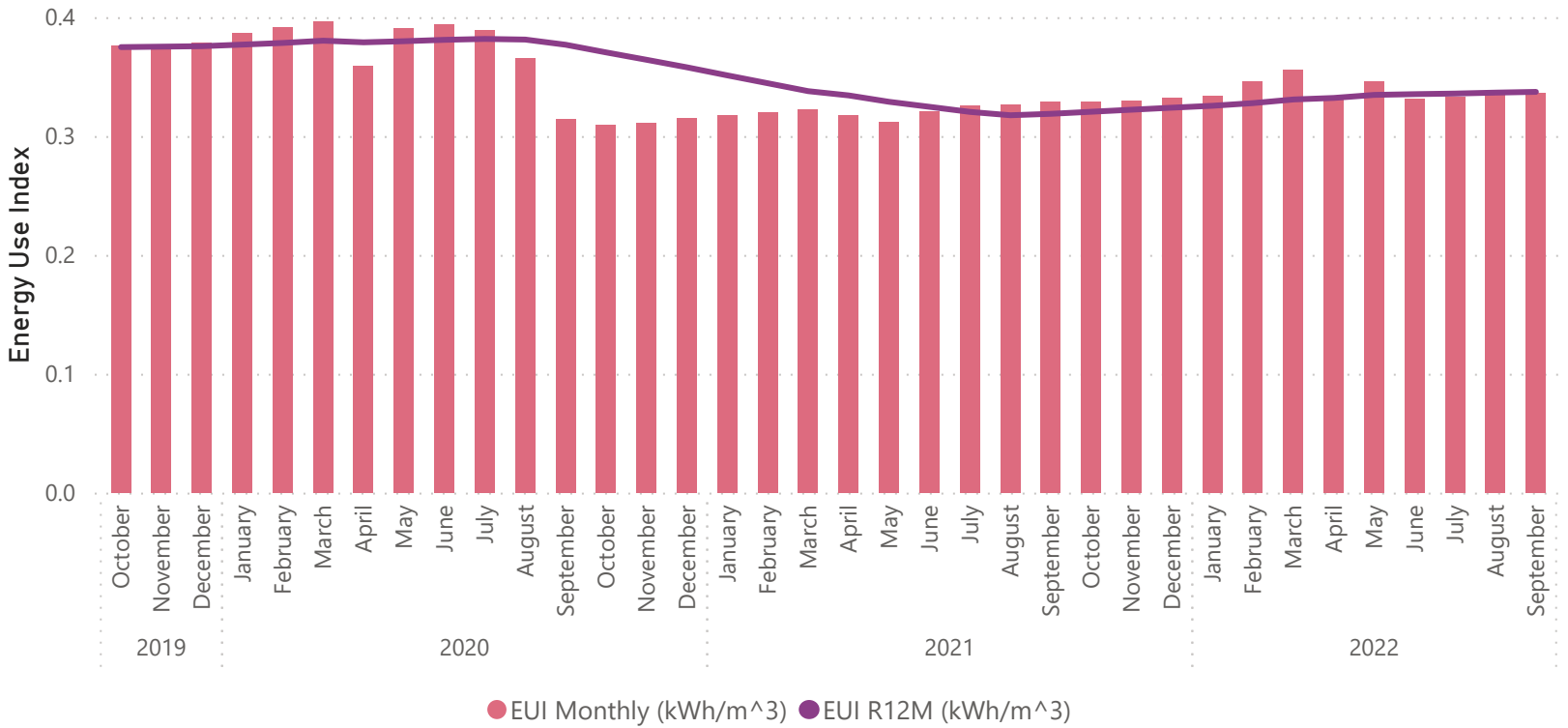


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

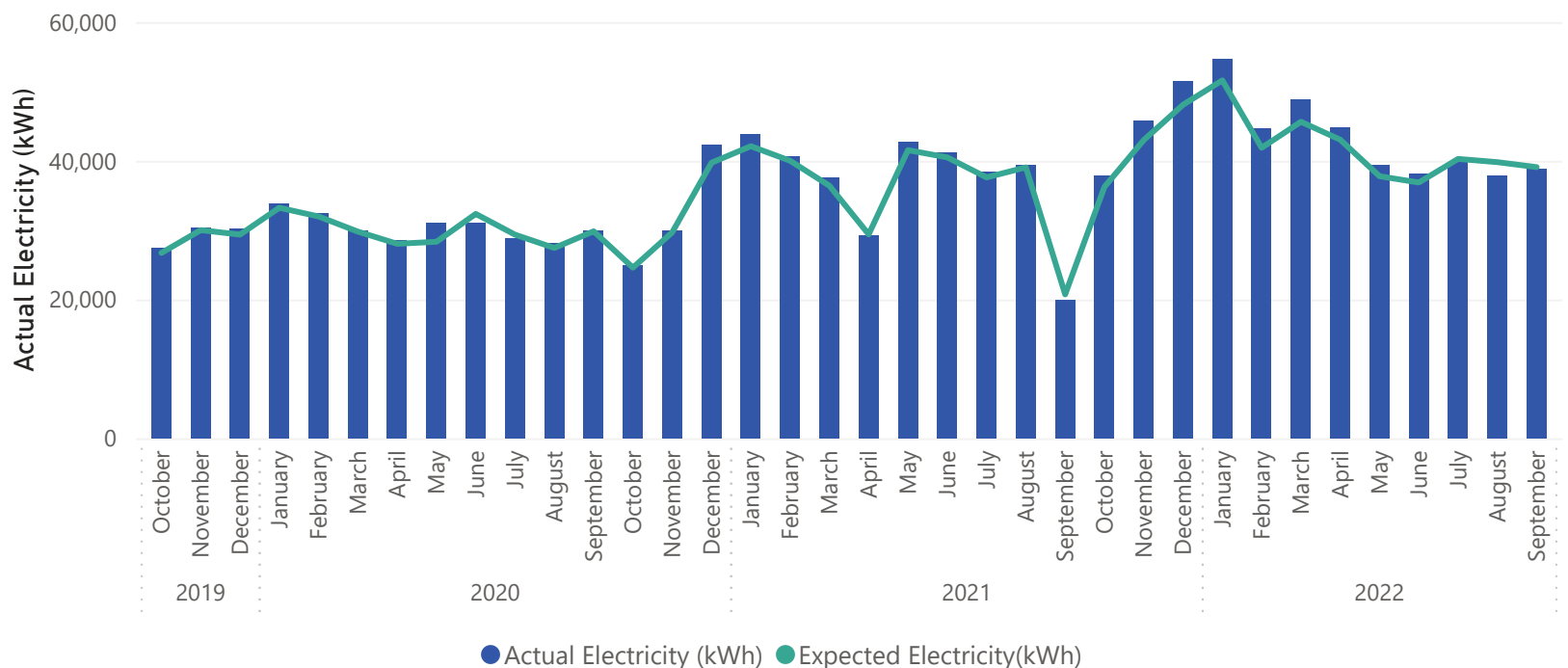
<p>\$47 Monthly Energy Cost Savings</p>	<p>245 Elec. Savings (kWh/mo)</p>	<p>1% Elec. Savings (%)</p>	<p>-18,848 R12M Electricity Savings (kWh/yr)</p>	<p>32 CO2e Savings (kg/mo)</p>
<p>-\$2,511 R12M Energy Cost Savings</p>				<p>-2,411 R12M CO2e Savings (kg/yr)</p>

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.

A small savings has been achieved at the Paul Road Pump Station this month. The monthly EUI is slightly less than average over the past 12 months.

Paul Rd Pumps Electricity Use Compared to Baseline (kWh)

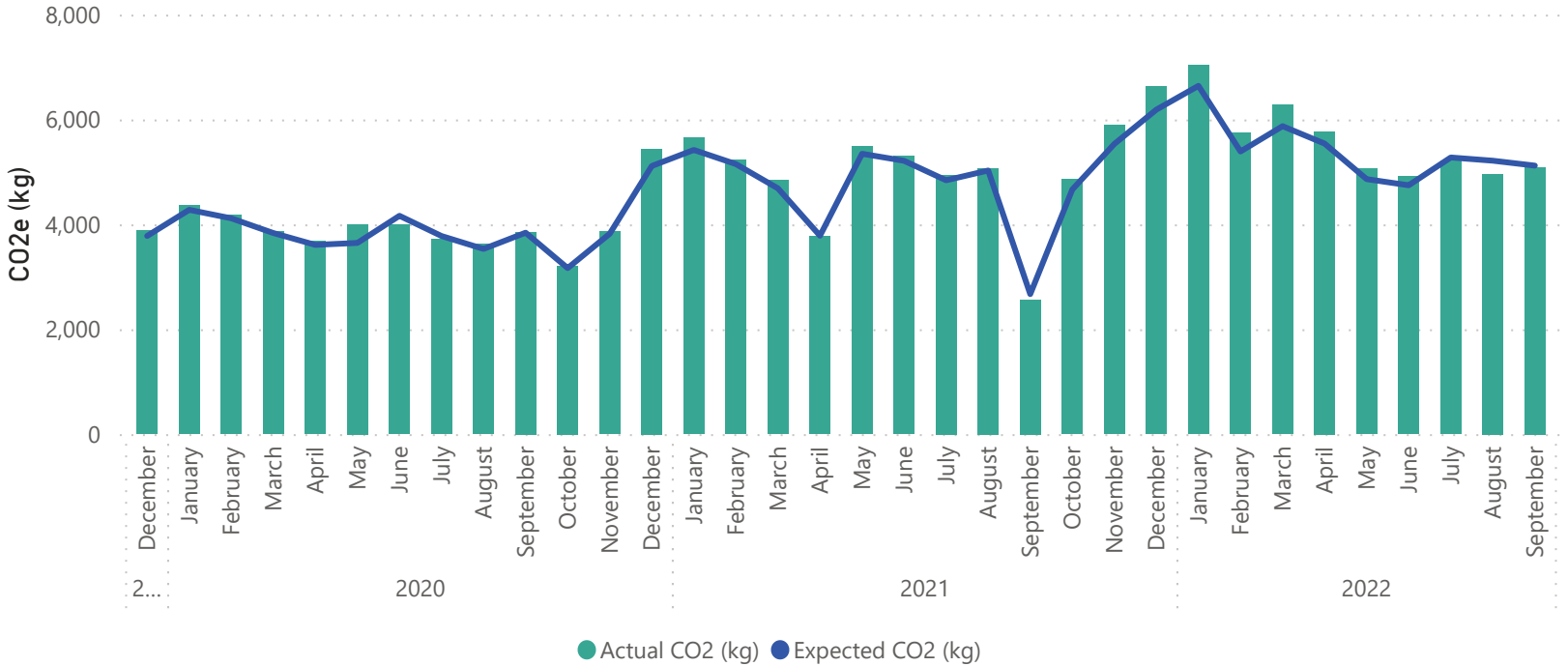


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

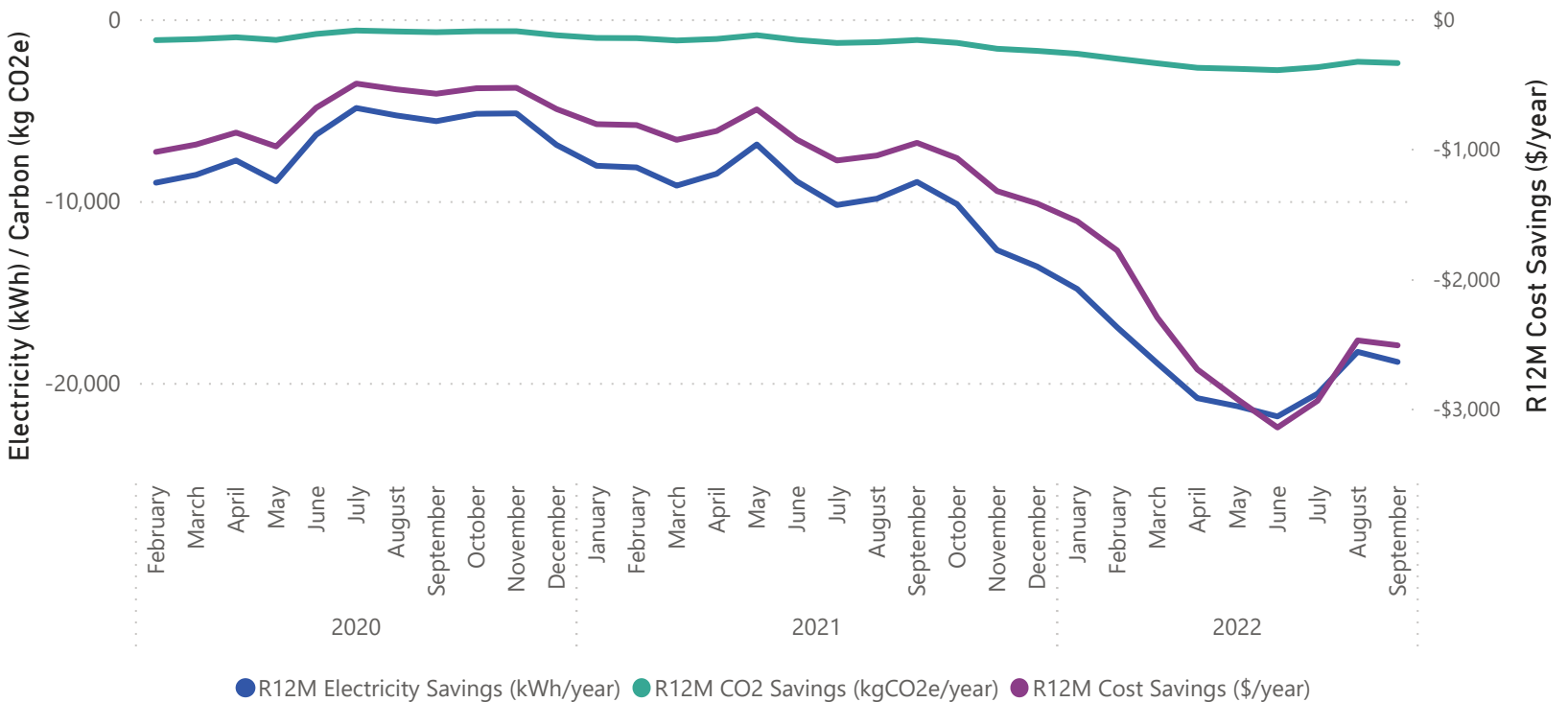
Whakatane District Council

Paul Road Pump Station

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



Paul Rd Pumps Rolling 12 Month Savings

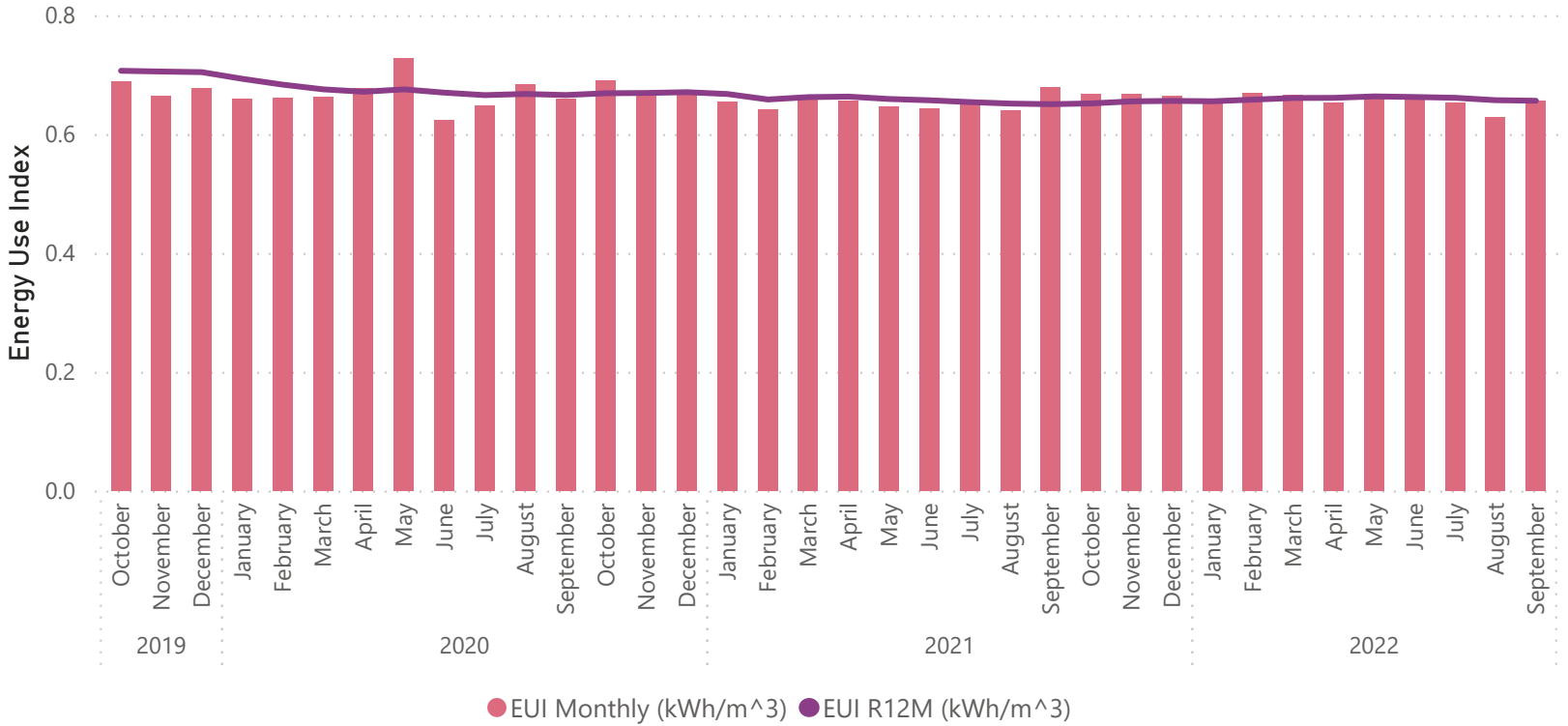


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

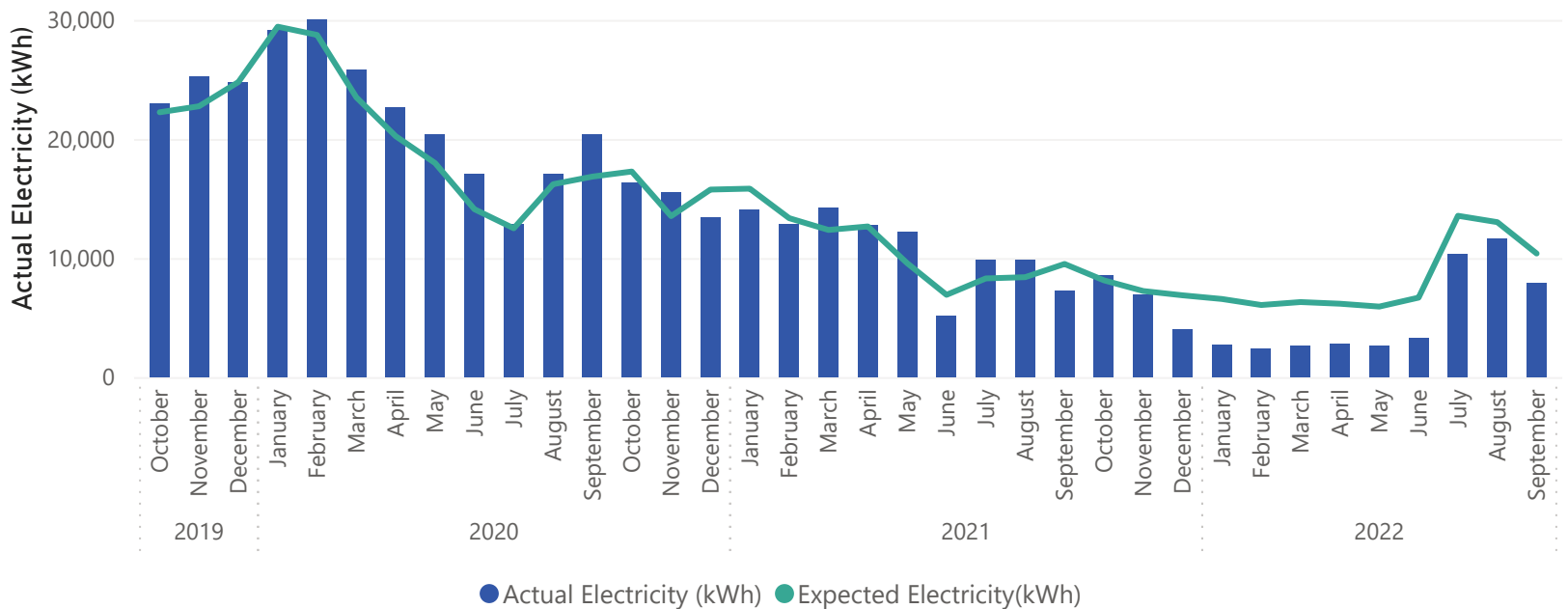
<p>\$529 Monthly Energy Cost Savings</p>	<p>2,459 Elec. Savings (kWh/mo)</p>	<p>24% Elec. Savings (%)</p>	<p>30,838 R12M Electricity Savings (kWh/yr)</p>	<p>322 CO2e Savings (kg/mo)</p>
<p>\$6,763 R12M Energy Cost Savings</p>			<p>3,986 R12M CO2e Savings (kg/yr)</p>	

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.

Electricity use has been elevated for the past three months, the EUI has decreased, which is expected, due to the non-zero baseload.

Johnson Rd Pumps Electricity Use Compared to Baseline (kWh)

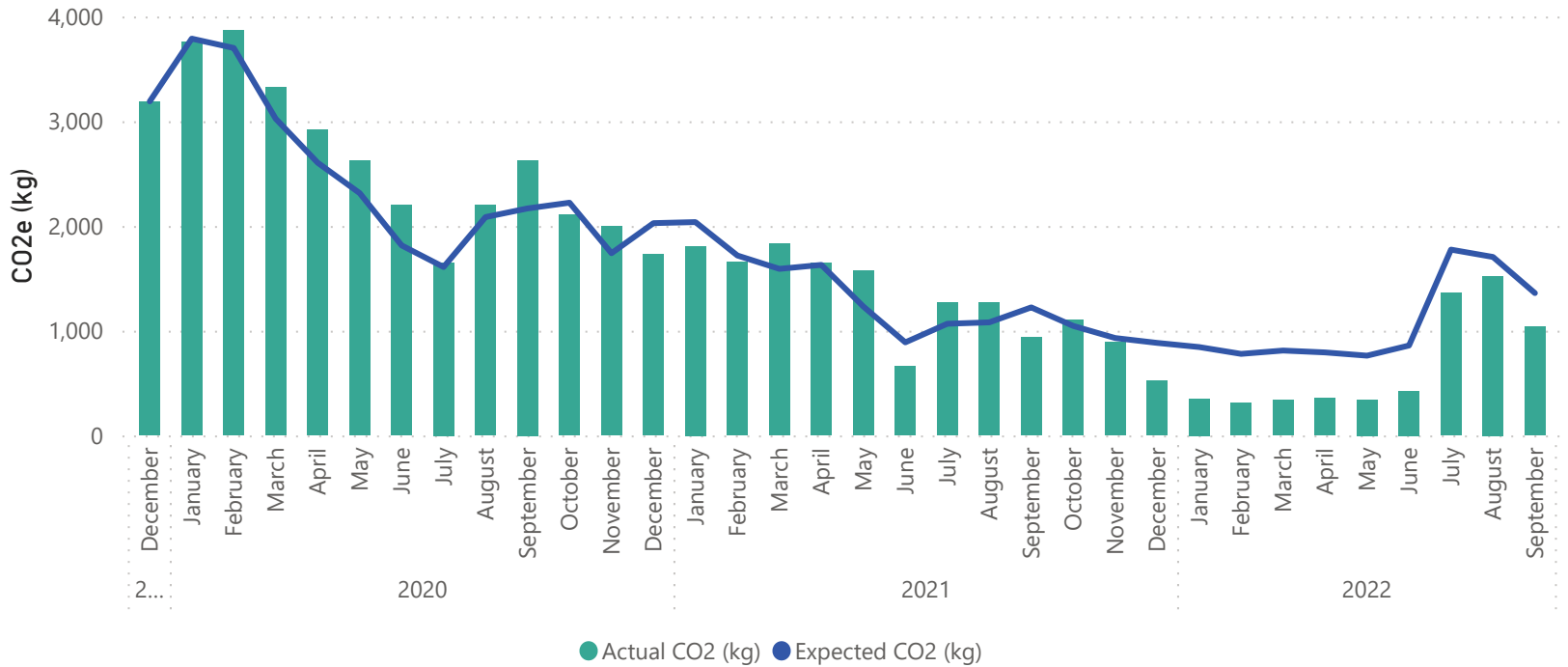


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

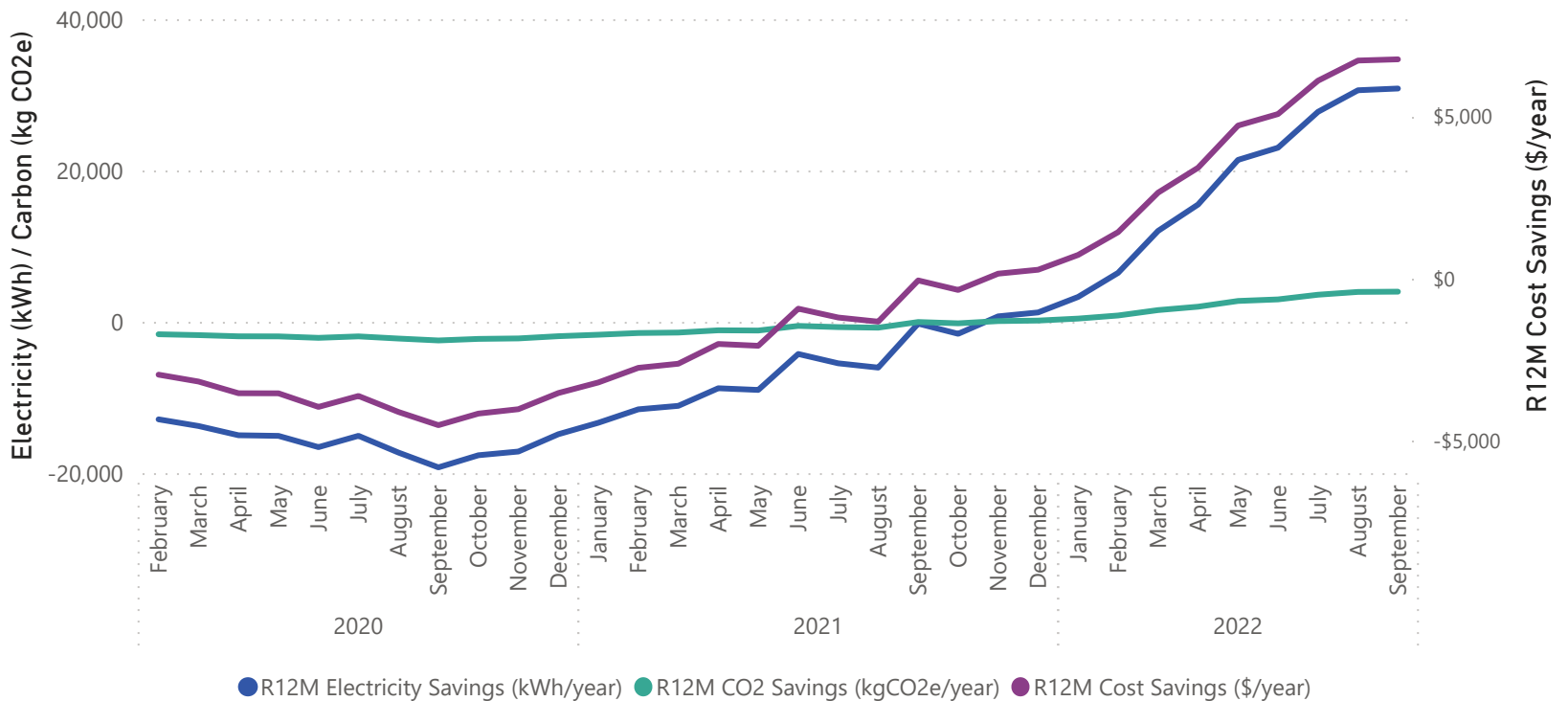
Whakatane District Council

Johnson Road Pump Station

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



Johnson Rd Pumps Rolling 12 Month Savings

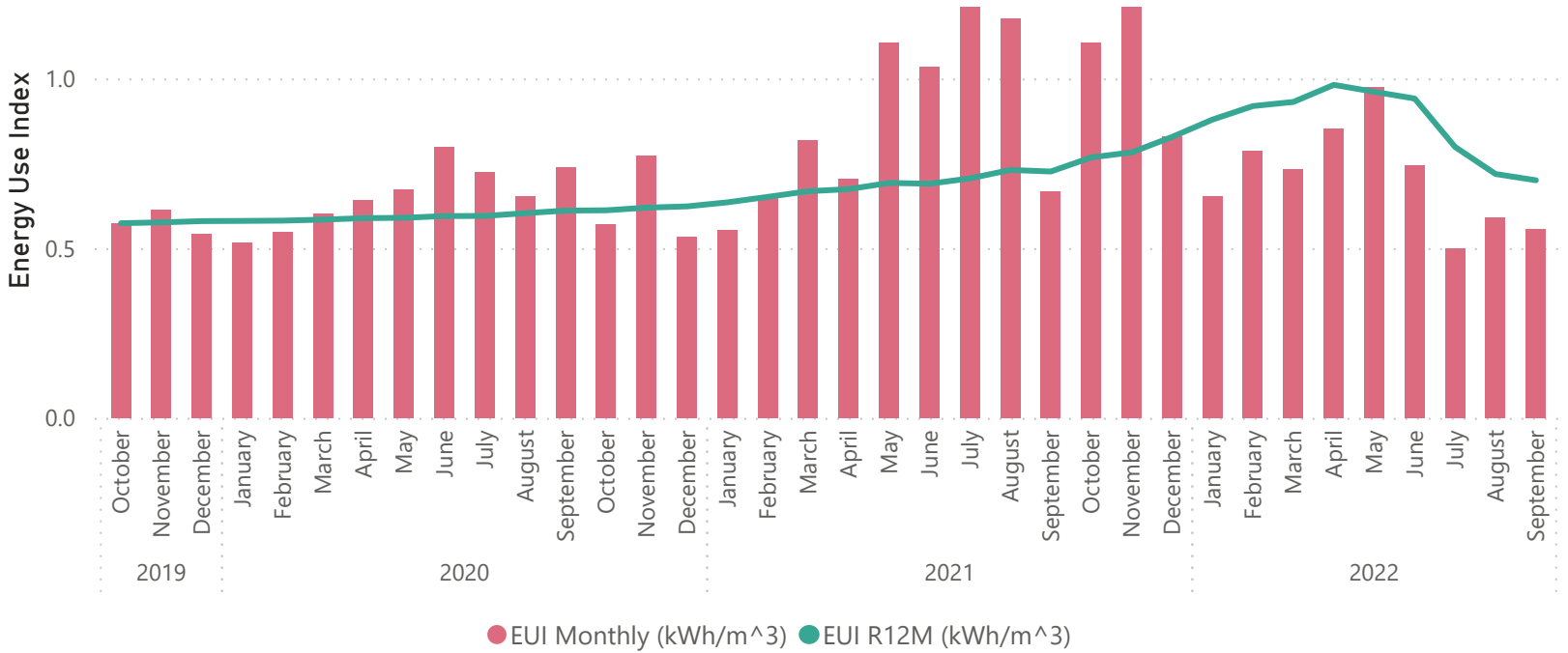


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

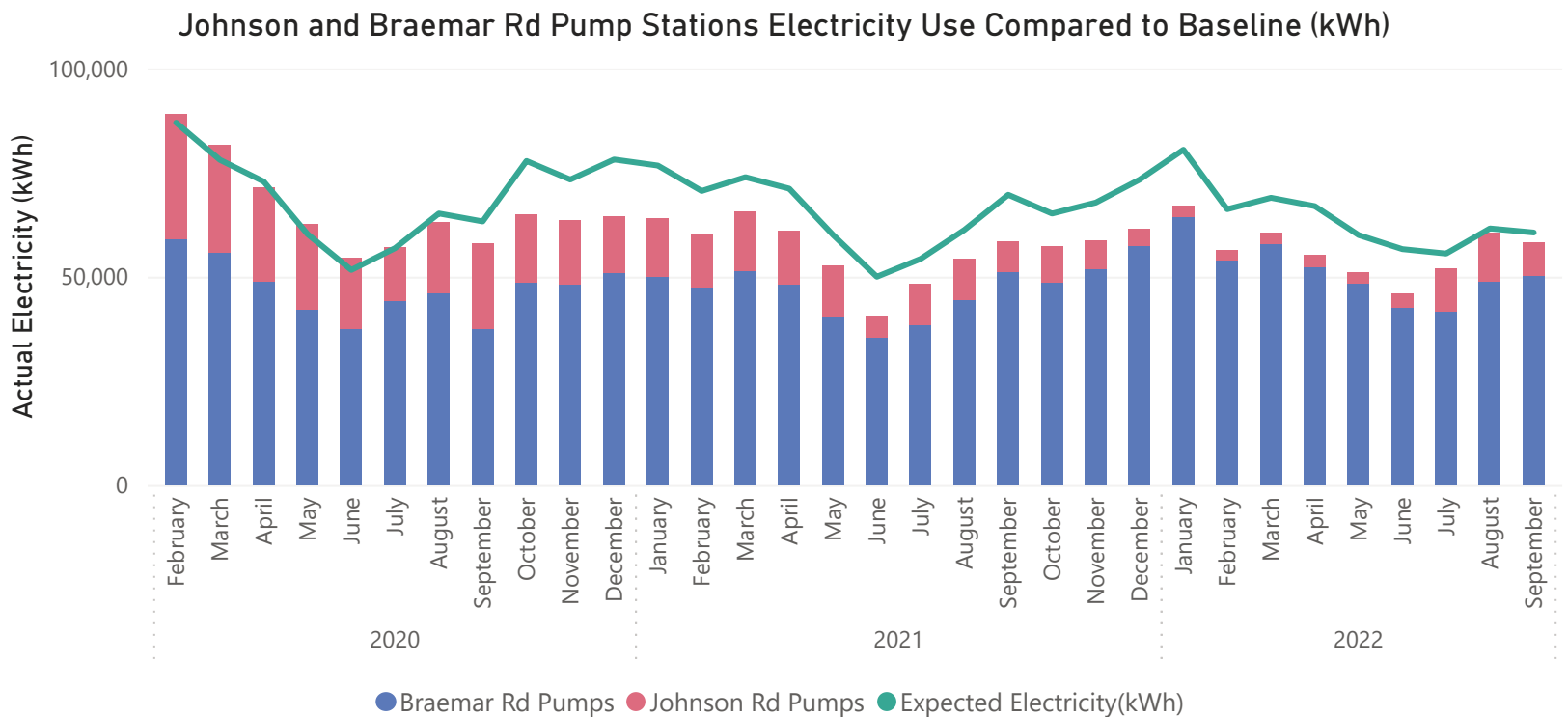
Johnson and Braemar Rd Pump Stations

<p>\$517 Monthly Energy Cost Savings</p>	<p>2,394 Elec. Savings (kWh/mo)</p>	<p>4% Elec. Savings (%)</p>	<p>99,097 R12M Electricity Savings (kWh/yr)</p>	<p>314 CO2e Savings (kg/mo)</p>
<p>\$16,740 R12M Energy Cost Savings</p>				<p>12,915 R12M CO2e Savings (kg/yr)</p>

Comments:

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

Johnson Rd achieved savings in September 2022, Braemar Rd pump station's electricity use was close to expected for the month.

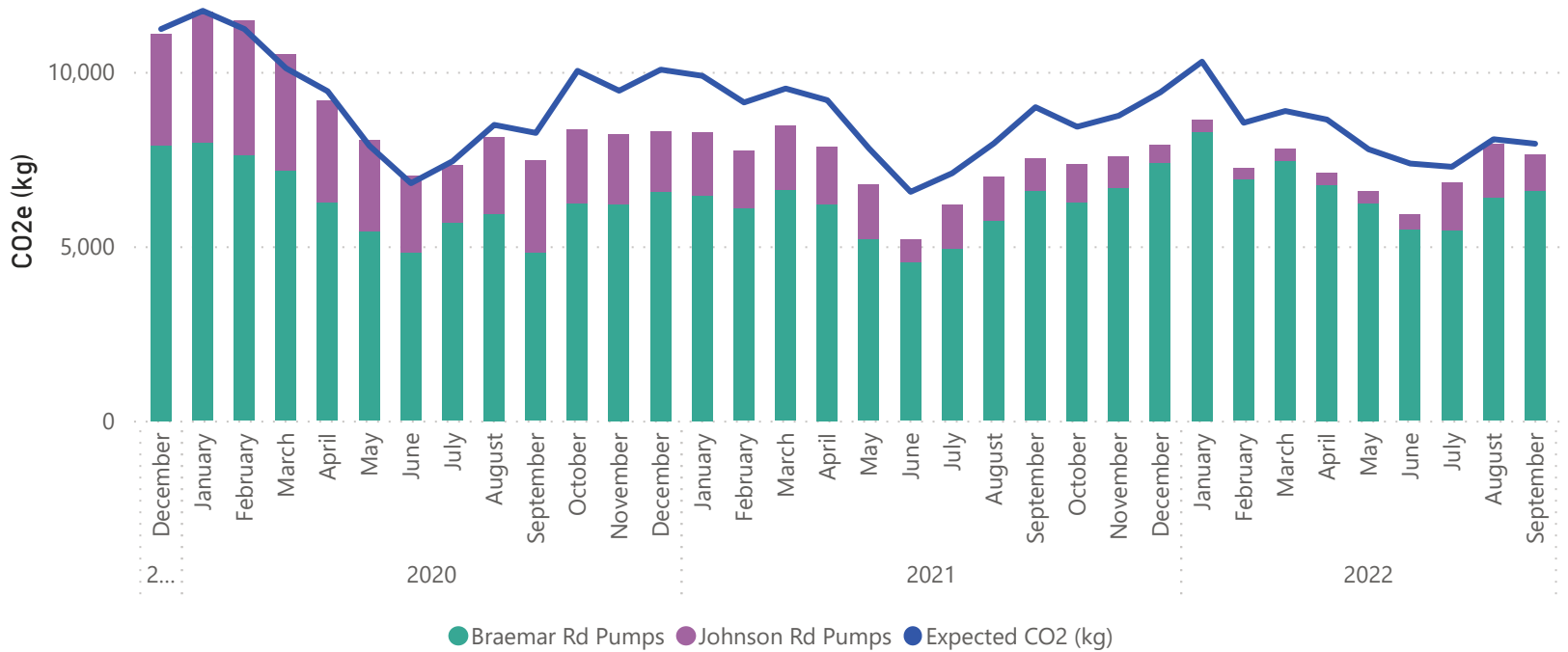


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

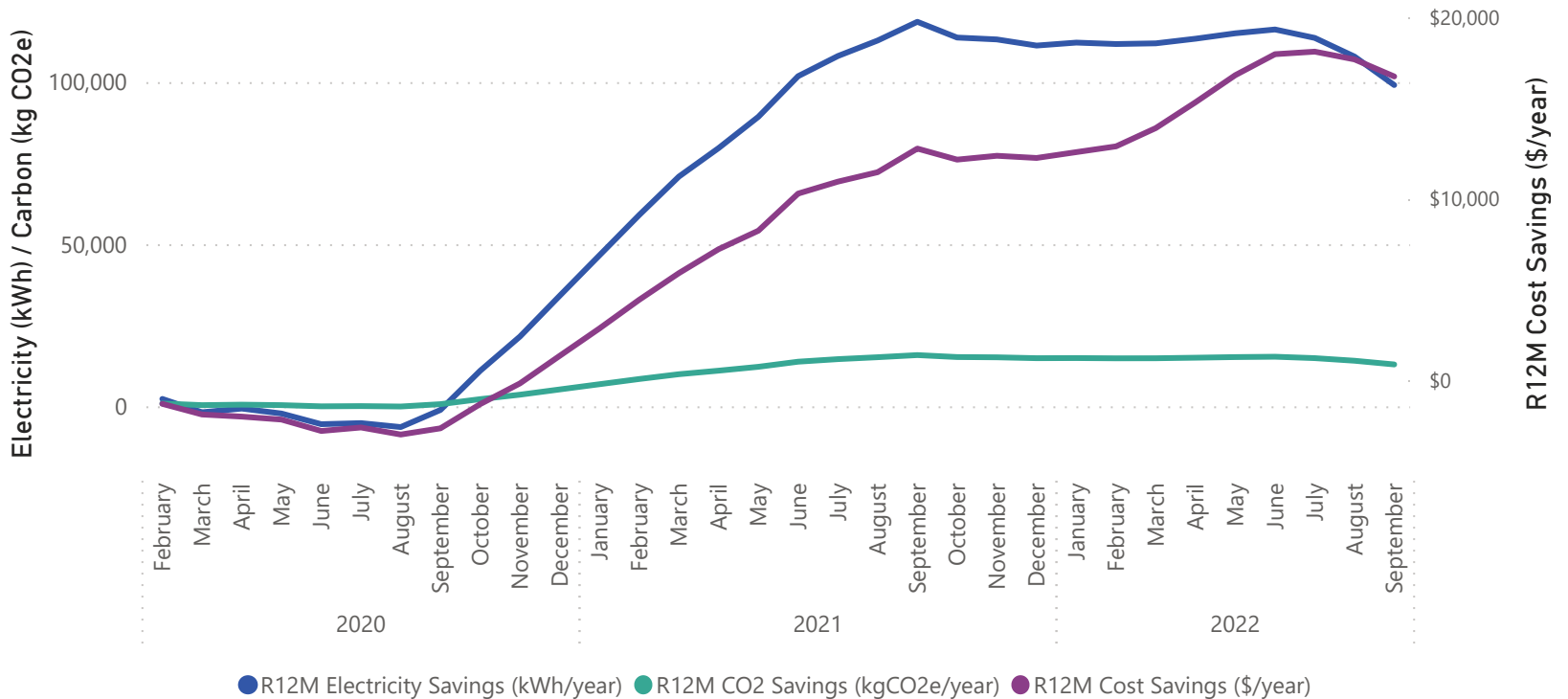
Whakatane District Council

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

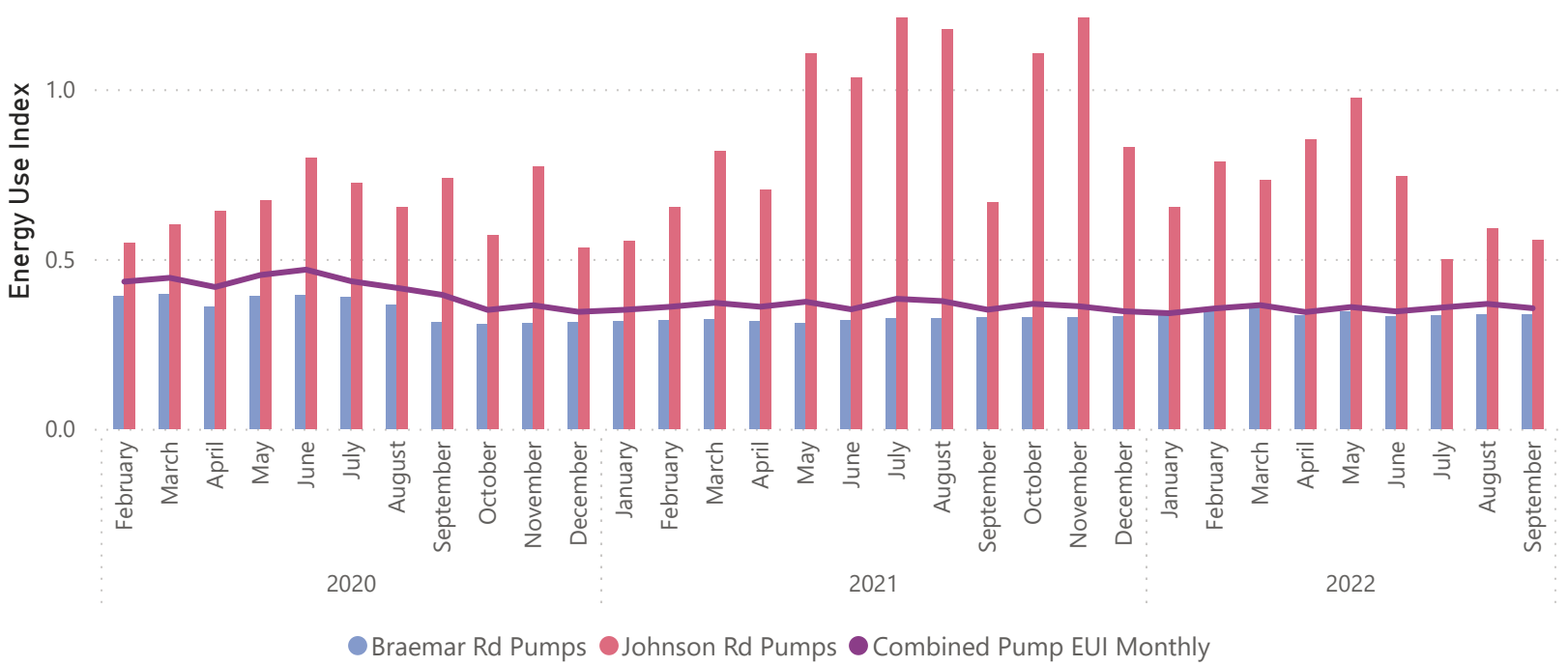


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

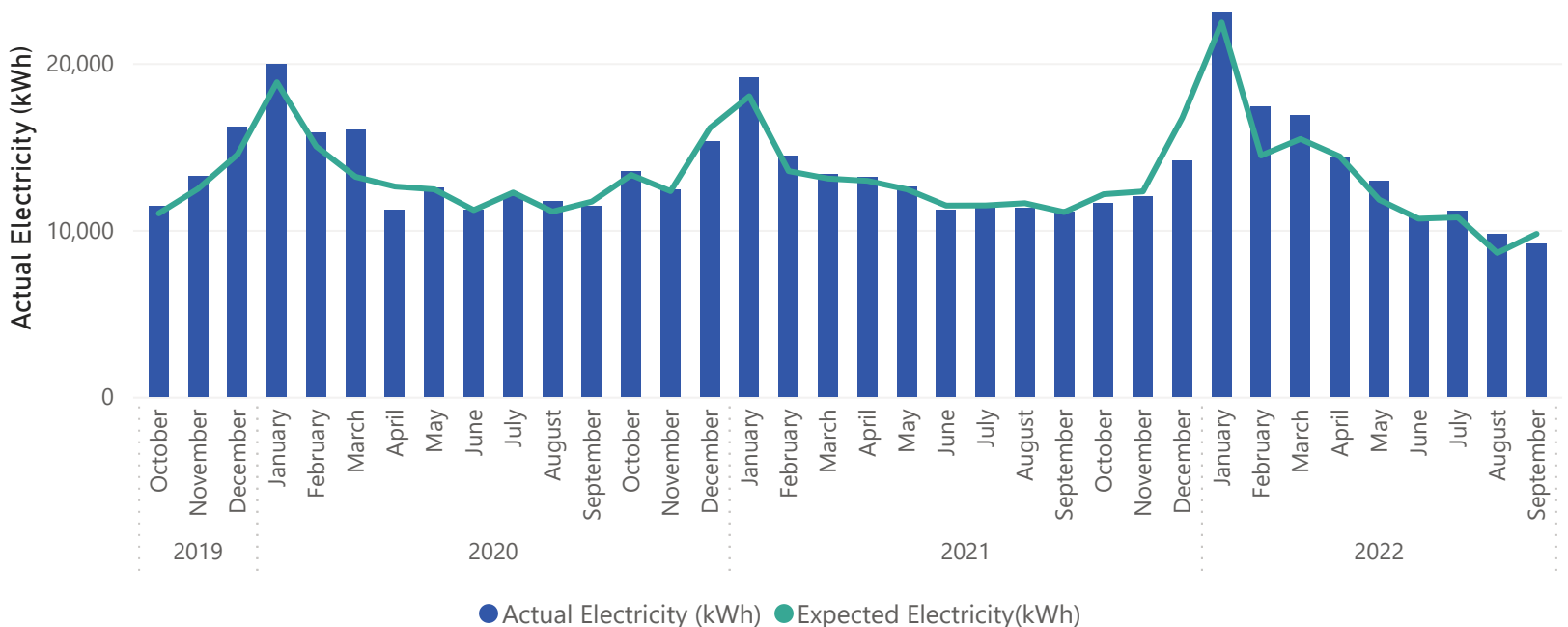
<p>\$107 Monthly Energy Cost Savings</p>	<p>607 Elec. Savings (kWh/mo)</p>	<p>6% Elec. Savings (%)</p>	<p>-3,782 R12M Electricity Savings (kWh/yr)</p>	<p>80 CO2e Savings (kg/mo)</p>
<p>-\$688 R12M Energy Cost Savings</p>				<p>-489 R12M CO2e Savings (kg/yr)</p>

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.

September 2022 electricity usage was less than expected and a 6% savings has been achieved. the monthly EUI has reduced compared to August, which could in part be due to when the meter was read.

Bridger Glade Pumps Electricity Use Compared to Baseline (kWh)

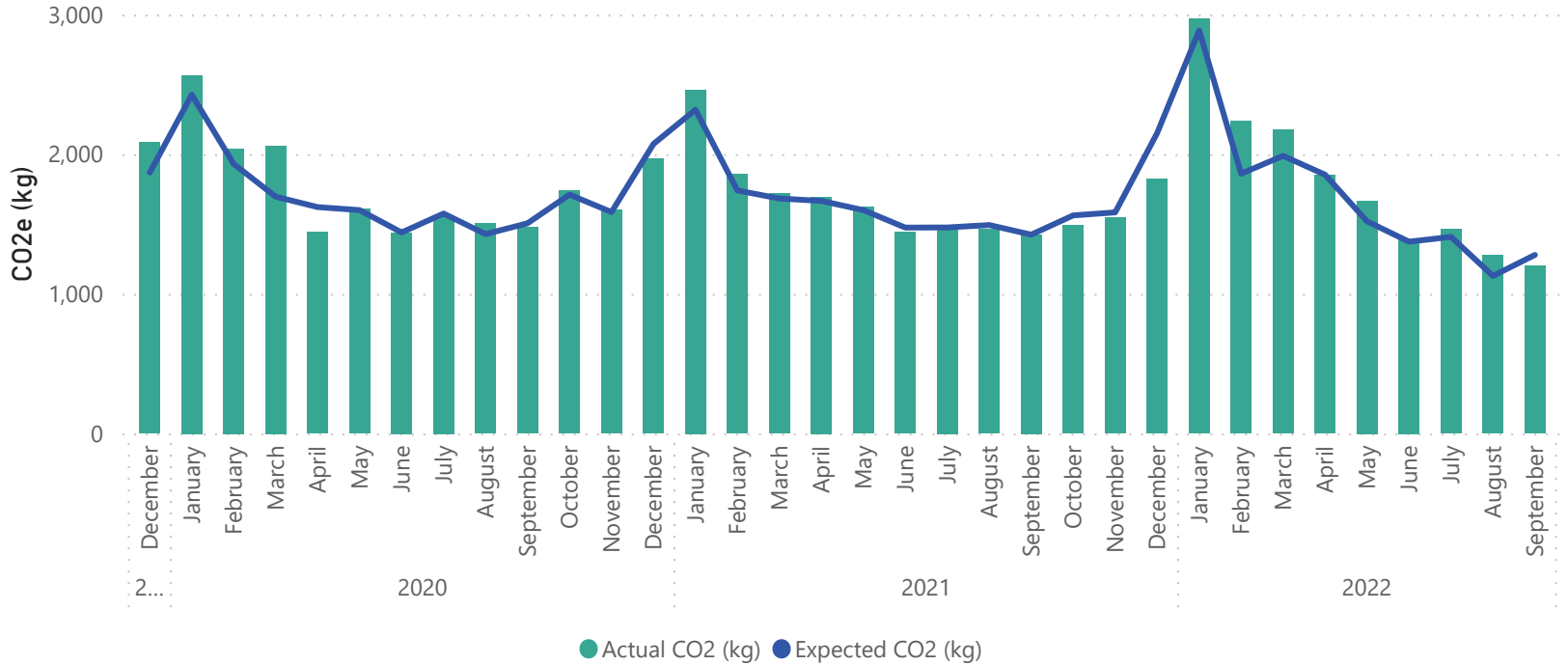


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

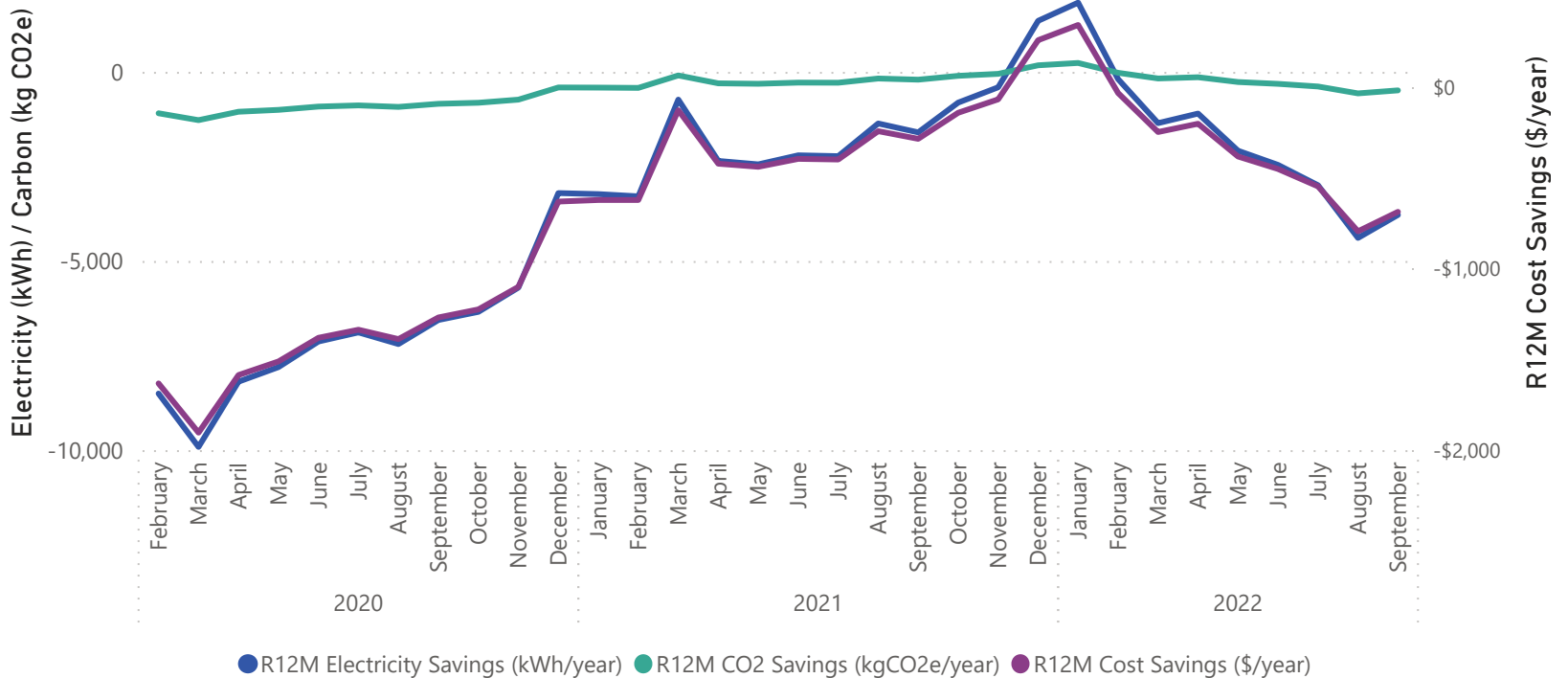
Whakatane District Council

Bridger Glade Pump Station

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



Bridger Glade Pumps Rolling 12 Month Savings

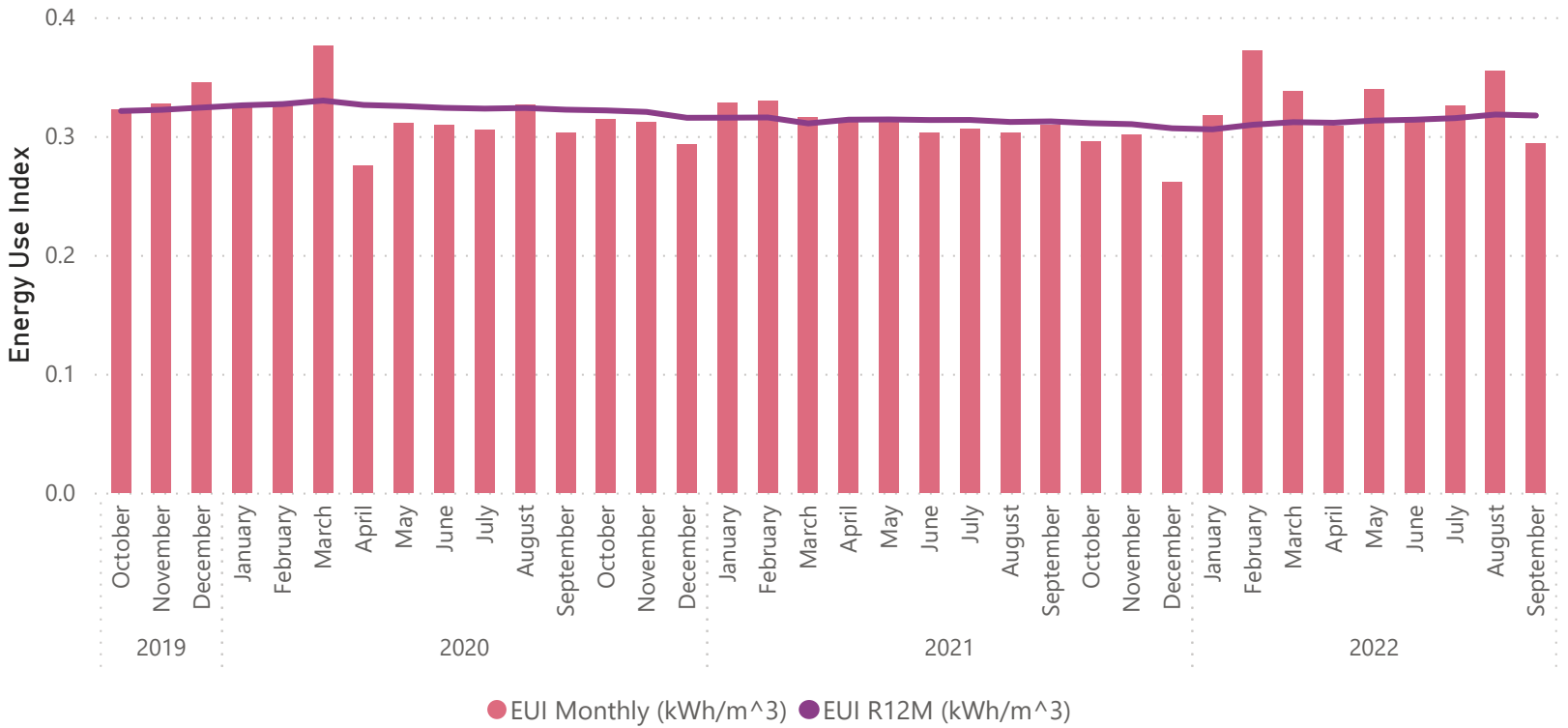


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

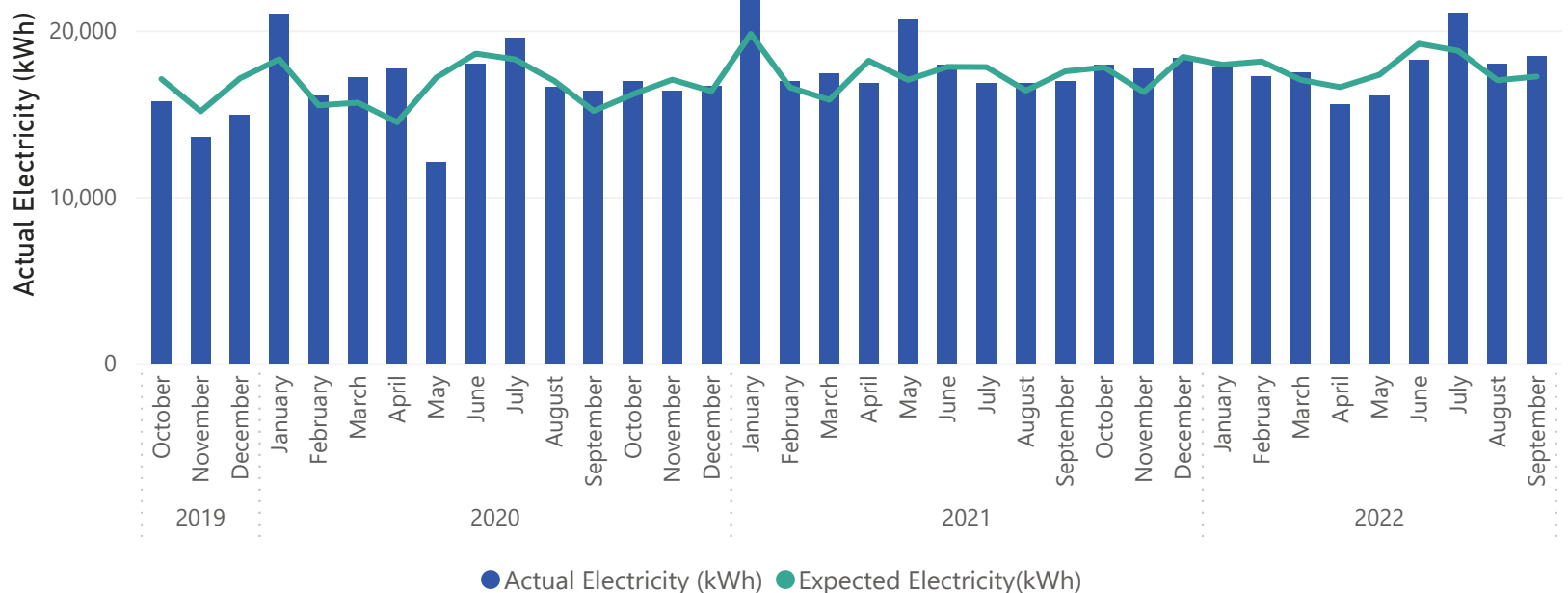
<p>-\$220 Monthly Energy Cost Savings</p>	<p>-1,247 Elec. Savings (kWh/mo)</p>	<p>-7% Elec. Savings (%)</p>	<p>-2,141 R12M Electricity Savings (kWh/yr)</p>	<p>-163 CO2e Savings (kg/mo)</p>
<p>-\$368 R12M Energy Cost Savings</p>				<p>-286 R12M CO2e Savings (kg/yr)</p>

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.

Electricity use has been more than expected since July 2022. The EUI in September is greater than it has been over the past 12 months.

Ohope Oxidation Ponds Electricity Use Compared to Baseline (kWh)

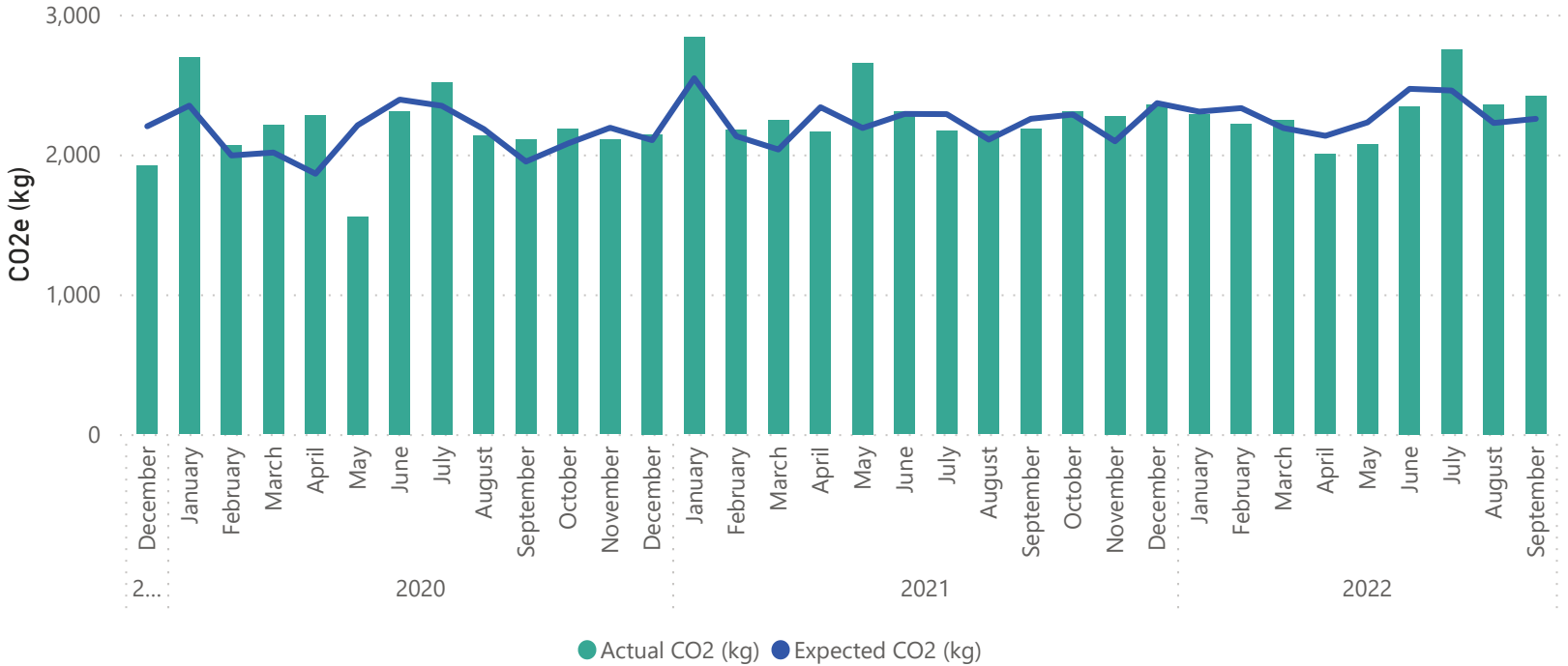


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

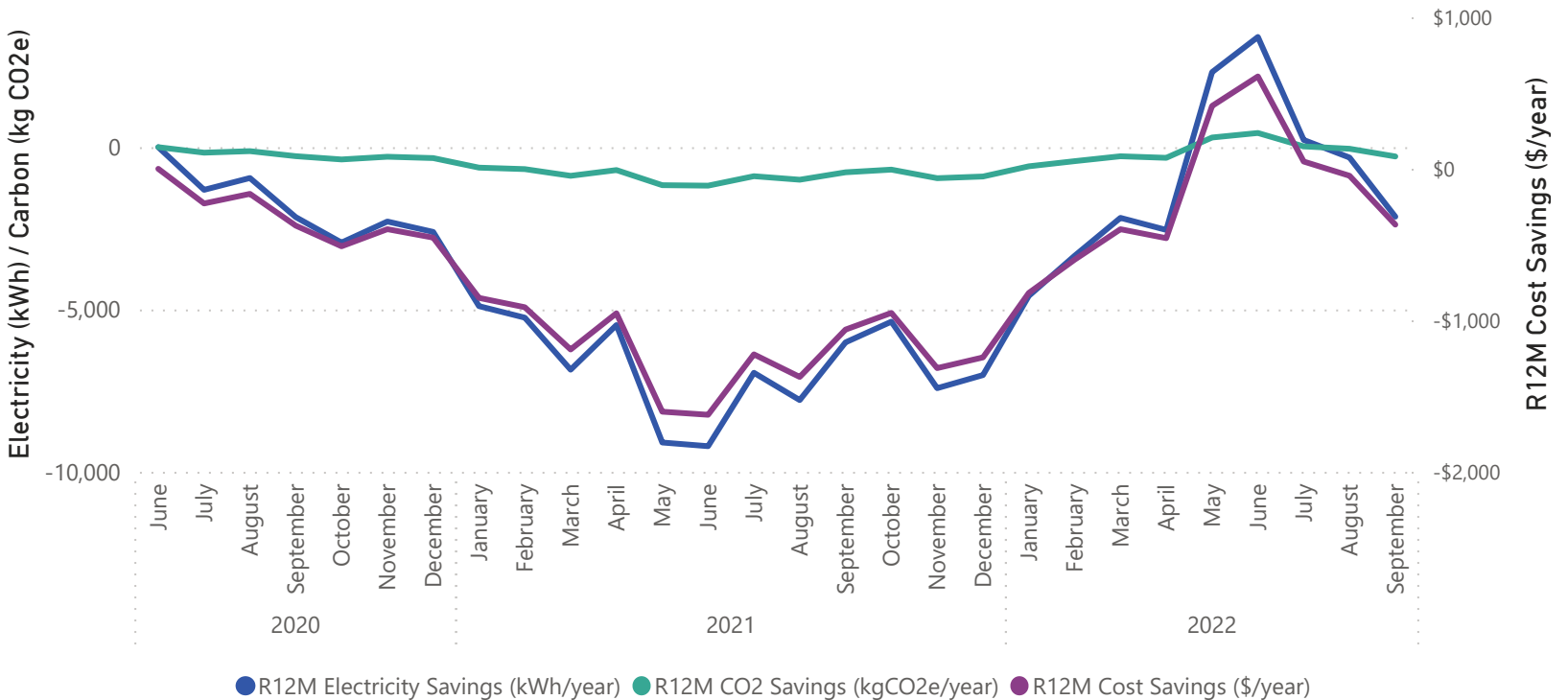
Whakatane District Council

Ohope Oxidation Ponds

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



Ohope Oxidation Ponds Rolling 12 Month Savings

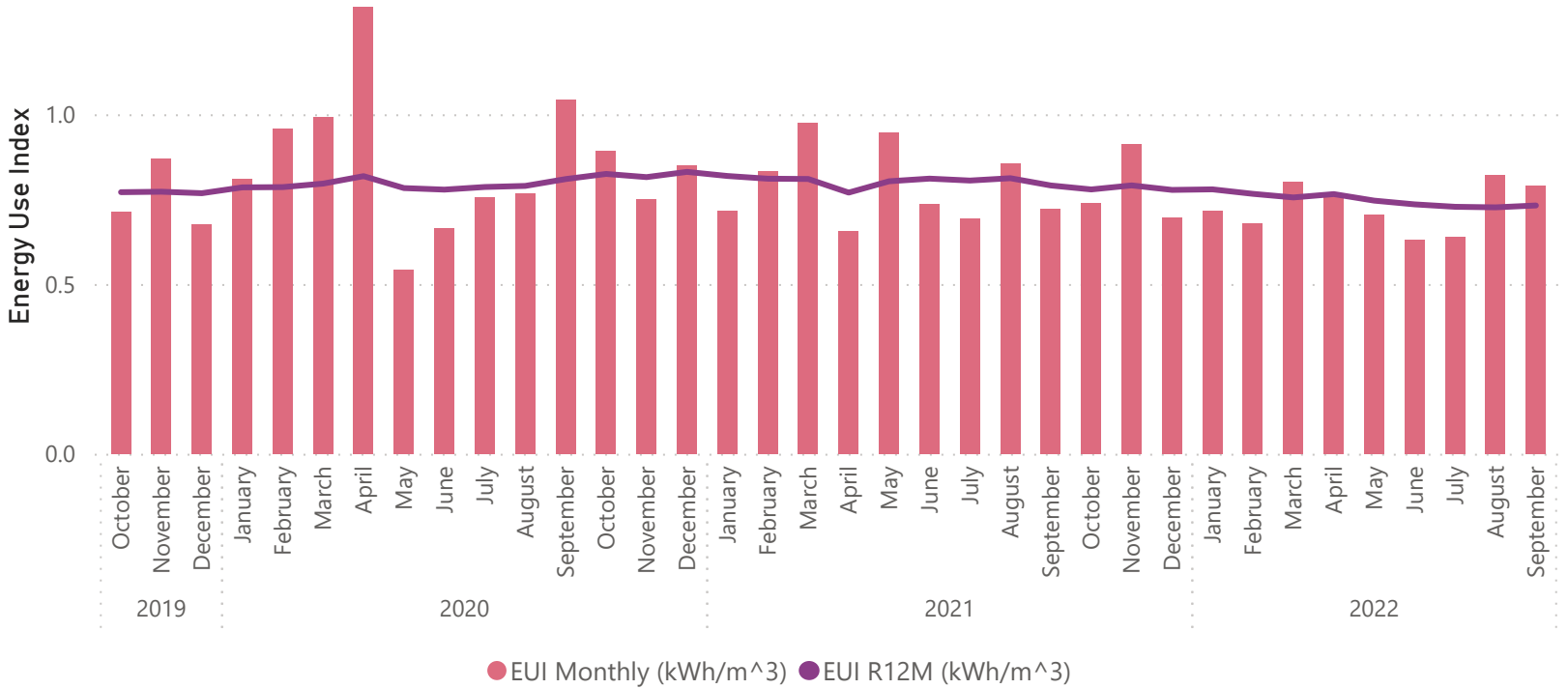


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time **Baselines were updated for all sites from July 2022.**

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

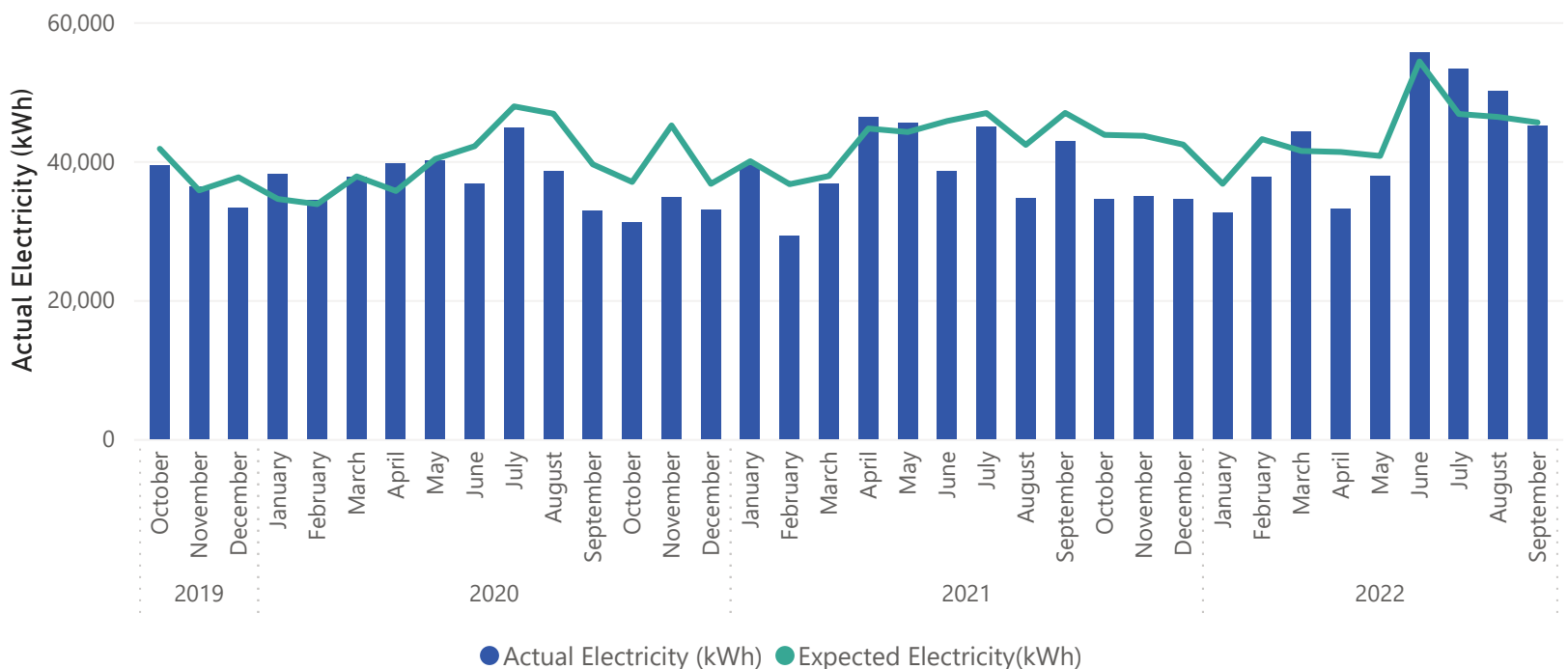
<p>\$95 Monthly Energy Cost Savings</p>	<p>522 Elec. Savings (kWh/mo)</p>	<p>1% Elec. Savings (%)</p>	<p>32,454 R12M Electricity Savings (kWh/yr)</p>	<p>68 CO2e Savings (kg/mo)</p>
<p>\$4,495 R12M Energy Cost Savings</p>				<p>4,155 R12M CO2e Savings (kg/yr)</p>

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 past three months have used more electricity than expected, which may have some interaction with rainfall. The EUI has decreased for the past four months, which is excellent. The EUI in September 2022 is approximately 16% lower than the same time last year.

Whakatane Oxidation Ponds Electricity Use Compared to Baseline (kWh)

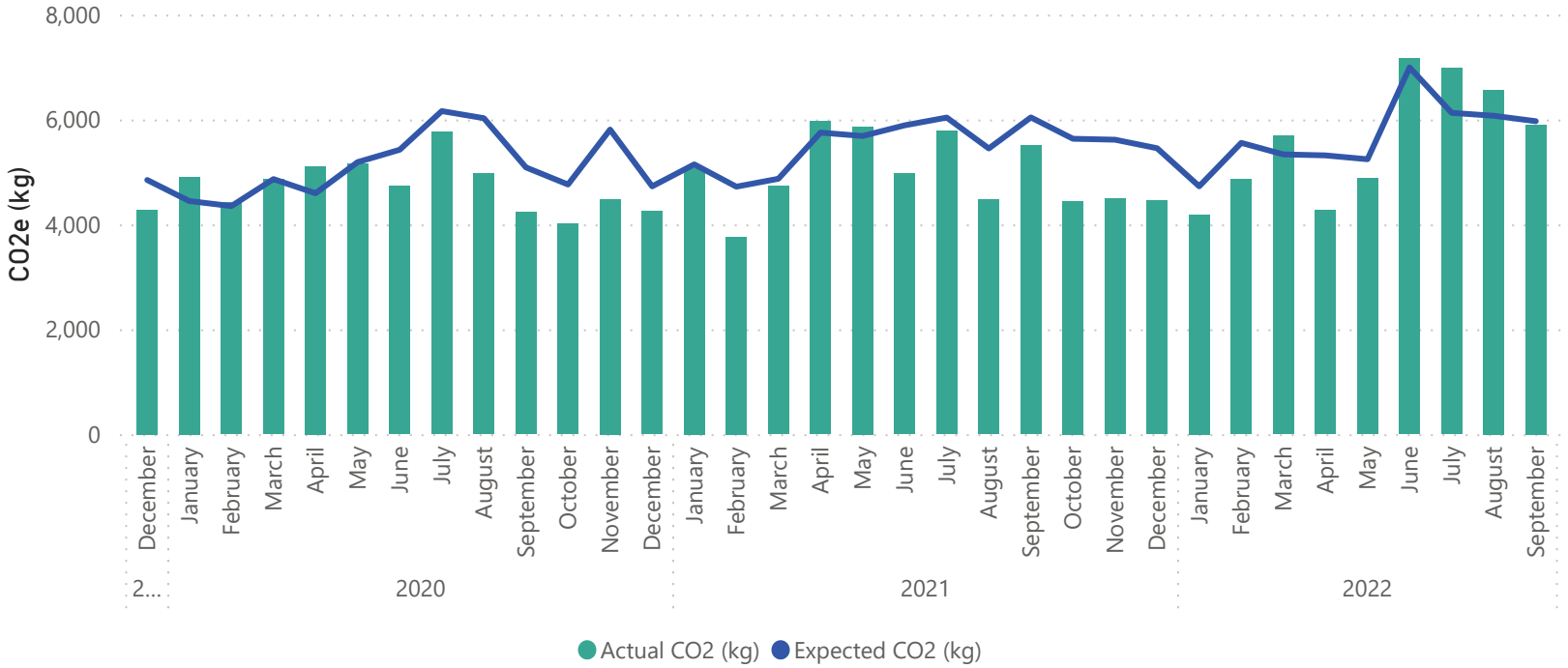


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

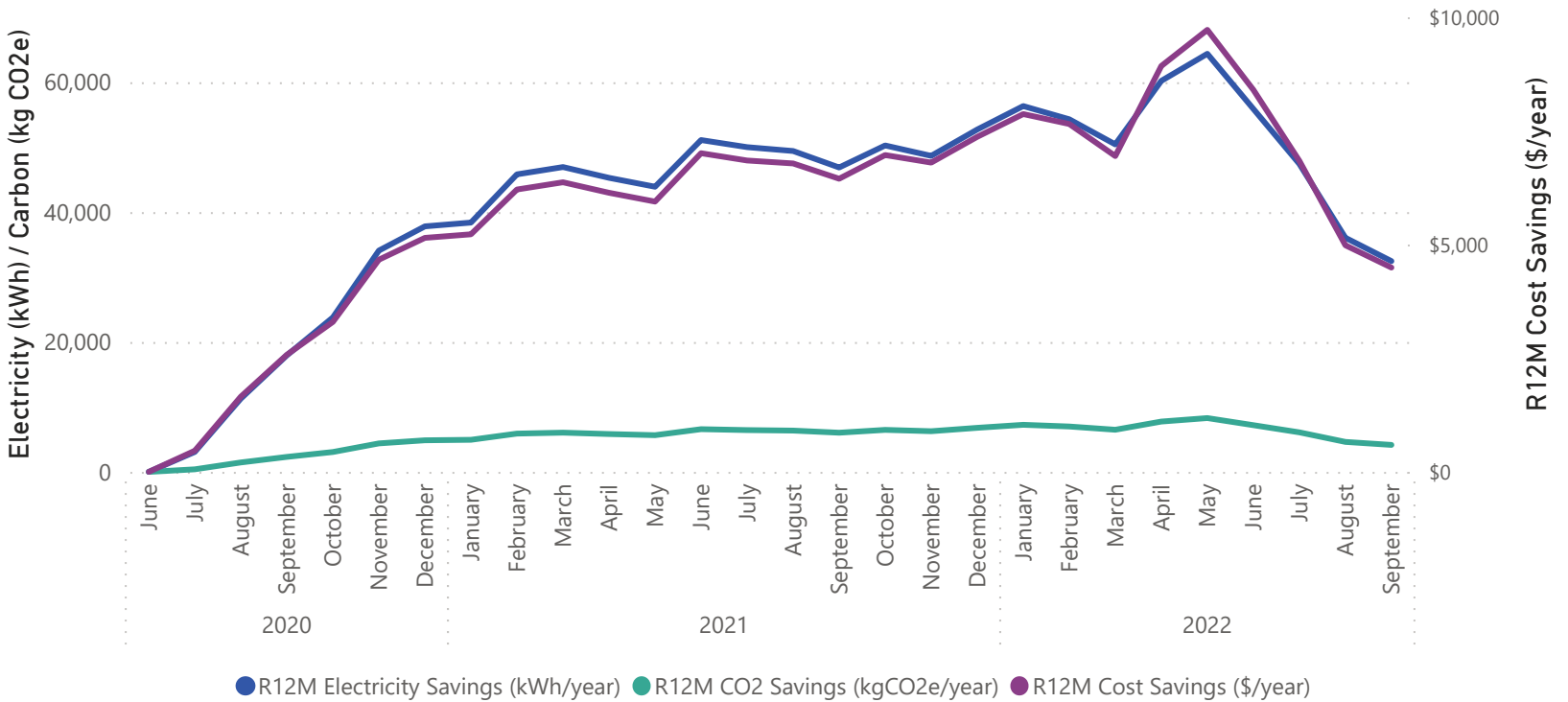
Whakatane District Council

Whakatane Oxidation Ponds

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



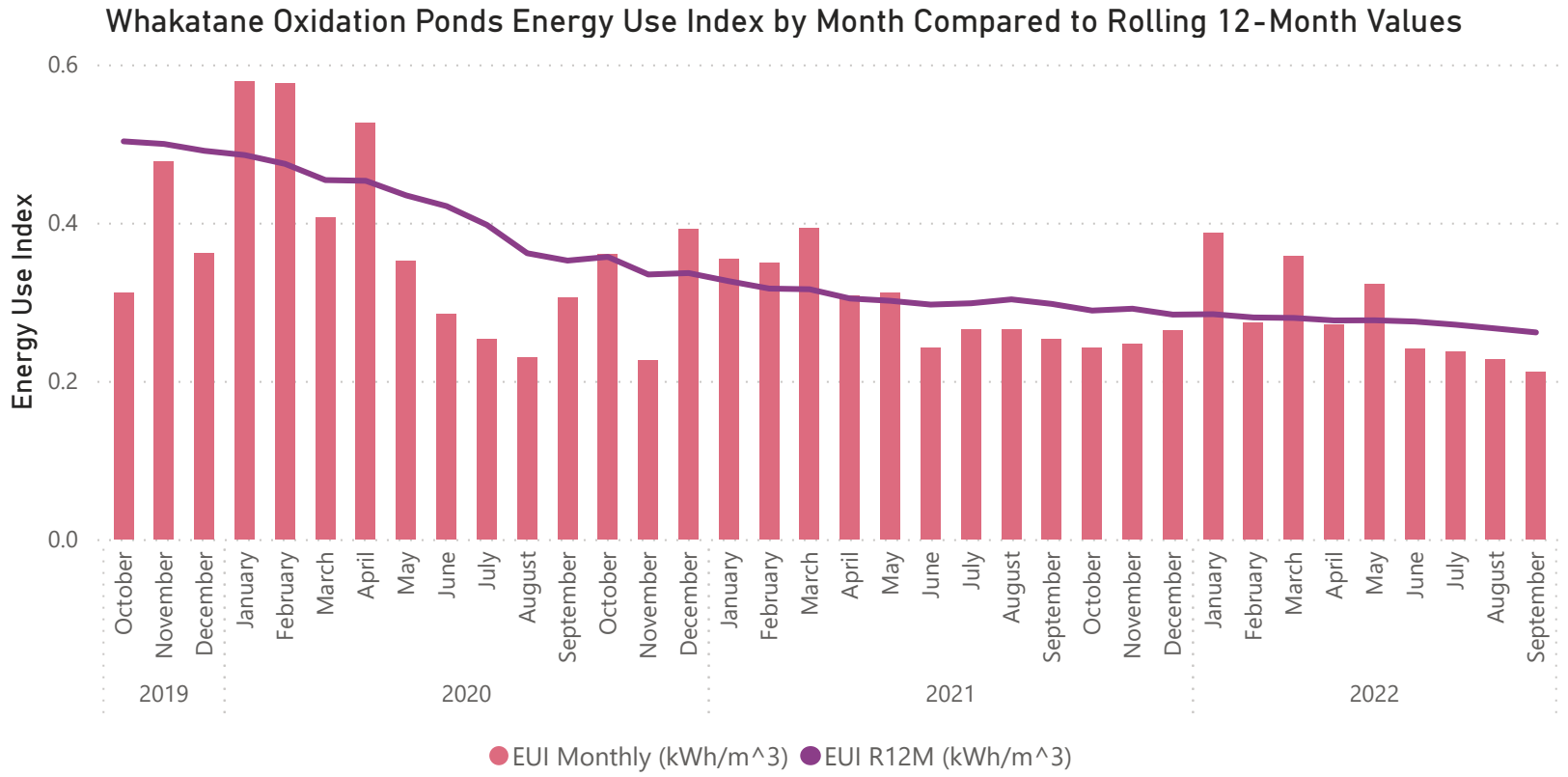
Whakatane Oxidation Ponds Rolling 12 Month Savings



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



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

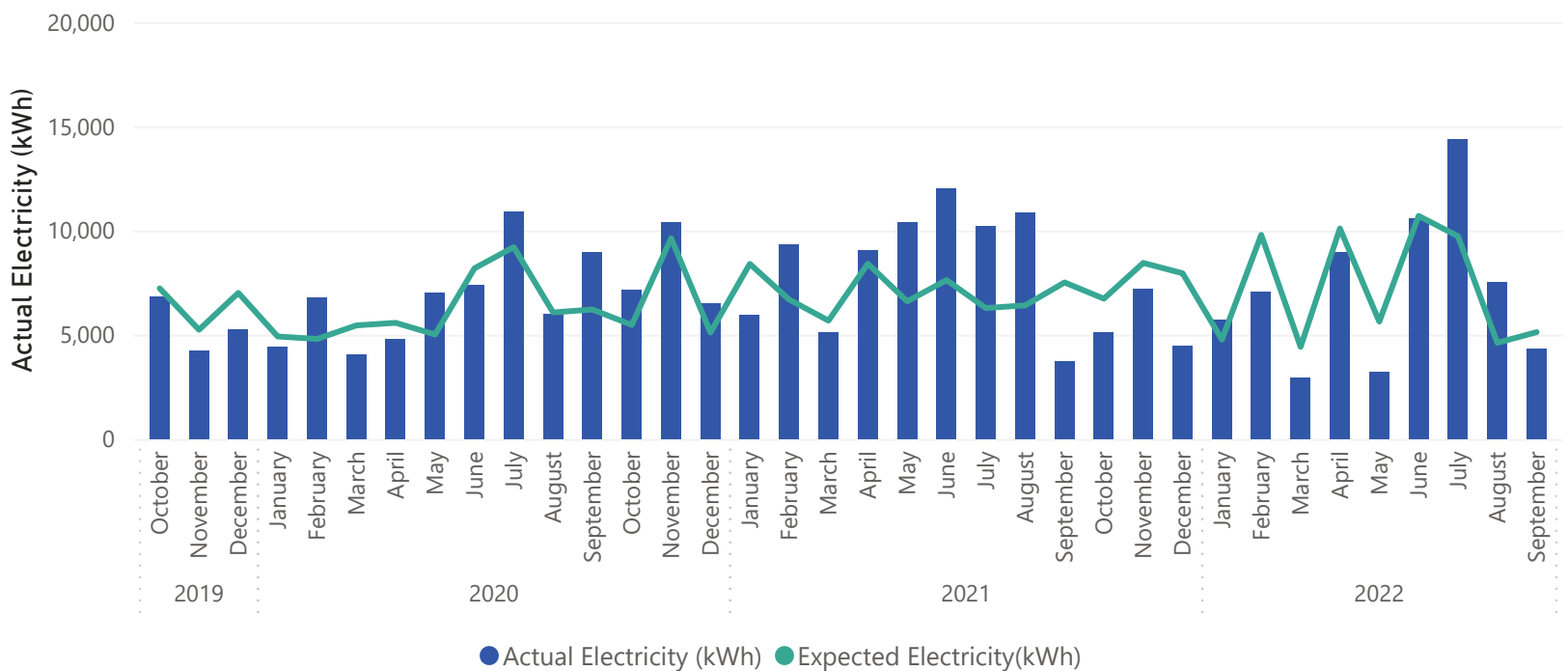
<p>\$307 Monthly Energy Cost Savings</p>	<p>802 Elec. Savings (kWh/mo)</p>	<p>16% Elec. Savings (%)</p>	<p>6,530 R12M Electricity Savings (kWh/yr)</p>	<p>105 CO2e Savings (kg/mo)</p>
<p>\$4,549 R12M Energy Cost Savings</p>				<p>825 R12M CO2e Savings (kg/yr)</p>

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.

Electricity used for the month was 16% less than expected. More than 200mm of rain fell in September, however, this was not captured during the electricity use period, due to when the meter was read. Demand imposed by some of the rainfall in September will be captured in subsequent monitoring. Rose Gardens pump station only used 34 kWh for the month.

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

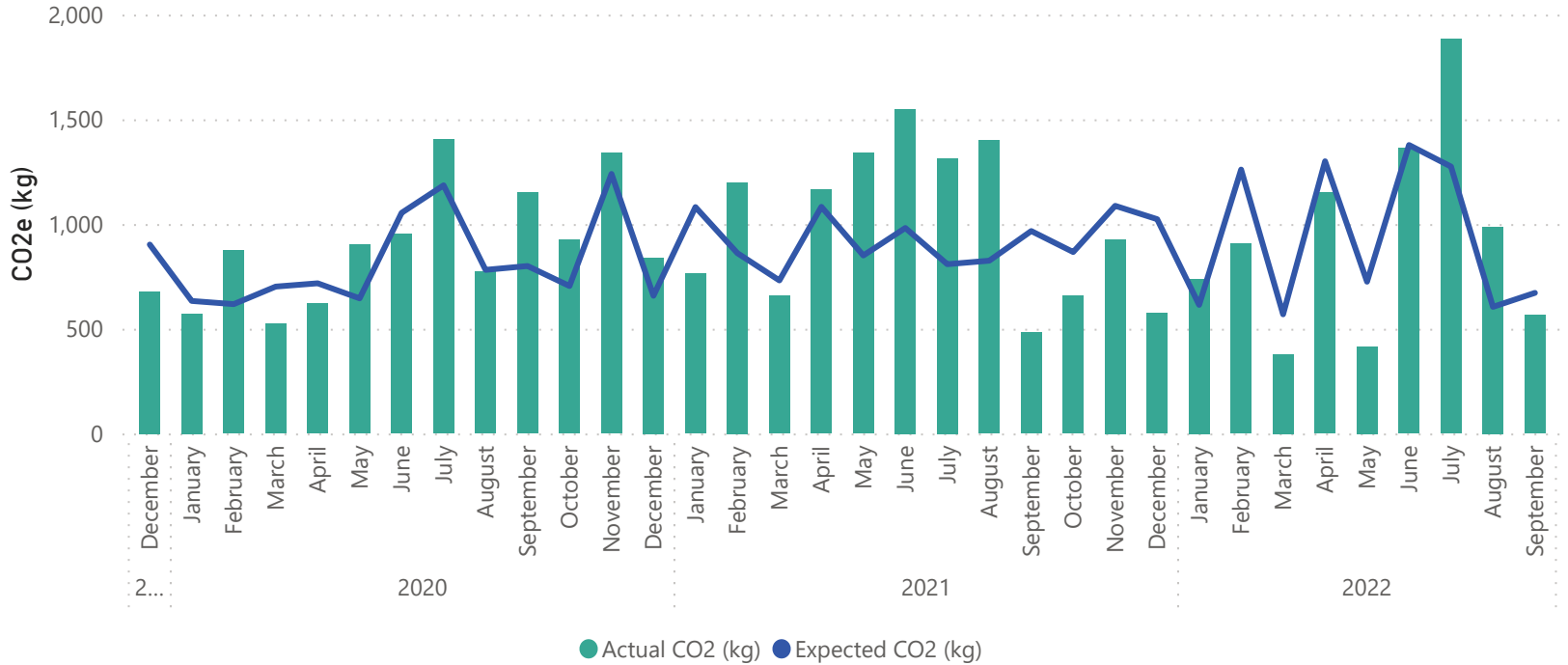


Note: New Zealand was in Covid-19 alert levels 3 and 4 from 23 March until 12 May, 2020. Energy use may have been impacted during this time
Baselines were updated for all sites from July 2022.

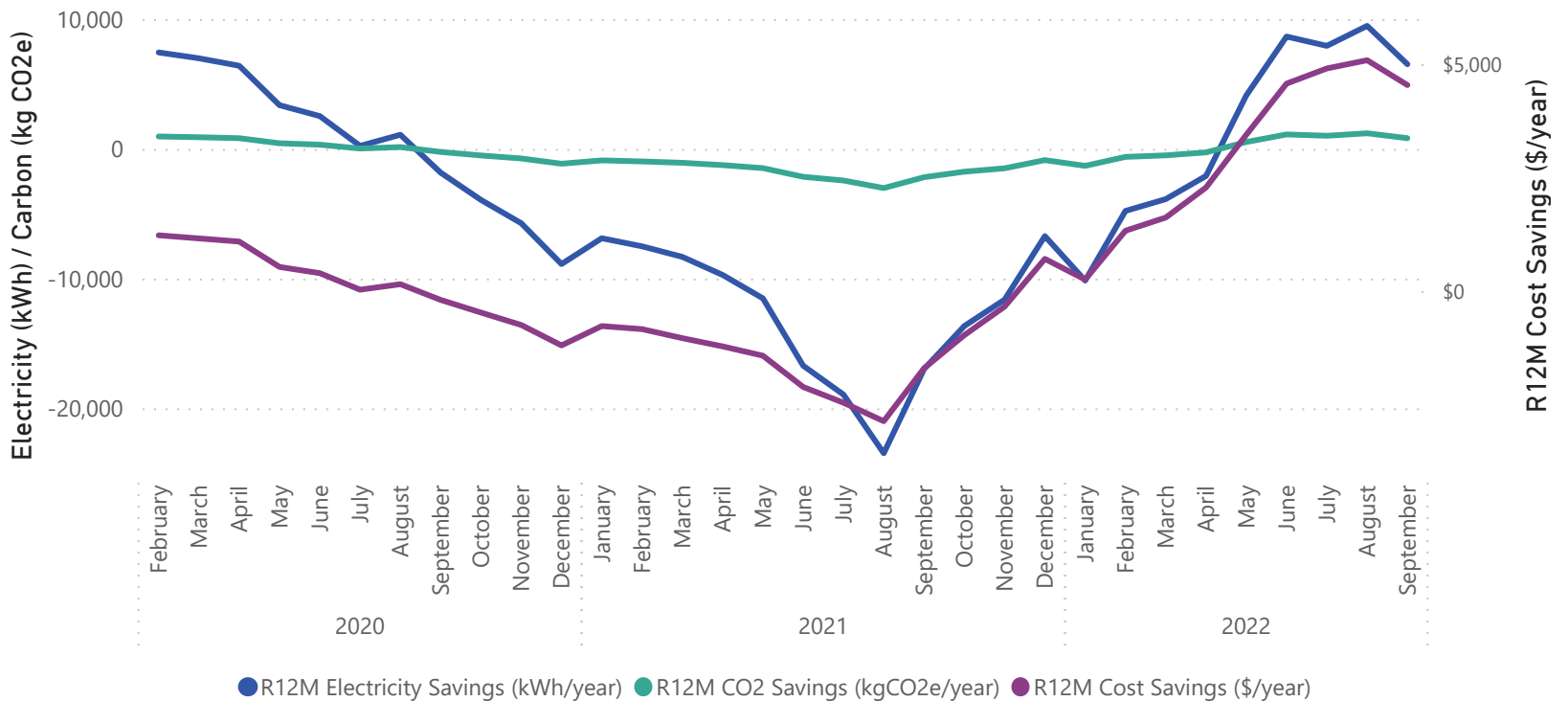
Whakatane District Council

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.**