

# Whakatāne District Council Energy Performance Report

#### Summary

For Whakatāne District Council's six largest energy using sites:

- Total energy used for the month was 458,622 kWh
- Total energy cost for the month was \$50,526
- Total carbon emissions for the month were 66,432 kgCO2e
- Rolling 12-month energy savings total 598,117 kWh
- Rolling 12-month energy cost savings total \$47,702
- Rolling 12-month carbon savings total 127,083 kgCO2e







Te Koputu Library , 3,700 , 6%













## **Civic Centre**

### Summary

- Electricity savings for the month were 1,599kWh, a saving of 5.1%.
- Energy cost savings for the month were \$163.
- Carbon savings for the month were 206 kgCO2e, a saving of 5.1%.
- Rolling 12-month electricity savings are 21,730 kWh, a saving of 5.7%.
- Rolling 12-month energy cost savings are \$2,503.
- Rolling 12-month carbon savings are 2,797 kgCO2e, a saving of 5.7%.

### Comments

Electricity use at the Civic Centre had been higher than expected for the three months from July to September 2019. This trend was broken in October with electricity used for the month 5.7% less than the baseline. Note, the baseline adjusts for ambient temperature. Electricity use in Oct 2019 was 8.7% less than electricity use in Oct 2018 in absolute terms (no adjustments for temperature).











# **Aquatic Centre**

## Summary

- Electricity savings for the month were -2,927kWh, an extra 2.5%.
- Natural gas savings for the month were 71,083 kWh, a saving of 45.9%
- Energy cost savings for the month were -\$275, which is an increase.
- Carbon savings for the month were 15,068 kgCO2e, a saving of 30.9%.
- Rolling 12-month electricity savings are -41,213 kWh, an extra 3.3%.
- Rolling 12-month natural gas savings are 572,815 kWh, a saving of 54.8%
- Rolling 12-month energy cost savings are \$40,251.
- Rolling 12-month carbon savings are 117,179 kgCO2e, a saving of 30.3%.

#### Comments

Electricity use was slightly higher than expected at the Aquatic Centre in October 2019, when adjusted for ambient temperature. October has historically been the Aquatic Centre's highest month for electricity use, and the same is true this year. The reason for the increased usage in October is the filling and then operating of the outdoor pool.

October is also historically a high gas using month due to the heating of the outdoor pool. Gas use in Oct 2019 was significantly below the baseline, which is similar to Oct 2018. Oct 2017, when the baseline was set, had much higher gas use.















## **Te Koputu Library**

## Summary

- Electricity savings for the month were 803kWh, a saving of 5.2%.
- Natural gas savings for the month were 1,141 kWh, a saving of 11.9%
- Energy cost savings for the month were \$83.
- Carbon savings for the month were 355 kgCO2e, a saving of 8.8%.
- Rolling 12-month electricity savings are 12,585 kWh, a saving of 6.8%
- Rolling 12-month natural gas savings are 7,336 kWh, a saving of 6.2%
- Rolling 12-month energy cost savings are \$2,130.
- Rolling 12-month carbon savings are 3,263 kgCO2e, a saving of 6.6%.

## Comments

Monthly electricity use at the library has been tracking below expected for the last six months, with a saving of 5.2% achieved in October 2019. A similar trend of electricity savings from April to Sep was observed in 2018 as well, however this was absent in 2017 when the baseline was set. By Oct in 2017, electricity use had increased to above the expected amount. In October 2019, electricity had increased compared to previous months, however it was still below the baseline.



Gas use was also lower than expected in October 2019. Monthly gas use has remained relatively constant since May 2019 and has not shown the same increase in colder months as was observed in 2018 and 2017.













## Whakatāne Water Treatment Plant

#### Summary

- Electricity savings for the month were -3,129kWh, an extra 2.9%.
- Energy cost savings for the month were -\$291, which is an increase.
- Carbon savings for the month were -403 kgCO2e, an extra 2.9%.
- Rolling 12-month electricity savings are 12,597 kWh, a saving of 0.9%.
- Rolling 12-month energy cost savings are \$1,578.
- Rolling 12-month carbon savings are 1,621 kgCO2e, a saving of 0.9%.

#### Comments

Electricity use was slightly higher than expected for the month at the Water Treatment Plant. This trend of higher than expected usage has tended to occur in higher usage months and is likely due to usage of a second lift pump not operating as efficiently as the first pump. Electricity was also higher than expected in October 2018.











## **Braemar Rd Pump Station**

### Summary

- Electricity savings for the month were 1,499kWh, a saving of 2.5%.
- Energy cost savings for the month were \$144.
- Carbon savings for the month were 217 kgCO2e, a saving of 2.5%.
- Rolling 12-month electricity savings are 21,281 kWh, a saving of 3.2%.
- Rolling 12-month energy cost savings are \$2,319.
- Rolling 12-month carbon savings are 3,377 kgCO2e, a saving of 3.2%.

### Comments

Braemar Rd has consistently made electricity savings of approximately 3% since October 2018. In October 2019, electricity savings were 2.5% for the month (adjusted for the volume of water supplied). This was slightly lower than the average saving achieved in the last 12 months (3.2%).











## **Paul Rd Pump Station**

- Electricity savings for the month were -751kWh, an extra 2.8%.
- Energy cost savings for the month were -\$74, which is an increase.
- Carbon savings for the month were -96 kgCO2e, an extra 2.8%.
- Rolling 12-month electricity savings are -9,013 kWh, an extra 3%.
- Rolling 12-month energy cost savings are -\$1,012, which is an increase.
- Rolling 12-month carbon savings are -1,154 kgCO2e, an extra 3%.

#### Comments

An error was identified in Paul Rd historic TOU data that occurred during the baseline year and had affected previously reported results. This has been corrected now, and the charts below show that the pattern of energy use has not deviated substantially from expected, although there has been a trend of decreasing energy use and water supplied by Paul Rd pump station.

Electricity use was slightly higher than expected in October 2019, by 2.8%.







