



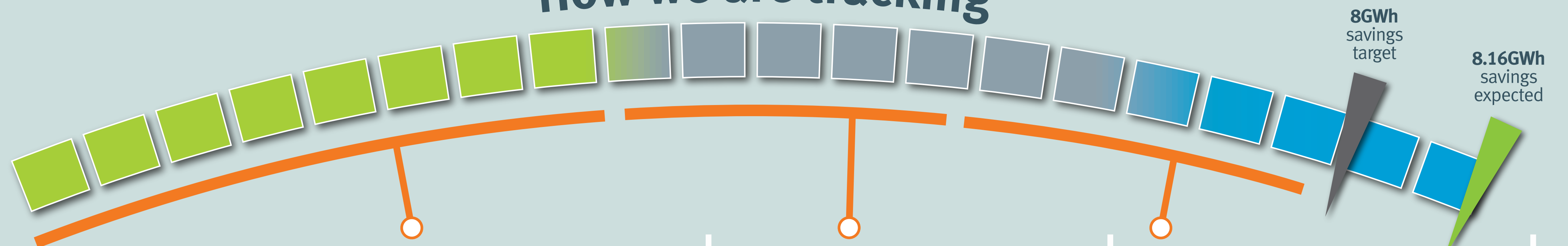
# Our performance against 8GWh energy savings target (2016 to 2019)

Watercare signed a collaboration agreement with EECA in 2016 to plan and implement 8GWh worth of annual efficiency gains within three years and energy neutrality at the Māngere and Rosedale wastewater treatment plants by the end of 2025.

## Since then, we have:

- Formed a cross-functional team of energy champions
- Held two energy weeks
- Employed an energy engineer to manage our energy programmes, initially co-funded by EECA, who is now a full-time Watercare employee
- Expected savings of \$630,000 per annum, equivalent to the power consumption of 960 NZ households per year
- Expected reduction in carbon emissions equivalent to 670 petrol cars per year
- Won three Water NZ conference awards relating to innovation in energy efficiency and an EECA leadership award.

## How we are tracking



### Confirmed savings 4.18GWh (\$328,000)

Orakei wastewater pump station control improvements, 0.3GWh

Electrical vehicles, 0.03GWh

Mangere WWTP inter-stage pump station control improvements, 0.3GWh

Mangere WWTP primary sedimentation tank sprayer reduction, 3.5GWh

### Estimated savings from projects recently completed: 2.35GWh (\$175,000)

Mangere WWTP flow diversion to reactor clarifiers 10 & 11, 1.37GWh

Mangere WWTP nitrite shunt (4 reactor clarifiers), 0.98GWh

### Theoretical savings from projects underway: 1.63GWh (\$127,000)

Mangere WWTP blower control improvements, 0.5GWh

Mangere WWTP UV (4 channels), 0.68GWh

Solar installation (Wellsford WWTP, Pukekohe WWTP, Redoubt Reservoir), 0.46GWh

\*Confirmed savings are energy savings that have been verified using the International Performance Measurement and Verification Protocol (IPMVP) as required under the collaboration agreement.