

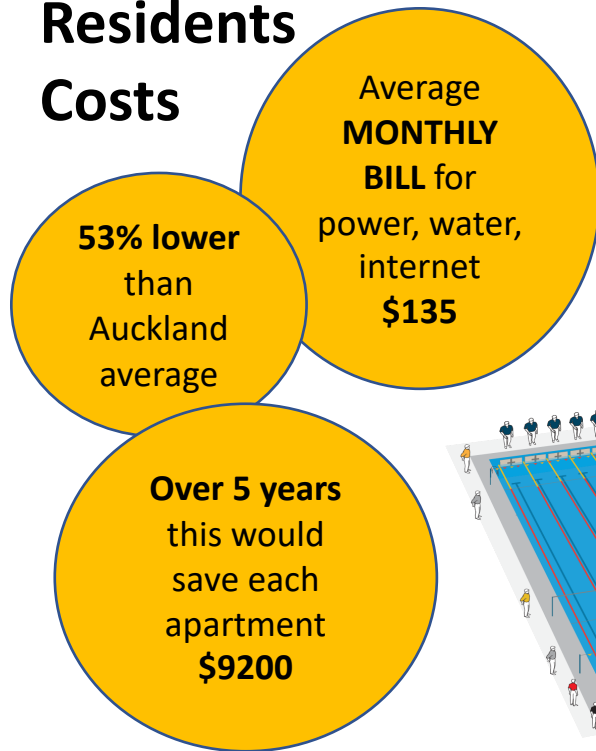
26 Aroha Services use & costs

1 year - March 2021 to February 2022

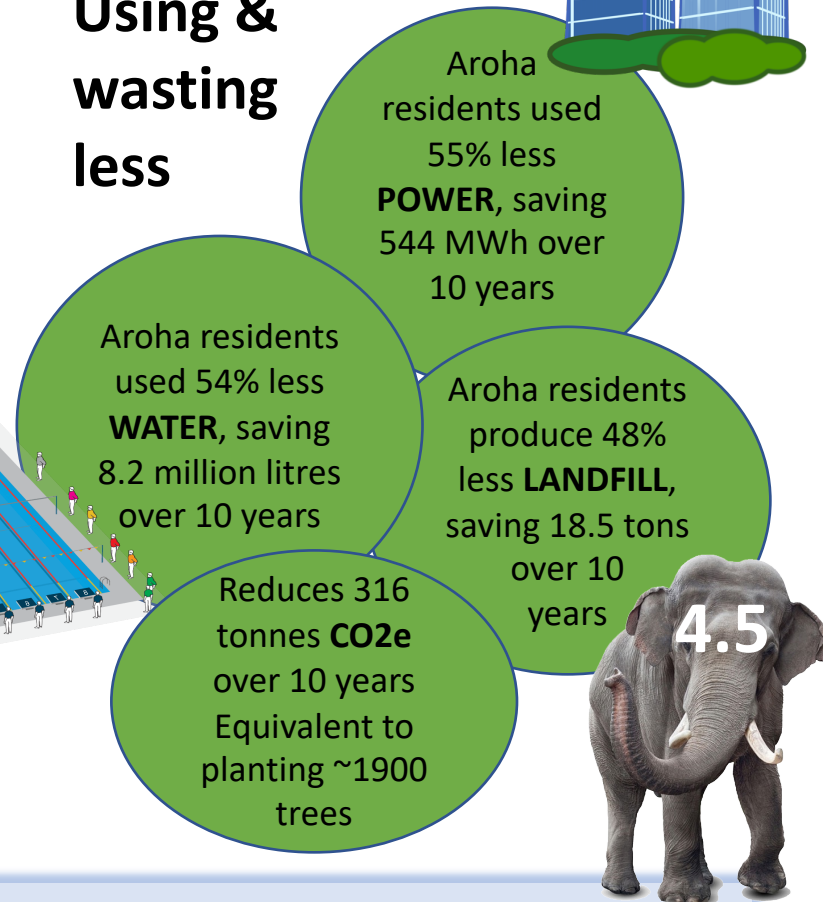
(savings/reductions compared to current Auckland averages)

26
aroha

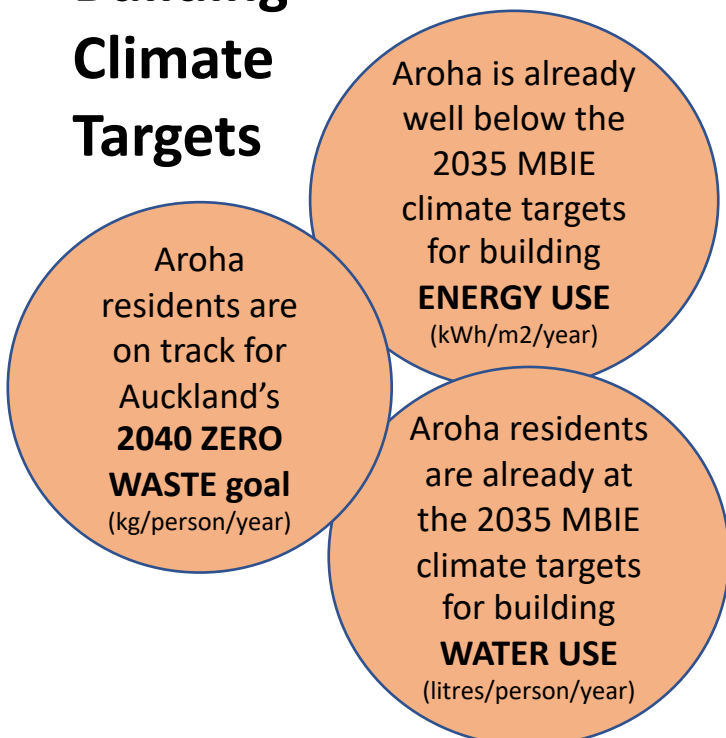
Residents Costs



Using & wasting less



Building Climate Targets



Achieved by...

- Amazing residents who use and waste less
- Single building power connection, sharing daily charges
- Better negotiated power rate for whole building than individual consumers
- Low heating requirement from very energy efficient building
- Low water use from low flow fittings
- Investment in technology to run private power, water and internet systems
- Investment in technology that automates measurement and billing of utilities
- Investment in Solar PV and Solar hot water
- Education, tracking use and giving feedback
- Applying low consumption & low waste principles in higher density multi story living

AROHA SERVICES ANALYSIS

1 Year - March 2021 - February 2022

Saving money for residents

Per Apartment	Aroha annual	Auckland annual	Annual saving	Aroha monthly
Average power bill	\$ 630	\$ 2,205		\$ 53
Average cold water bill	\$ 211	\$ 303		\$ 18
Average hot water bill	\$ 353	-		\$ 29
Average internet bill	\$ 420	\$ 960		\$ 35
Average TOTAL bill	\$ 1,614	\$ 3,468	\$ 1,854	\$ 135

Average Aroha saving vs Auckland averages		
	Per apartment	All residents
Per week	\$ 36	\$ 463
per month	\$ 154	\$ 2,008
per year	\$ 1,854	\$ 24,098
5 years	\$ 9,269	\$ 120,492

Sources

glimp.co.nz
powercompare.co.nz
watercare.co.nz
Auckland council waste minimisation team

Using & Wasting Less

	Aroha annually	Auckland average same size	Less per year	% lower	Reduction over 10 years		Tonnes CO2e reduced by 2030 (note 4)
13 Apartments / 27 people							
Water (litres)	705,250	1,527,525	822,275	54%	8.2	million litres	255
Power (kWh)	44,027	98,488	54,462	55%	544.6	MWh	55
Landfill waste (kg)	2,009	3,861	1,852	48%	18.5	tonnes landfill	6
							316

Building Climate Targets

	Aroha Mar 21-Feb22	Auckland 2021	Sustainable long term targets	Source
Water (litres/person/day)	69	140-170	75	MBIE new building performance std by 2035 (note 3)
Power (kWh/m2/year) (notes 1&2)	30.6	180	45	MBIE new building performance std by 2035 (note 3)
Landfill waste (kg/person/year)	74	143	0	Auckland Zero waste 2040

Note 1 - Aroha power use also includes all appliance power which is excluded from the building performance targets (ie. Aroha is even more efficient than shown)

Note 2 - PV generation of 8483 kWh is added to the kWh total

Note 3 - Transforming Operational Efficiency (MBIE: Building for climate change programme - August 2020)

Note 4 - Source: Ministry for Environment: Measuring emissions, a guide for organisations 2020 detailed guide. Water doesn't include CO2e reduction from avoided waste treatment.

Annual utilities + internet cost comparisons

\$4,320.00	Auckland.ac.nz - Akld Uni - average monthly electricity account of \$280 (not water)
\$3,580.68	numbeo
\$3,600.00	expatarrivals.com - small apartment
\$6,672.00	expatisan.co.nz - utilities 1 month for 2 people in 85m2 flat
\$3,444.60	budgetdirect.co.nz - Electricity, heating, water, garbage for 85m2 apartment