

Climate Change Action Plan:

Energy

Mahere Mahi Huringa Āhuarangi: Pūngao

This is one of six action plans, which support our <u>Climate Change Strategy 2020-23</u>.

To view the other documents, visit whakatane.govt.nz/climate-change

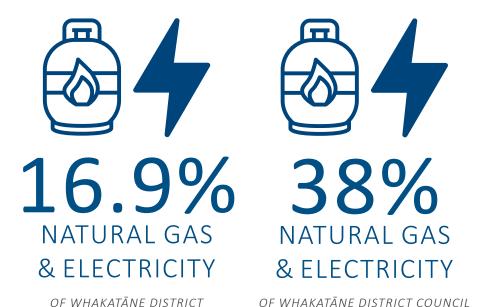




Why this area is important He aha tēnei e whakahirahira ai?

Energy represents the second largest emissions sector for the district, contributing 16.9% to overall emissions. The majority of the stationary energy emissions result from natural gas use¹. Energy also makes up 38% of the Council's overall emissions, primarily electricity(28%).

This action plan incorporates energy used for the production of electricity and gas but excludes the use of fossil fuels for transportation purposes (these are covered in the transport action plan).



¹ Bay of Plenty Community Carbon Footprint 2015/16

CARBON FOOTPRINT

CARBON FOOTPRINT

Where we are now Kei hea tātou ināianei?

Whakatāne has long been regarded as one of the top sunniest places in New Zealand, often earning the the titel of "Sunshine Capital of New Zealand". Within Council, energy efficiency and renewable energy opportunities are being actively progressed, including investigating the efficiency of solar panels (photovoltaics) for Council facilities.

The Council undertook an energy audit in 2018 in collaboration with the Energy Efficiency and Conservation Authority (EECA) and with the support of Council's energy management contractor EMSOL². Since then an energy management programme has been underway to identify opportunities for energy savings and emission reductions.

From the initiation of the energy management programme in October 2019 to May 2020, Council saw a reduction of approximately 800,000kWh of energy use. This is an equivalent of approx. 170,000 kgCo2e* less carbon emitted into the atmosphere or six households worth of less carbon emitted per year.

The energy management programme is being embedded into Council activities through the development of an Energy Management Policy and the creation of an Energy Action Group (EAG); an interdepartmental management group that ensures teams across the organisation are aware of and working towards Council's commitment to emission reduction.

* Definition- carbon dioxide equivalent (CO2e) is a measure for how much global warming a given type and amount of greenhouse gas causes, using the equivalent amount of carbon dioxide as the reference. CO2e is used for describing different greenhouse gases in a common unit, which allows them to be reported consistently⁴.

² Whakatāne District Council Energy Audit, November 2019

³ Estimated based on the Ministry for the Environment report "New Zealand's Greenhouse Gas Inventory 1990-2017" defining the New Zealand gross carbon dioxide emissions in 2016 to be 7.4 tCO2 per capita and assuming an average four person household.

⁴ As defined by the Ministry for the Environment in the report "New Zealand's Greenhouse Gas Inventory 1990-2017"

What we want this action plan to achieve Ngā paetae o tēnei Mahere Mahi

Outcomes

- 1. Reduce energy-related carbon emissions
- 2. Build energy supply resilience of the Whakatāne District

Goals

- 1. Enhance energy efficiency
- 2. Encourage low carbon energy options
- 3. Encourage the development of resilient low carbon energy options

Council energy target

1. Ensure Council delivers the benefits of 1GWh p.a. energy savings by June 2022 (based on June 2017 to May 2018 baseline).

This action plan primarily contributes to these climate change principles:

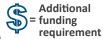


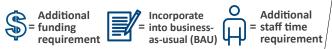
We will think
and act long term
Ka whakaaro pae tawhiti,
ka mahi pae tawhiti mātou



We will care for and protect the environment

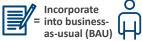
Ka manaaki, ka tiaki mātou i te tajao





Goal	Actions	Short term (2020-22)	Short term resource requirement (\$/BAU/staff time)	Medium term (2022-24)	Long term (2024-31)	Key external stakeholders and partners
	1.1 Adopt Energy Management Programme and establish an interdepartmental Energy Action Group	Formalise Energy Action Group and Terms of Reference		Energy Action Group to continue regularly measure and monitor energy use (including use of all fossil fuels excluding for transportation purposes) and report on progress	Energy Action Group to continue regularly measure and monitor energy use (including use of all fossil fuels excluding for transportation purposes) and report on progress Review Energy Policy in 2025 and 2030	Not applicable
	1.2 Undertake Energy Audit of all Council facilities	Adopt Energy Policy		Review, modify and enhance the Audit in 2023	Review, modify and enhance the Audit in 2028	EMSOL
Enhance energy efficiency	1.3 Reduce energy use within existing facilities through energy efficiency initiatives	Implement Energy Audit recommendations with a payback period of less than three years. Invest in energy efficiency and related greenhouse gas mitigation		Reduce electricity usage through efficiency measures identified through Energy Audit Invest in energy efficiency and related greenhouse gas mitigation	Continue to monitor usage trends and stay at cutting edge of efficient technology Invest in energy efficiency and related greenhouse gas mitigation	EMSOL Energy Efficiency and Conservation Authority
	1.4 Energy consumption considered for all major new projects	Council decision-making processes around new projects include consideration of energy efficiency and energy-related greenhouse gas emission consumption and those considerations for major decisions are made publicly available on Council's website		All new projects will consider energy efficiency and energy-related greenhouse gas emission	All new projects will consider energy efficiency and energy-related greenhouse gas emission	To be determined







Short term resource Key external stakeholders Short term Medium term Long term Goal **Actions** reauirement (2024-31) (2020-22)(2022-24)and partners (\$/BAU/staff time) **EMSOL** 1.5 Promote increased Distribute relevant and Review, modify and Review, modify and community energy digestible information enhance information enhance information efficiency to help educate the being distributed to the being distributed to the Energy Efficiency and community on energy community community Conservation Authority efficiency (e.g. GenLess website, Council case studies) for homes, businesses and agencies 1.6 Consider energy-Encourage suppliers Where a service will result Increase expectations **EMSOL** related greenhouse gas to include an Energy in quality of Energy in mandatory indirect emissions associated Management Plan as part emissions*, request Management Plans as with services as a of tender processes contractors and service sector awareness grows providers to calculate these factor in awarding contracts emissions Provide a template and training opportunities for contractors and service providers to help facilitate the meeting of this Action

^{*} Mandatory Scope 3 emissions as determined by the Toitū carbonreduce certification







	Goal	Actions	Short term (2020-22)	Short term resource requirement (\$/BAU/staff time)	Medium term (2022-24)	Long term (2024-31)	Key external stakeholders and partners
		2.1. Plan to transition from use of natural gas at Council facilities	Reduce natural gas usage through efficiency measures		Begin to phase out gas fired boilers	No longer use natural gas powered units	EMSOL Contractors
2	. Encourage low carbon energy options	2.2. Advocate for low- emissions energy generation	Investigate energy providers for future Council energy contracts and keep abreast of industry trends		Include greenhouse gas emissions as a determining factor when selecting energy suppliers in 2022	Include greenhouse gas emissions as a determining factor when selecting energy suppliers in 2022 Addressed through increased target in this plan and other strategy changes	Energy industry

^{*} Refer to the Energy Action Plan, which sets out how the Council will consider energy-related greenhouse gas emissions associated with services as a factor in awarding contracts



Additional into business- as-usual (BAU)

Additional staff time requirement

	requirement — as assum (BAS) 1 requirement						
	Goal	Actions	Short term (2020-22)	Short term resource requirement (\$/BAU/staff time)	Medium term (2022-24)	Long term (2024-31)	Key external stakeholders and partners
3.		3.1. Reduce organisational reliance on the national grid	Investigate viable options to generate localised renewable energy for Council use (e.g. photovoltaics)		Investigate collaboration or funding opportunities	Keep abreast of latest technology and opportunities	Electricity industry
	8. Encourage the development of resilient low carbon energy options	3.2. Enable community resilience through localised power generation	Continue free consents for installation of solar hot water Investigate options to incentivise localised low-carbon energy generation Distribute relevant and digestible information to help educate the community on renewable energy generation (e.g. photovoltaics) for homes, businesses and agencies	°Ę	Investigate viability of loan funding schemes	Continue to investigate viable options	Funders Providers Community EMSOL Energy Efficiency and Conservation Authority
		3.3. Encourage local collaboration to ensure energy resilient communities	Continue to collaborate with local utilities through lifelines network including participating in regional climate change risk assessment of the district's utilities' vulnerability to climate hazards		Continue to collaborate with utility network	Continue to collaborate with utility network	Utility network providers Bay of Plenty Regional Council

If you want to learn more about our climate change project visit whakatane.govt.nz/climate-change

This is one of six action plans which support our climate change strategy.

The other action plans are:

- Leadership and collaboration
- Transport
- Waste and circular economies
- Water services
- Land use and the built environment

















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