Climate change or global warming refers to the gradual rise of the earth’s average surface temperature caused in part by increased concentrations of greenhouse gases – primarily carbon dioxide (CO2) – in the atmosphere. These gases trap some of the heat the Earth radiates back into space.

As a Council we need to be prepared to manage the likely impact climate change will have on our city and take steps to reduce the production of greenhouse gas emissions.

As part of Hamilton City Council’s wider sustainability programme, we have a number of actions to influence the amount of carbon produced by the city. Hamilton Gardens is leading the way by setting a goal of being carbon neutral by 2030.

All the actions below contribute towards improving energy use and greenhouse gas emissions.

## ENERGY

We’re reducing energy consumption to help decrease power plant CO2 emissions.

**WE’RE MONITORING ENERGY CONSUMPTION TO IDENTIFY HOW WE CAN REDUCE THE NON-RENEWABLE ENERGY WE USE AS A CITY. CURRENTLY, THE ENERGY WE USE IS 55% RENEWABLE AND 45% NON-RENEWABLE.**

**WE’RE PROVIDING THE COMMUNITY WITH INFORMATION ABOUT HOW THEY CAN IMPROVE ENERGY EFFICIENCY AT HOME.**


**HERE ARE SOME OF THE PROJECTS WE’VE LED TO ACHIEVE THESE GOALS.**

- We’ve replaced Hamilton’s streetlights with new energy efficient LED lights.
- We’ve replaced traffic signal lanterns with LED lights.
- We’ve replaced lights within council buildings to lower energy LED lights.
- We’re using biogas generated from the digestion process at the wastewater treatment plant to run the gas boiler.
- We’re using electric heat pumps to control air temperature at Waterworld Aquatic Centre.

**WE’RE MAKING GREAT PROGRESS! AS A COUNCIL, OUR ELECTRICITY AND GAS USAGE (KWH) HAS DECREASED FROM 55,857,798 IN 2013 TO 39,160,583 IN 2019. CO2 EMISSIONS FROM ELECTRICITY HAVE DECREASED FROM 9901 IN 2013 TO 5974 IN 2019.**
TRANSPORT

Transportation is a key producer of carbon emissions. We’re focusing on reducing the number of cars on our roads and the length of journeys people take because we know this will have a big impact on reducing carbon emissions.

WE’RE IMPROVING TRAFFIC SIGNAL OPTIMISATION TO REDUCE TRAVEL TIME. IN MAY 2019, WE ACHIEVED A 27% REDUCTION IN THE AVERAGE TRAVEL TIME FROM MILL-SEDDON TO MILL-VICTORIA.

WE’VE MADE ELECTRIC BIKES AND KICK SCOOTERS AVAILABLE FOR STAFF TO USE FOR WORK-RELATED TRIPS.

WE’RE COMMITTED TO PROMOTING AND ENABLING PEOPLE TO GET AROUND OUR CITY BY BIKE. $52 MILLION TOWARDS BIKING PLAN PROJECTS WAS APPROVED IN THE 2018–28 10-YEAR PLAN.

WE’RE BECOMING MORE FUEL EFFICIENT WITH OUR OWN FLEET.

The average fuel use by our car and utility fleet for the year ended June 2018 was 9.98 litres per 100km (our target was 10 litres/100km).

The average fuel use by our light truck fleet for the year ended June 2018 was 26.7 litres per 100km.

Improvements in vehicle fuel efficiency and the ongoing turnover of older vehicles should see continued improvements in average fuel usage.

WE’RE ENCOURAGING THE USE OF BUSES.

Since July 2019, people 18 years and under can travel on free scheduled buses within the Hamilton network on weekends and public holidays.

We’ve installed 40 new bus shelters, 41 LED solar lights into new or existing shelters and accessible kerbing at 21 locations.

WE’RE ENCOURAGING THE USE OF ELECTRIC VEHICLES.

We’ve installed an electric vehicle (EV) charging station in our carpark on Caro St with help from Vel Networks.

We’re now exploring installing EV charging stations at Hamilton Lake and Hamilton Gardens.

WE’RE ENCOURAGING PEOPLE TO MOVE AROUND OUR CITY USING ACTIVE TRANSPORT. HERE’S JUST SOME OF THE WAYS WE’RE DOING THIS:

LOVE YOUR BIKE DAY – AN ANNUAL CYCLING PROMOTION EVENT.

CYCLE SAFETY CAMPAIGNS (E.G. VARIOUS PROGRAMMES RUN BY THE ROAD SAFETY COORDINATOR).

BIKE HAMILTON – SUMMER BIKING CAMPAIGN THE SMART TRAVEL CARPOOLSING WEBSITE SMARTTRAVEL.ORG.NZ

HAPPY FEET PROGRAMME.
**WATER**

We’re committed to reducing water consumption across the city because treating water uses a lot of electricity.

*We have a Water Master Plan to help us track leakage. So far this has helped us reduce water loss from the network from 14.5% to 9.6%.*

*We’ve run a Smart Water Campaign to promote water conservation in all of our communities.*

**WASTE**

We’re committed to reducing the volume of waste sent to landfill. Landfill gas (LFG) is a natural by-product of the decomposition of organic material in landfills. LFG is composed of roughly 50% methane (the primary component of natural gas), 50% CO2 and a small amount of non-methane organic compounds. Methane is a potent greenhouse gas that is 28 to 36 times more effective than CO2 at trapping heat in the atmosphere over a 100-year period. A reduction in the volume of waste sent to landfill will further reduce greenhouse gases.

*We have a Waste Minimisation Plan (2017–24) which guides us as we work towards waste avoidance, reduction and recovery.*

*We’re educating and supporting our communities through our ‘Fight the Landfill’ campaign.*

FIGHTTHELANDFILL.CO.NZ

**DID YOU KNOW...**

32% of the total volume of waste recovered at the kerbside was recycling.

18,139 tonnes of waste was diverted from landfill at council-operated waste facilities.

**WE'RE FUNDING WASTE REDUCTION AND MINIMISATION PROGRAMMES THROUGH OUR ANNUAL $50,000 CONTESTABLE FUND.**

**WE'RE LOOKING FORWARD TO HAVING A NEW WASTE CONTRACT IN PLACE IN JULY 2020 WHICH WILL ENABLE US TO RECYCLE PLASTICS 3-7 (ALONG WITH THE 1-2 WE ALREADY COLLECT). WE'RE ALSO EXCITED THAT 25% OF THE REFUSE TRUCKS WILL BE ELECTRIC!**

**DID YOU KNOW...**

We have both recycling and worm farms at council buildings.

We formed a sustainability club for council staff in February 2018. Here are some of the initiatives they’ve launched so far:

Providing tea bags without paper packets.

Recycling household batteries.

A harvest market table for the excess home garden produce of council staff.
LAND USE

We’re getting smarter at how we plan for land use in our city to mitigate the impacts of climate change.

**WE’RE DOING STORMWATER MODELLING TO MAKE SURE OUR NEW STORMWATER SYSTEMS CAN DEAL WITH INCREASED AND MORE INTENSE RAINFALL EVENTS.**

**WE ARE GUIDED BY A DISTRICT PLAN THAT ADDRESSES SUSTAINABLE DEVELOPMENT, DENSIFICATION AND CLIMATE CHANGE IMPACTS SUCH AS FLOOD HAZARDS.**

**WE STRUCTURE OUR PLANS TO GIVE CONSIDERATION TO TRANSPORT AND WATER CATCHMENT IMPACTS INTO THE FUTURE.**

BIODIVERSITY

We are focused on improving biodiversity to help reduce the negative impact of climate change by creating ecosystems that remove carbon dioxide from the air.

**OUR LOCAL INDIGENOUS BIODIVERSITY STRATEGY AIMS TO INCREASE HAMILTON’S LEVEL OF INDIGENOUS VEGETATION TO 10% INDIGENOUS VEGETATION COVER.**

**WE’VE INCREASED OUR PARKS AND OPEN SPACES BY 29HA FROM 2017/2018 TO 2018/2019.**

**IN 2018/2019, 38,804 PLANTS WERE PLANTED WITH 3,948 VOLUNTEERS CONTRIBUTING 9,960 HOURS OF VOLUNTEER TIME.**

**WE SUPPORT THE GULLY RESTORATION PROGRAMME GULLYGUIDE.CO.NZ/INDEX.ASP**

**WE HAVE A STAFF MEMBER FOCUSED EXCLUSIVELY ON CONNECTING WITH OUR COMMUNITIES AROUND PLANTING INITIATIVES. HERE IS A SNAPSHOT OF WHAT THEY DO:**

- Educating local schools, community volunteer groups, businesses and residents.
- Co-ordinating funds towards planting projects.
- Providing restoration advice for park areas (not private land).
- Supplying plants for volunteers to plant in parks and reserves.