

Taking On Climate Change Hamilton's Local Action Plan

WHAT IS CLIMATE CHANGE?

Climate change or global warming refers to the progressive gradual rise of the earth's average surface temperature. Global warming is thought to be caused in part by increased concentrations of greenhouse gases such as carbon dioxide, methane and chloro-fluoro carbons in the atmosphere, which trap some of the heat the earth radiates back into space. This trapping of heat is necessary for our survival as it ensures that our night time temperatures are regulated. However the more greenhouse gases in the atmosphere, the more heat gets trapped and the hotter the planet becomes.

Since the Industrial Revolution, the concentration of these gases, most notably carbon dioxide, has been increasing rapidly. The clearing of vast areas of vegetation has reduced nature's ability to remove carbon from the atmosphere and store it in the soil and as biomass.

The average global surface temperature is projected to increase by a further 1.4 – 5.8°C relative to 1990, by 2100. This rate of warming is greater than earlier projections, is much greater than observed changes during the 20th century, and is very likely without precedent during the last 10,000 years.

HOW WILL THIS AFFECT US?

We are already seeing the effects of climate change with more frequent and severe storms, flooding and erosion, damage to coastal ecosystems and infrastructure, and the spread of tropical insect pests, weeds and mosquito-borne diseases. These events often lead to additional costs for water supply, wastewater and stormwater systems, flood mitigation and building construction.

New Zealand's target is to reduce its greenhouse gas emissions to the level they were in 1990 and take responsibility for excess emissions. Achieving this target requires a substantial improvement in current performance given that New Zealand's greenhouse emissions have increased by 37% since 1990. We will only reach this target if local governments, the commercial and industrial sector and individuals start to take action to reduce greenhouse gases.



HAMILTON'S RESPONSE

In October 2004 Hamilton City Council joined the Communities for Climate Protection-New Zealand Programme (CCP-NZ), an international campaign to assist councils worldwide to reduce greenhouse gas emissions. The programme aims to reduce emissions by each council taking action, as well as councils influencing reductions in their wider communities. To assist councils and their communities address climate change, the programme consists of five key milestones. Each milestone has a council (corporate) component and a community component.

- Milestone 1 - Conduct an inventory and forecast for greenhouse gas emissions
- Milestone 2 - Establish emission reduction goals
- Milestone 3 - Develop and adopt a local action plan
- Milestone 4 - Implement the local action plan
- Milestone 5 - Monitor and report on achievements



Milestone 1: Measuring up – Hamilton's Greenhouse Gas Inventory

In July 2005 Hamilton City Council undertook an initial inventory of greenhouse gas emissions. The 2000/01 financial year was chosen as Hamilton's baseline year and emissions were categorised as either 'corporate' (directly from Council activities) in origin or 'community' in origin.

The corporate audit detailed the emissions from council's operations including landfill, business units, swimming pools, streetlights and council vehicles. The community analysis assessed the community's greenhouse gas emissions resulting from transport and waste generation, as well as industrial, commercial and residential energy use.

Council's Greenhouse Gas Emissions

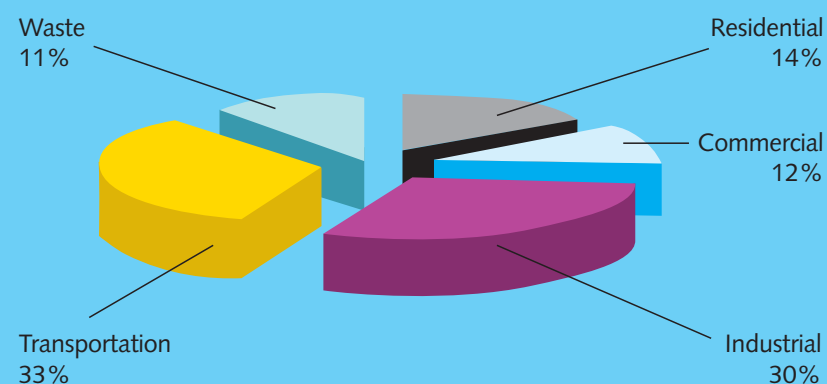
- As one of the largest electricity consumers in the Waikato, Council makes a significant contribution to the city's greenhouse gas emissions. Analysis shows that Council's greenhouse gas emissions were 9,000 tonnes of carbon dioxide equivalent (CO₂e) in 2000/01.
- The corporate audit detailed the emissions from council operations including landfill, business units, swimming pools, street lighting and council vehicles. Wastewater treatment was the largest producer of greenhouse gases contributing to 33% of the total, with council buildings coming second with 27% and street lighting being the third largest contributor producing 18%.

Based on a 'business as usual' scenario, it is estimated that by the year 2010 council activities will be responsible for greenhouse gas emissions of almost 17,400 tonnes of CO₂e - a 93% increase from 2001.

The Community's Greenhouse Gas Emissions

- For the community, greenhouse gases generated through the use of electricity, gas and transport fuels generated an estimated 1,144,000 tonnes of carbon dioxide equivalent (CO₂e) in 2000/01.

The Community's Greenhouse Gas Emissions by Source 2001



Based on a 'business as usual' scenario, statistical information indicates this is likely to rise to 1,301,000 tonnes of CO₂e in 2009/10 – a 14% increase from 2001.

Milestone 2: Hamilton's Goals

Council's Goals:

- By 2010 slow the rate of greenhouse gas emissions from Council (corporate) activities to an 11% increase on 2001 levels, compared to the 62% increase in 2004.
- By 2020 achieve a 20% reduction on 2001 levels.

Community's Goals:

- Stabilisation of greenhouse gas emissions for the community of Hamilton at 2001 levels by 2020.

WHAT YOU CAN DO...

Cutting your greenhouse gas emissions can be as easy as switching off a light, turning off your computer at the end of the day or walking to the dairy instead of driving. If you would like to know more about what you can do as a business or individual, visit www.carbonzero.co.nz or www.4million.org.nz

The reverse side of this leaflet sets out some of the actions in Hamilton's Local Action Plan. This plan provides the city with a starting point to address our greenhouse gas emissions. Council can exert a major influence on energy use and greenhouse gas emissions within Hamilton. However, as a city, we can only reach these goals if individuals and the commercial and industrial sector work together with Council to improve the future liveability of Hamilton. If you would like to find out more about what you can do towards this, go to www.hamilton.co.nz key words "Know it ... Live it" or e-mail megan.edmeades@hcc.govt.nz

Milestone 3: Hamiltons Local Action Plan

Council's Actions:

Since the Council's corporate energy management programme began in 1999, Council has reduced energy costs by \$1,260,000, saved 9,250,000 Kwh, and cut CO₂ emissions by 10,100 tonnes, through initiatives such as installing a landfill gas-powered engine at the Horotiu Landfill and a cogeneration facility that uses biogas from the treatment process at the Wastewater Treatment Plant. The tables below show a selection of actions from our Local Action Plan that will continue taking us towards our goals. For the full report go to www.hamilton.co.nz key word 'CCP Local Action Plan'.

ENERGY

Action	Timeframe
Increase the supply of 'green energy' (non-fossil fuel) by maximising biogas electricity generation and exploring options to utilise other renewable energy sources.	Ongoing
Consideration of energy efficiency given to all aspects of the CBD and Claudelands Event Centre upgrades.	Ongoing
Large buildings to display their annual energy performance indicator, to raise public awareness.	Ongoing
Initiation of staff education programmes encouraging the reduction of energy use in the municipal building.	2007 – 2010
Demonstrate where possible the use of passive solar gains and solar energy.	Ongoing
Consideration of solar water heating where possible as part of routine replacement of existing hot water supplies and new hot water supplies.	Ongoing
All tender processes to consider energy.	Ongoing

TRANSPORT/FLEET

Action	Timeframe
Implement the 'Every Trip Counts' corporate travel plan for Council. Reduction targets set and achieved.	2006 – 2008
Continue to promote the use of fleet bikes and monitor usage.	2005 – 2010
Maximise fuel savings by enhancing the model/mix of vehicle types, increasing utilisation and swapping vehicles for alternative forms of transport.	Ongoing
Fleet fuel efficiency, annual travel, and utilisation indicators developed, monitored, and reported on monthly. Undertake a six monthly review of indicators to identify opportunities for fuel and cost savings.	Ongoing

WASTE AND WASTEWATER

Action	Timeframe
Implement actions from the Liquid Waste Management Plan which work to increase energy efficiency.	2007 – 2010
Continue to communicate internal waste policy to reach target reduction.	2006 – 2010
Review Council's waste contract with a view to reducing waste.	2007 – 2008

BIODIVERSITY

Action	Timeframe
Work towards CarboNZero certification for the V8's event in Hamilton, including offsetting of CO ₂ with supplementary plantings at Waiwhakareke Natural Heritage Park.	2008 – 2015

Community's Actions:

The community section of the Local Action Plan sets out the activities that Council will undertake to encourage and support the community's involvement in reducing the city's greenhouse gas emissions.



ENERGY ACTIONS

Action	Timeframe
In partnership with BRANZ, an independent eco-adviser, work with residents and local building companies to improve performance ratings for Hamilton homes.	2006 – 2007
Deliver a community education programme to promote energy efficiency and water conservation practices.	2005 – 2007
Promote the EECA interest-free loans for householders who purchase solar water heaters.	2006 – 2007
Showcase business practices and technologies that use energy efficiently, reduce water consumption, produce less waste and promote transport alternatives.	2005 – 2008
Work with industries to find more sustainable alternatives to traditional utility services and encourage improved design of industrial complexes.	2008 – 2010

TRANSPORT ACTIONS

Action	Timeframe
Promote walking and cycling as an integral part of transport planning, addressing safety, facilities and infrastructure.	Ongoing
Promote bus use over car use including increased direct commuter routes, priority bus routes and bus related infrastructure.	2005 – 2016
Set up park and ride facilities on the outskirts of Hamilton.	2008 – 2011
Expand School Travel Planning including Walking School Bus Programme and Safe Routes Programme throughout the city.	2005 Onwards
Promote Business Travel Plans and Hamilton City Council's Corporate Travel Plan.	2006 Onwards

WASTE ACTIONS

Action	Timeframe
Use Council education programmes, regulations, fees, charges and rates to overcome barriers and aggressively promote waste avoidance, minimisation and recycling and implement programmes. Regularly research these barriers.	Ongoing
Continue to expand the types of recyclables that can be collected through household recycling bins.	Ongoing

BIODIVERSITY ACTIONS

Action	Timeframe
Continue supporting native plantings to increase carbon sequestration through the Gully Restoration Programme.	2005 – 2010