



GLOBAL ENVIRONMENT

Global environment: overview

Climate change, access to energy resources, biosecurity and pollution of air, land and water are all environmental issues that affect people across the world. While many of these issues may seem remote from Rotorua, it is likely the impacts will increasingly be felt at a local level.

Climate adaptation is essential in planning for the future if global climates change. For example if greater floods are expected to occur, infrastructure such as stormwater drains, detention ponds and treatment systems need to be engineered to cope with high and fast stormwater flows.

The Global Environment theme includes monitoring of three environmental indicators addressing the issue of greenhouse gas emission.

How are we going?

Reporting on climate change on a district scale is relatively new. Although not all data for climate change indicators is baseline data, it is the first time they have been reported on in the context of climate change. The top five greenhouse gas emission sources in the district are petrol, waste, electricity, diesel and natural gas.

It is difficult to state whether changes in Rotorua's climate are significant, as observations and conclusions are based on the past 60 years of data collected. Sixty years is only a very small snapshot in time when analysing something that spans a much larger time period. The results shown in this section are based purely on this small set of local data, the most reliable available today.

According to NIWA data, over the past 42 years there has been a 200 millimetre decline in annual rainfall and over the past 41 years wind speeds have become stronger by 1km per hour. This is consistent with westerly winds in the whole country, which have strengthened in recent decades. Data from 1993 onwards suggests there has been an increase in minimum temperatures and a proportional decrease in ground frost days.

What are we doing?

Rotorua District Council is part of the Communities for Climate Protection

Programme. So far, Milestone 1, an inventory of greenhouse gas emissions, has been achieved. The next milestones are about setting reduction targets and creating action plans to reach those targets.



Reducing the impacts of future climate change and sustainability are both long term commitments. The district plan is now required to consider the impacts that land use and activities in the district have on climate change.

Planning and provision of sustainable infrastructure also present challenges in terms of engineering for projected climate change events.

The Sustainable Business Network and the Sustainable Tourism Charter are about businesses working smarter to meet the demands of modern day purchasers. Many local businesses are owned and operated by local residents who have a vested interest in the long term sustainability of Rotorua.

There are many opportunities for the community to get involved and find out how to do their bit to prevent, and adapt to, future climate change. Local community and action groups such as the Mokoia Community Centre and Climaction Rotorua are educating and engaging the community through sustainable living workshops and development of communication networks.

Global environment indicators are:

Indicator	State
Greenhouse gas emissions	
Vehicle use and emissions	
Rotorua climate	