

# **CARBON ZERO**

# Newsletter

# From the WLASS energy managers

It seems hardly a day goes by without reports of the latest climate event or weather records being broken. The Government aims to get NZ to net zero emissions by 2050. Key to a carbon reduction programme is a focus on energy efficiency. Its been well established by others such as the Energy Efficiency and Conservation Authority that energy efficiency is the lowest cost way to deliver on-going greenhouse gas (GHG) emission reductions. In this newsletter we explore what makes up the bulk of emissions for our Council organisations.

Our best wishes for the festive season Martin Lynch and Kevin McGrath

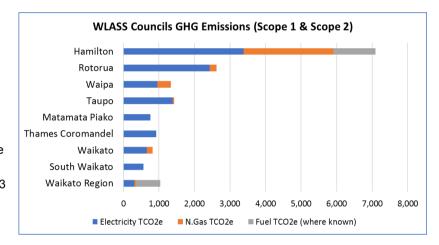
#### Council GHG Emissions

Historical data from Energypro and e-bench gives us an idea of the GHG emissions from natural gas and electricity by Council. For FY19, this amounts to 14,728 TCO2e. See graph to the right. Also shown is fuel data for Hamilton and WRC. Based on this initial data, its expected that fuel used in vehicle fleets will be a significant component for the district councils. Waste from Council facilities and air travel are also anticipated to be material scope 3 GHG emissions.

### Scope 1, Scope 2, Scope 3

Greenhouse gas emissions for businesses are classified into three scopes.

- Scope 1: direct GHG emissions from sources owned or controlled by the organisation, e.g. boiler plant that uses natural gas, cars that use fuel, diesel used in generators.
- Scope 2: indirect GHG emissions from the generation of purchased energy, e.g electricity, heat or steam that the organisation uses.
- Scope 3: other indirect GHG emissions occurring because of the activities of the organisation but generated from sources that it does not own or control, air travel and waste are good examples.



#### Zero Carbon Act

The Zero Carbon Act provides a framework for NZ to implement climate change policies that:

- contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5 degrees Celsius above pre-industrial levels
- allow NZ to prepare for and adapt to the effects of climate change.

The Government is establishing a Climate Change Commission charged with providing independent expert advice on how to mitigate climate change and adapt to the effects of climate change. It will also monitor and report on the Government's progress towards these goals. The first emissions budget for the period 2022 to 2025 will be set by 31 December 2021. This budget has to be met, as far as possible, through domestic emission reductions and domestic removals. An emissions reduction plan will be prepared which will include sector specific policies to reduce emissions, a multi sector strategy to meet emissions budgets and a strategy to mitigate the impacts that reducing emissions will have on employees, employers, regions, iwi and wider communities.

At the same time, a national climate change risk assessment must assess the risks to NZ's economy, society, environment, and ecology from the current and future effects of climate change; and identify the most significant risks to NZ. This then leads into a national adaption plan which will be publicly available. See https://www.mfe.govt.nz/climate-change

## **Producing a Carbon Inventory**

Producing a carbon inventory is an important first step to understand how we can move to low GHG emission organisations and where the opportunities lie. For example, natural gas makes up 13% of the WLASS councils combined total of electricity and natural gas consumption, but is responsible for 23% of GHG emissions. Increasing the use of natural gas will significantly impact on the amount of GHG emissions emitted. Councils should be actively investigating opportunities to phase out natural gas fired boilers by investing in low carbon alternatives in new design and at asset renewal. Likewise waste to landfill is a significant contributor, increased recycling and waste minimisation programmes implemented within Council facilities will rapidly lower emissions. We have all heard about the electric car revolution, but don't overlook other initiatives such as rightsizing the fleet, increasing vehicle utilisation, and "flipping the fleet" to benefit from improved fuel efficiencies and hybrid engines.

WLASS Councils that are signatories to the LGNZ Leaders' 2017 Climate Change Declaration are; Waikato, Hauraki, South Waikato, Matamata-Piako, Waikato Region and Waipa. This declaration signals the development of ambitious action plans that reduce greenhouse gas emissions. If you do need help in this area, the WLASS managers can assist. Martin and Kevin have had training in Carbon Accounting and are actively providing support to a number of WLASS Councils including Waikato District (emissions inventory), Hamilton City (emissions inventory and action plan), Waikato Region (action plan) and Hamilton Gardens (emissions inventory, enviro-mark assurance, and action plan leading to carbon neutral status).

#### What else is happening?

HCC hosted an Energypro training session for our programme participants in early December. It was well received and provided an understanding of how we can get the best out of this energy and carbon reporting software. We will most likely hold a second session in winter 2020. Thanks to all involved!

### How can I found out more?

Email us on info@ waikatolass.co.nz

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